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Statytojas/ Užsakovas	**LITGRID AB**
Projekto rengėjas	
Sutarties pavadinimas	
Statinio projekto pavadinimas	**Elektros tinklų Vilniaus r. sav., Nemenčinė, Bažnyčios g. 25, rekonstravimo projektas**
Statinio naudojimo paskirtis	**INŽINERINIAI STATINIAI – INŽINERINIAI TINKLAI – ELEKTROS TINKLAI**
Statinio adresas	**VILNIAUS R. SAV., NEMENČINĖ, BAŽNYČIOS G. 25**
Statinio projekto Nr.	**ED2201**
Investicinio projekto Nr.	Nr. PPRV19063
Statinio kategorija	**YPATINGASIS STATINYS**
Statybos rūšis	**REKONSTRAVIMAS (unikalus Nr. 4100-2081-1027)**
Statinio projekto etapas	**DARBO PROJEKTAS**
Statinio pavadinimas	**110/10 KV NEMENČINĖS TP. 110 KV SKIRSTYKLA**
Statinio projekto dalis	**Statybinės konstrukcijos. Inžineriniai skaičiavimai**

Byla (knyga)	SK-IS
Bylos laida	0 (II skaitymas)
Bylos išleidimo data	2023-05-10

Įmonė	Pareigos	Vardas, pavardė	Kvalifikacijos atestato Nr.	Parašas

KAUNAS

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SKAIČIAVIMAI ATLIKTI PAGAL ŽEMIAU SURAŠTYĄ PAGRINDINIŲ NORMATYVINIŲ DOKUMENTŲ SĄRAŠĄ

Projektas parengtas pagal šiuos privalomus dokumentus statinio projektui parengti ir pagrindinius normatyvinius statybos dokumentus:

Eil. Nr.	Dokumento žymuo	Dokumento pavadinimas	Pastabos
		LR įstatymai:	
1.	STR 1.04.02:2011	Inžineriniai geologiniai ir geotechniniai tyrimai	
2.	STR 1.04.04:2017	Statinio projektavimas, projekto ekspertizė	
3.	LST EN 1990	Eurokodas. Konstrukcijų projektavimo pagrindai	
4.	LST EN 1991	Eurokodas 1. Poveikiai konstrukcijoms	
5.	LST EN 1992	Eurokodas 2. Gelžbetoninių konstrukcijų projektavimas	
6.	LST EN 1993	Eurokodas 3. Plieninių konstrukcijų projektavimas	
7.	LST EN 1997	Eurokodas 7. Geotechninis projektavimas	
8.	LST EN 50341-1:2013	Aukštesnės kaip 1 kV kintamosios įtampos oro linijos. 1 dalis. Bendrieji reikalavimai. Bendrieji techniniai reikalavimai	
		Kompiuterinės programinės įrangos sąrašas, pagal techninio projekto dalis	
1.	SK	Paketas – Microsoft Office Autodesk AutoCAD GEO5, Peikko Designer, Dlubal RFEM	

Brėžinio ir jame pateiktos informacijos dauginimas ir platinimas trečiosioms šalims draudžiamas

0	2023-05-10	Statybos leidimui, įrangos užsakymui ir darbo projekto rengimui.
Laida	Išleidimo data	Laidos statusas. Keitimo priežastis (jei taikoma)

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AIŠKINAMASIS RAŠTAS

Darbo projektas „Elektros tinklų Vilniaus r. sav., Nemenčinė, Bažnyčios g. 25, rekonstravimo projektas“ parengtas vadovaujantis LITGRID AB projektavimo užduotimi (investicijų projekto Nr. PPRV19063), LITGRID AB projektavimo sąlygomis ir patvirtintais projektiniais pasiūlymais, kitų projekto dalių užduotimis, atliktus inžinerinius geologinius ir topografinius tyrimus, bei Lietuvos Respublikoje galiojančių dokumentų reikalavimus.

1.1 Vietovės trumpa charakteristika

Klimatiniai duomenys pagal RSN 156-94 (stotis Nr. 47 – Vilnius, miestas)

1 pav. Stebėjimo punktų žemėlapis

- Vidutinė metinė oro temperatūra +6,7 °C; (2.1 lentelė)
- Absoliutus oro temperatūros maksimumas +35,4 °C; (2.2 lentelė)
- Absoliutus oro temperatūros minimumas -37,2 °C; (2.3 lentelė)
- Šalčiausio penktadienio vidutinė temperatūra -26,0 °C; (2.11 lentelė)
- Santykinis oro metinis drėgnumas – 80%; (3.2 lentelė)
- Absoliutus vėjo maksimumas 28 m/s; (5.2 lentelė)
- Apšalo rajonas – III-as, apšalo storis 11,2 mm; (8.6 lentelė)
- Maksimalus žemės įšalo gylis: 9.1 lenetlė)
  - galimas 1 kartą per 10 metų iki 134 cm;
  - galimas 1 kartą per 50 metų iki 170 cm.

1.2 Greta išdėstyti statiniai ir inžineriniai tinklai

Elektros tinklų skirstykloje statybos darbai vykdomi tik aptvertoje teritorijoje. Vykdomi darbai aplinkiniams statiniams jokios įtakos neturės. Keliai, takai, tvoros ar kiti statiniai, kurie gali būti pažeisti ar išmontuoti statybos metu, privalo būti atstatyti ar sutvarkyti į neprastesnę būklę nei buvo prieš pradedant statybos darbus.

Skirstyklos suvestinių inžinerinių tinklų planas ir sklypo plano sprendiniai pateikiami Sklypo plano projekto dalyje.

Pilnai rekonstruojamoje 110kV Nemenčinės TP skirstykloje statybos eigoje bus sumontuota:

- nauja 110kV atvira skirstykla (AS) su 2 jungtuvais linijiniuose narveliuose;

- naujas 110kV valdymo pultas (110kV AS VP) su naujomis relinėmis spintomis, naujais kintamosios ir nuolatinės srovės skydais, nauja akumuliatorių baterija ir telekomunikacijų, TSPĮ spintomis.

Visi LITGRID AB turtinėje priklausomybėje esantys 110 kV elementai – skyrikliai, trumpikliai, viršįtampių ribotuvai, atraminiai izoliatoriai, jų statybinės konstrukcijos, gnybtynai, kabeliai, kabelių

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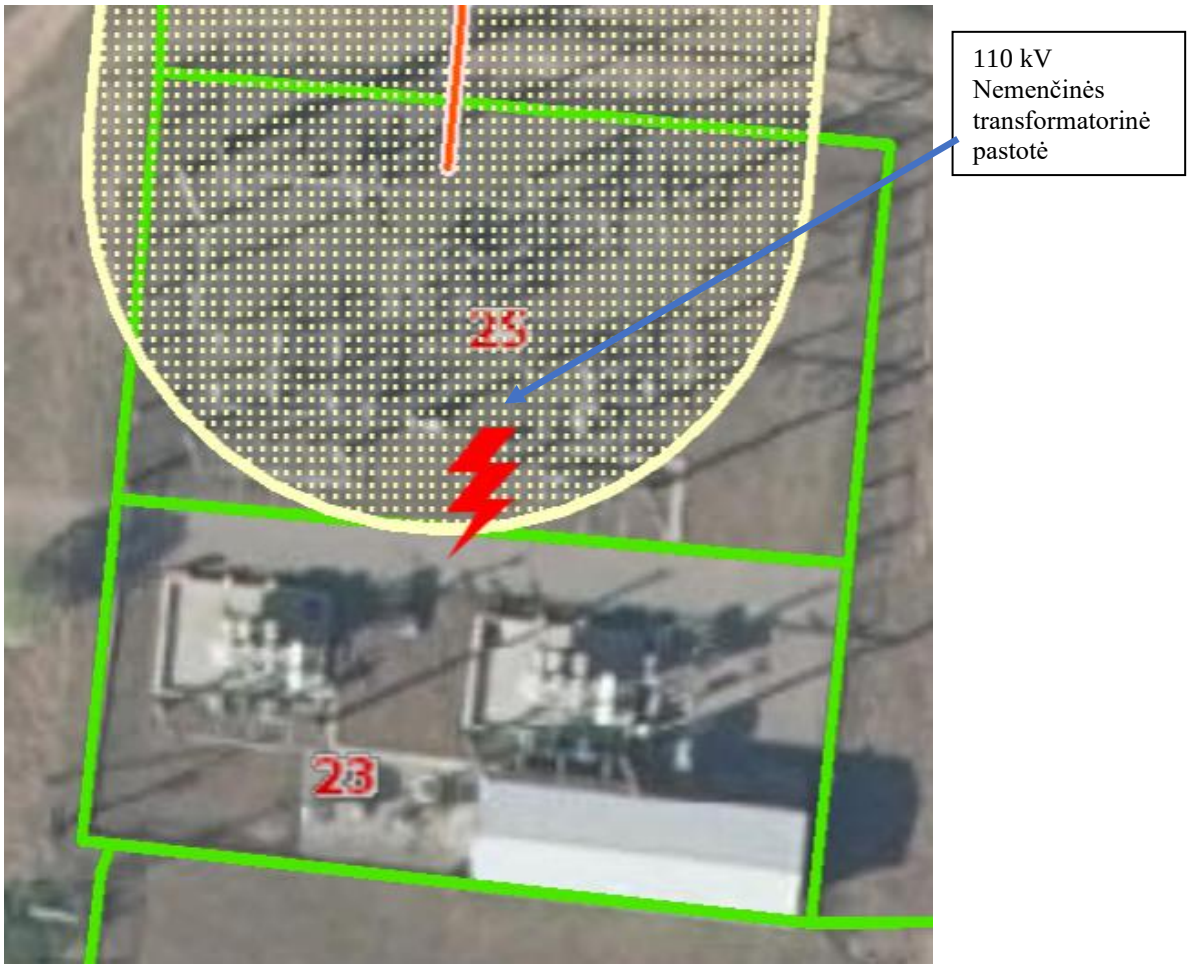
kanalai, portalai (taip pat ir transformatoriniai portalai) – išmontuojami ir utilizuojami, išskyrus įrenginius nurodytus bylos ED2201-XX-RTP-E-T1 3 Priede.



2 pav. Situacijos planas ir oro linijų fragmentas, duomenys iš www.regia.lt

1.3 Bendrieji pažintiniai duomenys apie statinį

Inžineriniai statiniai – inžineriniai tinklai – elektros tinklai (110 kV ir aukštesnės įtampos elektros perdavimo tinklai ir jų technologiniai priklausiniai) – ypatingasis statinys pagal STR 1.01.03:2017 „Statinių klasifikavimas“.

1.4 Apkrovos

Apkrovos į atvirosios skirstyklos (AS) įrenginių atramas priimamos pagal:

- LST EN 1991-1 „Eurokodas 1. Poveikiai konstrukcijoms“
- EĮĮBT – 2012 taisyklių reikalavimus;
- RSN 156 -94 „Statybinė klimatologija“;
- Elektrotechninės dalies išduotas užduotis.

Lentelė 1. Apkrovų lentelė

Eil. Nr.	Apkrovos pavadinimas	F, kN	q, kN/m^2	Pastaba
1.	**Nuolatinės apkrovos**			
1.1.	Konstrukcijų savasis svoris			
1.1.1.	Gelžbetonio savasis svoris	-	-	γ=25 kN/m^3
1.1.2.	Plienas	-	-	γ=78,50 kN/m^3
1.1.3.	Smėlis arba žvyras	-	-	γ=16,0-18,0 kN/m^3
2.	**Kintamos apkrovos**			

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Eil. Nr.	Apkrovos pavadinimas	F, kN	q, kN/m²	Pastaba
2.1.	Naudinga apkrova	-	2,5	
2.2.	Sniegas II-as raj.	-	1,6	
2.3.	Vėjas I-as raj. 24 m/s,	-	0,36	
2.4.	Apledėjimas III-as raj. RSN 156-94 (8.6 lentelė)			Priimta t = 11,2 mm

Lentelė 2. 110 kV AS dalies apkrovos

Eil. Nr.	Apkrovos pavadinimas	F, kN	Pastaba
3.	**Nuolatinės apkrovos**		
3.1.	Konstrukcijų savasis svoris	-	Pagal faktą
3.2.	Plieno aliuminio srovėlaidis 149-AL1/24-ST1A	-	0.60 kg/m
3.3.	Plieno aliuminio srovėlaidis 243-AL1/39-ST1A	-	0,87 kg/m
3.4.	Vamzdinės šynos Al Ø100/88A1	-	4.80 g/m

1.4.1. Nuolatinės apkrovos

Nuolatinėms apkrovoms priskiriama:

- Metalo konstrukcijų savasis svoris ir kitų medžiagų savieji svoriai:
- Įrenginių svoriai bei tvirtinimo armatūra;
- Laidų nuosavas svoris.

1.4.2. Kintamos apkrovos

Vėjo apkrova

Vėjo apkrova priskiriama prie kintamųjų laisvųjų poveikių. Pagal teritorinį paskirstymą statinys yra I-ame vėjo greičio rajone, kur vėjo greičio pagrindinė atskaitinė reikšmė priimama v_{ref0}=24 m/s.

Lentelė 3. Vėjo greičio pagrindinės atskaitinės reikšmės $v_{ref,0}$

Vėjo greičio rajonas	$v_{ref,0}$ m/s
I	24

Lentelė 4. Atskaitinis vėjo slėgis q_{ref}

Vėjo greičio rajonas	q_{ref} , kN/m²
I	0,36

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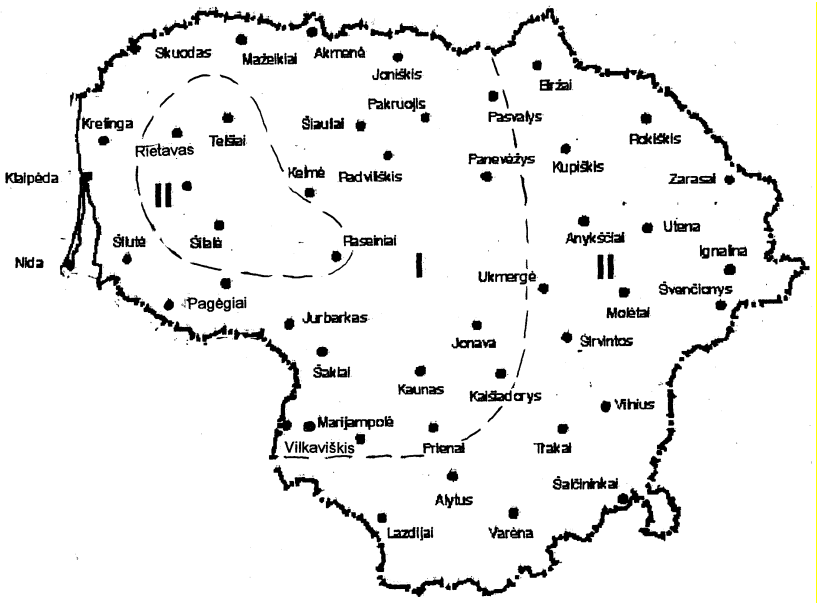
Pav. 1 Lietuvos vėjo apkrovos rajonai

Lentelė 5. Vėjo kategorijos ir vietovės parametrai pagal LST EN 1991-1-4:2005

Vietovės kategorija	Vietovės charakteristika	z_0, m	z_{min}, m
0	Atviri jūros ar jūros pakrančių ruožai	0,003	1,0
I	Ežerai ir plokšti horizontalūs ruožai su nežymia augalija ir be kliūčių	0,01	1,0
II	Mažai augmenijos; izoliuotos kliūtys atstumais bent 20 kartų didesniais už kliūčių aukštį	0,05	2,0
III	**Reguliari augmenija; priemiesčiai; kaimai;**	**0,3**	**5,0**
IV	Bent 15% paviršiaus užstatyta pastatais, kurių vidutinis aukštis bent 15 m	1,0	10,0

Sniego apkrova

Apkrova priskiriama prie kintamųjų laisvųjų poveikių. Pagal teritorinį paskirstymą statinys yra II-ame sniego rajone, kur sniego s_k antžeminės apkrovos charakteristinė reikšmė $s_k = 1,6$ kN/m^2.



Pav. 4 Lietuvos sniego apkrovos rajonai

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1.5 Apkrovų deriniai ir patikimumo daliniai koeficientai

Lentelė 6. Daliniai patikimumo koeficientai

Eil. Nr.	Apkrovos pavadinimas	Daliniai patikimumo koeficientas, $\gamma \cdot K_{Fi}$	
		Saugos ribinis būvis - SRB	**Trinkamumo ribinis būvis - TRB**
1.	**Nuolatinės apkrovos** - G_{kj}	1,35·1,0 $\gamma_{G,j} \cdot K_{Fi}$	1,0·1,0 $\gamma_{G,j} \cdot K_{Fi}$
1.1.	Konstrukcijų savieji svoriai		
1.2.	Įrenginiai, laidai, kt prietaisai.		
2.	**Kintamos apkrovos** - $Q_{k,i}$	1,3·1,0 $\gamma_{Q,1} \cdot K_{Fi}$	1,0·1,0 $\gamma_{Q,1} \cdot K_{Fi}$
2.1.	Vėjas		
2.2.	Apledėjimas		
2.3.	Laidų tempimai		

Lentelė 7. Koeficientų ψ reikšmės naudojamos derinių sudarymui pagal STR 2.05.04:2003

Poveikis	ψ_0	ψ_1	ψ_2
Statinių naudojimo apkrovos kategorija :			
E kategorija: saugyklų plotai	1,0	0,9	0,8
Statinių sniego apkrovos	0,7	0,5	0,2
Statinių vėjo apkrova	0,6	0,2	0
Temperatūra (ne gaisro) statiniuose	0,6	0,5	0

Lentelė 8. Daliniai apkrovų koeficientai (SRB ir TRB)

Fundamental combination (STR/GEO...	EN 1990: Annex A1 Table A1.2(B)
Permanent action - unfavorable	
Value	1,35
Permanent action - favorable	
Value	1,00
Leading variable action	
Value	1,30
Accompanying variable action	
Value	1,30
Reduction factor ksi	
Value	0,85

Tikrinami šie saugos ribinius būvius, kai tinka:

EQU: konstrukcijos arba jos dalies, traktuojamų standžiu kūnu, statinės pusiausvyros netekimas, kai vieno šaltinio poveikių sklaidos erdvėje maži pakitimai yra reikšmingi, o konstrukcijos medžiagų ar grunto stiprumai nesvarbūs;

STR: konstrukcijos arba laikančiųjų elementų vidinis irimas arba pernelyg didelės deformacijos, kai lemia statybinių medžiagų arba konstrukcijos stiprumas;

GEO: grunto irimas arba pernelyg didelės deformacijos, kai grunto arba uolienos stiprumai yra reikšmingi atsparumui.

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Lentelė 9. Derinių sudarymo principas BEM programoje – saugos ribiniam būviui ir tinkamumo ribiniam būviui

Skaičiuotinė poveikio reikšmė	Poveikio derinio išraiška
Saugos ribinis būvis - SRB	
EQU	$\sum_{j\geq 1}\gamma_{G,j}G_{k,j}"+"\gamma_{p}P"+"\gamma_{Q,1}Q_{k,1}"+"\sum_{i>1}\gamma_{Q,i}\psi_{0,i}Q_{k,i}$
STR/GEO	$\sum_{j\geq 1}\gamma_{G,j}G_{k,j}"+"\gamma_{p}P"+"\gamma_{Q,1}Q_{k,1}"+"\sum_{i>1}\gamma_{Q,i}\psi_{0,i}Q_{k,i}$
	$\begin{cases}\sum_{j\geq 1}\gamma_{G,j}G_{k,j}"+"\gamma_{p}P"+"\gamma_{Q,1}\psi_{0,1}Q_{k,1}"+"\sum_{i>1}\gamma_{Q,i}\psi_{0,i}Q_{k,i},\\ \sum_{j\geq 1}\xi_{j}\gamma_{G,j}G_{k,j}"+"\gamma_{p}P"+"\gamma_{Q,1}Q_{k,1}"+"\sum_{i>1}\gamma_{Q,i}\psi_{0,i}Q_{k,i};\end{cases}$ (1*)
Tinkamumo ribinis būvis - TRB	
Charakteristinis - negrįžtamiems ribiniams būviams	$\sum_{j\geq 1}G_{k,j}"+"P"+"Q_{k,1}"+"\sum_{i>1}\psi_{0,i}Q_{k,i}.$
Dažninis - grįžtamiesiems ribiniams būviams	$\sum_{j\geq 1}G_{k,j}"+"P"+"\psi_{1,1}Q_{k1}"+"\sum_{i>1}\psi_{2,i}Q_{k,i}.$
Tariamai nuolatinis - ilgalaikiams efektams ir konstrukcijos išvaizdai	$\sum_{j\geq 1}G_{k,j}"+"P"+\sum_{i>1}\psi_{2,i}Q_{ki}.$

(1*) - alternatyviai, STR ir GEO ribiniams būviams viena iš dviejų toliau pateiktų išraiškų, kuria gaunamas nepalankesnis rezultatas.

1.6 Inžinerinių geologinių tyrimų gylio parinkimo sąlygos

Pagal STR 2.05.21:2016 „Geotechninis projektavimas. Bendrieji reikalavimai“ parinkti IGG (inžineriniai, geologiniai ir geotechniniai tyrimai) atsižvelgiant į šiuos punktus:

„155. IGG tyrimų gylio nuo statinio žemiausio taško (jo pamato dugno, iškasos dugno ir pan.) (za) minimalios vertės yra apskaičiuojamos atsižvelgiant į statomo statinio ypatumus ir inžinerines geologines sąlygas:

155.1. kai statinio pamatas bus seklusis pamatas, tuomet IGG tyrimų gylis po pamatu (za) turi būti trys pamato pločiai, bet nemažiau kaip 6 m;

155.2. kai statinio pamatas bus plokštė, tuomet IGG tyrimų gylis po pamatu (za) turi būti nemažiau kaip pusantro plokštės pločio;

155.3. kai statinio pamatas bus poliai, tuomet IGG tyrimų gylis po polio padu (za), kai gruntas su gyliu stiprėja, turi būti trys polio skersmenys (DF), jei stiprėjimo tendencijos nėra ar silpnėja, tuomet ne mažiau kaip 5 m.“

1.7 Geologinės ir hidrogeologinės sąlygos

Geologinė sandara

Geologiniu požiūriu aikštelėje sutikti technogeniniai (t IV), aliuviniai (a III bl), fliuvioglacialiniai (f III bl0 bei glacialiniai (g III bl) dariniai. Augalinis sluoksnis (dirvožemis) padengęs visą teritoriją 0,2 – 0,3 m storio sluoksniu.

Technogeninius (t IV) gruntus iki 0,8 – 1,0 m gylio sudaro mažai dulkingas molingas vidutinio rupumo smėlis. Po juo vietomis nuo 0,8 – 1,0 m gylio išskirti aliuviniai (a III bl) vidutinio rupumo smėliai. Giliau, o vietomis po piltinio grunto sluoksniu suklostyti fliuvioglacialiniai žvyringi smėliai, vietomis mažai dulkingi molingi gerai išrūšiuoti žvyringi smėliai, vidutinio rupumo smėliai, vietomis tolygiai išrūšiuoti, mažai dulkingi molingi vidutinio rupumo smėliai. Nuo 10,7 – 11,3 m suklostyti glacialiniai (g III bl) smėlingi mažo plastiškumo moliai ir dulkiai, moreniniai.

Gruntų slūgsojimas detaliau pavaizduotas gręžinių stulpeliuose ir inžineriniuose geologiniuose pjūviuose.

Gruntų sudėtis ir inžineriniai geologiniai sluoksniai

Techninį gruntą (t IV) sudaro:

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IGS – 1 Purus – vidutinio tankumo, mažai dulkingas molingas vidutinio rupumo smėlis. Supiltas visuose gręžiniuose po 0,2 – 0,3 m storio dirvožemio sluoksniu, o sluoksnio padas pasiektas 0,8 – 1,0 m gylyje.

Aliuvinius (a III bl) darinius sudaro:

IGS – 2 Purus, vidutinio rupumo smėlis. Suklostytas tik gręžinių Gr. 1 ir 4 aplinkose nuo 0,8 – 1,0 m gylio, o sluoksnio padas pasiektas 1,5 -2,0 m gylyje.

Fliuvioglacialinius (f III bl) darinius sudaro:

IGS – 3 Vidutinio tankumo – tankus, vidutinio rupumo smėlis, mažai dulkingas molingas vidutinio rupumo smėlis, rečiau žvyringas smėlis. Suklostytas visame tirtame plote nuo 0,9 – 3,0 m gylio, o sluoksnio padas pasiektas 9,6 – 10,8 m gylyje.

IGS -4 Labai tankus – ypatingai tankus, žvyringas smėlis, mažai dulkingas molingas gerai išrūšiuotas žvyringas smėlis, rečiau vidutinio rupumo smėlis. Suklostytas visame tirtame plote nuo 2,5 – 3,5 m gylio, o sluoksnio padas pasiektas 10,7 – 11,3 m gylyje. Persisluoksniuoja su IGS – 3 smėliais.

Glacialinius (g III bl) darinius sudaro:

IGS – 5 Vidutinio stiprumo, smėlingas mažo plastiškumo molis ir dulkis, moreninis, tvirtas. Suklostytas visame tirtame plote nuo 10,7 – 11,3 m gylio, o sluoksnio padas gręžiniais iki 15,0 – 16,0 m nepasiektas.

Hidrogeologinės sąlygos

2022 metų balandžio mėnesį vykusių lauko darbų metu požeminis gruntinis vanduo sutiktas ištisai 7,80 – 8,0 m (109,91 – 110,46 m abs. a.) gylyje nuo esamo žemės paviršiaus. Vanduo talpinasi fliuvioglacialiniuose įvairiuose smėliuose. Vandeningo sluoksnio storis siekia 2,70 – 3,50 m. Vandenspara tarnauja moreninis smėlingas mažo plastiškumo molis ir dulkis. Vandenys maitinami kritulių vandenimis infiltraciniu būdu.

Lietingais laikotarpiais ir pavasarinio polaidžio metu gruntinio vandens lygis gali pakilti 0,5 - 1,0 m.

Vertinant vandens cheminės analizės rezultatus, vanduo yra kalcio hidrokarbonatinis. Vertinant laboratoriniais tyrimais nustatytas požeminio vandens rodiklių (SO_4, pH, CO_2, NH_4, Mg^{2+} ir t.t.) ribines vertes, nustatyta, kad vanduo neagresyvus betonui.

Statybos ir eksploatacijos metu reikia numatyti atitinkamas priemones pastato pamatų ir kąsinių apsaugai nuo paviršutinio vandens pritekėjimo.

Išvados ir rekomendacijos

1. Geomorfologiniu požiūriu tyrimų plotas yra paskutiniojo apledėjimo fliuvioglacialinių lygumų, Šiauryčių lygumos, Neries vidurupio slėnio terasuotoje atkarpoje.
2. Geologinį pjūvį sudaro technogeniniai (t IV), aliuviniai (a III bl), fliuvioglacialiniai (f III bl) bei glacialiniai (g III bl) dariniai. Augalinis sluoksnis (dirvožemis) padengęs visą teritroiją 0,2 – 0,3 m storio sluoksniu.
3. Atsižvelgiant į genetines formavimopsi sąlygas, litologinę sudėtį ir fizines mechanines savybes tyrimų plote išskirti 5 inžineriniai geologiniai sluoksniai. Viršutinėje dalyje, iki 0,8 -1,0 m supilti technogeniniai purūs – vidutinio tankumo (IGS – 1) mažai dulkingi molingi vidutinio rupumo smėliai. Giliau sutinkami purūs (IGS – 2) vidutinio rupumo smėliai, vidutinio tankumo – tankūs (IGS – 3) vidutinio rupumo smėliai, tolygiai išrūšiuoti vidutinio rupumo smėliai, mažai dulkingi molingi vidutinio rupumo smėliai, rečiau žvyringi smėliai, bei labai tankūs – ypatingai tankūs (IGS – 4) žvyringi smėliai, mažai dulkingi molingi gerai išrūšiuoti žvyringi smėliai, rečiau vidutinio rupumo smėliai. Po jais nuo 10,7 – 11,3 m gylio sutinkami vidutinio stiprumo (IGS – 5) smėlingi mažo plastiškumo moliai ir dulkiai, moreniniai.
4. Tyrimo metu tyrimų plote požeminis gruntinis vanduo sutiktas ištisai 7,80 – 8,0 m (109,91 – 110,46 m ab. A.) gylyje nuo esamo žemės paviršiaus.
5. Lietingais laikotarpiais ir pavasarinio polaidžio metu gruntinio vandens lygis gali pakilti 0,5 - 1,0 m.
6. Vertinant vandens cheminės analizės rezultatus, vanduo yra kalcio hidrokarbonatinis. Vertinant laboratoriniais tyrimais nustatytas požeminio vandens rodiklių (SO_4, pH, CO_2, NH_4, Mg^{2+} (detaliau LST EN 206-1)) ribines vertes, kad vanduo neagresyvus betonui.
7. Geotechniniu požiūriu pagal STR 1.04.02:2011 „Inžineriniai geologiniai ir geotechniniai tyrimai“ 1 priedą inžinerinės geologinės sąlygos yra paprastos. Inžinerinės geologinės sąlygos

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yra palankios statinio statybai.

8. Pamatų pagrindais nereikėtų naudoti technogeninių ir purių gruntų (IGS – 1, 2).
9. Atliktos IGG tyrimų apimtys ir metodika leidžia detaliai įvertinti tyrimų ploto inžinerinės geologinės sąlygas ir pagrindo parinkimą statinio pamatų parinkimui.

Lentelė 10. Pamatų projektavimui daliniai patikimumo koeficientai pagal LST EN 1997-1:2006

Pavadinimas	Žymuo	Rodiklių vertė	
		A1+M1+R2	A2+M2+R3
A grupė taikoma poveikiams ir poveikių efektams			
Nuolatiniai -nepalankūs	γ_G	1,35	1,0
Nuolatiniai -palankūs		1,0	1,0
Kintamieji-nepalankūs	γ_Q	1,3	1,3
Kintamieji-palankūs		0	0
M grupė – grunto rodikliams			
Vidinės trinties kampo tangentas (a)	$\gamma_{(tg\varphi')}$	1,0	1,25
Efektyvioji sankiba	$\gamma_{c'}$	1,0	1,25
Kerpamasis stipris nedrenuojant	γ_{cu}	1,0	1,4
Nevaržomas gniuždomasis stipris	γ_{qu}	1,0	1,4
Savitasis sunkis	γ_γ	1,0	1,0
R grupė – laikomosios galios vertėms			
Poliniams pamatams taikomi koeficientai			
Polio pado pagrindo laikomoji galia	γ_b	1,1	1,0
Polio pagrindo prie polio kamieno kerpamoji laikomoji galia	γ_s	1,1	1,0
Polio pagrindo suminė laikomoji galia	γ_t	1,1	1,0
Tempiamo polio pagrindo laikomoji galia	$\gamma_{s;t}$	1,15	1,0
Polio pado pagrindo laikomoji galia	γ_b	1,1	1,0
Polio pagrindo prie polio kamieno kerpamoji laikomoji galia	γ_s	1,1	1,0
Polio pagrindo suminė laikomoji galia	γ_t	1,1	1,0
Tempiamo polio pagrindo laikomoji galia	$\gamma_{s;t}$	1,15	1,1
a Šis koeficientas taikomas kampo tangentui (tgφ').			

1.8 Medžiagų daliniai koeficientai

Nuolatinės ir laikinosios projektavimo situacijos: betonas γ_c=1,5 , armatūros γ_s=1,15.

1.9 Patikimumas ir ilgaamžiškumas

Projektuojami k-jos priskiriamos RC2 patikimumo klasei bei CC1 pasekmių klasei. Poveikių koeficientas K_{FI} = 1,0.

Pagal patikimumą ir ilgaamžiškumą statinys priskiriamas S4 kategorijai pagal LST EN 1992-1-1 „Eurokodas 2. Gelžbetoninių konstrukcijų projektavimas“. Skaičiuotinis eksploatacinis laikotarpis – 50 m.

Plieno konstrukcijų ilgaamžiškumas užtikrinamas numatant plieno k-jų apsaugą – cinkuojant.

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Lentelė 11. Konstrukcijų ribiniai įlinkai ir poslinkiai

Konstrukcijų elementai	Keliamieji reikalavimai	Vertikalieji ribiniai įlinkiai, d_{lim}	Apkrovos vertikaliesiems įlinkiams apskaičiuoti
Sijos, santvaros, rėmo sijos, ilginiai, plokštės, paklotai (įskaitant plokščių ir paklotų skersines briaunas):			
denginių ir perdangų, atvirų apžvalgai, kai anga l, m: l = 3 l = 6	estetiniai-psichologiniai	 l/150 l/200	
Perdangų plokštės, laiptotakiai ir laiptų aikštelės, kurių įlinkiams netrukdo gretimi elementai	fiziologiniai	0,7 mm	1 kN koncentruota apkrova tarpatramio viduryje
Sąramos ir kabamieji sienų paneliai virš durų ir langų angų (rėmo sijos ir įstiklinimo sijos)	konstrukciniai	l/200	Sumažinančios tarpą tarp laikančiųjų elementų ir langų bei durų angų užpildymo, esančio po elementais
	estetiniai ir psichologiniai	Kaip ir 2a pozicijoje	

Lentelė 12. Karkasinių pastatų horizontalieji ribiniai poslinkiai, ribojami konstrukciniais reikalavimais

Pastatai, sienos ir pertvaros	Sienų ir pertvarų tvirtinimas prie pastato karkaso	Ribiniai poslinkiai, u_{lim}
3. Vienaaukščiai pastatai (su save laikančiomis sienomis), kai aukštis h_s, m: h_s = 15	paslankusis	h_s/200

Lentelė 13. Konstrukcijų ribiniai poslinkiai ir įlinkiai

Konstrukcijos apibudinimas	Atramų santykinės nuokrypos
1. Oro linijų atramos	Nuo 1/100 iki 1/500
2. Įrangos atramos	1/100

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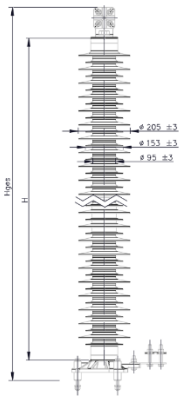
2. 110 KV AS ĮRENGINIŲ ATRAMŲ KONSTRUKCINIAI SPRENDINIAI

110 kV atvirosios skirstyklos plieninės konstrukcijos projektuojamos taip, kad jų pritaikomumas būtų galimas parinktiems vėjo ir sniego rajonams.

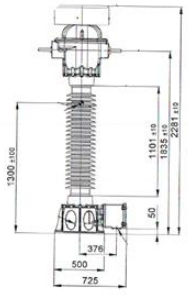
Lentelė 14. 110 kV AS naudojamų laidų vertikali apkrova

Įtampa, kV	Laido žymuo	Laido skersmuo, mm	Laido svoris, (kg/m); kN/m		G_{laid}, kN
110kV	149 AL1/24ST1A	17,1	(0,6)	~0,01	0,07
	243 AL1/39	21,8	(0,87)	~0,01	0,09
	Kieta al. šyna	Ø100x8	(4,784)	~0,05	0,45

Lentelė 15. 110 kV AS įrenginys – viršįtempių ribotuvas

Įrenginio pav.	Įrenginio eskizas	Techniniai parametrai		
Viršįtampis ribotuvas		Plotis,	m	≤ 0,24
		Aukštis,	m	≤ 1,65
		Plotas, b·h	m^2	0,396
		Svoris	kN	≤ 0,15
		Apledėjimas	kN	≤ 1,05
		Q_{lim}, kN	kN	3,0
		M_{lim}, kNm	kNm	4,5

Lentelė 16. 110 kV AS įrenginys – srovės transformatorius

Įrenginio pav.	Įrenginio eskizas	Techniniai parametrai		
Srovės transformatorius		Plotis, b	m	≤ 0,5
		Aukštis, h	m	≤ 2,11
		Plotas, b·h	m^2	≤ 1,25
		Svoris	kN	≤ 1,5
		Apledėjimas	kN	≤ 0,99
		Q_{lim}, kN	kN	3,0
		M_{lim}, kNm	kNm	6,0

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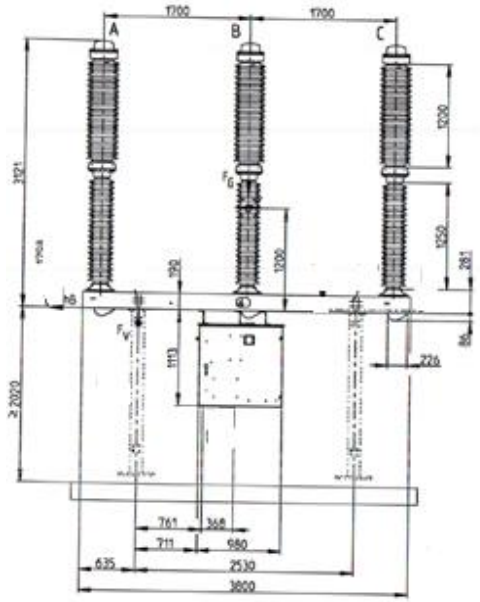
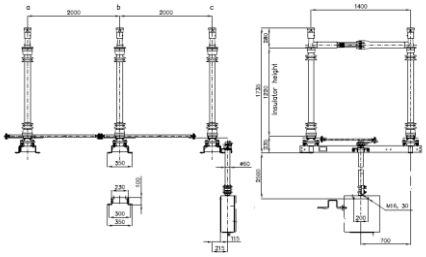
Lentelė 17. 110 kV AS įrenginys – jungtuvas

Įrenginio pav.	Įrenginio eskizas	Techniniai parametrai		
Jungtuvas		Plotis,	m	≤ 0,455
		Aukštis,	m	≤ 3,57
		Plotas, b·h	m^2	1,625
		Laidų pajungimo aukštis	m	2,1
		Svoris	kN	≤ 3·0,5=1,5
		Apledėjimas	kN	≤ 3,75
		Qlim	kN	3,5
		Mlim	kNm	5,5

Lentelė 18. 110 kV AS įrenginys – tripolis skyriklis

Įrenginio pav.	Įrenginio eskizas	Techniniai parametrai		
Tripolis skyriklis		Plotis,	m	≤ 0,24
		Aukštis,	m	≤ 1,68
		Plotas, b·h	m^2	≤ 1,92
		Svoris	kN	≤ 0,75
		Apledėjimas	kN	≤ 0,192
		Q_{lim}, kN	kN	2,5
		M_{lim}, kNm	kNm	5,0

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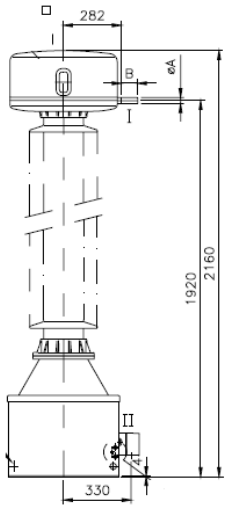
Lentelė 19. 110 kV AS įrenginys – įtampos transformatorius

Įrenginio pav.	Įrenginio eskizas	Techniniai parametrai		
Įtampos transformatorius		Plotis,	m	≤ 0,57
		Aukštis,	m	≤ 2,025
		Plotas, b·h	m^2	≤ 1,15
		Svoris	kN	≤ 1,5
		Apledėjimas	kN	≤ 1,05
		Q_{lim}, kN	kN	3,0
		M_{lim}, kNm	kNm	6,0

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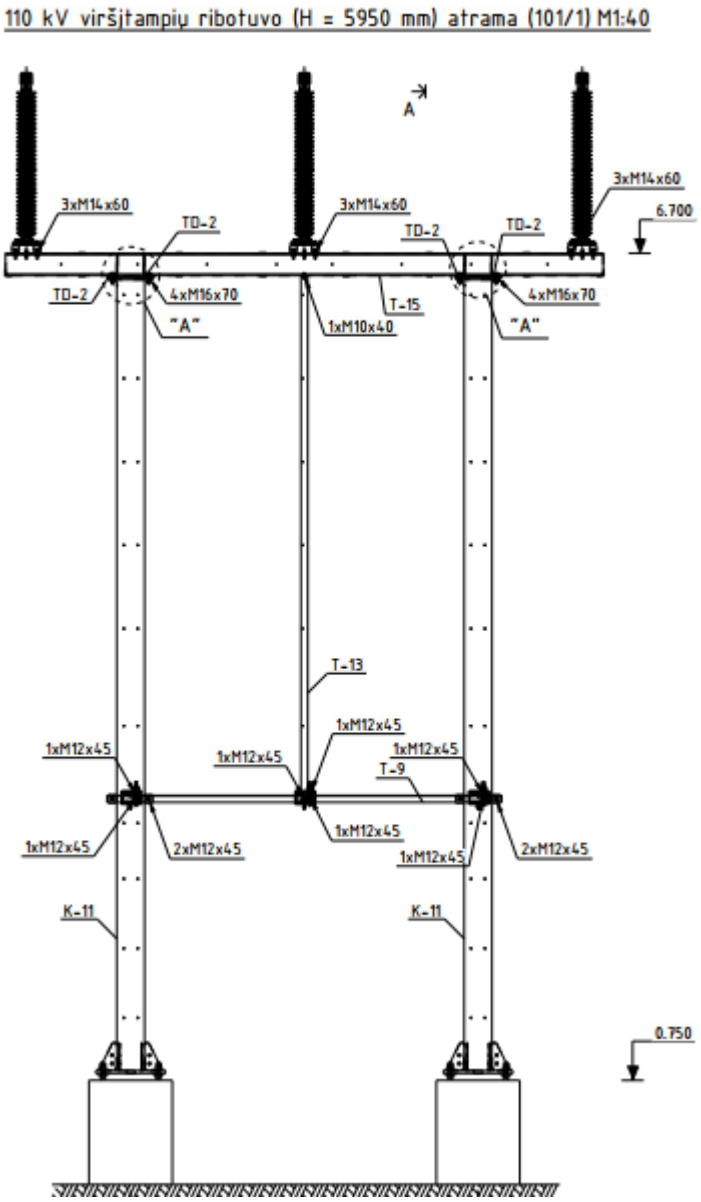
2.1. Viršįtempių ribotuvas (h = 5950 mm)



Pav. 5 Viršįtempių ribotuvo atrama

Viršįtempių ribotuvo atramą sudaro:

- Dvi vamzdinio profilio kolonos, rėmo plokštumoje standžiai sujungtos su pamatu per inkarinius varžtus;
- Sudvejinta traversa iš UPN profilių, kuri tarpusavyje sujungta standžiai IPE ar UPN tipo profiliais.
- Traversa su kolona, jungiama varžtais – standžiai.
- Laikančiųjų konstrukcijų plienas S235J2.

Lentelė 20. Atviros skirstomosios įrangos konstrukcijų ribiniai poslinkiai ir įlinkiai

Konstrukcijos apibudinimas ir nuokrypio kryptis	Atramų santykinės nuokrypos	Santykiniai traversų įlinkiai (tarpatramio -1 arba gembės ilgiui -2)			
		Vertikalieji		Horizontalieji	
		Tarpatramyje	Gembėje	Tarpatramyje	Gembėje
Atviros skirstomosios įrangos atramos išilgai laidų	1/100 5,95/100=0,06m	1/200 3/200=0,015	1/70 0,50/70=0,01	1/200 3/200=0,015	1/70 0,5/70=0,010
Atviros skirstomosios įrangos atramos skersai laidų	1/70 5,95/70=0,08m	n/a	n/a	n/a	n/a

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Pastabos:
1. Kai yra avariniai ir montažiniai režimai, atviros skirstomosios įrangos atramų ir oro linijų traversų atramų nuokrypiai nenormuojami.
2. Nuokrypiai ir įlinkiai, turi būti sumažinti, jei įrangos eksploatacijos techninės sąlygos numato griežtesnius apribojimus.

Viršįtempių ribotuvo atramą veikiančios nuolatinės ir kintamos apkrovos pateiktos žemiau esančioje lentelėje.

Lentelė 21. Viršįtempių ribotuvą veikiančios apkrovos

Įrenginio apkrovų pasiskirstymas					
Eil. Nr.	Apkrovos pavadinimas	F, kN	q, kN/m	Jėgos veikimo kryptis	Pastaba
1.	**Nuolatinės apkrovos**				
1.1.	Konstrukcijos savasis svoris	BEM	-	↓	γ=78,50 kN/m³
1.2.	Technologiniai įrenginiai	0,15	-	↓	-
1.3.	Laidų svoris	0,21	-	↓	-
2.	**Kintamos apkrovos**				
2.1.	*Vėjas x-x kryptimi*				
2.1.1.	Į koloną	-	0,074	→	X-X
2.1.2.	Į traversą	-	0,036	→	X-X
2.1.3.	Į technologinius įrenginius	-	0,11	→	X-X
2.1.4.	Nuo laidų	0,15	-	→	X-X
2.2.	*Vėjas y-y kryptimi*				
2.2.1.	Į koloną	-	0,074	→	Y-Y
2.2.2.	Į traversą	-	0,036	→	Y-Y
2.2.3.	Į technologinius įrenginius	-	0,11	→	Y-Y
2.2.4.	Nuo laidų	-	-	-	Vėjo kryptis išilgai laidų
2.3.	*Apšalas*				
2.3.1.	Nuo įrenginio	1,01		↓	Z-Z
2.3.2.	Nuo laidų	0,043		↓	Z-Z
2.4.	*Laidų išilginis tempimas*	1,5		→	X-X

Lentelė 22. Apkrovų eksplikacija

Apkrovos nr.	**Apkrovos žymuo**	**Apkrovos pavadinimas**
1	LC1	Savasis svoris
2	LC2	Įrenginių svoris
3	LC3	Laidų svoris
4	LC4	Vėjas X-X
5	LC5	Vėjas Y-Y
6	LC6	Apšalas
7	LC7	Laidų išilginis tempimas

1.3 Materials

Matl. No.	Modulus E [kN/cm²]	Modulus G [kN/cm²]	Poisson's Ratio n [-]	Spec. Weight g [kN/m³]	Coeff. of Th. Exp. a [1/°C]	Partial Factor g_M [-]	Material Model
1	Steel S 235 J2 | BDS EN 10025-2:2004-11						
	21000.00	8076.92	0.300	78.50	1.20E-05	1.00	Isotropic Linear Elastic

1.7 Nodal Supports

Support No.	Nodes No.	Axis System	Column in Z	Support Conditions u_X	u_Y	u_Z	j_X	j_Y	j_Z
1	1,2	Global X,Y,Z	-	x	x	x	x	x	x

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1.13 Cross-Sections

Section No.	Matl. No.	J [cm⁴] / A [cm²]	I_y [cm⁴] / A_y [cm²]	I_z [cm⁴] / A_z [cm²]	Principal Axes a [°]	Rotation a' [°]	Overall Dimensions [mm] Width b	Height h
1	QRO 200x5 | EN 10219-2:2006							
	1	14200.00	8707.00	8707.00	0.00	0.00	250.0	250.0
		92.60	40.52	40.52				
		59.40	29.63	29.63				
3	UPN 160 | ArcelorMittal (EN 10365:2017)							
	1	9.55	1350.00	114.00	0.00	0.00	70.0	180.0
		28.00	7.14	12.38				

1.17 Members

Mbr. No.	Line No.	Member	Rotation Type	Rotation b [°]	Cross-Section Start	Cross-Section End	Hinge No. Start	Hinge No. End	Ecc. No.	Div. No.	Length L [m]	
1	1	Beam	Angle	0.00	1	1	-	-	-	-	5.700	Z
2	2	Beam	Angle	0.00	1	1	-	-	-	-	5.700	Z
3	5	Beam	Angle	180.00	3	3	-	-	-	-	4.400	X
4	3	Beam	Angle	0.00	3	3	-	-	-	-	4.400	X
5	6	Beam	Angle	0.00	3	3	-	-	-	-	0.230	Y
6	14	Beam	Angle	0.00	3	3	-	-	-	-	0.230	Y
7	9	Beam	Angle	0.00	3	3	-	-	-	-	0.230	Y
8	15	Beam	Angle	0.00	3	3	-	-	-	-	0.230	Y
9	7	Beam	Angle	0.00	3	3	-	-	-	-	0.230	Y
10	8	Beam	Angle	0.00	3	3	-	-	-	-	0.230	Y
11	13	Beam	Angle	0.00	2	2	-	-	-	-	1.600	Z
12	12	Beam	Angle	0.00	2	2	-	-	-	-	1.600	Z
13	11	Beam	Angle	0.00	2	2	-	-	-	-	1.600	Z
14	18	Beam	Angle	0.00	3	3	-	-	-	-	0.230	Y

2.1 Load Cases

Load Case	Load Case Description	EN 1990 | LST Action Category	Self-Weight - Factor in Direction Active	X	Y	Z
LC1	Savasis svoris	Permanent	x	0.000	0.000	-1.000
LC2	Irenginiu svoris	Permanent	-			
LC3	Laidu svoris	Permanent	-			
LC4	Vejas X-X kryptimi	Wind	-			
LC5	Vejas Y-Y kryptimi	Wind	-			
LC6	Apsalas	Snow / ice	-			
LC7	Laidu isilginis tempimas	Temperature (non fire)	-			

2.1.1 Load Cases - Calculation Parameters

Load Case	Load Case Description	Calculation Parameters		
LC1	Savasis svoris	Method of analysis	: x	Geometrically linear analysis
		Method for solving system of nonlinear algebraic equations	: x	Newton-Raphson
		Activate stiffness factors of:	: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
LC2	Irenginiu svoris	Method of analysis	: x	Geometrically linear analysis
		Method for solving system of nonlinear algebraic equations	: x	Newton-Raphson
		Activate stiffness factors of:	: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
LC3	Laidu svoris	Method of analysis	: x	Geometrically linear analysis
		Method for solving system of nonlinear algebraic equations	: x	Newton-Raphson
		Activate stiffness factors of:	: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
LC4	Vejas X-X kryptimi	Method of analysis	: x	Geometrically linear analysis
		Method for solving system of nonlinear algebraic equations	: x	Newton-Raphson
		Activate stiffness factors of:	: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
LC5	Vejas Y-Y kryptimi	Method of analysis	: x	Geometrically linear analysis
		Method for solving system of nonlinear algebraic equations	: x	Newton-Raphson
		Activate stiffness factors of:	: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
LC6	Apsalas	Method of analysis	: x	Geometrically linear analysis

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2.1.1 Load Cases - Calculation Parameters

Load Case	Load Case Description	Calculation Parameters			
		Method for solving system of nonlinear algebraic equations	:	x	Newton-Raphson
		Activate stiffness factors of:	:	x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			:	x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
LC7	Laidu isilginis tempimas	Method of analysis	:	x	Geometrically linear analysis
		Method for solving system of nonlinear algebraic equations	:	x	Newton-Raphson
		Activate stiffness factors of:	:	x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			:	x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)

2.5 Load Combinations

Load Combin.	DS	Load Combination Description	No.	Factor	Load Case	
CO1	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
CO2	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC4	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	1.30	LC4	Vejas X-X kryptimi
CO3	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC5	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	1.30	LC5	Vejas Y-Y kryptimi
CO4	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC4 + 0.78*LC7	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	1.30	LC4	Vejas X-X kryptimi
			5	0.78	LC7	Laidu isilginis tempimas
CO5	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC5 + 0.78*LC7	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	1.30	LC5	Vejas Y-Y kryptimi
			5	0.78	LC7	Laidu isilginis tempimas
CO6	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC4 + 0.91*LC6 + 0.78*LC7	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	1.30	LC4	Vejas X-X kryptimi
			5	0.91	LC6	Apsalas
			6	0.78	LC7	Laidu isilginis tempimas
CO7	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC5 + 0.91*LC6 + 0.78*LC7	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	1.30	LC5	Vejas Y-Y kryptimi
			5	0.91	LC6	Apsalas
			6	0.78	LC7	Laidu isilginis tempimas
CO8	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC4 + 0.91*LC6	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	1.30	LC4	Vejas X-X kryptimi
			5	0.91	LC6	Apsalas
CO9	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC5 + 0.91*LC6	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	1.30	LC5	Vejas Y-Y kryptimi
			5	0.91	LC6	Apsalas
CO10	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC7	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	1.30	LC7	Laidu isilginis tempimas
CO11	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC4 + 1.3*LC7	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	0.78	LC4	Vejas X-X kryptimi
			5	1.30	LC7	Laidu isilginis tempimas

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7.5 Load Combinations

Load Combin.	DS	Load Combination Description	No.	Factor	Load Case	
CO12	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC5 + 1.3*LC7	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	0.78	LC5	Vejas Y-Y kryptimi
			5	1.30	LC7	Laidu isilginis tempimas
CO13	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC4 + 0.91*LC6 + 1.3*LC7	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	0.78	LC4	Vejas X-X kryptimi
			5	0.91	LC6	Apsalas
			6	1.30	LC7	Laidu isilginis tempimas
CO14	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC5 + 0.91*LC6 + 1.3*LC7	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	0.78	LC5	Vejas Y-Y kryptimi
			5	0.91	LC6	Apsalas
			6	1.30	LC7	Laidu isilginis tempimas
CO15	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.91*LC6 + 1.3*LC7	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	0.91	LC6	Apsalas
			5	1.30	LC7	Laidu isilginis tempimas
CO16	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC6	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	1.30	LC6	Apsalas
CO17	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC4 + 1.3*LC6	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	0.78	LC4	Vejas X-X kryptimi
			5	1.30	LC6	Apsalas
CO18	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC5 + 1.3*LC6	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	0.78	LC5	Vejas Y-Y kryptimi
			5	1.30	LC6	Apsalas
CO19	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC4 + 1.3*LC6 + 0.78*LC7	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	0.78	LC4	Vejas X-X kryptimi
			5	1.30	LC6	Apsalas
			6	0.78	LC7	Laidu isilginis tempimas
CO20	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC5 + 1.3*LC6 + 0.78*LC7	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	0.78	LC5	Vejas Y-Y kryptimi
			5	1.30	LC6	Apsalas
			6	0.78	LC7	Laidu isilginis tempimas
CO21	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC6 + 0.78*LC7	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	1.30	LC6	Apsalas
			5	0.78	LC7	Laidu isilginis tempimas
CO22	STR	LC1 + LC2 + LC3	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
CO23	STR	LC1 + LC2 + LC3 + 1.3*LC4	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.30	LC4	Vejas X-X kryptimi
CO24	STR	LC1 + LC2 + LC3 + 1.3*LC5	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.30	LC5	Vejas Y-Y kryptimi

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7.5 Load Combinations

Load Combin.	DS	Load Combination Description	No.	Factor	Load Case	
CO25	STR	LC1 + LC2 + LC3 + 1.3*LC4 + 0.78*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.30	LC4	Vejas X-X kryptimi
			5	0.78	LC7	Laidu isilginis tempimas
CO26	STR	LC1 + LC2 + LC3 + 1.3*LC5 + 0.78*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.30	LC5	Vejas Y-Y kryptimi
			5	0.78	LC7	Laidu isilginis tempimas
CO27	STR	LC1 + LC2 + LC3 + 1.3*LC4 + 0.91*LC6 + 0.78*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.30	LC4	Vejas X-X kryptimi
			5	0.91	LC6	Apsalas
			6	0.78	LC7	Laidu isilginis tempimas
CO28	STR	LC1 + LC2 + LC3 + 1.3*LC5 + 0.91*LC6 + 0.78*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.30	LC5	Vejas Y-Y kryptimi
			5	0.91	LC6	Apsalas
			6	0.78	LC7	Laidu isilginis tempimas
CO29	STR	LC1 + LC2 + LC3 + 1.3*LC4 + 0.91*LC6	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.30	LC4	Vejas X-X kryptimi
			5	0.91	LC6	Apsalas
CO30	STR	LC1 + LC2 + LC3 + 1.3*LC5 + 0.91*LC6	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.30	LC5	Vejas Y-Y kryptimi
			5	0.91	LC6	Apsalas
CO31	STR	LC1 + LC2 + LC3 + 1.3*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.30	LC7	Laidu isilginis tempimas
CO32	STR	LC1 + LC2 + LC3 + 0.78*LC4 + 1.3*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.78	LC4	Vejas X-X kryptimi
			5	1.30	LC7	Laidu isilginis tempimas
CO33	STR	LC1 + LC2 + LC3 + 0.78*LC5 + 1.3*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.78	LC5	Vejas Y-Y kryptimi
			5	1.30	LC7	Laidu isilginis tempimas
CO34	STR	LC1 + LC2 + LC3 + 0.78*LC4 + 0.91*LC6 + 1.3*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.78	LC4	Vejas X-X kryptimi
			5	0.91	LC6	Apsalas
			6	1.30	LC7	Laidu isilginis tempimas
CO35	STR	LC1 + LC2 + LC3 + 0.78*LC5 + 0.91*LC6 + 1.3*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.78	LC5	Vejas Y-Y kryptimi
			5	0.91	LC6	Apsalas
			6	1.30	LC7	Laidu isilginis tempimas
CO36	STR	LC1 + LC2 + LC3 + 0.91*LC6 + 1.3*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.91	LC6	Apsalas
			5	1.30	LC7	Laidu isilginis tempimas
CO37	STR	LC1 + LC2 + LC3 + 1.3*LC6	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.30	LC6	Apsalas

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.5 Load Combinations

Load Combin.	DS	Load Combination Description	No.	Factor	Load Case	
CO38	STR	LC1 + LC2 + LC3 + 0.78*LC4 + 1.3*LC6	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.78	LC4	Vejas X-X kryptimi
			5	1.30	LC6	Apsalas
CO39	STR	LC1 + LC2 + LC3 + 0.78*LC5 + 1.3*LC6	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.78	LC5	Vejas Y-Y kryptimi
			5	1.30	LC6	Apsalas
CO40	STR	LC1 + LC2 + LC3 + 0.78*LC4 + 1.3*LC6 + 0.78*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.78	LC4	Vejas X-X kryptimi
			5	1.30	LC6	Apsalas
			6	0.78	LC7	Laidu isilginis tempimas
CO41	STR	LC1 + LC2 + LC3 + 0.78*LC5 + 1.3*LC6 + 0.78*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.78	LC5	Vejas Y-Y kryptimi
			5	1.30	LC6	Apsalas
			6	0.78	LC7	Laidu isilginis tempimas
CO42	STR	LC1 + LC2 + LC3 + 1.3*LC6 + 0.78*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.30	LC6	Apsalas
			5	0.78	LC7	Laidu isilginis tempimas
CO43	S Ch	LC1 + LC2 + LC3	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
CO44	S Ch	LC1 + LC2 + LC3 + LC4	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.00	LC4	Vejas X-X kryptimi
CO45	S Ch	LC1 + LC2 + LC3 + LC5	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.00	LC5	Vejas Y-Y kryptimi
CO46	S Ch	LC1 + LC2 + LC3 + LC4 + 0.6*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.00	LC4	Vejas X-X kryptimi
			5	0.60	LC7	Laidu isilginis tempimas
CO47	S Ch	LC1 + LC2 + LC3 + LC5 + 0.6*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.00	LC5	Vejas Y-Y kryptimi
			5	0.60	LC7	Laidu isilginis tempimas
CO48	S Ch	LC1 + LC2 + LC3 + LC4 + 0.7*LC6 + 0.6*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.00	LC4	Vejas X-X kryptimi
			5	0.70	LC6	Apsalas
			6	0.60	LC7	Laidu isilginis tempimas
CO49	S Ch	LC1 + LC2 + LC3 + LC5 + 0.7*LC6 + 0.6*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.00	LC5	Vejas Y-Y kryptimi
			5	0.70	LC6	Apsalas
			6	0.60	LC7	Laidu isilginis tempimas
CO50	S Ch	LC1 + LC2 + LC3 + LC4 + 0.7*LC6	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.00	LC4	Vejas X-X kryptimi
			5	0.70	LC6	Apsalas
CO51	S Ch	LC1 + LC2 + LC3 + LC5 + 0.7*LC6	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris

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4.5 Load Combinations

Load Combin.	DS	Load Combination Description	No.	Factor	Load Case	
			3	1.00	LC3	Laidu svoris
			4	1.00	LC5	Vejas Y-Y kryptimi
			5	0.70	LC6	Apsalas
CO52	S Ch	LC1 + LC2 + LC3 + LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.00	LC7	Laidu isilginis tempimas
CO53	S Ch	LC1 + LC2 + LC3 + 0.6*LC4 + LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.60	LC4	Vejas X-X kryptimi
			5	1.00	LC7	Laidu isilginis tempimas
CO54	S Ch	LC1 + LC2 + LC3 + 0.6*LC5 + LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.60	LC5	Vejas Y-Y kryptimi
			5	1.00	LC7	Laidu isilginis tempimas
CO55	S Ch	LC1 + LC2 + LC3 + 0.6*LC4 + 0.7*LC6 + LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.60	LC4	Vejas X-X kryptimi
			5	0.70	LC6	Apsalas
			6	1.00	LC7	Laidu isilginis tempimas
CO56	S Ch	LC1 + LC2 + LC3 + 0.6*LC5 + 0.7*LC6 + LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.60	LC5	Vejas Y-Y kryptimi
			5	0.70	LC6	Apsalas
			6	1.00	LC7	Laidu isilginis tempimas
CO57	S Ch	LC1 + LC2 + LC3 + 0.7*LC6 + LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.70	LC6	Apsalas
			5	1.00	LC7	Laidu isilginis tempimas
CO58	S Ch	LC1 + LC2 + LC3 + LC6	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.00	LC6	Apsalas
CO59	S Ch	LC1 + LC2 + LC3 + 0.6*LC4 + LC6	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.60	LC4	Vejas X-X kryptimi
			5	1.00	LC6	Apsalas
CO60	S Ch	LC1 + LC2 + LC3 + 0.6*LC5 + LC6	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.60	LC5	Vejas Y-Y kryptimi
			5	1.00	LC6	Apsalas
CO61	S Ch	LC1 + LC2 + LC3 + 0.6*LC4 + LC6 + 0.6*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.60	LC4	Vejas X-X kryptimi
			5	1.00	LC6	Apsalas
			6	0.60	LC7	Laidu isilginis tempimas
CO62	S Ch	LC1 + LC2 + LC3 + 0.6*LC5 + LC6 + 0.6*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.60	LC5	Vejas Y-Y kryptimi
			5	1.00	LC6	Apsalas
			6	0.60	LC7	Laidu isilginis tempimas
CO63	S Ch	LC1 + LC2 + LC3 + LC6 + 0.6*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.00	LC6	Apsalas
			5	0.60	LC7	Laidu isilginis tempimas

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15.5.2 Load Combinations - Calculation Parameters

Load Combin.	Description	Calculation Parameters		
CO1	1.35*LC1 + 1.35*LC2 + 1.35*LC3	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO2	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC4	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO3	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC5	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO4	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC4 + 0.78*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO5	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC5 + 0.78*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO6	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC4 + 0.91*LC6 + 0.78*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)

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1.5.2 Load Combinations - Calculation Parameters

Load Combin.	Description	Calculation Parameters		
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO7	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC5 + 0.91*LC6 + 0.78*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
			x	Normal forces N
			x	Shear forces V_y and V_z
			x	Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO8	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC4 + 0.91*LC6	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
			x	Normal forces N
			x	Shear forces V_y and V_z
			x	Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO9	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC5 + 0.91*LC6	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
			x	Normal forces N
			x	Shear forces V_y and V_z
			x	Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO10	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
			x	Normal forces N
			x	Shear forces V_y and V_z
			x	Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO11	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC4 + 1.3*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
			x	Normal forces N
			x	Shear forces V_y and V_z
			x	Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO12	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC5 + 1.3*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
			x	Normal forces N
			x	Shear forces V_y and V_z
			x	Moments M_y, M_z and M_T

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5.2 Load Combinations - Calculation Parameters

Load Combin.	Description	Calculation Parameters		
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO13	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC4 + 0.91*LC6 + 1.3*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO14	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC5 + 0.91*LC6 + 1.3*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO15	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.91*LC6 + 1.3*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO16	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC6	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO17	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC4 + 1.3*LC6	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO18	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC5 + 1.3*LC6	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N

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15.5.2 Load Combinations - Calculation Parameters

Load Combin.	Description	Calculation Parameters
		x Shear forces V_y and V_z x Moments M_y, M_z and M_T Activate stiffness factors of: : x Materials (partial factor gM) : x Cross-sections (factor for J, I_y, I_z, A, A_y, A_z) : x Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO19	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC4 + 1.3*LC6 + 0.78*LC7	Method of analysis : x Second order analysis (P-Delta) Method for solving system of nonlinear algebraic equations : x Picard Options : x Consider favorable effects due to tension : x Refer internal forces to deformed system for: x Normal forces N x Shear forces V_y and V_z x Moments M_y, M_z and M_T Activate stiffness factors of: : x Materials (partial factor gM) : x Cross-sections (factor for J, I_y, I_z, A, A_y, A_z) : x Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO20	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC5 + 1.3*LC6 + 0.78*LC7	Method of analysis : x Second order analysis (P-Delta) Method for solving system of nonlinear algebraic equations : x Picard Options : x Consider favorable effects due to tension : x Refer internal forces to deformed system for: x Normal forces N x Shear forces V_y and V_z x Moments M_y, M_z and M_T Activate stiffness factors of: : x Materials (partial factor gM) : x Cross-sections (factor for J, I_y, I_z, A, A_y, A_z) : x Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO21	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC6 + 0.78*LC7	Method of analysis : x Second order analysis (P-Delta) Method for solving system of nonlinear algebraic equations : x Picard Options : x Consider favorable effects due to tension : x Refer internal forces to deformed system for: x Normal forces N x Shear forces V_y and V_z x Moments M_y, M_z and M_T Activate stiffness factors of: : x Materials (partial factor gM) : x Cross-sections (factor for J, I_y, I_z, A, A_y, A_z) : x Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO22	LC1 + LC2 + LC3	Method of analysis : x Second order analysis (P-Delta) Method for solving system of nonlinear algebraic equations : x Picard Options : x Consider favorable effects due to tension : x Refer internal forces to deformed system for: x Normal forces N x Shear forces V_y and V_z x Moments M_y, M_z and M_T Activate stiffness factors of: : x Materials (partial factor gM) : x Cross-sections (factor for J, I_y, I_z, A, A_y, A_z) : x Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO23	LC1 + LC2 + LC3 + 1.3*LC4	Method of analysis : x Second order analysis (P-Delta) Method for solving system of nonlinear algebraic equations : x Picard Options : x Consider favorable effects due to tension : x Refer internal forces to deformed system for: x Normal forces N x Shear forces V_y and V_z x Moments M_y, M_z and M_T Activate stiffness factors of: : x Materials (partial factor gM) : x Cross-sections (factor for J, I_y, I_z, A, A_y, A_z) : x Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO24	LC1 + LC2 + LC3 + 1.3*LC5	Method of analysis : x Second order analysis (P-Delta) Method for solving system of nonlinear algebraic equations : x Picard Options : x Consider favorable effects due to tension : x Refer internal forces to deformed system for: x Normal forces N

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5.2 Load Combinations - Calculation Parameters

Load Combin.	Description	Calculation Parameters
		x Shear forces V_y and V_z x Moments M_y, M_z and M_T Activate stiffness factors of: : x Materials (partial factor gM) : x Cross-sections (factor for J, I_y, I_z, A, A_y, A_z) : x Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO25	LC1 + LC2 + LC3 + 1.3*LC4 + 0.78*LC7	Method of analysis : x Second order analysis (P-Delta) Method for solving system of nonlinear algebraic equations : x Picard Options : x Consider favorable effects due to tension : x Refer internal forces to deformed system for: x Normal forces N x Shear forces V_y and V_z x Moments M_y, M_z and M_T Activate stiffness factors of: : x Materials (partial factor gM) : x Cross-sections (factor for J, I_y, I_z, A, A_y, A_z) : x Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO26	LC1 + LC2 + LC3 + 1.3*LC5 + 0.78*LC7	Method of analysis : x Second order analysis (P-Delta) Method for solving system of nonlinear algebraic equations : x Picard Options : x Consider favorable effects due to tension : x Refer internal forces to deformed system for: x Normal forces N x Shear forces V_y and V_z x Moments M_y, M_z and M_T Activate stiffness factors of: : x Materials (partial factor gM) : x Cross-sections (factor for J, I_y, I_z, A, A_y, A_z) : x Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO27	LC1 + LC2 + LC3 + 1.3*LC4 + 0.91*LC6 + 0.78*LC7	Method of analysis : x Second order analysis (P-Delta) Method for solving system of nonlinear algebraic equations : x Picard Options : x Consider favorable effects due to tension : x Refer internal forces to deformed system for: x Normal forces N x Shear forces V_y and V_z x Moments M_y, M_z and M_T Activate stiffness factors of: : x Materials (partial factor gM) : x Cross-sections (factor for J, I_y, I_z, A, A_y, A_z) : x Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO28	LC1 + LC2 + LC3 + 1.3*LC5 + 0.91*LC6 + 0.78*LC7	Method of analysis : x Second order analysis (P-Delta) Method for solving system of nonlinear algebraic equations : x Picard Options : x Consider favorable effects due to tension : x Refer internal forces to deformed system for: x Normal forces N x Shear forces V_y and V_z x Moments M_y, M_z and M_T Activate stiffness factors of: : x Materials (partial factor gM) : x Cross-sections (factor for J, I_y, I_z, A, A_y, A_z) : x Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO29	LC1 + LC2 + LC3 + 1.3*LC4 + 0.91*LC6	Method of analysis : x Second order analysis (P-Delta) Method for solving system of nonlinear algebraic equations : x Picard Options : x Consider favorable effects due to tension : x Refer internal forces to deformed system for: x Normal forces N x Shear forces V_y and V_z x Moments M_y, M_z and M_T Activate stiffness factors of: : x Materials (partial factor gM) : x Cross-sections (factor for J, I_y, I_z, A, A_y, A_z) : x Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO30	LC1 + LC2 + LC3 + 1.3*LC5 + 0.91*LC6	Method of analysis : x Second order analysis (P-Delta) Method for solving system of nonlinear algebraic equations : x Picard Options : x Consider favorable effects due to tension

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7.5.2 Load Combinations - Calculation Parameters

Load Combin.	Description	Calculation Parameters		
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO31	LC1 + LC2 + LC3 + 1.3*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO32	LC1 + LC2 + LC3 + 0.78*LC4 + 1.3*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO33	LC1 + LC2 + LC3 + 0.78*LC5 + 1.3*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO34	LC1 + LC2 + LC3 + 0.78*LC4 + 0.91*LC6 + 1.3*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO35	LC1 + LC2 + LC3 + 0.78*LC5 + 0.91*LC6 + 1.3*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO36	LC1 + LC2 + LC3 + 0.91*LC6 + 1.3*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard

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15.5.2 Load Combinations - Calculation Parameters

Load Combin.	Description	Calculation Parameters		
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO37	LC1 + LC2 + LC3 + 1.3*LC6	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO38	LC1 + LC2 + LC3 + 0.78*LC4 + 1.3*LC6	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO39	LC1 + LC2 + LC3 + 0.78*LC5 + 1.3*LC6	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO40	LC1 + LC2 + LC3 + 0.78*LC4 + 1.3*LC6 + 0.78*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO41	LC1 + LC2 + LC3 + 0.78*LC5 + 1.3*LC6 + 0.78*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO42	LC1 + LC2 + LC3 + 1.3*LC6 + 0.78*LC7	Method of analysis	: x	Second order analysis (P-Delta)

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7.5.2 Load Combinations - Calculation Parameters

Load Combin.	Description	Calculation Parameters		
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO43	LC1 + LC2 + LC3	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO44	LC1 + LC2 + LC3 + LC4	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO45	LC1 + LC2 + LC3 + LC5	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO46	LC1 + LC2 + LC3 + LC4 + 0.6*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO47	LC1 + LC2 + LC3 + LC5 + 0.6*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO48	LC1 + LC2 + LC3 + LC4 + 0.7*LC6 + 0.6*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard

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15.5.2 Load Combinations - Calculation Parameters

Load Combin.	Description	Calculation Parameters		
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO49	LC1 + LC2 + LC3 + LC5 + 0.7*LC6 + 0.6*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO50	LC1 + LC2 + LC3 + LC4 + 0.7*LC6	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO51	LC1 + LC2 + LC3 + LC5 + 0.7*LC6	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO52	LC1 + LC2 + LC3 + LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO53	LC1 + LC2 + LC3 + 0.6*LC4 + LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO54	LC1 + LC2 + LC3 + 0.6*LC5 + LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:

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15.5.2 Load Combinations - Calculation Parameters

Load Combin.	Description	Calculation Parameters		
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO55	LC1 + LC2 + LC3 + 0.6*LC4 + 0.7*LC6 + LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO56	LC1 + LC2 + LC3 + 0.6*LC5 + 0.7*LC6 + LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO57	LC1 + LC2 + LC3 + 0.7*LC6 + LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO58	LC1 + LC2 + LC3 + LC6	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO59	LC1 + LC2 + LC3 + 0.6*LC4 + LC6	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO60	LC1 + LC2 + LC3 + 0.6*LC5 + LC6	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N

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2.5.2 Load Combinations - Calculation Parameters

Load Combin.	Description	Calculation Parameters
		x Shear forces V_y and V_z x Moments M_y, M_z and M_T Activate stiffness factors of: : x Materials (partial factor gM) : x Cross-sections (factor for J, I_y, I_z, A, A_y, A_z) : x Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO61	LC1 + LC2 + LC3 + 0.6*LC4 + LC6 + 0.6*LC7	Method of analysis : x Second order analysis (P-Delta) Method for solving system of nonlinear algebraic equations : x Picard Options : x Consider favorable effects due to tension : x Refer internal forces to deformed system for: x Normal forces N x Shear forces V_y and V_z x Moments M_y, M_z and M_T Activate stiffness factors of: : x Materials (partial factor gM) : x Cross-sections (factor for J, I_y, I_z, A, A_y, A_z) : x Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO62	LC1 + LC2 + LC3 + 0.6*LC5 + LC6 + 0.6*LC7	Method of analysis : x Second order analysis (P-Delta) Method for solving system of nonlinear algebraic equations : x Picard Options : x Consider favorable effects due to tension : x Refer internal forces to deformed system for: x Normal forces N x Shear forces V_y and V_z x Moments M_y, M_z and M_T Activate stiffness factors of: : x Materials (partial factor gM) : x Cross-sections (factor for J, I_y, I_z, A, A_y, A_z) : x Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO63	LC1 + LC2 + LC3 + LC6 + 0.6*LC7	Method of analysis : x Second order analysis (P-Delta) Method for solving system of nonlinear algebraic equations : x Picard Options : x Consider favorable effects due to tension : x Refer internal forces to deformed system for: x Normal forces N x Shear forces V_y and V_z x Moments M_y, M_z and M_T Activate stiffness factors of: : x Materials (partial factor gM) : x Cross-sections (factor for J, I_y, I_z, A, A_y, A_z) : x Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)

2.7 Result Combinations

Result Combin	Description	Loading
RC1	ULS (STR/GEO) - Permanent / transient - Eq. 6.10	CO1/p or to CO42
RC2	SLS - Characteristic	CO43/p or to CO63

LC2
Irenginiu svoris

3.1 Nodal Loads - By Components - Coordinate System

LC2: Irenginiu svoris

No.	On Nodes No.	Coordinate System	Force [kN] P_X / P_U	P_Y / P_V	P_Z / P_W	Moment [kNm] M_X / M_U	M_Y / M_V	M_Z / M_W
1	14,17,19	0 | Global XYZ	0.000	0.000	-0.490	0.000	0.000	0.000

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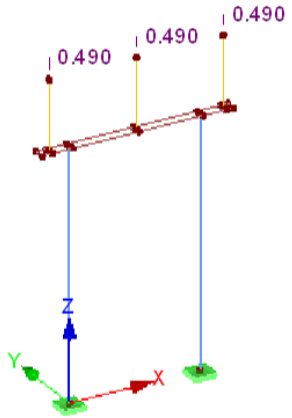
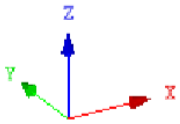
LC2 : Irenginiu svoris
Loads [kN]





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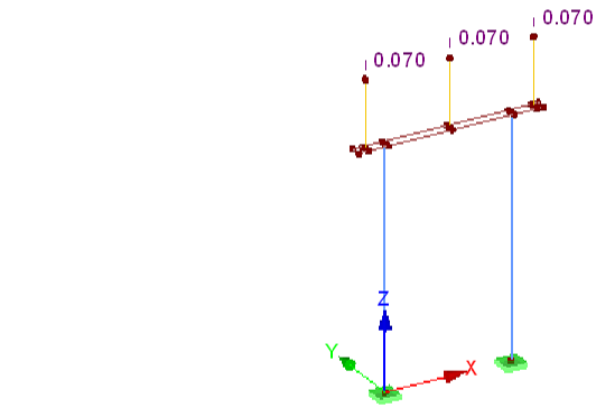
3.1 Nodal Loads - By Components - Coordinate System

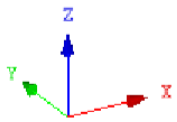
No.	On Nodes No.	Coordinate System	Force [kN] P_X / P_U	P_Y / P_V	P_Z / P_W	Moment [kNm] M_X / M_U	M_Y / M_V	M_Z / M_W
1	14,17,19	0 | Global XYZ	0.000	0.000	-0.070	0.000	0.000	0.000

LC3: Laidu svoris

LC3 : Laidu svoris
Loads [kN]

Isometric





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3.2 Member Loads

LC4: Vejas X-X kryptimi

No.	Reference to	On Members No.	Load Type	Load Distribution	Load Direction	Reference Length	Load Parameters Symbol	Value	Unit
1	Members	1,2	Force	Uniform	z	True Length	p	0.120	kN/m
2	Members	5	Force	Uniform	y	True Length	p	0.090	kN/m
3	Members	13	Force	Uniform	z	True Length	p	-0.130	kN/m
4	Members	11	Force	Uniform	z	True Length	p	-0.130	kN/m
5	Members	12	Force	Uniform	z	True Length	p	-0.130	kN/m

3.2/1 Member Loads - Load Eccentricity

LC4: Vejas X-X kryptimi

No.	Reference to	On Members No.	Absolute Offset Mbr. Start e_Y [mm]	Absolute Offset Mbr. Start e_Z [mm]	Absolute Offset Mbr. End e_Y [mm]	Absolute Offset Mbr. End e_Z [mm]	Relative Offset Mbr. Start y-Axis	Relative Offset Mbr. Start z-Axis	Relative Offset Mbr. End y-Axis	Relative Offset Mbr. End z-Axis
1	Members	1,2	0.0	0.0	0.0	0.0	Middle	Middle	Middle	Middle
2	Members	5	0.0	0.0	0.0	0.0	Middle	Middle	Middle	Middle
3	Members	13	0.0	0.0	0.0	0.0	Middle	Middle	Middle	Middle
4	Members	11	0.0	0.0	0.0	0.0	Middle	Middle	Middle	Middle
5	Members	12	0.0	0.0	0.0	0.0	Middle	Middle	Middle	Middle

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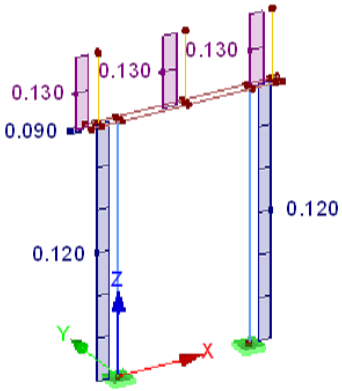
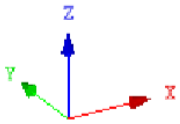
LC4 : Vejas X-X kryptimi
Loads [kN/m]





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3.2 Member Loads

No.	Reference to	On Members No.	Load Type	Load Distribution	Load Direction	Reference Length	Load Parameters Symbol	Value	Unit
1	Members	11-13	Force	Uniform	y	True Length	p	0.130	kN/m
2	Members	4	Force	Uniform	y	True Length	p	-0.090	kN/m
3	Members	1,2	Force	Uniform	y	True Length	p	0.120	kN/m

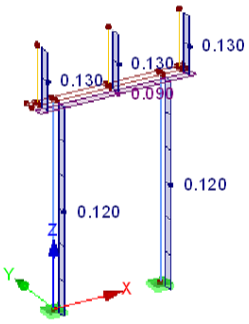
3.2/1 Member Loads - Load Eccentricity

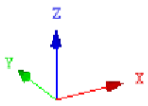
No.	Reference to	On Members No.	Absolute Offset Mbr. Start e_Y [mm]	Absolute Offset Mbr. Start e_Z [mm]	Absolute Offset Mbr. End e_Y [mm]	Absolute Offset Mbr. End e_Z [mm]	Relative Offset Mbr. Start y-Axis	Relative Offset Mbr. Start z-Axis	Relative Offset Mbr. End y-Axis	Relative Offset Mbr. End z-Axis
1	Members	11-13	0.0	0.0	0.0	0.0	Middle	Middle	Middle	Middle
2	Members	4	0.0	0.0	0.0	0.0	Middle	Middle	Middle	Middle
3	Members	1,2	0.0	0.0	0.0	0.0	Middle	Middle	Middle	Middle

LC5: Vejas Y-Y kryptimi

LC5 : Vejas Y-Y kryptimi
Loads [kN/m]

Isometric





LC6

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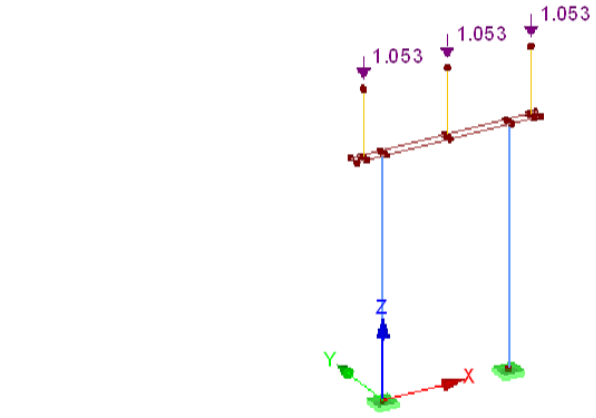
3.1 Nodal Loads - By Components - Coordinate System

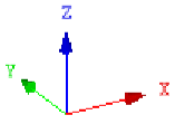
No.	On Nodes No.	Coordinate System	Force [kN] P_X / P_U	P_Y / P_V	P_Z / P_W	Moment [kNm] M_X / M_U	M_Y / M_V	M_Z / M_W
2	14,17,19	0 | Global XYZ	0.000	0.000	-1.053	0.000	0.000	0.000

LC6: Apsalas

LC6 : Apsalas
Loads [kN]

Isometric





LC7
Laidu isilginis tempimas

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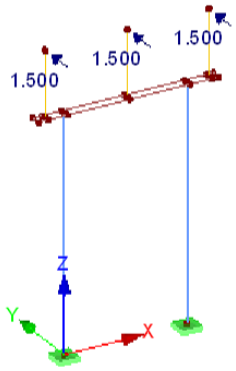
5.1 Nodal Loads - By Components - Coordinate System

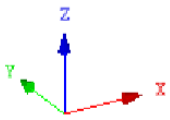
No.	On Nodes No.	Coordinate System	Force [kN] P_X / P_U	P_Y / P_V	P_Z / P_W	Moment [kNm] M_X / M_U	M_Y / M_V	M_Z / M_W
1	14,17,19	0 | Global XYZ	0.000	1.500	0.000	0.000	0.000	0.000

LC7: Laidu isilginis tempimas

LC7 : Laidu isilginis tempimas
Loads [kN]

Isometric





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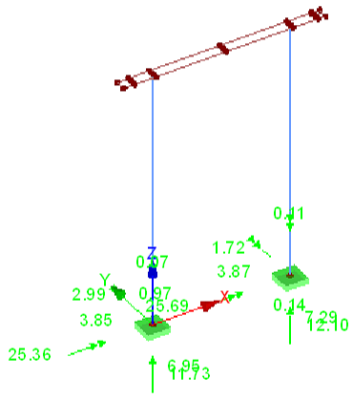
7.1 Nodes - Support Forces

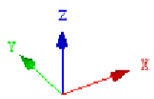
Node No.	RC		Support Forces [kN] P_X	P_Y	P_Z	Support Moments [kNm] M_X	M_Y	M_Z	
1	RC1	Max	0.97	3.85	-6.95	0.00	2.99	0.07	
									ULS (STR/GEO) - Permanent / transient - Eq. 6.10
		Min	0.00	0.00	-11.73	-25.36	0.00	0.00	
									ULS (STR/GEO) - Permanent / transient - Eq. 6.10
	RC2	Max	0.75	2.96	-7.01	0.00	2.30	0.05	SLS - Characteristic
		Min	0.00	0.00	-8.75	-19.47	0.00	0.00	SLS - Characteristic
2	RC1	Max	0.00	3.87	-7.29	0.00	1.72	0.11	
									ULS (STR/GEO) - Permanent / transient - Eq. 6.10
		Min	-0.14	0.00	-12.10	-25.69	0.00	0.00	
									ULS (STR/GEO) - Permanent / transient - Eq. 6.10
	RC2	Max	0.00	2.97	-7.29	0.00	1.32	0.09	SLS - Characteristic
		Min	-0.10	0.00	-9.02	-19.72	0.00	0.00	SLS - Characteristic

Support Reactions

RC1 : ULS (STR/GEO) - Permanent / transient - Eq. 6.10
Support Reactions[kN], [kNm]
Result Combinations: Max and Min Values

Isometric





Max P-X': 0.97, Min P-X': -0.14 kN
Max P-Y': 3.87, Min P-Y': 0.00 kN
Max P-Z': -6.95, Min P-Z': -12.10 kN
Max M-X': 0.00, Min M-X': -25.69 kNm
Max M-Y': 2.99, Min M-Y': 0.00 kNm
Max M-Z': 0.11, Min M-Z': 0.00 kNm

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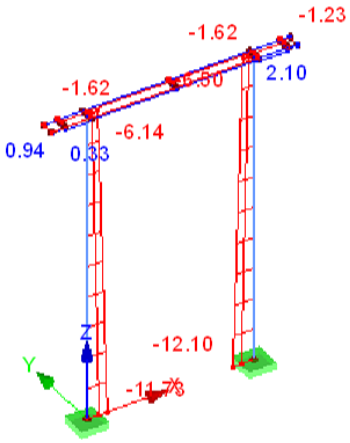
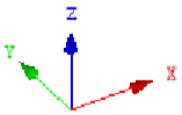
RC1 : ULS (STR/GEO) - Permanent / transient - Eq. 6.10
Internal Forces N
Result Combinations: Max and Min Values





Max N: 2.10, Min N: -12.10 [kN]

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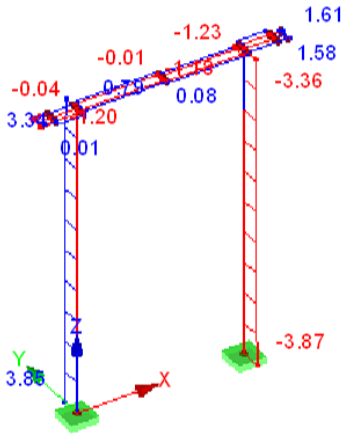
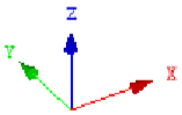
RC1 : ULS (STR/GEO) - Permanent / transient - Eq. 6.10
Internal Forces V-y
Result Combinations: Max and Min Values





Max V-y: 3.85, Min V-y: -3.87 [kN]

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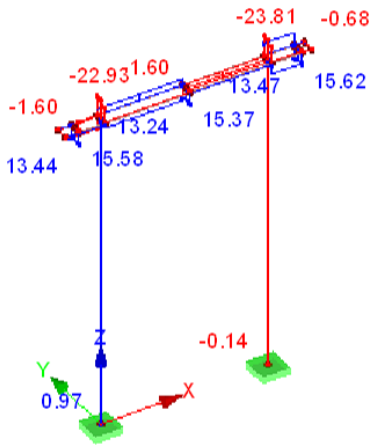
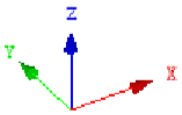
RC1 : ULS (STR/GEO) - Permanent / transient - Eq. 6.10
Internal Forces V-z
Result Combinations: Max and Min Values





Max V-z: 15.62, Min V-z: -23.81 [kN]

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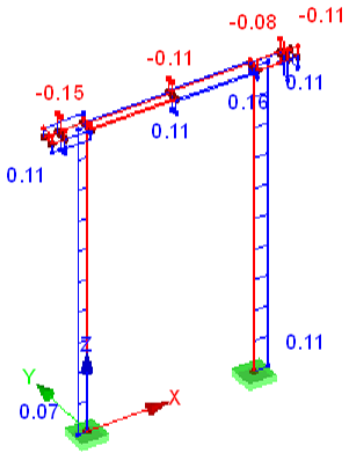
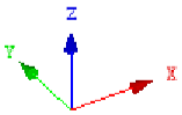
RC1 : ULS (STR/GEO) - Permanent / transient - Eq. 6.10
Internal Forces M-T
Result Combinations: Max and Min Values





Max M-T: 0.16, Min M-T: -0.15 [kNm]

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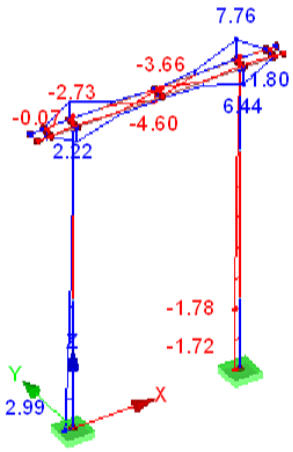
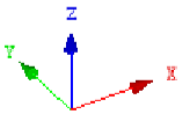
ernal forces My

RC1 : ULS (STR/GEO) - Permanent / transient - Eq. 6.10
Internal Forces M-y
Result Combinations: Max and Min Values





Max M-y: 7.76, Min M-y: -4.60 [kNm]

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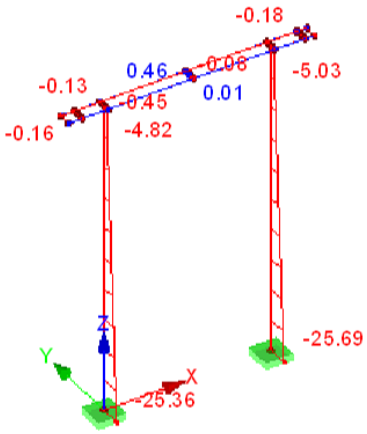
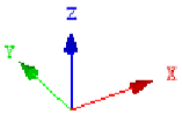
RC1 : ULS (STR/GEO) - Permanent / transient - Eq. 6.10
Internal Forces M-z
Result Combinations: Max and Min Values





Max M-z: 0.46, Min M-z: -25.69 [kNm]

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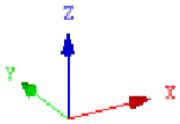
LC7 : Laidu isilginis tempimas
Global Deformations u-Y [mm]



Factor of deformations: 36.00
Max u-Y: 11.3, Min u-Y: 0.0 mm

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2.12 Parameters - Members

Member No.	Description	Parameter
1	Cross-Section	1 - QRO 250x10 | EN 10219-2:2006
	Shear panel	-
	Rotational restraint	-
	Cross-sectional area for tension design	-
2	Cross-Section	1 - QRO 250x10 | EN 10219-2:2006
	Shear panel	-
	Rotational restraint	-
	Cross-sectional area for tension design	-
3	Cross-Section	3 - UPN 180 | ArcelorMittal (EN 10365:2017)
	Shear panel	-
	Rotational restraint	-
	Cross-sectional area for tension design	-
4	Cross-Section	3 - UPN 180 | ArcelorMittal (EN 10365:2017)
	Shear panel	-
	Rotational restraint	-
	Cross-sectional area for tension design	-
5	Cross-Section	3 - UPN 180 | ArcelorMittal (EN 10365:2017)
	Shear panel	-
	Rotational restraint	-
	Cross-sectional area for tension design	-
6	Cross-Section	3 - UPN 180 | ArcelorMittal (EN 10365:2017)
	Shear panel	-
	Rotational restraint	-
	Cross-sectional area for tension design	-
7	Cross-Section	3 - UPN 180 | ArcelorMittal (EN 10365:2017)
	Shear panel	-
	Rotational restraint	-
	Cross-sectional area for tension design	-
8	Cross-Section	3 - UPN 180 | ArcelorMittal (EN 10365:2017)
	Shear panel	-
	Rotational restraint	-
	Cross-sectional area for tension design	-
9	Cross-Section	3 - UPN 180 | ArcelorMittal (EN 10365:2017)
	Shear panel	-
	Rotational restraint	-
	Cross-sectional area for tension design	-

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5 Design by cross-sections

Section No.	Member No.	Location x [m]	Load-ing	Design Ratio		Design According to Formula
1	QRO 200x5 | EN 10219-2:2006					
	1	0.000	CO37	0.00	£ 1	CS100) Negligible internal forces
	2	0.000	CO19	0.00	£ 1	CS102) Cross-section check - Compression acc. to 6.2.4
	1	5.700	LC4	0.01	£ 1	CS111) Cross-section check - Bending about y-axis acc. to 6.2.5 - Class 1 or 2
	2	0.000	LC7	0.07	£ 1	CS116) Cross-section check - Bending about z-axis acc. to 6.2.5 - Class 1 or 2
	2	0.000	CO33	0.01	£ 1	CS123) Cross-section check - Shear force in y-axis acc. to 6.2.6
	1	5.700	LC4	0.01	£ 1	CS141) Cross-section check - Bending and shear force acc. to 6.2.5 and 6.2.8
	2	0.000	LC7	0.07	£ 1	CS151) Cross-section check - Bending about z-axis and shear force acc. to 6.2.5 and 6.2.8
	1	2.850	CO32	0.01	£ 1	CS161) Cross-section check - Biaxial bending and shear force acc. to 6.2.6, 6.2.7 and 6.2.9
	1	5.700	CO8	0.01	£ 1	CS181) Cross-section check - Bending, shear and axial force acc. to 6.2.9.1
	2	0.000	CO14	0.11	£ 1	CS201) Cross-section check - Bending about z-axis, shear and axial force acc. to 6.2.9.1
	2	0.000	CO13	0.02	£ 1	CS221) Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9
3	UPN 160 | ArcelorMittal (EN 10365:2017)					
	3	4.166	CO39	0.00	£ 1	CS100) Negligible internal forces
	4	0.166	CO33	0.00	£ 1	CS101) Cross-section check - Tension acc. to 6.2.3
	3	0.700	CO33	0.00	£ 1	CS102) Cross-section check - Compression acc. to 6.2.4
	7	0.115	CO57	0.05	£ 1	CS111) Cross-section check - Bending about y-axis acc. to 6.2.5 - Class 1 or 2
	6	0.000	CO33	0.01	£ 1	CS116) Cross-section check - Bending about z-axis acc. to 6.2.5 - Class 1 or 2
	9	0.115	CO14	0.10	£ 1	CS121) Cross-section check - Shear force in z-axis acc. to 6.2.6
	6	0.000	CO33	0.01	£ 1	CS123) Cross-section check - Shear force in y-axis acc. to 6.2.6
	3	0.000	LC7	0.00	£ 1	CS126) Cross-section check - Shear buckling acc. to 6.2.6(6)
	6	0.115	CO6	0.11	£ 1	CS131) Cross-section check - Torsion acc. to 6.2.7
	6	0.000	CO14	0.07	£ 1	CS132) Cross-section check - Torsion and shear force acc. to 6.2.7(9)
	6	0.230	CO33	0.01	£ 1	CS137) Cross-section check - Torsion and shear force acc. to 6.2.7(9)
	7	0.115	CO57	0.05	£ 1	CS141) Cross-section check - Bending and shear force acc. to 6.2.5 and 6.2.8
	6	0.115	CO14	0.04	£ 1	CS146) Cross-section check - Bending, shear force and torsion acc. to 6.2.5 to 6.2.8
	6	0.000	CO33	0.01	£ 1	CS151) Cross-section check - Bending about z-axis and shear force acc. to 6.2.5 and 6.2.8
	6	0.000	CO14	0.01	£ 1	CS156) Cross-section check - Bending about z-axis, shear force and torsion acc. to 6.2.5 to 6.2.8
	3	0.700	CO14	0.21	£ 1	CS161) Cross-section check - Biaxial bending and shear force acc. to 6.2.6, 6.2.7 and 6.2.9
	4	3.700	CO32	0.14	£ 1	CS166) Cross-section check - Biaxial bending, shear force and torsion acc. to 6.2.5 to 6.2.8
	7	0.000	CO13	0.01	£ 1	CS201) Cross-section check - Bending about z-axis, shear and axial force acc. to 6.2.9.1
	3	0.700	CO56	0.16	£ 1	CS221) Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9
	3	0.700	CO14	0.21	£ 1	CS226) Cross-section check - Biaxial bending, shear, torsion and axial force acc. to 6.2.10 and 6.2.9
	3	0.700	CO14	0.26	£ 1	CS271) Cross-section check - Axial stress and torsion - Elastic design
	3	0.700	CO14	0.53	£ 1	ST333) Stability analysis - Lateral torsional buckling acc. to 6.3.2.1 and 6.3.2.2 - General Section

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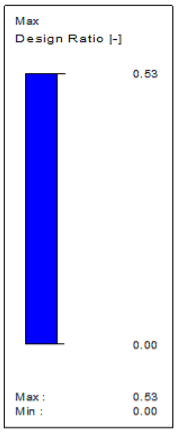
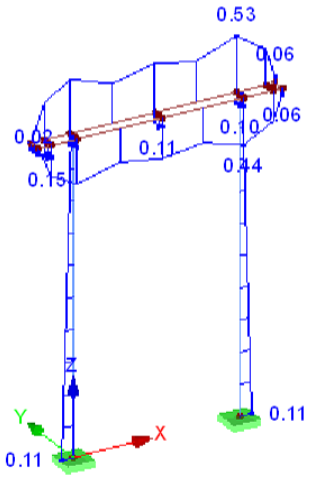
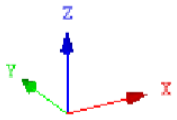
esign Ratio

RF-STEEL EC3 CA1 Isom

Ultimate Limit State: Cross-Section Design, Stability Design, Weld Design, Pressure Design, Plastic Design







Max Design Ratio: 0.53

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aterial

Steel	S 235
Concrete	C30/37

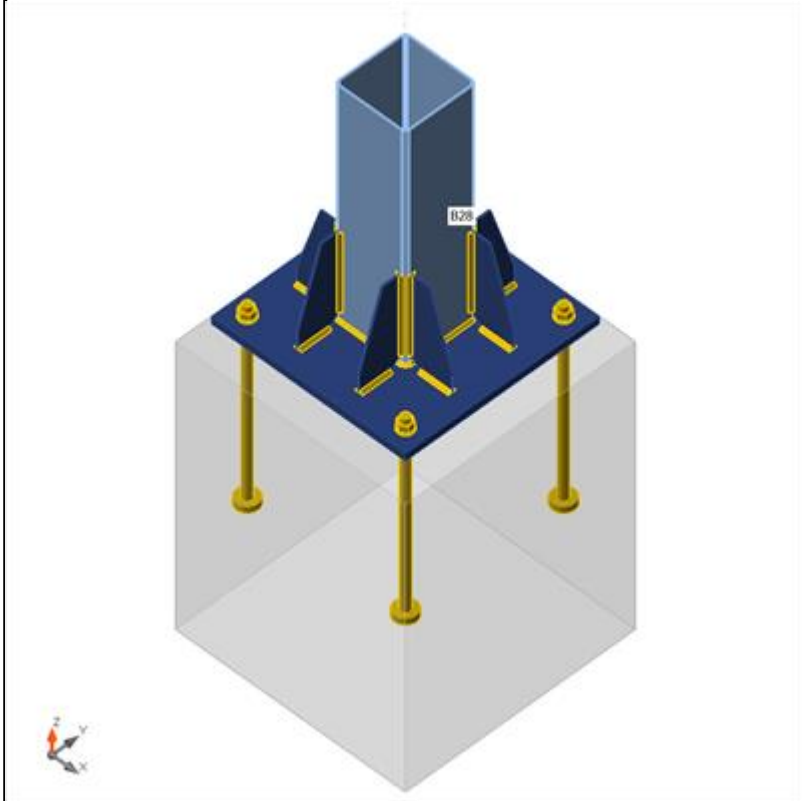
Design

Name	Con N112
Description	
Analysis	Stress, strain/ simplified loading

Members

Geometry

B28 1 - SHS200/200/5.0 0,0 90,0 -90,0 0 0 0 Position



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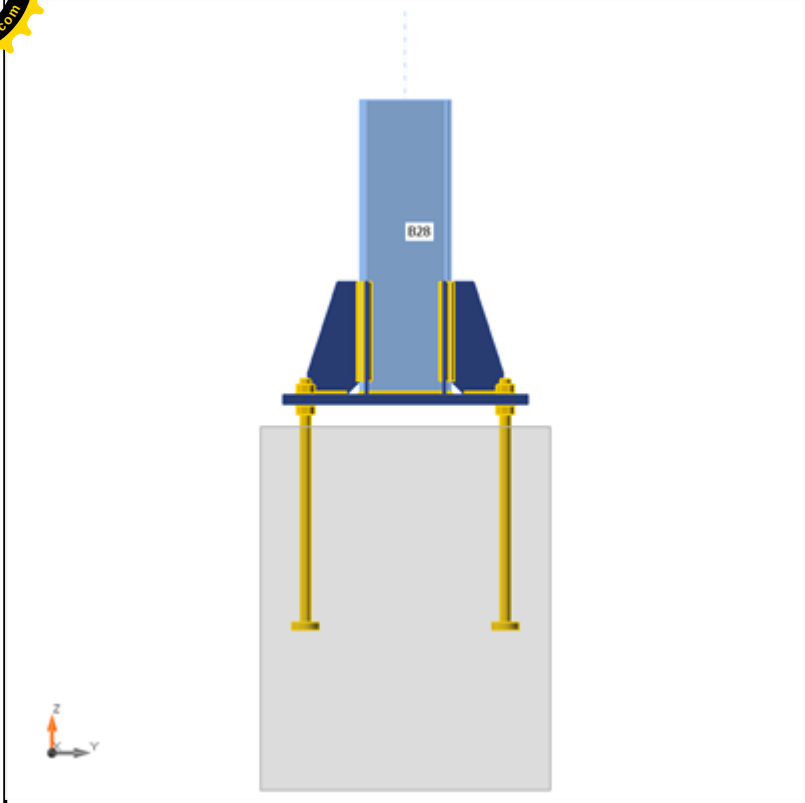

Cross-sections

1 - SHS200/200/5.0 S 235

Anchors

M24 8.8 M24 8.8 24 800,0 452

Load effects (Equilibrium not required)

Nmin+Mmax B28 -12,1 -1,0 3,0 -26,0 0,0 0,0

Foundation block

CB 1

Dimensions	640 x 640	mm
Depth	800	mm
Anchor	M24 8.8	
Anchoring length	430	mm
Shear force transfer	Anchors	
Gap	50	mm

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Check

Summary

Analysis	100,0%	OK
Plates	0,0 < 5,0%	OK
Anchors	94,7 < 100%	OK
Welds	20,7 < 100%	OK
Concrete block	Not calculated	
Buckling	Not calculated	

Plates

B28	5,0	Nmin+Mmax	135,2	0,0	0,0	OK
BP1	20,0	Nmin+Mmax	78,4	0,0	0,0	OK
RIB1a	5,0	Nmin+Mmax	42,5	0,0	0,0	OK
RIB1b	5,0	Nmin+Mmax	46,5	0,0	0,0	OK
RIB2a	5,0	Nmin+Mmax	41,6	0,0	0,0	OK
RIB2b	5,0	Nmin+Mmax	45,7	0,0	0,0	OK
RIB3a	5,0	Nmin+Mmax	42,5	0,0	0,0	OK
RIB3b	5,0	Nmin+Mmax	44,6	0,0	0,0	OK
RIB4a	5,0	Nmin+Mmax	43,4	0,0	0,0	OK
RIB4b	5,0	Nmin+Mmax	45,6	0,0	0,0	OK

Design data

S 235	235,0	5,0

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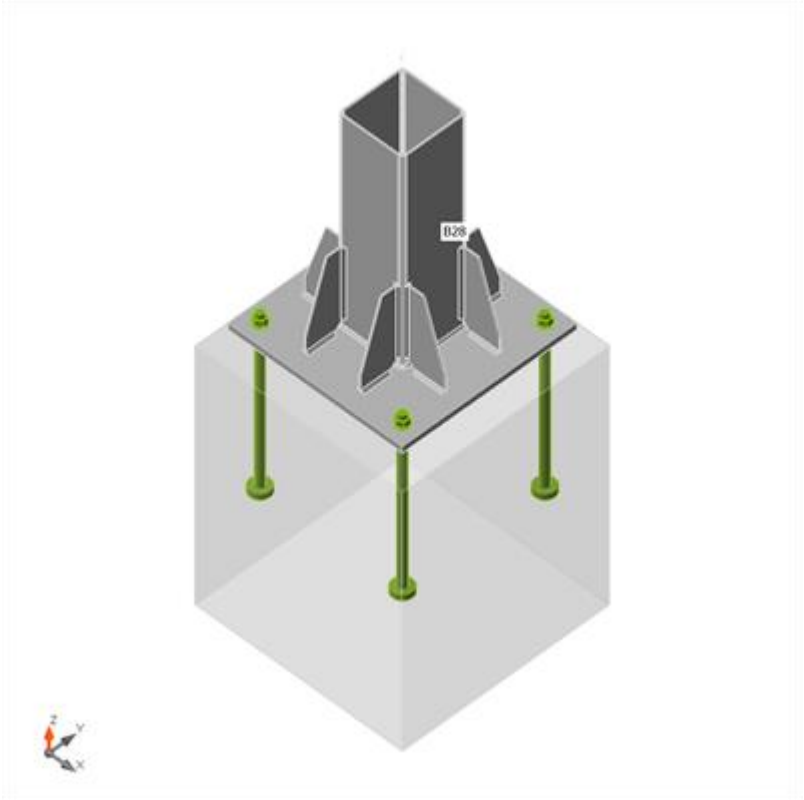
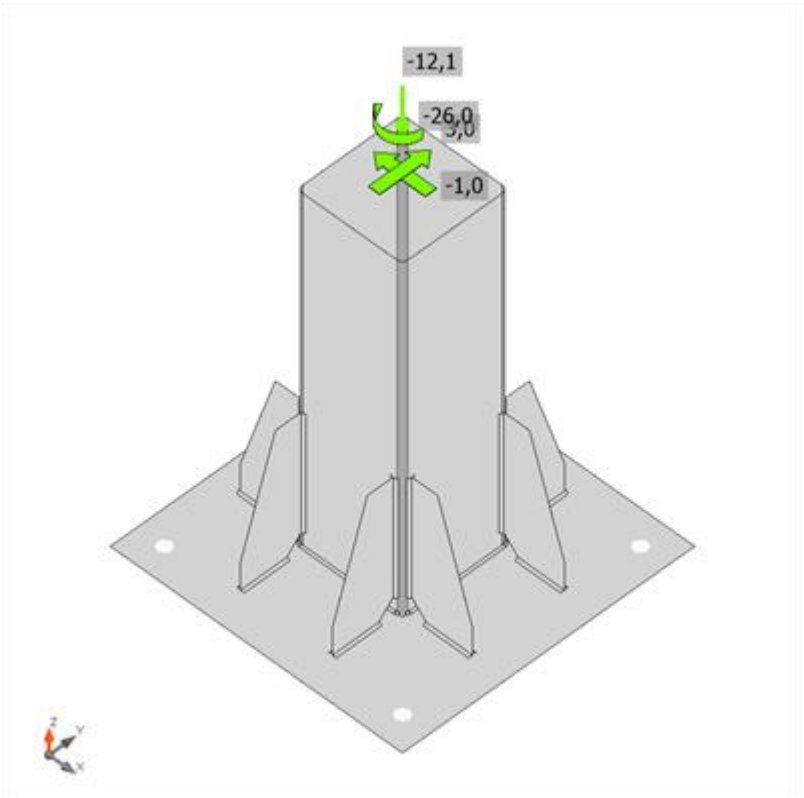


Overall check, Nmin+Mmax



Strain check, Nmin+Mmax

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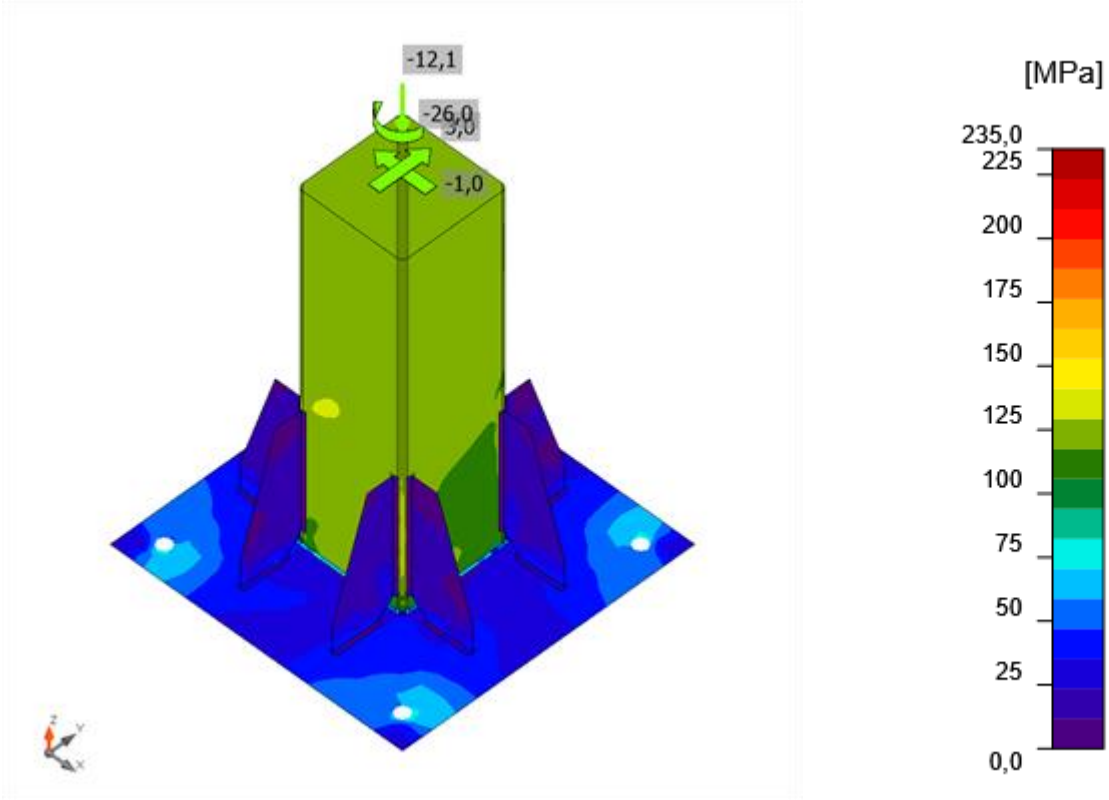
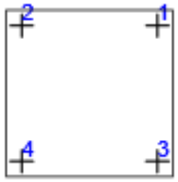


Equivalent stress, Nmin+Mmax

Anchors



A1	Nmin+Mmax	-3,1	20,7	0,7	23,5	93,8	OK	OK
A2	Nmin+Mmax	-3,2	20,8	0,8	23,7	94,5	OK	OK
A3	Nmin+Mmax	-2,8	20,8	0,7	23,6	94,0	OK	OK
A4	Nmin+Mmax	-3,0	20,9	0,8	23,8	94,7	OK	OK

Design data

M24 8.8 - 1 154,6 88,1 0,8

Detailed result for A1

Stand-off anchor compressive resistance (EN 1993-1-1 – Cl. 6.3)

$F_{c,Rd} = \frac{\chi \cdot A_s \cdot f_y}{\gamma_{M1}} =$ 154,6 kN ≥ $F_c =$ 3,1 kN

Where:

$\chi = \min\left(\frac{1}{\Phi + \sqrt{\Phi^2 - \overline{\lambda}^2}}, 1\right) =$ 0,86 – buckling reduction factor

$\Phi = 0,5 \cdot [1 + \alpha \cdot (\overline{\lambda} - 0.2) + \overline{\lambda}^2] =$ 0,68 – value to determine buckling reduction factor

$\alpha =$ 0,49 – imperfection factor

$\overline{\lambda} = \sqrt{\frac{A_s \cdot f_y}{N_{cr}}} =$ 0,48 – relative slenderness

A_s = 353 mm^2 – anchor area reduced by thread

$N_{cr} = \frac{\pi^2 \cdot E \cdot I}{L_{cr}^2}$ = 991,1 kN – Euler's critical force

E = 210000,0 MPa – elastic modulus

I = 9916 mm^4 – moment of inertia of the bolt

-

$I = \frac{\pi \cdot d_s^4}{64}$

, where:

-
  -

d_s =

21 mm – diameter reduced by thread

L_{cr} = 144 mm – buckling length (is it assumed on a safe side that the bolt is fixed in the concrete and able to freely rotate at the base plate)

-

$L_{cr} = 2 \cdot l$

, where:

-
  -

l =

72 mm – effective length

f_y = 640,0 MPa – anchor yield strength

γ_{M2} = 1,25 – safety factor

Concrete pullout resistance (EN 1992-4 – Cl. 7.2.1.5)

$\frac{N_{Rd,p}}{N_{Rd,c}}$ = 296,9 kN ≥ N_{Ed} = -3,1 kN

$N_{Rk,p} = k_2 \cdot A_h \cdot f_{ck}$ = 534,4 kN

Where:

k_2 = 7,50 – coefficient for cracked/uncracked concrete

A_h = 2375 mm^2 – area of the load-bearing head of the fastener

-

$A_h = \frac{\pi}{4} \cdot (d_h^2 - d^2)$

, where:

-
  -

d_h =

60 mm

$\geq 6 \cdot t_h + d$

– effective size of washer plate, where:

-
-

$t_h \geq \frac{d_h - d}{6} =$

6 mm – thickness of the head of the headed fastener

-

$d =$

24 mm – diameter of the shank of the fastener

$f_{ck} =$ 30,0 MPa – concrete compressive strength

$\gamma_{Mc} =$ 1,80 – safety factor for concrete

Stand-off anchor shear resistance (EN 1993-1-1 – Cl. 6.2.6)

$V_{pl,Rd} =$ 88,1 kN ≥ $F_v =$ 20,7 kN

Where:

$A_v =$ 298 mm^2 – shear area

-

$A_v = 0,844 \cdot A_s$

, where:

-
-

$A_s =$

353 mm^2 – anchor area reduced by thread

$f_y =$ 640,0 MPa – anchor yield strength

$\gamma_{M2} =$ 1,25 – safety factor

Stand-off anchor bending resistance (EN 1993-1-1 – Cl. 6.2.5)

$M_{pl,Rd} = \frac{W_{pl} f_y}{\gamma_{M2}} =$ 0,8 kNm ≥ $M =$ 0,7 kNm

Where:

$W_{pl} =$ 1588 mm^3 – plastic section modulus of the fastener

-

$W_{pl} = \frac{d_s^3}{6}$

, where:

-
-

$d_s =$

21 mm – diameter reduced by thread

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f_y = 640,0 MPa – anchor yield strength

γ_{M2} = 1,25 – safety factor

Interaction of loading

$\frac{F_c}{F_{c,Rd}} +$ 0,94 ≤ 1,0

Where:

F_c = 3,1 kN – design compression force

$F_{c,Rd}$ = 154,6 kN – design compression resistance

M_{Ed} = 0,7 kNm – design bending moment

$M_{pl,Rd}$ = 0,8 kNm – design bending resistance

Supplementary reinforcement (EN 1992-4 – Cl. 7.2.1.9; EN 1992-4 – Cl. 7.2.2.6)
Supplementary reinforcement should resist force of 12,1 kN in tension and 6,3 kN in shear.

Detailed result for A2

Stand-off anchor compressive resistance (EN 1993-1-1 – Cl. 6.3)

$F_{c,Rd} = \frac{\chi \cdot A_s \cdot f_y}{\gamma_{M2}} =$ 154,6 kN ≥ $F_c =$ 3,2 kN

Where:

$\chi = \min\left(\frac{1}{\Phi+\sqrt{\Phi^2-\overline{\lambda}^2}}, 1\right) =$ 0,86 – buckling reduction factor

$\Phi = 0,5 \cdot [1+\alpha \cdot (\overline{\lambda} - 0.2) + \overline{\lambda}^2] =$ 0,68 – value to determine buckling reduction factor

$\alpha =$ 0,49 – imperfection factor

$\overline{\lambda} = \sqrt{\frac{A_s \cdot f_y}{N_{cr}}} =$ 0,48 – relative slenderness

$A_s =$ 353 mm^2 – anchor area reduced by thread

$N_{cr} = \frac{\pi^2 \cdot E \cdot I}{L_{cr}^2} =$ 991,1 kN – Euler's critical force

$E =$ 210000,0 MPa – elastic modulus

$I =$ 9916 mm^4 – moment of inertia of the bolt

-

$I = \frac{\pi \cdot d_s^4}{64}$

, where:

-
  -

$d_s =$

21 mm – diameter reduced by thread

$L_{cr} =$ 144 mm – buckling length (is it assumed on a safe side that the bolt is fixed in the concrete and able to freely rotate at the base plate)

-

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$l_{cr} = 2 \cdot l$

, where:

-
  -

$l =$

72 mm – effective length

$f_y =$ 640,0 MPa – anchor yield strength

$\gamma_{M2} =$ 1,25 – safety factor

Concrete pullout resistance (EN 1992-4 – Cl. 7.2.1.5)

$N_{Rd,p} =$ 296,9 kN ≥ $N_{Ed} =$ -3,2 kN

$N_{Rk,p} = k_2 \cdot A_h \cdot f_{ck} =$ 534,4 kN

Where:

$k_2 =$ 7,50 – coefficient for cracked/uncracked concrete

$A_h =$ 2375 mm^2 – area of the load-bearing head of the fastener

-

$A_h = \frac{\pi}{4} \cdot (d_h^2 - d^2)$

, where:

-
  -

$d_h =$

60 mm

$\leq 6 \cdot t_h + d$

– effective size of washer plate, where:

-
  -

$t_h \geq \frac{d_h - d}{6} =$

6 mm – thickness of the head of the headed fastener

-

$d =$

24 mm – diameter of the shank of the fastener

$f_{ck} =$ 30,0 MPa – concrete compressive strength

$\gamma_{Mc} =$ 1,80 – safety factor for concrete

Stand-off anchor shear resistance (EN 1993-1-1 – Cl. 6.2.6)

$V_{pl,Rd} =$ 88,1 kN ≥ $F_v =$ 20,8 kN

Where:

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A_v = 298 mm² – shear area

-

$A_v = 0,844 \cdot A_s$

, where:

-
  -

A_s =

353 mm² – anchor area reduced by thread

f_y = 640,0 MPa – anchor yield strength

γ_{M2} = 1,25 – safety factor

Stand-off anchor bending resistance (EN 1993-1-1 – Cl. 6.2.5)

$M_{pl,Rd} = \frac{W_{pl} f_y}{\gamma_{M2}}$ = 0,8 kNm ≥ M = 0,8 kNm

Where:

W_{pl} = 1588 mm³ – plastic section modulus of the fastener

-

$W_{pl} = \frac{d_s^3}{6}$

, where:

-
  -

d_s =

21 mm – diameter reduced by thread

f_y = 640,0 MPa – anchor yield strength

γ_{M2} = 1,25 – safety factor

Interaction of loading

$\frac{F_c}{F_{c,Rd}} +$ 0,94 ≤ 1,0

Where:

F_c = 3,2 kN – design compression force

$F_{c,Rd}$ = 154,6 kN – design compression resistance

M_{Ed} = 0,8 kNm – design bending moment

$M_{pl,Rd}$ = 0,8 kNm – design bending resistance

Supplementary reinforcement (EN 1992-4 – Cl. 7.2.1.9; EN 1992-4 – Cl. 7.2.2.6)
Supplementary reinforcement should resist force of 12,1 kN in tension and 6,3 kN in shear.

Detailed result for A3

Stand-off anchor compressive resistance (EN 1993-1-1 – Cl. 6.3)

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$F_{c,Rd} = \frac{\chi \cdot A_s \cdot f_y}{\gamma_{M2}} =$ 154,6 kN ≥ $F_c =$ 2,8 kN

Where:

$\chi = \min\left(\frac{1}{\Phi + \sqrt{\Phi^2 - \overline{\lambda}^2}}, 1\right) =$ 0,86 – buckling reduction factor

$\Phi = 0,5 \cdot [1 + \alpha \cdot (\overline{\lambda} - 0.2) + \overline{\lambda}^2] =$ 0,68 – value to determine buckling reduction factor

$\alpha =$ 0,49 – imperfection factor

$\overline{\lambda} = \sqrt{\frac{A_s f_y}{N_{cr}}} =$ 0,48 – relative slenderness

$A_s =$ 353 mm^2 – anchor area reduced by thread

$N_{cr} = \frac{\pi^2 \cdot E \cdot I}{L_{cr}^2} =$ 991,1 kN – Euler's critical force

$E =$ 210000,0 MPa – elastic modulus

$I =$ 9916 mm^4 – moment of inertia of the bolt

-

$I = \frac{\pi \cdot d_s^4}{64}$

, where:

-
  -

$d_s =$

21 mm – diameter reduced by thread

$L_{cr} =$ 144 mm – buckling length (is it assumed on a safe side that the bolt is fixed in the concrete and able to freely rotate at the base plate)

-

$L_{cr} = 2 \cdot l$

, where:

-
  -

$l =$

72 mm – effective length

$f_y =$ 640,0 MPa – anchor yield strength

$\gamma_{M2} =$ 1,25 – safety factor

Concrete pullout resistance (EN 1992-4 – Cl. 7.2.1.5)

$N_{Rd,p} =$ 296,9 kN ≥ $N_{Ed} =$ -2,8 kN

$N_{Rk,p} = k_2 \cdot A_h \cdot f_{ck} =$ 534,4 kN

Where:

$k_2 =$ 7,50 – coefficient for cracked/uncracked concrete

$A_h =$ 2375 mm^2 – area of the load-bearing head of the fastener

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-

$A_h = \frac{\pi}{4} \cdot (d_h^2 - d^2)$

, where:

  -
  -

$d_h =$

60 mm

$\leq 6 \cdot t_h + d$

– effective size of washer plate, where:

    -
    -

$t_h \geq \frac{d_h - d}{6} =$

6 mm – thickness of the head of the headed fastener

    -

$d =$

24 mm – diameter of the shank of the fastener

f_{ck} = 30,0 MPa – concrete compressive strength

γ_{Mc} = 1,80 – safety factor for concrete

Stand-off anchor shear resistance (EN 1993-1-1 – Cl. 6.2.6)

$V_{pl,Rd} =$ 88,1 kN ≥ $F_v =$ 20,8 kN

Where:

A_v = 298 mm^2 – shear area

-

$A_v = 0,844 \cdot A_s$

, where:

  -
  -

$A_s =$

353 mm^2 – anchor area reduced by thread

f_y = 640,0 MPa – anchor yield strength

γ_{M2} = 1,25 – safety factor

Stand-off anchor bending resistance (EN 1993-1-1 – Cl. 6.2.5)

$M_{pl,Rd} = \frac{W_{pl} \cdot f_y}{\gamma_{M2}} =$ 0,8 kNm ≥ $M =$ 0,7 kNm

Where:

W_{pl} = 1588 mm^3 – plastic section modulus of the fastener

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-

$W_{pl} = \frac{d_s^3}{6}$

, where:

-
  -

$d_s =$

21 mm – diameter reduced by thread

$f_y =$ 640,0 MPa – anchor yield strength

$\gamma_{M2} =$ 1,25 – safety factor

Interaction of loading

$\frac{F_c}{F_{c,Rd}} +$ 0,94 ≤ 1,0

Where:

$F_c =$ 2,8 kN – design compression force

$F_{c,Rd} =$ 154,6 kN – design compression resistance

$M_{Ed} =$ 0,7 kNm – design bending moment

$M_{pl,Rd} =$ 0,8 kNm – design bending resistance

Supplementary reinforcement (EN 1992-4 – Cl. 7.2.1.9; EN 1992-4 – Cl. 7.2.2.6)
Supplementary reinforcement should resist force of 12,1 kN in tension and 6,3 kN in shear.

Detailed result for A4

Stand-off anchor compressive resistance (EN 1993-1-1 – Cl. 6.3)

$F_{c,Rd} = \frac{\chi \cdot A_s \cdot f_y}{\gamma_{M2}} =$ 154,6 kN ≥ $F_c =$ 3,0 kN

Where:

$\chi = \min\left(\frac{1}{\Phi + \sqrt{\Phi^2 - \overline{\lambda}^2}}, 1\right) =$ 0,86 – buckling reduction factor

$\Phi = 0,5 \cdot [1 + \alpha \cdot (\overline{\lambda} - 0.2) + \overline{\lambda}^2] =$ 0,68 – value to determine buckling reduction factor

$\alpha =$ 0,49 – imperfection factor

$\overline{\lambda} = \sqrt{\frac{A_s f_y}{N_{cr}}} =$ 0,48 – relative slenderness

$A_s =$ 353 mm² – anchor area reduced by thread

$N_{cr} = \frac{\pi^2 \cdot E \cdot I}{L_{cr}^2} =$ 991,1 kN – Euler's critical force

$E =$ 210000,0 MPa – elastic modulus

$I =$ 9916 mm⁴ – moment of inertia of the bolt

-

$I = \frac{\pi \cdot d_s^4}{64}$

, where:

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d_s =
21 mm – diameter reduced by thread

L_{cr} = 144 mm – buckling length (is it assumed on a safe side that the bolt is fixed in the concrete and able to freely rotate at the base plate)

-

$L_{cr} = 2 \cdot l$
, where:

-
  -

l =
72 mm – effective length

f_y = 640,0 MPa – anchor yield strength

γ_{M2} = 1,25 – safety factor

Concrete pullout resistance (EN 1992-4 – Cl. 7.2.1.5)

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Where:

k_2 = 7,50 – coefficient for cracked/uncracked concrete

A_h = 2375 mm² – area of the load-bearing head of the fastener

-

$A_h = \frac{\pi}{4} \cdot (d_h^2 - d^2)$
, where:

-
  -

d_h =
60 mm
$\leq 6 \cdot t_h + d$
– effective size of washer plate, where:

  -
    -

$t_h \geq \frac{d_h - d}{6}$ =
6 mm – thickness of the head of the headed fastener

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▪

d =

24 mm – diameter of the shank of the fastener

f_{ck} = 30,0 MPa – concrete compressive strength

γ_{Mc} = 1,80 – safety factor for concrete

Stand-off anchor shear resistance (EN 1993-1-1 – Cl. 6.2.6)

$V_{pl,Rd}$ = 88,1 kN ≥ F_v = 20,9 kN

Where:

A_v = 298 mm^2 – shear area

•

$A_v = 0,844 \cdot A_s$

, where:

•

○

A_s =

353 mm^2 – anchor area reduced by thread

f_y = 640,0 MPa – anchor yield strength

γ_{M2} = 1,25 – safety factor

Stand-off anchor bending resistance (EN 1993-1-1 – Cl. 6.2.5)

$M_{pl,Rd} = \frac{W_{pl} f_y}{\gamma_{M2}}$ = 0,8 kNm ≥ M = 0,8 kNm

Where:

W_{pl} = 1588 mm^3 – plastic section modulus of the fastener

•

$W_{pl} = \frac{d_s^3}{6}$

, where:

•

○

d_s =

21 mm – diameter reduced by thread

f_y = 640,0 MPa – anchor yield strength

γ_{M2} = 1,25 – safety factor

Interaction of loading

$\frac{F_s}{F_{s,Rd}} +$ 0,95 ≤ 1,0

Where:

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F_c = 3,0 kN – design compression force

$F_{c,Rd}$ = 154,6 kN – design compression resistance

M_{Ed} = 0,8 kNm – design bending moment

$M_{pl,Rd}$ = 0,8 kNm – design bending resistance

Supplementary reinforcement (EN 1992-4 – Cl. 7.2.1.9; EN 1992-4 – Cl. 7.2.2.6)
Supplementary reinforcement should resist force of 12,1 kN in tension and 6,3 kN in shear.

Welds

BP1	RIB1a	◢ 6,0 ◣	85	Nmin+Mmax	19,3	0,0	-7,6	6,3	-8,1	5,4	4,8	OK
		◢ 6,0 ◣	85	Nmin+Mmax	15,1	0,0	-4,0	-1,3	8,3	4,2	2,6	OK
B28-w1	RIB1a	◢ 6,0 ◣	219	Nmin+Mmax	13,3	0,0	-3,8	5,5	4,9	3,7	0,7	OK
		◢ 6,0 ◣	219	Nmin+Mmax	18,0	0,0	-1,9	-9,8	-3,2	5,0	2,9	OK
BP1	RIB1b	◢ 6,0 ◣	85	Nmin+Mmax	24,8	0,0	2,9	14,0	2,5	6,9	3,8	OK
		◢ 6,0 ◣	85	Nmin+Mmax	27,8	0,0	1,2	15,9	-2,2	7,7	6,2	OK
B28-w1	RIB1b	◢ 6,0 ◣	219	Nmin+Mmax	12,9	0,0	2,5	-6,6	-3,1	3,6	1,9	OK
		◢ 6,0 ◣	219	Nmin+Mmax	8,1	0,0	-2,7	3,0	-3,3	2,3	1,1	OK
BP1	RIB2a	◢ 6,0 ◣	85	Nmin+Mmax	19,6	0,0	-7,9	-5,8	8,6	5,5	4,9	OK
		◢ 6,0 ◣	85	Nmin+Mmax	14,4	0,0	-3,5	0,3	-8,1	4,0	2,5	OK
B28-w2	RIB2a	◢ 6,0 ◣	219	Nmin+Mmax	11,4	0,0	1,5	6,0	-2,6	3,2	0,7	OK
		◢ 6,0 ◣	219	Nmin+Mmax	18,8	0,0	-1,8	-10,4	-2,9	5,2	2,8	OK
BP1	RIB2b	◢ 6,0 ◣	85	Nmin+Mmax	25,9	0,0	3,0	-14,7	-2,5	7,2	3,8	OK
		◢ 6,0 ◣	85	Nmin+Mmax	28,8	0,0	0,9	-16,5	1,9	8,0	6,2	OK
B28-w2	RIB2b	◢ 6,0 ◣	219	Nmin+Mmax	12,6	0,0	2,4	-6,5	-3,0	3,5	1,9	OK
		◢ 6,0 ◣	219	Nmin+Mmax	8,0	0,0	-2,6	3,0	-3,2	2,2	1,1	OK
BP1	RIB3a	◢ 6,0 ◣	85	Nmin+Mmax	20,3	0,0	-8,2	6,0	-8,9	5,6	5,0	OK
		◢ 6,0 ◣	85	Nmin+Mmax	14,4	0,0	-3,4	-0,3	8,1	4,0	2,6	OK
B28-w3	RIB3a	◢ 6,0 ◣	219	Nmin+Mmax	12,2	0,0	1,4	6,4	-2,7	3,4	0,7	OK

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		◢ 6,0 ◣	219	Nmin+Mmax	19,6	0,0	-1,9	-10,8	-3,2	5,4	2,9	OK
BP1	RIB3b	◢ 6,0 ◣	85	Nmin+Mmax	23,9	0,0	2,7	13,5	2,3	6,7	3,7	OK
		◢ 6,0 ◣	85	Nmin+Mmax	26,8	0,0	1,2	15,3	-2,1	7,4	5,9	OK
B28-w3	RIB3b	◢ 6,0 ◣	219	Nmin+Mmax	11,7	0,0	2,4	-6,0	-2,9	3,3	1,9	OK
		◢ 6,0 ◣	219	Nmin+Mmax	7,3	0,0	-2,7	2,3	-3,2	2,0	1,1	OK
BP1	RIB4a	◢ 6,0 ◣	85	Nmin+Mmax	19,8	0,0	-8,2	-5,7	8,7	5,5	5,0	OK
		◢ 6,0 ◣	85	Nmin+Mmax	15,4	0,0	-4,1	1,2	-8,5	4,3	2,6	OK
B28-w4	RIB4a	◢ 6,0 ◣	219	Nmin+Mmax	12,6	0,0	-3,7	5,1	4,7	3,5	0,7	OK
		◢ 6,0 ◣	219	Nmin+Mmax	18,8	0,0	-2,0	-10,3	-3,2	5,2	2,9	OK
BP1	RIB4b	◢ 6,0 ◣	85	Nmin+Mmax	23,9	0,0	2,6	-13,5	-2,3	6,7	3,6	OK
		◢ 6,0 ◣	85	Nmin+Mmax	26,7	0,0	1,2	-15,2	2,2	7,4	5,9	OK
B28-w4	RIB4b	◢ 6,0 ◣	219	Nmin+Mmax	11,9	0,0	2,5	-6,0	-3,1	3,3	1,9	OK
		◢ 6,0 ◣	219	Nmin+Mmax	7,3	0,0	-2,6	2,4	-3,2	2,0	1,1	OK
BP1	B28	◢ 5,0 ◣	757	Nmin+Mmax	65,5	0,0	5,2	37,3	5,1	18,2	14,3	OK
		◢ 5,0 ◣	757	Nmin+Mmax	74,3	0,0	-1,7	-42,9	2,2	20,7	16,9	OK

Design data

S 235 0,80 360,0 259,2

Detailed result for BP1 / RIB1a - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 19,3 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 7,6 MPa

where:

$f_u =$ 360,0 MPa – Ultimate strength

$\beta_w =$ 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

$\gamma_{M2} =$ 1,25 – Safety factor

Stress utilization

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$U_t = \max\left(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}\right) =$ 0,05 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 19,3 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = -7,6 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB1a - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 15,1 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 4,0 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max\left(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}\right) =$ 0,04 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 15,1 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = -4,0 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 1 / RIB1a - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 13,3 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 3,8 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max\left(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}\right) =$ 0,04 ≤ 1,0

Where:

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$\sigma_{w,Ed}$ = 13,3 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_{\perp}|$ = -3,8 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 1 / RIB1a - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_{\perp}^2 + 3(\tau_{\perp}^2 + \tau_{\parallel}^2)]^{0.5} =$ 18,0 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_{\perp}| =$ 1,9 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_{\perp}|}{\sigma_{\perp,Rd}}) =$ 0,05 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 18,0 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_{\perp}|$ = -1,9 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB1b - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_{\perp}^2 + 3(\tau_{\perp}^2 + \tau_{\parallel}^2)]^{0.5} =$ 24,8 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_{\perp}| =$ 2,9 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_{\perp}|}{\sigma_{\perp,Rd}}) =$ 0,07 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 24,8 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

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$|\sigma_\perp|$ = 2,9 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB1b - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 27,8 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 1,2 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,08 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 27,8 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = 1,2 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 1 / RIB1b - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 12,9 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 2,5 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,04 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 12,9 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = 2,5 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

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Detailed result for B28-w 1 / RIB1b - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 8,1 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 2,7 MPa

where:

$f_u =$ 360,0 MPa – Ultimate strength

$\beta_w =$ 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

$\gamma_{M2} =$ 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,02 ≤ 1,0

Where:

$\sigma_{w,Ed} =$ 8,1 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd} =$ 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp| =$ -2,7 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd} =$ 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB2a - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 19,6 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 7,9 MPa

where:

$f_u =$ 360,0 MPa – Ultimate strength

$\beta_w =$ 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

$\gamma_{M2} =$ 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,05 ≤ 1,0

Where:

$\sigma_{w,Ed} =$ 19,6 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd} =$ 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp| =$ -7,9 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd} =$ 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB2a - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

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$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 14,4 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 3,5 MPa

where:

$f_u =$ 360,0 MPa – Ultimate strength

$\beta_w =$ 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

$\gamma_{M2} =$ 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,04 ≤ 1,0

Where:

$\sigma_{w,Ed} =$ 14,4 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd} =$ 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp| =$ -3,5 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd} =$ 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 2 / RIB2a - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 11,4 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 1,5 MPa

where:

$f_u =$ 360,0 MPa – Ultimate strength

$\beta_w =$ 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

$\gamma_{M2} =$ 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,03 ≤ 1,0

Where:

$\sigma_{w,Ed} =$ 11,4 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd} =$ 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp| =$ 1,5 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd} =$ 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 2 / RIB2a - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 18,8 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 1,8 MPa

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Where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,05 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 18,8 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = -1,8 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB2b - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 25,9 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 3,0 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,07 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 25,9 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = 3,0 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB2b - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 28,8 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 0,9 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

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γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,08 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 28,8 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = 0,9 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 2 / RIB2b - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 12,6 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 2,4 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,03 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 12,6 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = 2,4 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 2 / RIB2b - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 8,0 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 2,6 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

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$U_t = \max\left(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}\right) =$ 0,02 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 8,0 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = -2,6 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB3a - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 20,3 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 8,2 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max\left(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}\right) =$ 0,06 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 20,3 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = -8,2 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB3a - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 14,4 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 3,4 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max\left(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}\right) =$ 0,04 ≤ 1,0

Where:

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$\sigma_{w,Ed}$ = 14,4 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_{\perp}|$ = -3,4 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 3 / RIB3a - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_{\perp}^2 + 3(\tau_{\perp}^2 + \tau_{\parallel}^2)]^{0.5} =$ 12,2 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_{\perp}| =$ 1,4 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_{\perp}|}{\sigma_{\perp,Rd}}) =$ 0,03 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 12,2 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_{\perp}|$ = 1,4 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 3 / RIB3a - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_{\perp}^2 + 3(\tau_{\perp}^2 + \tau_{\parallel}^2)]^{0.5} =$ 19,6 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_{\perp}| =$ 1,9 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_{\perp}|}{\sigma_{\perp,Rd}}) =$ 0,05 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 19,6 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

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$|\sigma_\perp|$ = -1,9 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB3b - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 23,9 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 2,7 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,07 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 23,9 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = 2,7 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB3b - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 26,8 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 1,2 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,07 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 26,8 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = 1,2 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

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Detailed result for B28-w 3 / RIB3b - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 11,7 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 2,4 MPa

where:

$f_u =$ 360,0 MPa – Ultimate strength

$\beta_w =$ 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

$\gamma_{M2} =$ 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,03 ≤ 1,0

Where:

$\sigma_{w,Ed} =$ 11,7 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd} =$ 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp| =$ 2,4 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd} =$ 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 3 / RIB3b - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 7,3 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 2,7 MPa

where:

$f_u =$ 360,0 MPa – Ultimate strength

$\beta_w =$ 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

$\gamma_{M2} =$ 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,02 ≤ 1,0

Where:

$\sigma_{w,Ed} =$ 7,3 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd} =$ 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp| =$ -2,7 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd} =$ 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB4a - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

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$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 19,8 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 8,2 MPa

where:

$f_u =$ 360,0 MPa – Ultimate strength

$\beta_w =$ 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

$\gamma_{M2} =$ 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,06 ≤ 1,0

Where:

$\sigma_{w,Ed} =$ 19,8 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd} =$ 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp| =$ -8,2 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd} =$ 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB4a - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 15,4 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 4,1 MPa

where:

$f_u =$ 360,0 MPa – Ultimate strength

$\beta_w =$ 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

$\gamma_{M2} =$ 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,04 ≤ 1,0

Where:

$\sigma_{w,Ed} =$ 15,4 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd} =$ 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp| =$ -4,1 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd} =$ 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 4 / RIB4a - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 12,6 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 3,7 MPa

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here:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,03 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 12,6 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = -3,7 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 4 / RIB4a - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 18,8 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 2,0 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,05 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 18,8 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = -2,0 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB4b - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 23,9 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 2,6 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

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γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,07 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 23,9 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = 2,6 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB4b - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 26,7 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 1,2 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,07 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 26,7 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = 1,2 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 4 / RIB4b - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 11,9 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 2,5 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

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$U_t = \max\left(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}\right) =$ 0,03 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 11,9 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = 2,5 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 4 / RIB4b - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 7,3 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 2,6 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max\left(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}\right) =$ 0,02 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 7,3 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = -2,6 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / B28 - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 65,5 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 5,2 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max\left(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}\right) =$ 0,18 ≤ 1,0

Where:

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$\sigma_{w,Ed}$ = 65,5 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_{\perp}|$ = 5,2 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / B28 - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_{\perp}^2 + 3(\tau_{\perp}^2 + \tau_{\parallel}^2)]^{0.5} =$ 74,3 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_{\perp}| =$ 1,7 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_{\perp}|}{\sigma_{\perp,Rd}}) =$ 0,21 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 74,3 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_{\perp}|$ = -1,7 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Išvados:

- Viršįtampių ribotuvo kolonos ribinis poslinkis lygus 58 mm, traversos – 15 mm. Pagal atliktus skaičiavimus kolonos poslinkis y kryptimi lygus 12,7 mm, traversos poslinkis z kryptimi – 1,2 mm. Gauti rezultatai neviršija ribinio poslinkio reikšmės.
- Viršįtempių ribotuvo atramos labiausiai pagal skerspjūvį išnaudojamas elemento profilis – UPN 160. Nustatytos reikšmės neviršija ribinių 0,53 ≤ 1.

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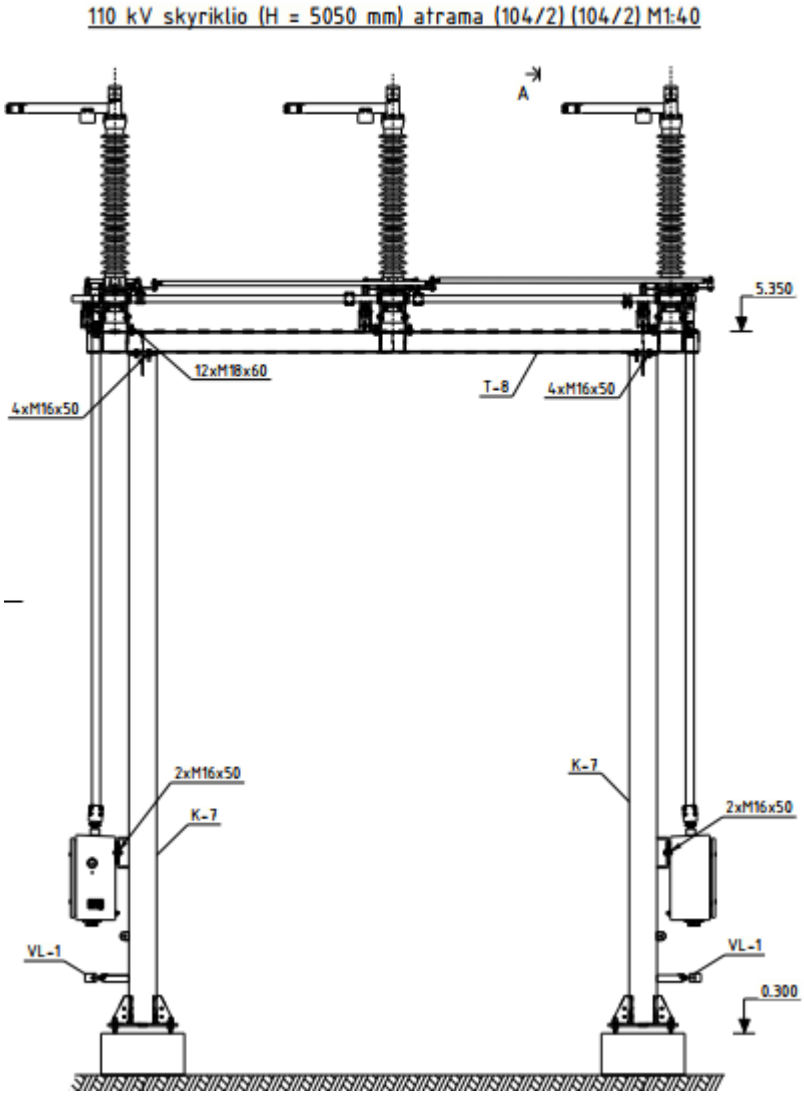
2.2. Skyriklis (h = 5050 mm)



Pav. 6 Tripolio skyriklio atrama

Tripolio skyriklio atramą sudaro:

- Dvi vamzdinio profilio kolonos rėmo plokštumoje standžiai sujungtos su pamatu per inkarinius varžtus;
- Sudvejinta traversa iš UPN profilių, kuri tarpusavyje sujungta standžiai IPE ar UPN tipo profiliais.
- Traversa su kolona jungiama varžtais – standžiai.
- Laikančiųjų konstrukcijų plienas S275J2.

Lentelė 23. Atviros skirstomosios įrangos konstrukcijų ribiniai poslinkiai ir įlinkiai

Konstrukcijos apibudinimas ir nuokrypio kryptis	Atramų santykinės nuokrypos	Santykiniai traversų įlinkiai (tarpatramio -1 arba gembės ilgiui -2)			
		Vertikalieji		Horizontalieji	
		Tarpatramyje	Gembėje	Tarpatramyje	Gembėje
Atviros skirstomosios įrangos atramos išilgai laidų	1/100 5,1/100=0,051m	1/200 4/200=0,02	1/70 0,50/70=0,010	1/200 4/200=0,02	1/70 0,5/70=0,010
Atviros skirstomosios įrangos atramos skersai laidų	1/70 5,1/70=0,073m	n/a	n/a	n/a	n/a

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Pastabos:
1. Kai yra avariniai ir montažiniai režimai, atviros skirstomosios įrangos atramų ir oro linijų traversų atramų nuokrypiai nenormuojami.
2. Nuokrypiai ir įlinkiai, turi būti sumažinti, jei įrangos eksploatacijos techninės sąlygos numato griežtesnius apribojimus.

Tripolio skyriklio atramą veikiančios nuolatinės ir kintamos apkrovos pateiktos žemiau esančioje lentelėje.

Lentelė 24. Tripolį skyriklį veikiančios apkrovos

Įrenginio apkrovų pasiskirstymas					
Eil. Nr.	Apkrovos pavadinimas	F, kN	q, kN/m	Jėgos veikimo kryptis	Pastaba
1.	**Nuolatinės apkrovos**				
1.1.	Konstrukcijos savasis svoris	BEM	-	↓	γ=78,50 kN/m^3
1.2.	Technologiniai įrenginiai	0,75	-	↓	-
1.3.	Laidų svoris	0,21	-	↓	-
2.	**Kintamos apkrovos**				
2.1.	*Vėjas x-x kryptimi*				
2.1.1.	Į koloną	-	0,092	→	X-X
2.1.2.	Į traversą	-	0,074	→	X-X
2.1.3.	Į technologinius įrenginius	-	0,12	→	X-X
2.1.4.	Nuo laidų	0,15	-	-	X-X
2.2.	*Vėjas y-y kryptimi*				
2.2.1.	Į koloną	-	0,092	→	Y-Y
2.2.2.	Į traversą	-	0,074	→	Y-Y
2.2.3.	Į technologinius įrenginius	-	0,12	→	Y-Y
2.2.4.	Nuo laidų	-	-	→	Vėjo kryptis išilgai laidų
2.3.	*Apšalas*				
2.3.1.	Nuo įrenginio	0,142		↓	Z-Z
2.3.2.	Nuo laidų	0,05		↓	Z-Z
2.4.	*Laidų išilginis tempimas*	1,5		→	X-X

Lentelė 25. Apkrovų eksplikacija

Apkrovos nr.	**Apkrovos žymuo**	**Apkrovos pavadinimas**
1	LC1	Savasis svoris
2	LC2	Įrenginių svoris
3	LC3	Laidų svoris
4	LC4	Vėjas X-X
5	LC5	Vėjas Y-Y
6	LC6	Apšalas
7	LC7	Laidų išilginis tempimas

1.3 Materials

Matl. No.	Modulus E [kN/cm^2]	Modulus G [kN/cm^2]	Poisson's Ratio n [-]	Spec. Weight g [kN/m^3]	Coeff. of Th. Exp. a [1/°C]	Partial Factor g_M [-]	Material Model
2	Steel S 235 J2 | BDS EN 10025-2:2004-11						
	21000.00	8076.92	0.300	78.50	1.20E-05	1.00	Isotropic Linear Elastic

1.7 Nodal Supports

Support No.	Nodes No.	Axis System	Column in Z	Support Conditions u_X	u_Y	u_Z	j_X	j_Y	j_Z
1	1,2	Global X,Y,Z	-	x	x	x	x	x	x

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1.13 Cross-Sections

Section No.	Matl. No.	J [cm⁴] A [cm²]	I_y [cm⁴] A_y [cm²]	I_z [cm⁴] A_z [cm²]	Principal Axes a [°]	Rotation a' [°]	Overall Dimensions [mm] Width b	Height h
1	QRO 200x5 | EN 10219-2:2006							
	2	8843.00	5672.00	5672.00	0.00	0.00	250.0	250.0
		57.60	24.56	24.56				
2	UPN 220 | ArcelorMittal (EN 10365:2017)							
	2	9.55	1350.00	114.00	0.00	0.00	70.0	180.0
		28.00	7.14	12.38				

1.17 Members

Mbr. No.	Line No.	Member	Rotation Type	Rotation b [°]	Cross-Section Start	Cross-Section End	Hinge No. Start	Hinge No. End	Ecc. No.	Div. No.	Length L [m]	
3	3	Beam	Angle	180.00	2	2	-	-	-	-	4.470	X
4	4	Beam	Angle	0.00	2	2	-	-	-	-	4.470	X
5	5	Beam	Angle	0.00	3	3	-	-	-	-	1.320	Y
7	9	Beam	Angle	0.00	3	3	-	-	-	-	1.320	Y
8	8	Beam	Angle	0.00	3	3	-	-	-	-	1.320	Y
12	1	Beam	Angle	0.00	5	5	-	-	-	-	5.020	Z
13	2	Beam	Angle	0.00	5	5	-	-	-	-	5.020	Z
20	14	Beam	Angle	0.00	6	6	-	-	-	-	1.650	Z
21	17	Beam	Angle	0.00	6	6	-	-	-	-	1.650	Z
22	13	Beam	Angle	0.00	6	6	-	-	-	-	1.650	Z
23	16	Beam	Angle	0.00	6	6	-	-	-	-	1.650	Z
24	12	Beam	Angle	0.00	6	6	-	-	-	-	1.650	Z
25	15	Beam	Angle	0.00	6	6	-	-	-	-	1.650	Z
26	18	Beam	Angle	0.00	3	3	-	-	-	-	1.320	Y
27	19	Beam	Angle	0.00	3	3	-	-	-	-	1.320	Y
28	6	Beam	Angle	270.00	2	2	-	-	-	-	1.320	Y
29	7	Beam	Angle	270.00	2	2	-	-	-	-	1.320	Y
30	10	Beam	Angle	270.00	2	2	-	-	-	-	1.320	Y

2.1 Load Cases

Load Case	Load Case Description	EN 1990 | LST Action Category	Self-Weight - Factor in Direction Active	X	Y	Z
LC1	Savasis svoris	Permanent	x	0.000	0.000	-1.000
LC2	Irenginiu svoris	Permanent	-			
LC3	Laidu svoris	Permanent	-			
LC4	Vejas X-X	Wind	-			
LC5	Vejas Y-Y	Wind	-			
LC6	Apsalas	Snow / ice	-			
LC7	Laidu isilginis tempimas	Temperature (non fire)	-			

2.1.1 Load Cases - Calculation Parameters

Load Case	Load Case Description	Calculation Parameters		
LC1	Savasis svoris	Method of analysis	: x	Geometrically linear analysis
		Method for solving system of nonlinear algebraic equations	: x	Newton-Raphson
		Activate stiffness factors of:	: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
LC2	Irenginiu svoris	Method of analysis	: x	Geometrically linear analysis
		Method for solving system of nonlinear algebraic equations	: x	Newton-Raphson
		Activate stiffness factors of:	: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
LC3	Laidu svoris	Method of analysis	: x	Geometrically linear analysis
		Method for solving system of nonlinear algebraic equations	: x	Newton-Raphson
		Activate stiffness factors of:	: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
LC4	Vejas X-X	Method of analysis	: x	Geometrically linear analysis
		Method for solving system of nonlinear algebraic equations	: x	Newton-Raphson
		Activate stiffness factors of:	: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
LC5	Vejas Y-Y	Method of analysis	: x	Geometrically linear analysis
		Method for solving system of nonlinear algebraic equations	: x	Newton-Raphson

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2.1.1 Load Cases - Calculation Parameters

Load Case	Load Case Description	Calculation Parameters		
		Activate stiffness factors of:	: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
LC6	Apsalas	Method of analysis	: x	Geometrically linear analysis
		Method for solving system of nonlinear algebraic equations	: x	Newton-Raphson
		Activate stiffness factors of:	: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
LC7	Laidu isilginis tempimas	Method of analysis	: x	Geometrically linear analysis
		Method for solving system of nonlinear algebraic equations	: x	Newton-Raphson
		Activate stiffness factors of:	: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)

2.5 Load Combinations

Load Combin.	DS	Load Combination Description	No.	Factor	Load Case	
CO1	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
CO2	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC4	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	1.30	LC4	Vejas X-X
CO3	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC5	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	1.30	LC5	Vejas Y-Y
CO4	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC4 + 0.91*LC6	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	1.30	LC4	Vejas X-X
			5	0.91	LC6	Apsalas
CO5	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC5 + 0.91*LC6	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	1.30	LC5	Vejas Y-Y
			5	0.91	LC6	Apsalas
CO6	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC4 + 0.91*LC6 + 0.78*LC7	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	1.30	LC4	Vejas X-X
			5	0.91	LC6	Apsalas
			6	0.78	LC7	Laidu isilginis tempimas
CO7	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC5 + 0.91*LC6 + 0.78*LC7	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	1.30	LC5	Vejas Y-Y
			5	0.91	LC6	Apsalas
			6	0.78	LC7	Laidu isilginis tempimas
CO8	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC4 + 0.78*LC7	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	1.30	LC4	Vejas X-X
			5	0.78	LC7	Laidu isilginis tempimas
CO9	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC5 + 0.78*LC7	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	1.30	LC5	Vejas Y-Y
			5	0.78	LC7	Laidu isilginis tempimas
CO10	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC6	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	1.30	LC6	Apsalas
CO11	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC4 + 1.3*LC6	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris

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.5 Load Combinations

Load Combin.	DS	Load Combination Description	No.	Factor	Load Case	
			3	1.35	LC3	Laidu svoris
			4	0.78	LC4	Vejas X-X
			5	1.30	LC6	Apsalas
CO12	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC5 + 1.3*LC6	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	0.78	LC5	Vejas Y-Y
			5	1.30	LC6	Apsalas
CO13	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC4 + 1.3*LC6 + 0.78*LC7	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	0.78	LC4	Vejas X-X
			5	1.30	LC6	Apsalas
			6	0.78	LC7	Laidu isilginis tempimas
CO14	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC5 + 1.3*LC6 + 0.78*LC7	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	0.78	LC5	Vejas Y-Y
			5	1.30	LC6	Apsalas
			6	0.78	LC7	Laidu isilginis tempimas
CO15	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC6 + 0.78*LC7	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	1.30	LC6	Apsalas
			5	0.78	LC7	Laidu isilginis tempimas
CO16	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC7	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	1.30	LC7	Laidu isilginis tempimas
CO17	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC4 + 1.3*LC7	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	0.78	LC4	Vejas X-X
			5	1.30	LC7	Laidu isilginis tempimas
CO18	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC5 + 1.3*LC7	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	0.78	LC5	Vejas Y-Y
			5	1.30	LC7	Laidu isilginis tempimas
CO19	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC4 + 0.91*LC6 + 1.3*LC7	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	0.78	LC4	Vejas X-X
			5	0.91	LC6	Apsalas
			6	1.30	LC7	Laidu isilginis tempimas
CO20	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC5 + 0.91*LC6 + 1.3*LC7	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	0.78	LC5	Vejas Y-Y
			5	0.91	LC6	Apsalas
			6	1.30	LC7	Laidu isilginis tempimas
CO21	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.91*LC6 + 1.3*LC7	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	0.91	LC6	Apsalas
			5	1.30	LC7	Laidu isilginis tempimas
CO22	S Ch	LC1 + LC2 + LC3	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
CO23	S Ch	LC1 + LC2 + LC3 + LC4	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.00	LC4	Vejas X-X
CO24	S Ch	LC1 + LC2 + LC3 + LC5	1	1.00	LC1	Savasis svoris

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.5 Load Combinations

Load Combin.	DS	Load Combination Description	No.	Factor	Load Case	
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.00	LC5	Vejas Y-Y
CO25	S Ch	LC1 + LC2 + LC3 + LC4 + 0.7*LC6	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.00	LC4	Vejas X-X
			5	0.70	LC6	Apsalas
CO26	S Ch	LC1 + LC2 + LC3 + LC5 + 0.7*LC6	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.00	LC5	Vejas Y-Y
			5	0.70	LC6	Apsalas
CO27	S Ch	LC1 + LC2 + LC3 + LC4 + 0.7*LC6 + 0.6*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.00	LC4	Vejas X-X
			5	0.70	LC6	Apsalas
			6	0.60	LC7	Laidu isilginis tempimas
CO28	S Ch	LC1 + LC2 + LC3 + LC5 + 0.7*LC6 + 0.6*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.00	LC5	Vejas Y-Y
			5	0.70	LC6	Apsalas
			6	0.60	LC7	Laidu isilginis tempimas
CO29	S Ch	LC1 + LC2 + LC3 + LC4 + 0.6*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.00	LC4	Vejas X-X
			5	0.60	LC7	Laidu isilginis tempimas
CO30	S Ch	LC1 + LC2 + LC3 + LC5 + 0.6*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.00	LC5	Vejas Y-Y
			5	0.60	LC7	Laidu isilginis tempimas
CO31	S Ch	LC1 + LC2 + LC3 + LC6	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.00	LC6	Apsalas
CO32	S Ch	LC1 + LC2 + LC3 + 0.6*LC4 + LC6	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.60	LC4	Vejas X-X
			5	1.00	LC6	Apsalas
CO33	S Ch	LC1 + LC2 + LC3 + 0.6*LC5 + LC6	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.60	LC5	Vejas Y-Y
			5	1.00	LC6	Apsalas
CO34	S Ch	LC1 + LC2 + LC3 + 0.6*LC4 + LC6 + 0.6*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.60	LC4	Vejas X-X
			5	1.00	LC6	Apsalas
			6	0.60	LC7	Laidu isilginis tempimas
CO35	S Ch	LC1 + LC2 + LC3 + 0.6*LC5 + LC6 + 0.6*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.60	LC5	Vejas Y-Y
			5	1.00	LC6	Apsalas
			6	0.60	LC7	Laidu isilginis tempimas
CO36	S Ch	LC1 + LC2 + LC3 + LC6 + 0.6*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.00	LC6	Apsalas
			5	0.60	LC7	Laidu isilginis tempimas
CO37	S Ch	LC1 + LC2 + LC3 + LC7	1	1.00	LC1	Savasis svoris

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2.5 Load Combinations

Load Combin.	DS	Load Combination Description	No.	Factor	Load Case	
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.00	LC7	Laidu isilginis tempimas
CO38	S Ch	LC1 + LC2 + LC3 + 0.6*LC4 + LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.60	LC4	Vejas X-X
			5	1.00	LC7	Laidu isilginis tempimas
CO39	S Ch	LC1 + LC2 + LC3 + 0.6*LC5 + LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.60	LC5	Vejas Y-Y
			5	1.00	LC7	Laidu isilginis tempimas
CO40	S Ch	LC1 + LC2 + LC3 + 0.6*LC4 + 0.7*LC6 + LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.60	LC4	Vejas X-X
			5	0.70	LC6	Apsalas
			6	1.00	LC7	Laidu isilginis tempimas
CO41	S Ch	LC1 + LC2 + LC3 + 0.6*LC5 + 0.7*LC6 + LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.60	LC5	Vejas Y-Y
			5	0.70	LC6	Apsalas
			6	1.00	LC7	Laidu isilginis tempimas
CO42	S Ch	LC1 + LC2 + LC3 + 0.7*LC6 + LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.70	LC6	Apsalas
			5	1.00	LC7	Laidu isilginis tempimas

2.5.2 Load Combinations - Calculation Parameters

Load Combin.	Description	Calculation Parameters		
CO1	1.35*LC1 + 1.35*LC2 + 1.35*LC3	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
			x	Normal forces N
			x	Shear forces V_y and V_z
			x	Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO2	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC4	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
			x	Normal forces N
			x	Shear forces V_y and V_z
			x	Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO3	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC5	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
			x	Normal forces N
			x	Shear forces V_y and V_z
			x	Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)

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15.5.2 Load Combinations - Calculation Parameters

Load Combin.	Description	Calculation Parameters		
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO4	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC4 + 0.91*LC6	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
			x	Normal forces N
			x	Shear forces V_y and V_z
			x	Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO5	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC5 + 0.91*LC6	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
			x	Normal forces N
			x	Shear forces V_y and V_z
			x	Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO6	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC4 + 0.91*LC6 + 0.78*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
			x	Normal forces N
			x	Shear forces V_y and V_z
			x	Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO7	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC5 + 0.91*LC6 + 0.78*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
			x	Normal forces N
			x	Shear forces V_y and V_z
			x	Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO8	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC4 + 0.78*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
			x	Normal forces N
			x	Shear forces V_y and V_z
			x	Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO9	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC5 + 0.78*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
			x	Normal forces N
			x	Shear forces V_y and V_z

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15.5.2 Load Combinations - Calculation Parameters

Load Combin.	Description	Calculation Parameters		
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO10	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC6	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO11	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC4 + 1.3*LC6	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO12	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC5 + 1.3*LC6	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO13	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC4 + 1.3*LC6 + 0.78*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO14	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC5 + 1.3*LC6 + 0.78*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO15	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC6 + 0.78*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:

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5.2 Load Combinations - Calculation Parameters

Load Combin.	Description	Calculation Parameters
		x Normal forces N x Shear forces V_y and V_z x Moments M_y, M_z and M_T Activate stiffness factors of: : x Materials (partial factor gM) : x Cross-sections (factor for J, I_y, I_z, A, A_y, A_z) : x Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO16	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC7	Method of analysis : x Second order analysis (P-Delta) Method for solving system of nonlinear algebraic equations : x Picard Options : x Consider favorable effects due to tension : x Refer internal forces to deformed system for: x Normal forces N x Shear forces V_y and V_z x Moments M_y, M_z and M_T Activate stiffness factors of: : x Materials (partial factor gM) : x Cross-sections (factor for J, I_y, I_z, A, A_y, A_z) : x Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO17	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC4 + 1.3*LC7	Method of analysis : x Second order analysis (P-Delta) Method for solving system of nonlinear algebraic equations : x Picard Options : x Consider favorable effects due to tension : x Refer internal forces to deformed system for: x Normal forces N x Shear forces V_y and V_z x Moments M_y, M_z and M_T Activate stiffness factors of: : x Materials (partial factor gM) : x Cross-sections (factor for J, I_y, I_z, A, A_y, A_z) : x Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO18	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC5 + 1.3*LC7	Method of analysis : x Second order analysis (P-Delta) Method for solving system of nonlinear algebraic equations : x Picard Options : x Consider favorable effects due to tension : x Refer internal forces to deformed system for: x Normal forces N x Shear forces V_y and V_z x Moments M_y, M_z and M_T Activate stiffness factors of: : x Materials (partial factor gM) : x Cross-sections (factor for J, I_y, I_z, A, A_y, A_z) : x Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO19	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC4 + 0.91*LC6 + 1.3*LC7	Method of analysis : x Second order analysis (P-Delta) Method for solving system of nonlinear algebraic equations : x Picard Options : x Consider favorable effects due to tension : x Refer internal forces to deformed system for: x Normal forces N x Shear forces V_y and V_z x Moments M_y, M_z and M_T Activate stiffness factors of: : x Materials (partial factor gM) : x Cross-sections (factor for J, I_y, I_z, A, A_y, A_z) : x Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO20	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC5 + 0.91*LC6 + 1.3*LC7	Method of analysis : x Second order analysis (P-Delta) Method for solving system of nonlinear algebraic equations : x Picard Options : x Consider favorable effects due to tension : x Refer internal forces to deformed system for: x Normal forces N x Shear forces V_y and V_z x Moments M_y, M_z and M_T Activate stiffness factors of: : x Materials (partial factor gM) : x Cross-sections (factor for J, I_y, I_z, A, A_y, A_z) : x Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO21	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.91*LC6 + 1.3*LC7	Method of analysis : x Second order analysis (P-Delta) Method for solving system of nonlinear algebraic equations : x Picard

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5.2 Load Combinations - Calculation Parameters

Load Combin.	Description	Calculation Parameters		
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO22	LC1 + LC2 + LC3	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO23	LC1 + LC2 + LC3 + LC4	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO24	LC1 + LC2 + LC3 + LC5	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO25	LC1 + LC2 + LC3 + LC4 + 0.7*LC6	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO26	LC1 + LC2 + LC3 + LC5 + 0.7*LC6	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO27	LC1 + LC2 + LC3 + LC4 + 0.7*LC6 + 0.6*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:

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15.5.2 Load Combinations - Calculation Parameters

Load Combin.	Description	Calculation Parameters		
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO28	LC1 + LC2 + LC3 + LC5 + 0.7*LC6 + 0.6*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO29	LC1 + LC2 + LC3 + LC4 + 0.6*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO30	LC1 + LC2 + LC3 + LC5 + 0.6*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO31	LC1 + LC2 + LC3 + LC6	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO32	LC1 + LC2 + LC3 + 0.6*LC4 + LC6	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO33	LC1 + LC2 + LC3 + 0.6*LC5 + LC6	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z

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15.5.2 Load Combinations - Calculation Parameters

Load Combin.	Description	Calculation Parameters		
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO34	LC1 + LC2 + LC3 + 0.6*LC4 + LC6 + 0.6*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO35	LC1 + LC2 + LC3 + 0.6*LC5 + LC6 + 0.6*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO36	LC1 + LC2 + LC3 + LC6 + 0.6*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO37	LC1 + LC2 + LC3 + LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO38	LC1 + LC2 + LC3 + 0.6*LC4 + LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO39	LC1 + LC2 + LC3 + 0.6*LC5 + LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T

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2.5.2 Load Combinations - Calculation Parameters

Load Combin.	Description	Calculation Parameters
		Activate stiffness factors of: : x Materials (partial factor gM) : x Cross-sections (factor for J, I_y, I_z, A, A_y, A_z) : x Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO40	LC1 + LC2 + LC3 + 0.6*LC4 + 0.7*LC6 + LC7	Method of analysis : x Second order analysis (P-Delta) Method for solving system of nonlinear algebraic equations : x Picard Options : x Consider favorable effects due to tension : x Refer internal forces to deformed system for: x Normal forces N x Shear forces V_y and V_z x Moments M_y, M_z and M_T Activate stiffness factors of: : x Materials (partial factor gM) : x Cross-sections (factor for J, I_y, I_z, A, A_y, A_z) : x Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO41	LC1 + LC2 + LC3 + 0.6*LC5 + 0.7*LC6 + LC7	Method of analysis : x Second order analysis (P-Delta) Method for solving system of nonlinear algebraic equations : x Picard Options : x Consider favorable effects due to tension : x Refer internal forces to deformed system for: x Normal forces N x Shear forces V_y and V_z x Moments M_y, M_z and M_T Activate stiffness factors of: : x Materials (partial factor gM) : x Cross-sections (factor for J, I_y, I_z, A, A_y, A_z) : x Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO42	LC1 + LC2 + LC3 + 0.7*LC6 + LC7	Method of analysis : x Second order analysis (P-Delta) Method for solving system of nonlinear algebraic equations : x Picard Options : x Consider favorable effects due to tension : x Refer internal forces to deformed system for: x Normal forces N x Shear forces V_y and V_z x Moments M_y, M_z and M_T Activate stiffness factors of: : x Materials (partial factor gM) : x Cross-sections (factor for J, I_y, I_z, A, A_y, A_z) : x Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)

2.7 Result Combinations

Result Combin	Description	Loading
RC1	ULS (STR/GEO) - Permanent / transient - Eq. 6.10	CO1/p or to CO21
RC2	SLS - Characteristic	CO22/p or to CO42

LC2
Irenginiu svoris

3.1 Nodal Loads - By Components - Coordinate System

LC2: Irenginiu svoris

No.	On Nodes No.	Coordinate System	Force [kN] P_X / P_U	P_Y / P_V	P_Z / P_W	Moment [kNm] M_X / M_U	M_Y / M_V	M_Z / M_W
1	24,25,27,29,30,32	0 | Global XYZ	0.000	0.000	-1.230	0.000	0.000	0.000

LC2: Irenginiu svoris

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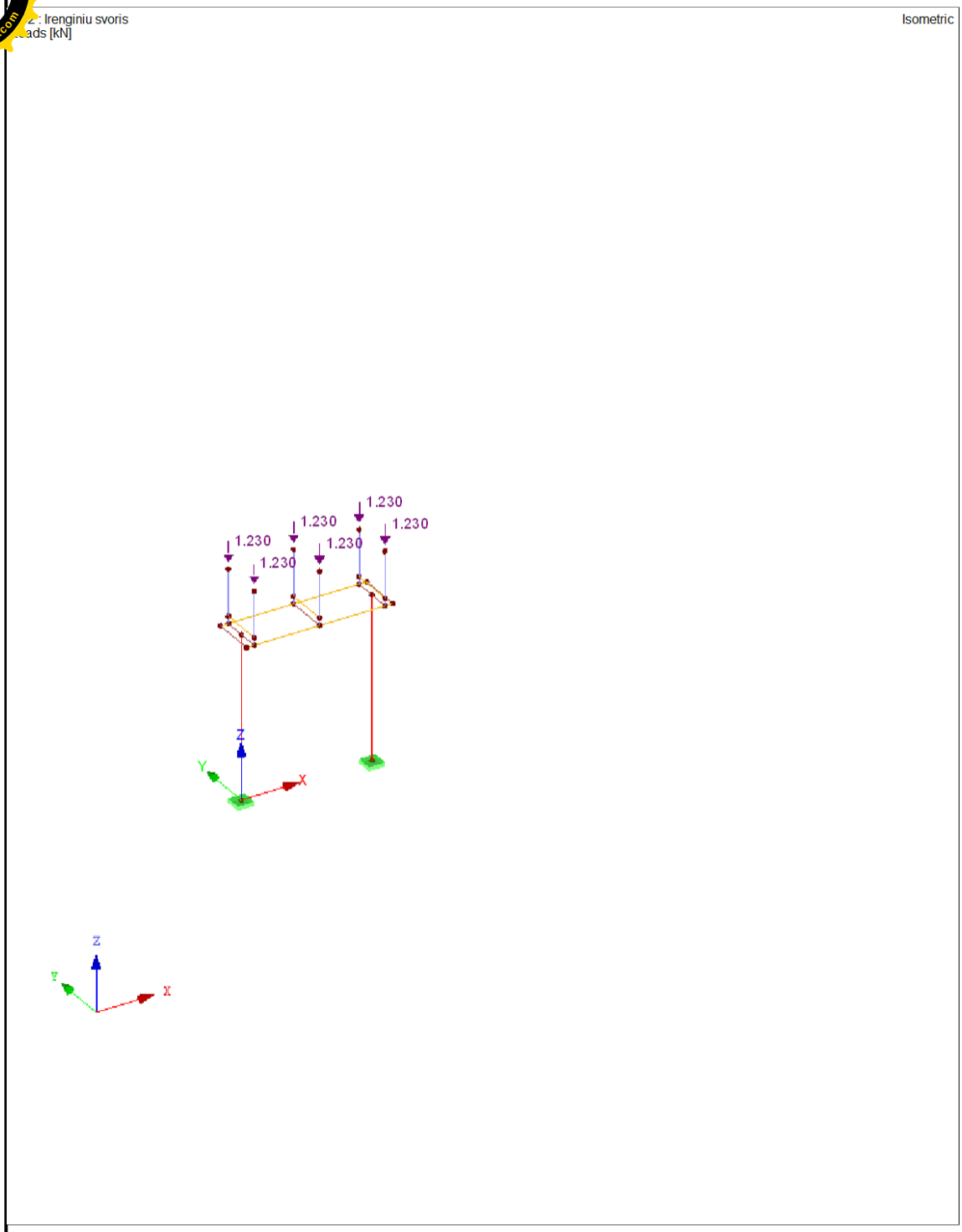

LC3
Laidu svoris

3.1 Nodal Loads - By Components - Coordinate System

LC3: Laidu svoris

No.	On Nodes No.	Coordinate System	Force [kN] P_X / P_U	P_Y / P_V	P_Z / P_W	Moment [kNm] M_X / M_U	M_Y / M_V	M_Z / M_W
1	24,25,27,29,30,32	0 | Global XYZ	0.000	0.000	-0.070	0.000	0.000	0.000

LC3: Laidu svoris

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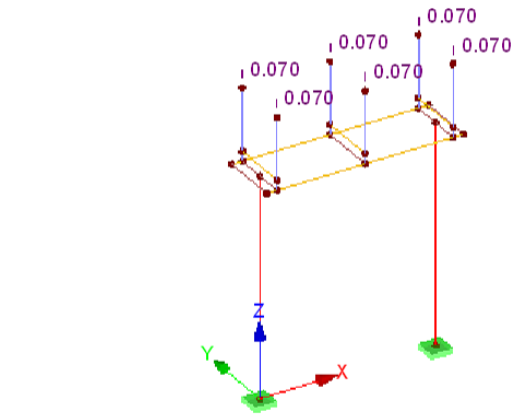
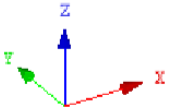
LC3 : Laidu svoris
Loads [kN]





LC4
Vejas X-X

3.2 Member Loads

LC4: Vejas X-X

No.	Reference to	On Members No.	Load Type	Load Distribution	Load Direction	Reference Length	Load Parameters		
							Symbol	Value	Unit
1	Members	13	Force	Uniform	z	True Length	p	-0.092	kN/m
2	Members	12	Force	Uniform	z	True Length	p	-0.092	kN/m
3	Members	20-25	Force	Uniform	z	True Length	p	-0.120	kN/m

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3.2 Member Loads

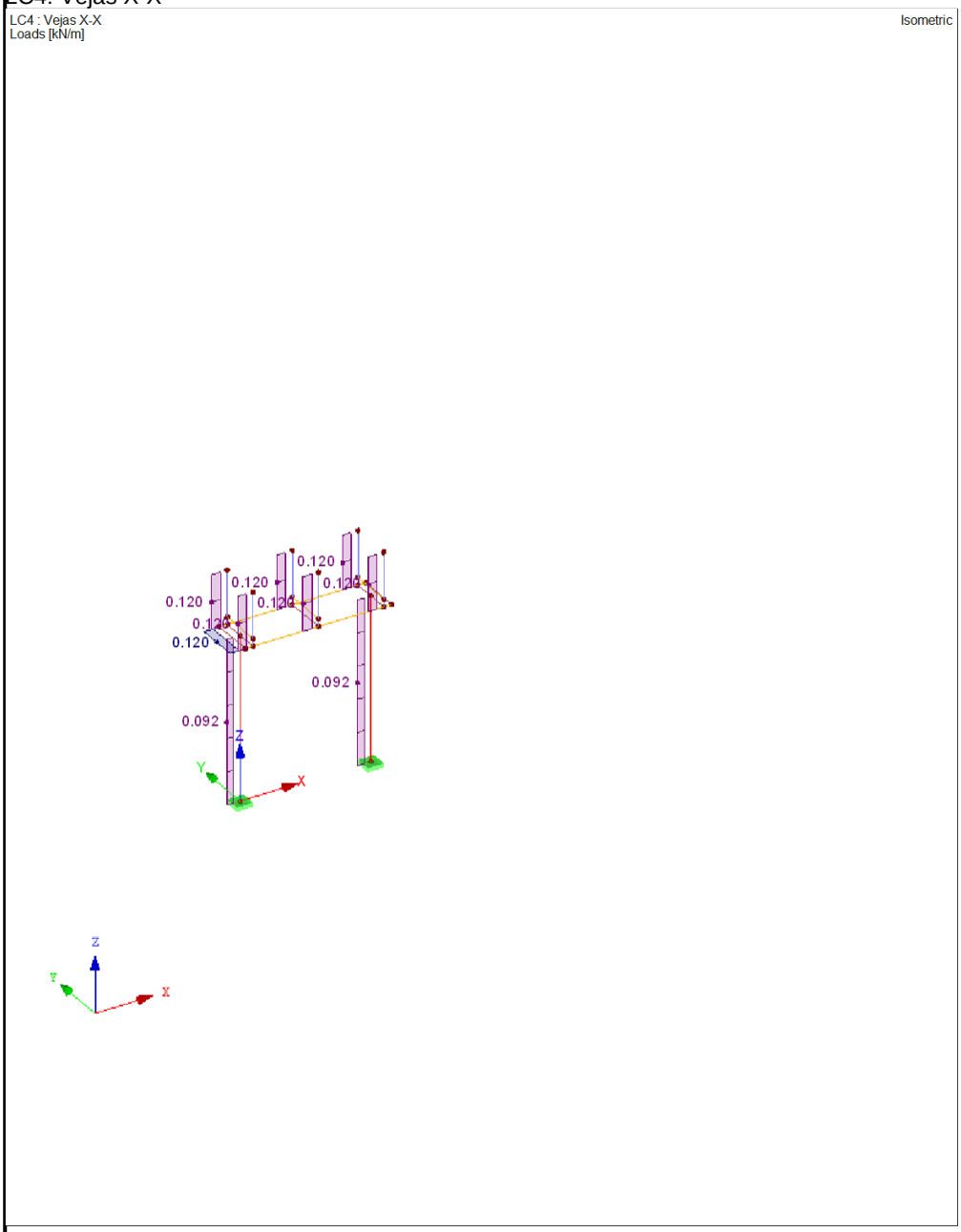
No.	Reference to	On Members No.	Load Type	Load Distribution	Load Direction	Reference Length	Load Parameters Symbol	Value	Unit
4	Members	26	Force	Uniform	y	True Length	p	0.120	kN/m

3.2/1 Member Loads - Load Eccentricity

LC4: Vejas X-X

No.	Reference to	On Members No.	Absolute Offset Mbr. Start e_Y [mm]	Absolute Offset Mbr. Start e_Z [mm]	Absolute Offset Mbr. End e_Y [mm]	Absolute Offset Mbr. End e_Z [mm]	Relative Offset Mbr. Start y-Axis	Relative Offset Mbr. Start z-Axis	Relative Offset Mbr. End y-Axis	Relative Offset Mbr. End z-Axis
1	Members	13	0.0	0.0	0.0	0.0	Middle	Middle	Middle	Middle
2	Members	12	0.0	0.0	0.0	0.0	Middle	Middle	Middle	Middle
3	Members	20-25	0.0	0.0	0.0	0.0	Middle	Middle	Middle	Middle
4	Members	26	0.0	0.0	0.0	0.0	Middle	Middle	Middle	Middle

LC4: Vejas X-X



LC5

Vejas Y-Y

3.2 Member Loads

LC5: Vejas Y-Y

No.	Reference to	On Members No.	Load Type	Load Distribution	Load Direction	Reference Length	Load Parameters Symbol	Value	Unit
1	Members	12,13	Force	Uniform	y	True Length	p	0.092	kN/m
2	Members	4	Force	Uniform	y	True Length	p	-0.120	kN/m

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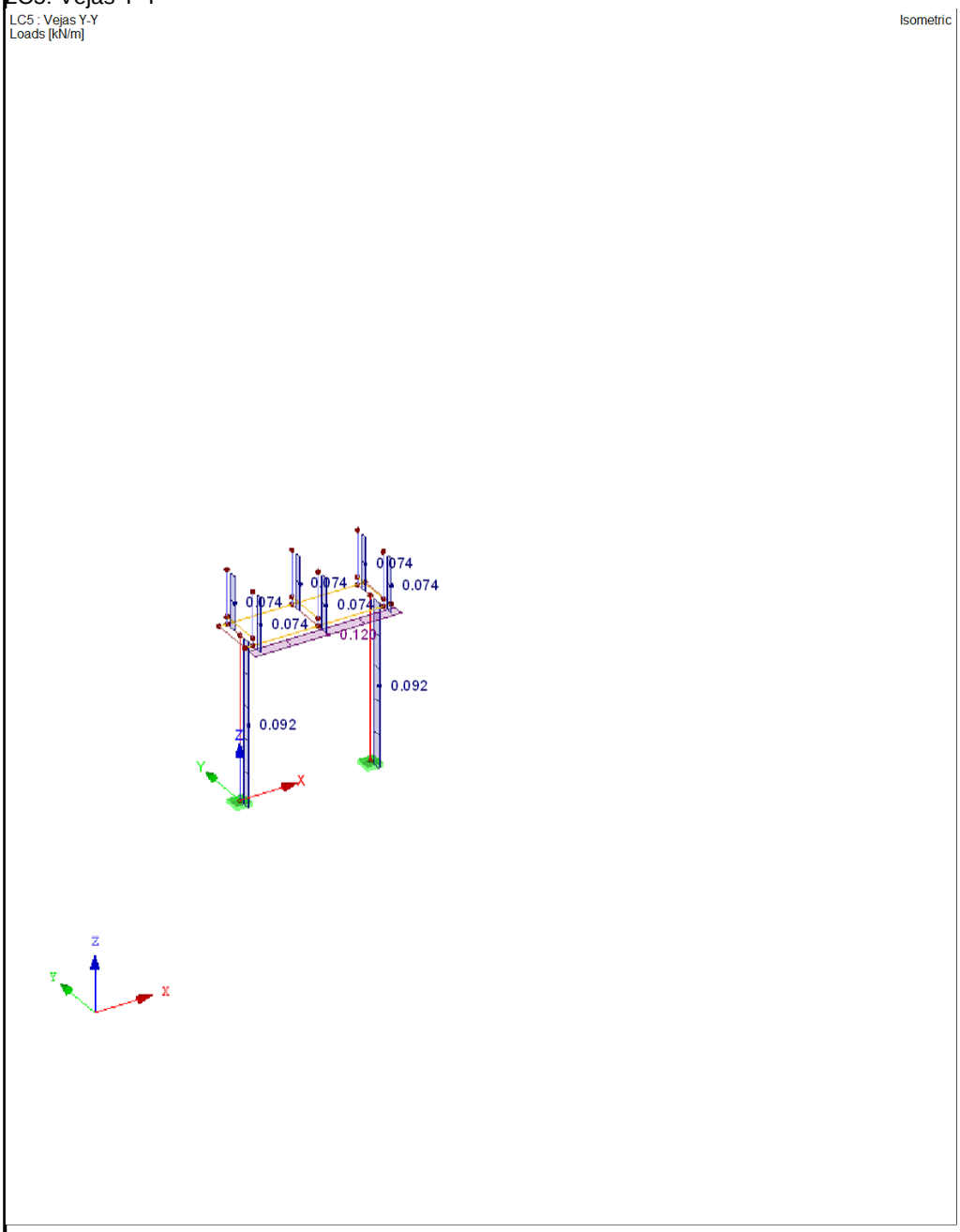
3.2 Member Loads

No.	Reference to	On Members No.	Load Type	Load Distribution	Load Direction	Reference Length	Load Parameters		
							Symbol	Value	Unit
3	Members	20-25	Force	Uniform	y	True Length	p	0.074	kN/m

3.2/1 Member Loads - Load Eccentricity

No.	Reference to	On Members No.	Absolute Offset		Absolute Offset		Relative Offset		Relative Offset	
			Mbr. Start	Mbr. Start	Mbr. End	Mbr. End	Mbr. Start	Mbr. Start	Mbr. End	Mbr. End
			e_Y [mm]	e_Z [mm]	e_Y [mm]	e_Z [mm]	y-Axis	z-Axis	y-Axis	z-Axis
1	Members	12,13	0.0	0.0	0.0	0.0	Middle	Middle	Middle	Middle
2	Members	4	0.0	0.0	0.0	0.0	Middle	Middle	Middle	Middle
3	Members	20-25	0.0	0.0	0.0	0.0	Middle	Middle	Middle	Middle

LC5: Vejas Y-Y



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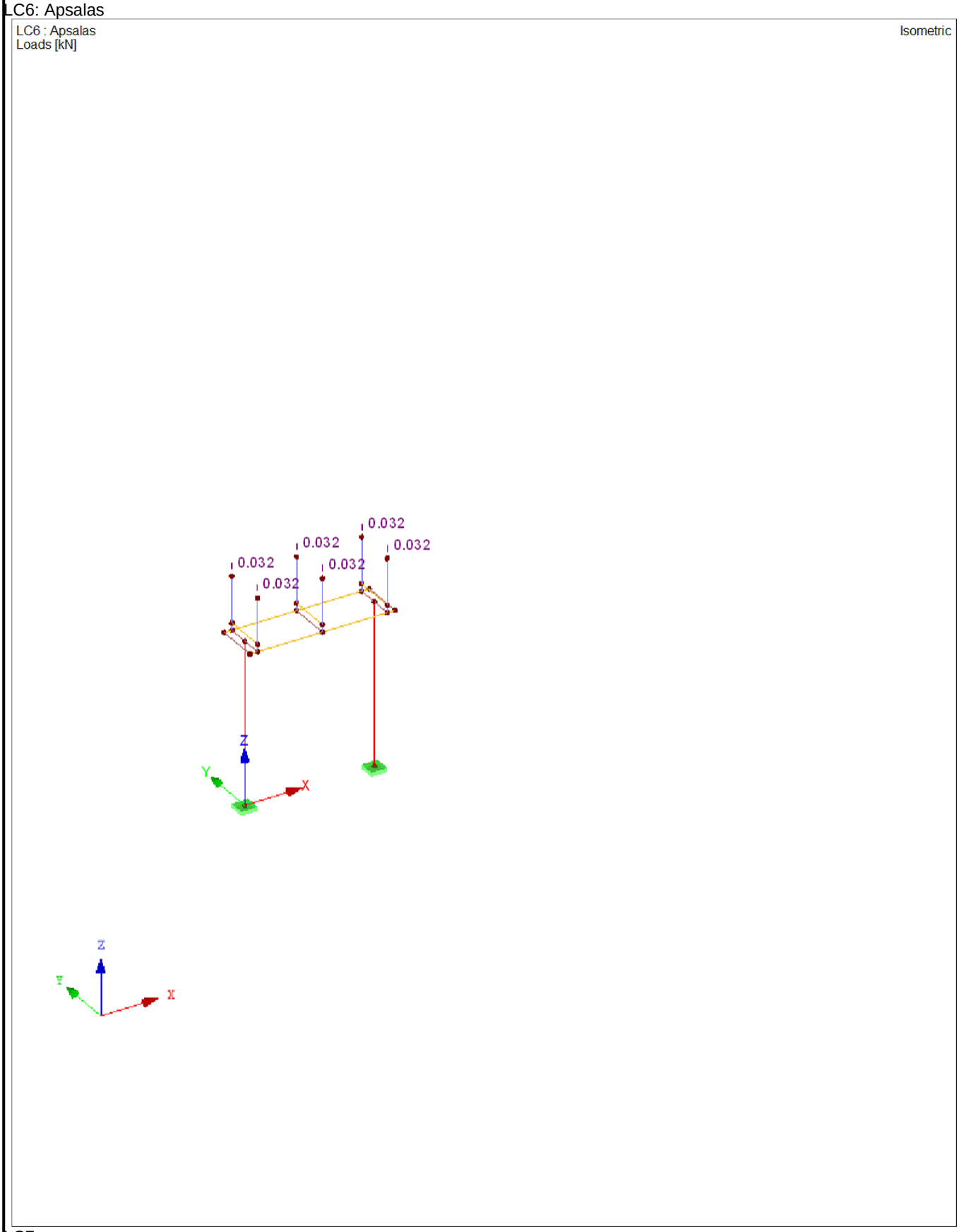
3.1 Nodal Loads - By Components - Coordinate System

No.	On Nodes No.	Coordinate System	Force [kN] P_X / P_U	P_Y / P_V	P_Z / P_W	Moment [kNm] M_X / M_U	M_Y / M_V	M_Z / M_W
1	24,25,27,29,30,32	0 | Global XYZ	0.000	0.000	-0.032	0.000	0.000	0.000

LC6: Apsalas



LC7

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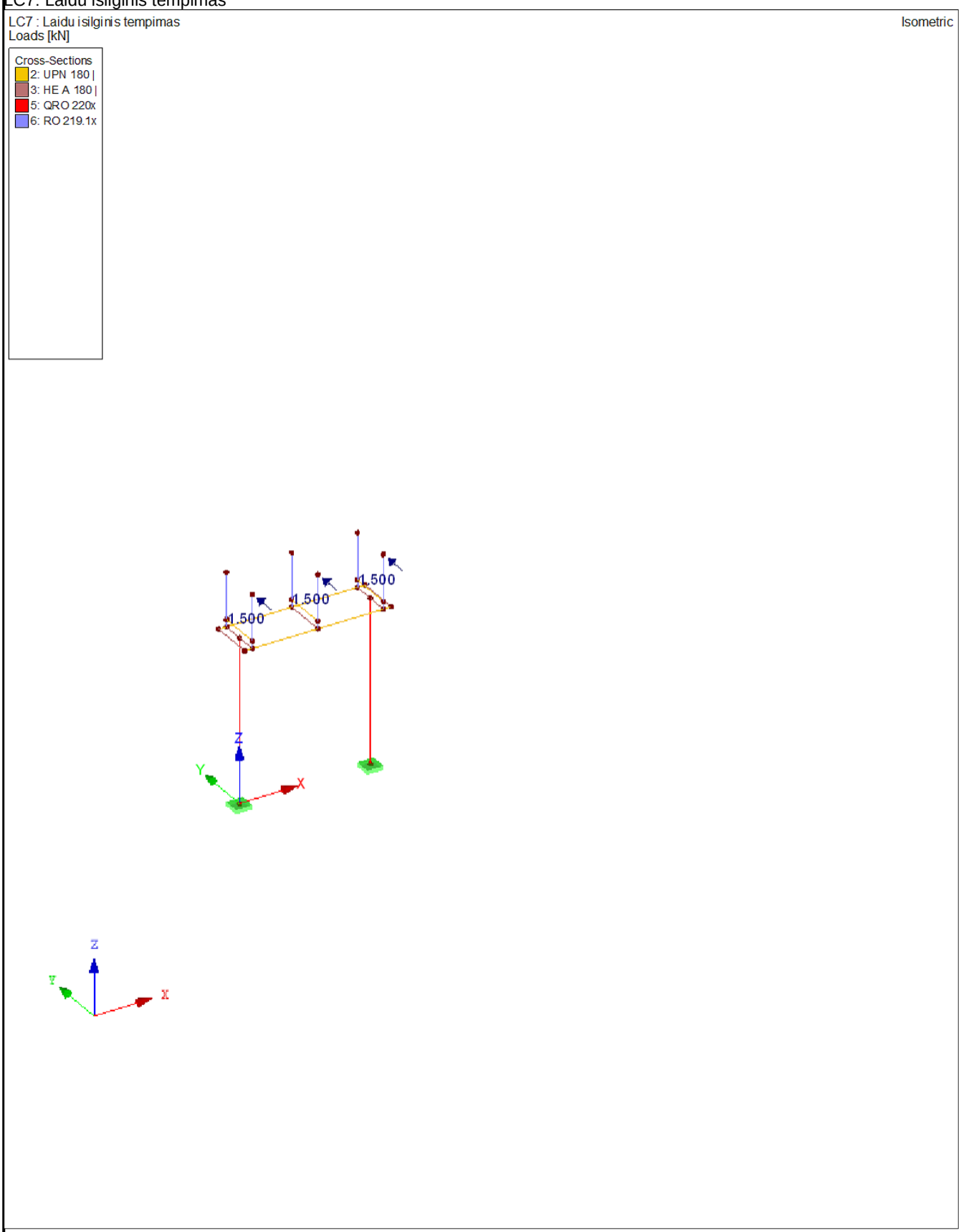
3.1 Nodal Loads - By Components - Coordinate System

No.	On Nodes No.	Coordinate System	Force [kN] P_X / P_U	P_Y / P_V	P_Z / P_W	Moment [kNm] M_X / M_U	M_Y / M_V	M_Z / M_W
1	29,30,32	0 | Global XYZ	0.000	1.500	0.000	0.000	0.000	0.000

LC7: Laidu isilginis tempimas



Global Deformations uY

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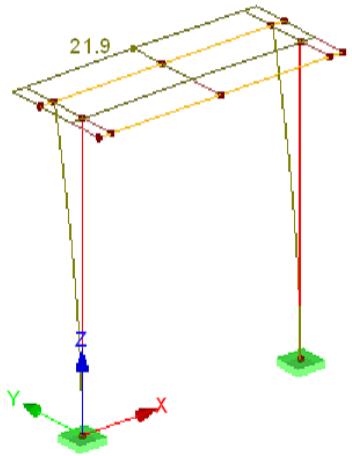
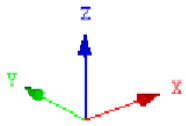
7 : Laidu isilginis tempimas
Global Deformations u-Y [mm]

Cross-Sections
2: UPN 180 |
3: HE A 180 |
5: QRO 220x





Factor of deformations: 30.00
Max u-Y: 21.9, Min u-Y: 0.0 mm

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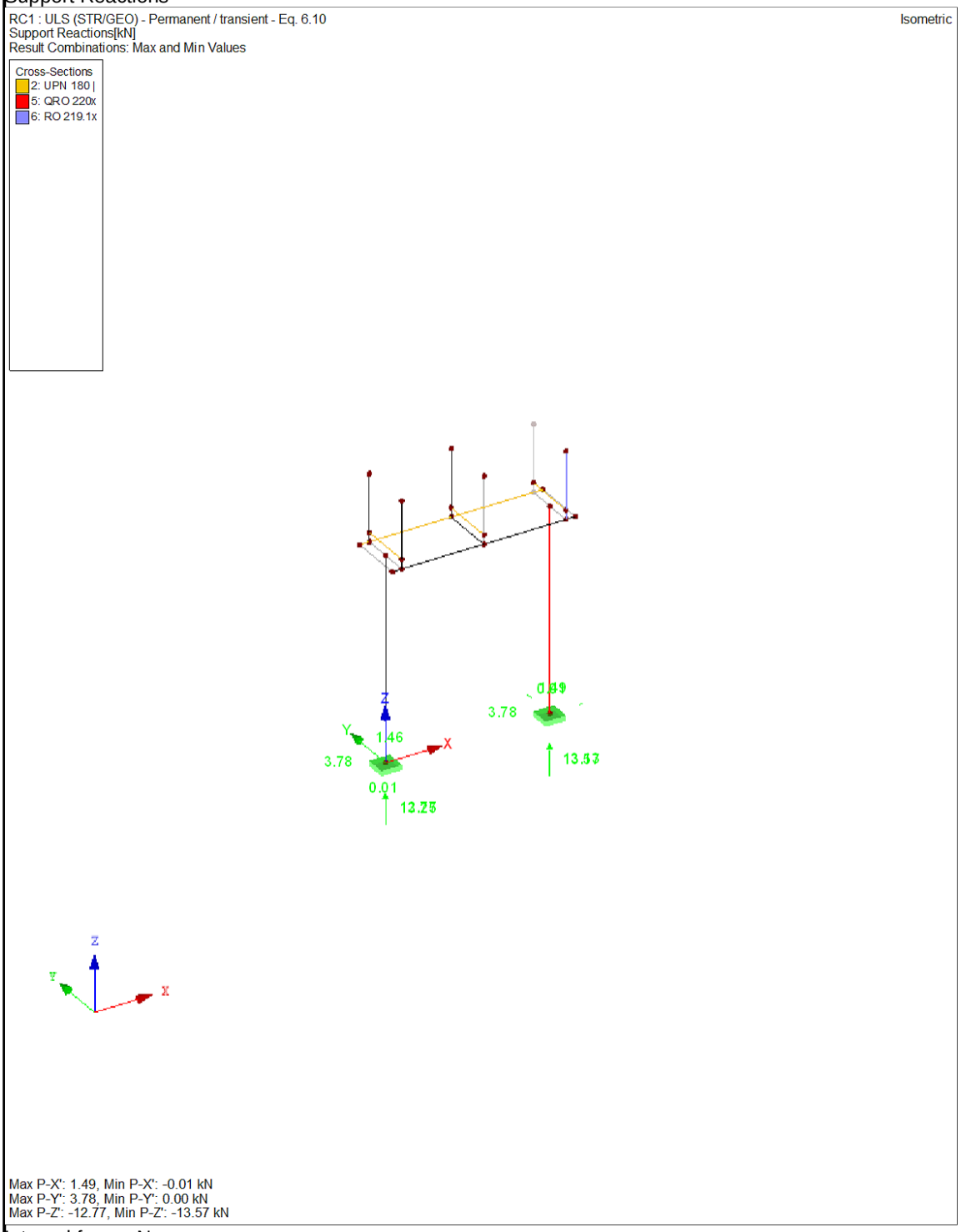
4.2 Nodes - Support Forces

Node No.	RC		Support Forces [kN] $P_{X'}$	$P_{Y'}$	$P_{Z'}$	Support Moments [kNm] $M_{X'}$	$M_{Y'}$	$M_{Z'}$	
1	RC1	Max	1.46	3.78	-12.77	0.00	5.89	0.02	
									ULS (STR/GEO) - Permanent / transient - Eq. 6.10
		Min	-0.01	0.00	-13.25	-23.67	-0.02	0.00	
									ULS (STR/GEO) - Permanent / transient - Eq. 6.10
	RC2	Max	1.13	2.91	-9.45	0.00	4.52	0.02	SLS - Characteristic
		Min	-0.01	0.00	-9.82	-18.10	-0.02	0.00	SLS - Characteristic
2	RC1	Max	1.49	3.78	-13.13	0.00	5.94	0.00	
									ULS (STR/GEO) - Permanent / transient - Eq. 6.10
		Min	0.01	0.00	-13.57	-23.67	0.02	-0.02	
									ULS (STR/GEO) - Permanent / transient - Eq. 6.10
	RC2	Max	1.14	2.91	-9.72	0.00	4.55	0.00	SLS - Characteristic
		Min	0.01	0.00	-10.06	-18.10	0.02	-0.02	SLS - Characteristic

Support Reactions



Internal forces N

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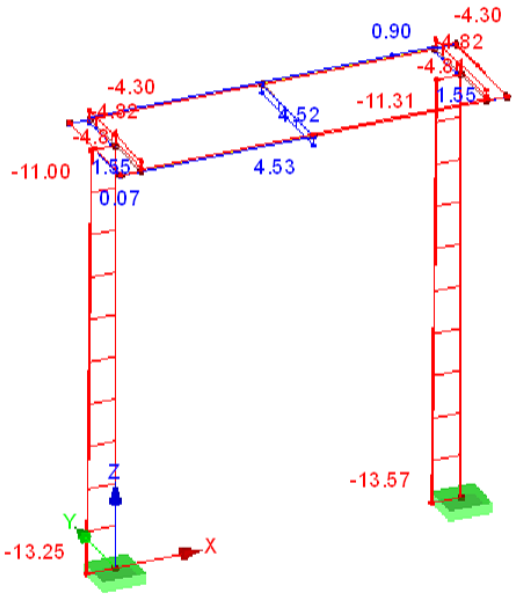
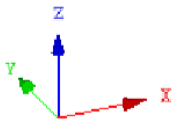
C1 : ULS (STR/GEO) - Permanent / transient - Eq. 6.10
Internal Forces N
Result Combinations: Max and Min Values

Cross-Sections
2: UPN 180 |
3: HE A 180 |
5: QRO 220x





Max N: 4.53, Min N: -13.57 [kN]

ED2201-XX-RDP-SK-T1.IS	LAPAS	LAPŲ	LAIDA
	107	643	0

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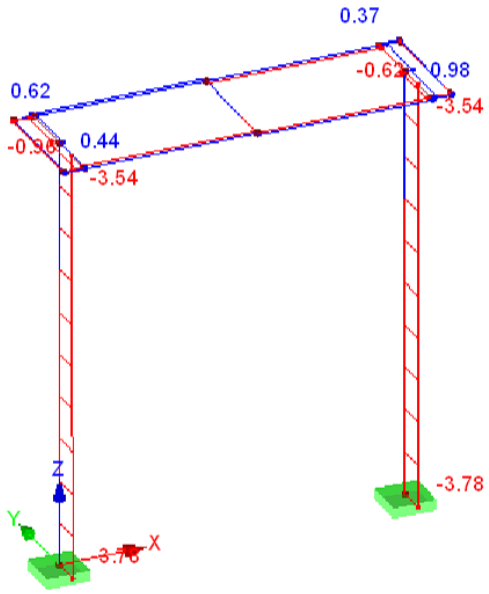
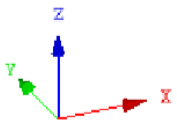
ternal forces Vy

RC1 : ULS (STR/GEO) - Permanent / transient - Eq. 6.10
Internal Forces V-y
Result Combinations: Max and Min Values





Max V-y: 0.98, Min V-y: -3.78 [kN]

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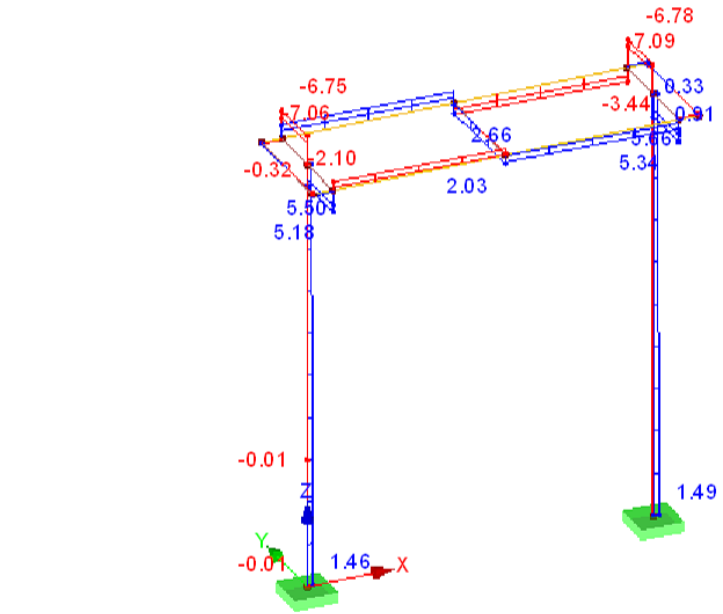
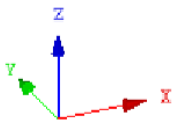
ternal forces Vz

RC1 : ULS (STR/GEO) - Permanent / transient - Eq. 6.10
Internal Forces V-z
Result Combinations: Max and Min Values





Max V-z: 5.66, Min V-z: -7.09 [kN]

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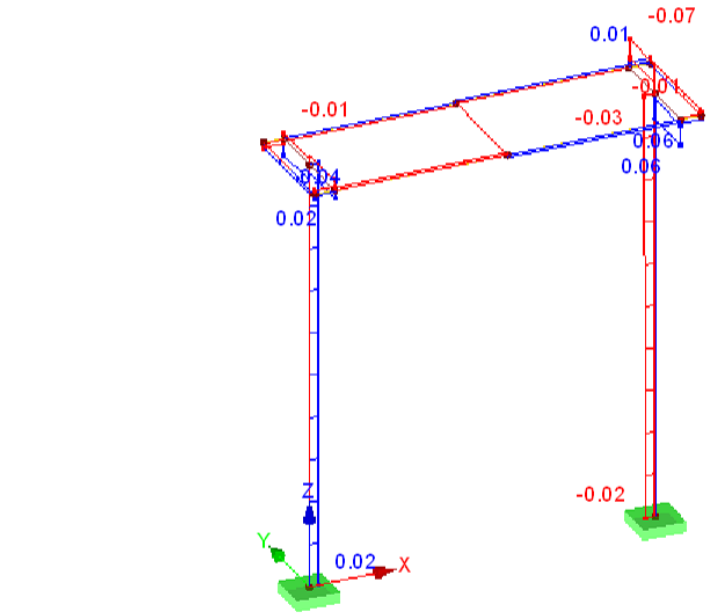
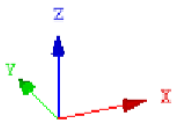
ternal forces MT

RC1 : ULS (STR/GEO) - Permanent / transient - Eq. 6.10
Internal Forces M-T
Result Combinations: Max and Min Values





Max M-T: 0.06, Min M-T: -0.07 [kNm]

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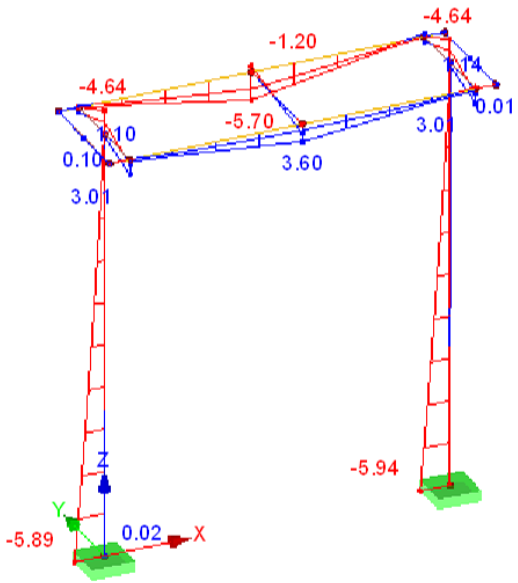
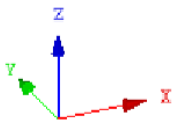
ternal forces My

RC1 : ULS (STR/GEO) - Permanent / transient - Eq. 6.10
Internal Forces M-y
Result Combinations: Max and Min Values





Max M-y: 3.60, Min M-y: -5.94 [kNm]

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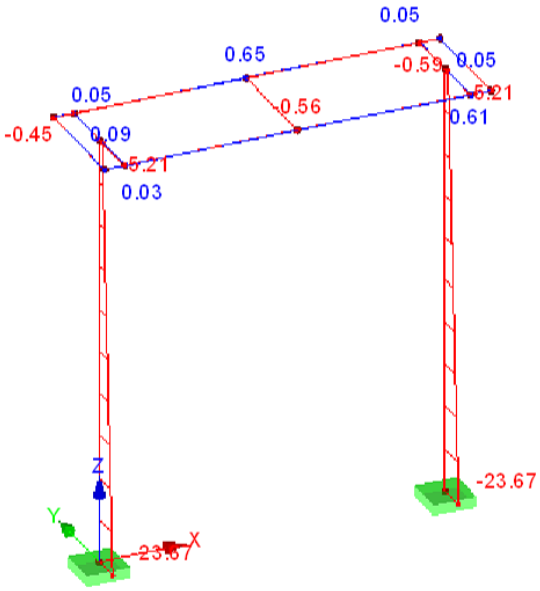
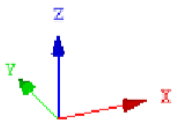
ternal forces Mz

RC1 : ULS (STR/GEO) - Permanent / transient - Eq. 6.10
Internal Forces M-z
Result Combinations: Max and Min Values





Max M-z: 0.65, Min M-z: -23.67 [kNm]

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1.5 Effective Lengths - Members

Member No.	Buckling Possible	Buckling About Axis y			Buckling About Axis z			Lateral-Torsional Buckling				
		Possible	$k_{cr,y}$	$L_{cr,y}$ [m]	Possible	$k_{cr,z}$	$L_{cr,z}$ [m]	Possible	k_z	k_w	L_w [m]	L_T [m]
3	x	x	1.00	4.470	x	1.00	4.470	x	1.0	1.0	4.470	4.470
4	x	x	1.00	4.470	x	1.00	4.470	x	1.0	1.0	4.470	4.470
5	x	x	1.00	1.320	x	1.00	1.320	x	1.0	1.0	1.320	1.320
7	x	x	1.00	1.320	x	1.00	1.320	x	1.0	1.0	1.320	1.320
8	x	x	1.00	1.320	x	1.00	1.320	x	1.0	1.0	1.320	1.320
12	x	x	1.00	5.020	x	1.00	5.020	-	1.0	1.0	5.020	5.020
13	x	x	1.00	5.020	x	1.00	5.020	-	1.0	1.0	5.020	5.020

1.12 Parameters - Members

Member No.	Description	Parameter
3	Cross-Section	2 - UPN 180 | ArcelorMittal (EN 10365:2017)
	Shear panel	-
	Rotational restraint	-
	Cross-sectional area for tension design	-
4	Cross-Section	2 - UPN 180 | ArcelorMittal (EN 10365:2017)
	Shear panel	-
	Rotational restraint	-
	Cross-sectional area for tension design	-
5	Cross-Section	3 - HE A 180 | Euronorm 53-62
	Shear panel	-
	Rotational restraint	-
	Cross-sectional area for tension design	-
7	Cross-Section	3 - HE A 180 | Euronorm 53-62
	Shear panel	-
	Rotational restraint	-
	Cross-sectional area for tension design	-
8	Cross-Section	3 - HE A 180 | Euronorm 53-62
	Shear panel	-
	Rotational restraint	-
	Cross-sectional area for tension design	-
12	Cross-Section	5 - QRO 220x5 | EN 10219-2:2006
	Shear panel	-
	Rotational restraint	-
	Cross-sectional area for tension design	-
13	Cross-Section	5 - QRO 220x5 | EN 10219-2:2006
	Shear panel	-
	Rotational restraint	-
	Cross-sectional area for tension design	-

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5 Design by cross-sections

No.	No.	x [m]	ing	Ratio		Design According to Formula
2	UPN 220 | ArcelorMittal (EN 10365:2017)					
	3	0.235	CO26	0.00	£ 1	CS100) Negligible internal forces
	3	2.235	CO4	0.08	£ 1	CS111) Cross-section check - Bending about y-axis acc. to 6.2.5 - Class 1 or 2
	3	4.235	CO6	0.03	£ 1	CS116) Cross-section check - Bending about z-axis acc. to 6.2.5 - Class 1 or 2
	3	0.235	CO19	0.01	£ 1	CS121) Cross-section check - Shear force in z-axis acc. to 6.2.6
	4	0.235	CO20	0.00	£ 1	CS123) Cross-section check - Shear force in y-axis acc. to 6.2.6
	3	0.235	LC1	0.00	£ 1	CS126) Cross-section check - Shear buckling acc. to 6.2.6(6)
	3	2.235	CO4	0.08	£ 1	CS141) Cross-section check - Bending and shear force acc. to 6.2.5 and 6.2.8
	3	4.235	CO6	0.03	£ 1	CS151) Cross-section check - Bending about z-axis and shear force acc. to 6.2.5 and 6.2.8
	3	2.235	CO20	0.18	£ 1	CS161) Cross-section check - Biaxial bending and shear force acc. to 6.2.6, 6.2.7 and 6.2.9
	3	2.235	CO7	0.11	£ 1	ST332) Stability analysis - Lateral torsional buckling acc. to 6.3.2.1 and 6.3.2.2(4) - General Section
	3	2.235	CO20	0.32	£ 1	ST333) Stability analysis - Lateral torsional buckling acc. to 6.3.2.1 and 6.3.2.2 - General Section
5	QRO 200x5 | EN 10219-2:2006					
	13	5.020	LC4	0.00	£ 1	CS100) Negligible internal forces
	13	0.000	CO6	0.01	£ 1	CS102) Cross-section check - Compression acc. to 6.2.4
	12	0.000	CO10	0.01	£ 1	CS103) Cross-section check - Compression acc. to 6.2.4 - Class 4
	13	0.000	CO4	0.00	£ 1	CS122) Cross-section check - Shear force in z-axis acc. to 6.2.6(4) - Class 3 or 4
	12	0.000	CO18	0.01	£ 1	CS124) Cross-section check - Shear force in y-axis acc. to 6.2.6(4) - Class 3 or 4
	12	0.000	LC4	0.00	£ 1	CS126) Cross-section check - Shear buckling acc. to 6.2.6(6)
	12	4.016	CO11	0.02	£ 1	CS191) Cross-section check - Bending, shear and axial force acc. to 6.2.9.3 - Class 4
	13	0.000	CO4	0.09	£ 1	CS192) Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	12	0.000	CO20	0.32	£ 1	CS212) Cross-section check - Bending about z-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	13	0.000	CO19	0.30	£ 1	CS222) Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	12	4.518	CO19	0.09	£ 1	CS232) Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	12	0.000	LC4	0.06	£ 1	CS245) Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	12	0.000	LC7	0.19	£ 1	CS255) Cross-section check - Bending about z-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4

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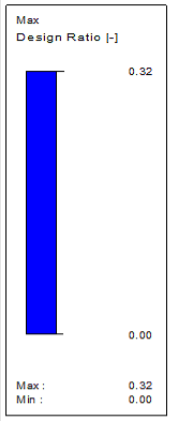
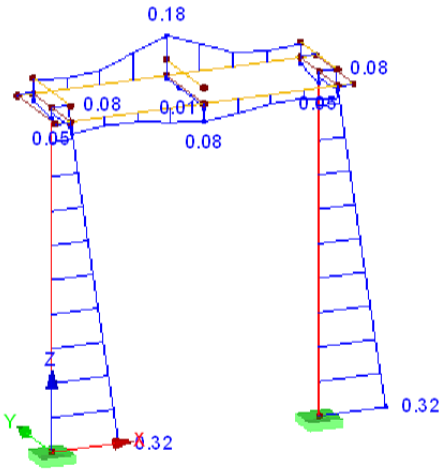
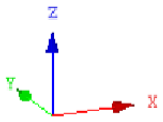
Design: Ultimate Limit State - Cross-Section Design

RF-STEEL EC3 CA1
Ultimate Limit State: Cross-Section Design

Isometric







Max Design Ratio: 0.32

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Material

Steel	S 235
Concrete	C30/37

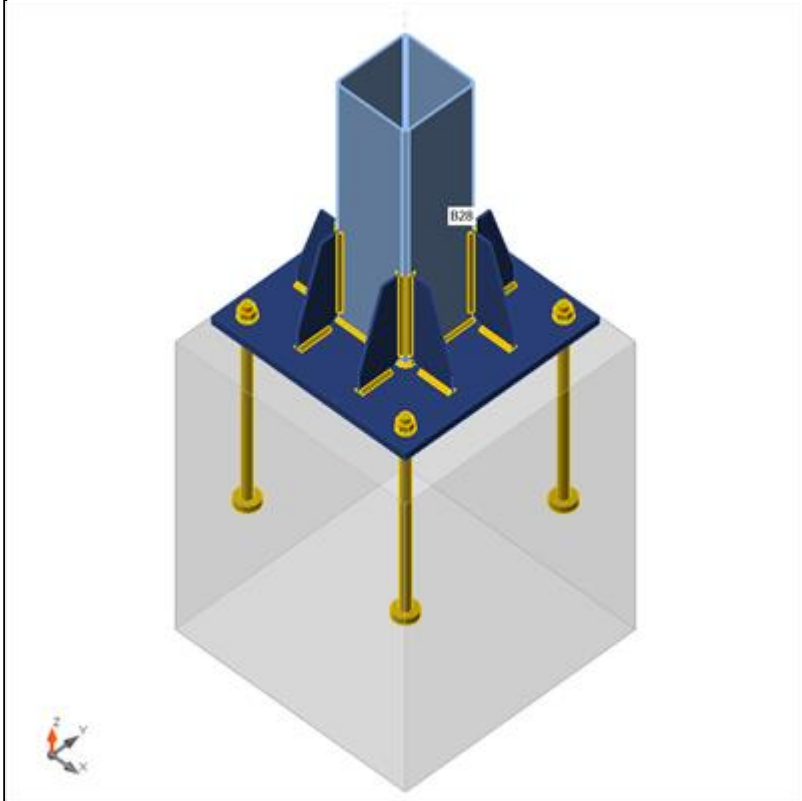
Design

Name	Con N112
Description	
Analysis	Stress, strain/ simplified loading

Members

Geometry

B28 1 - SHS200/200/5.0 0,0 90,0 -90,0 0 0 0 Position



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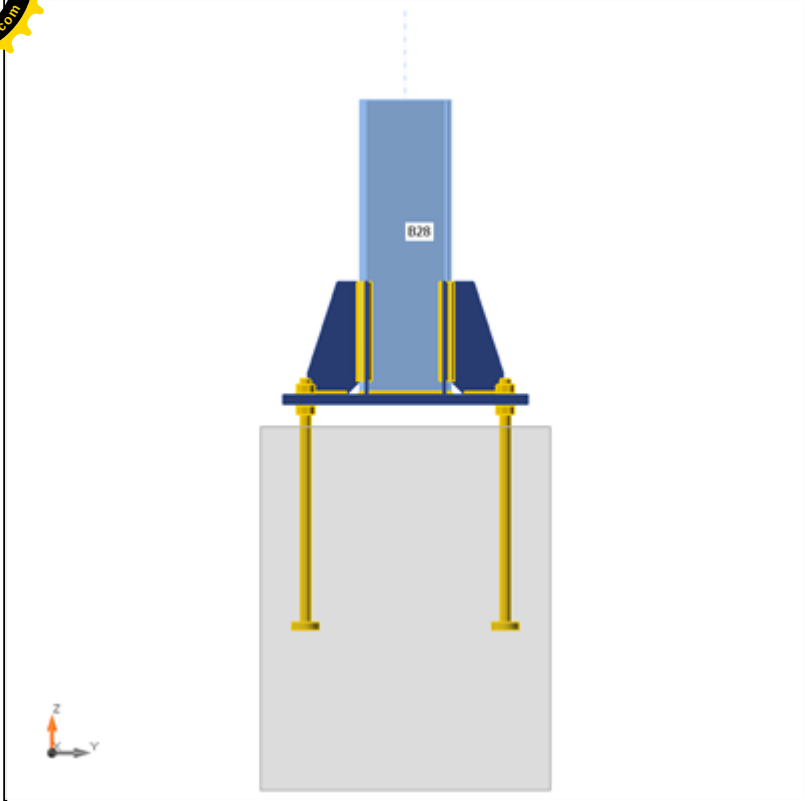

Cross-sections

1 - SHS200/200/5.0 S 235

Anchors

M24 8.8 M24 8.8 24 800,0 452

Load effects (Equilibrium not required)

Nmin+Mmax B28 -14,0 1,5 4,0 -24,0 0,0 0,0

Foundation block

CB 1

Dimensions	640 x 640	mm
Depth	800	mm
Anchor	M24 8.8	
Anchoring length	430	mm
Shear force transfer	Anchors	
Gap	50	mm

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Check

Summary

Analysis	100,0%	OK
Plates	0,0 < 5,0%	OK
Anchors	90,3 < 100%	OK
Welds	19,5 < 100%	OK
Concrete block	Not calculated	
Buckling	Not calculated	

Plates

B28	5,0	Nmin+Mmax	125,8	0,0	0,0	OK
BP1	20,0	Nmin+Mmax	73,6	0,0	0,0	OK
RIB1a	5,0	Nmin+Mmax	41,8	0,0	0,0	OK
RIB1b	5,0	Nmin+Mmax	43,1	0,0	0,0	OK
RIB2a	5,0	Nmin+Mmax	41,1	0,0	0,0	OK
RIB2b	5,0	Nmin+Mmax	41,6	0,0	0,0	OK
RIB3a	5,0	Nmin+Mmax	41,3	0,0	0,0	OK
RIB3b	5,0	Nmin+Mmax	41,8	0,0	0,0	OK
RIB4a	5,0	Nmin+Mmax	41,3	0,0	0,0	OK
RIB4b	5,0	Nmin+Mmax	43,4	0,0	0,0	OK

Design data

S 235	235,0	5,0

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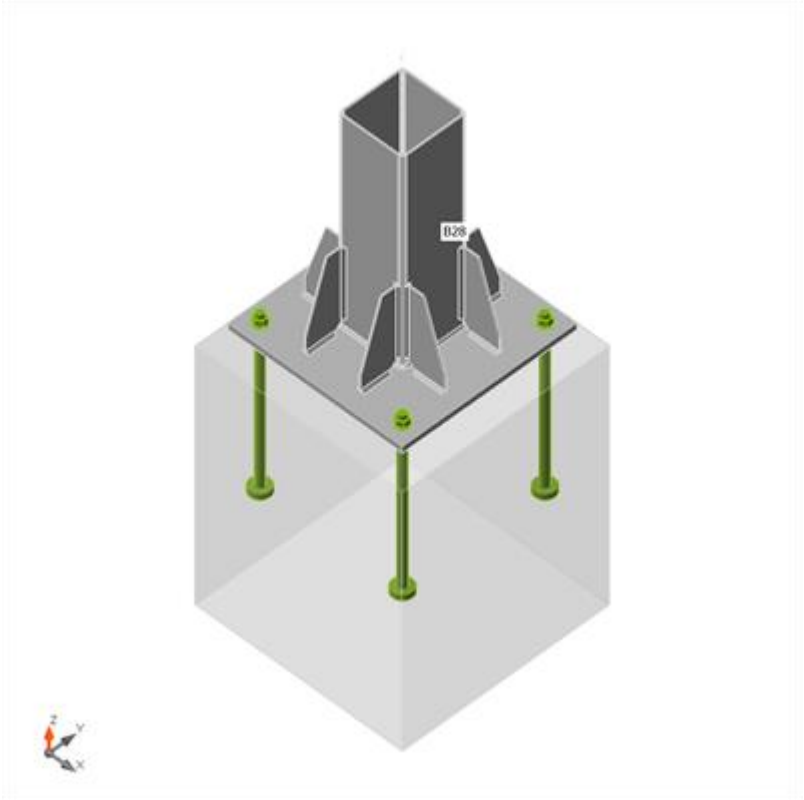
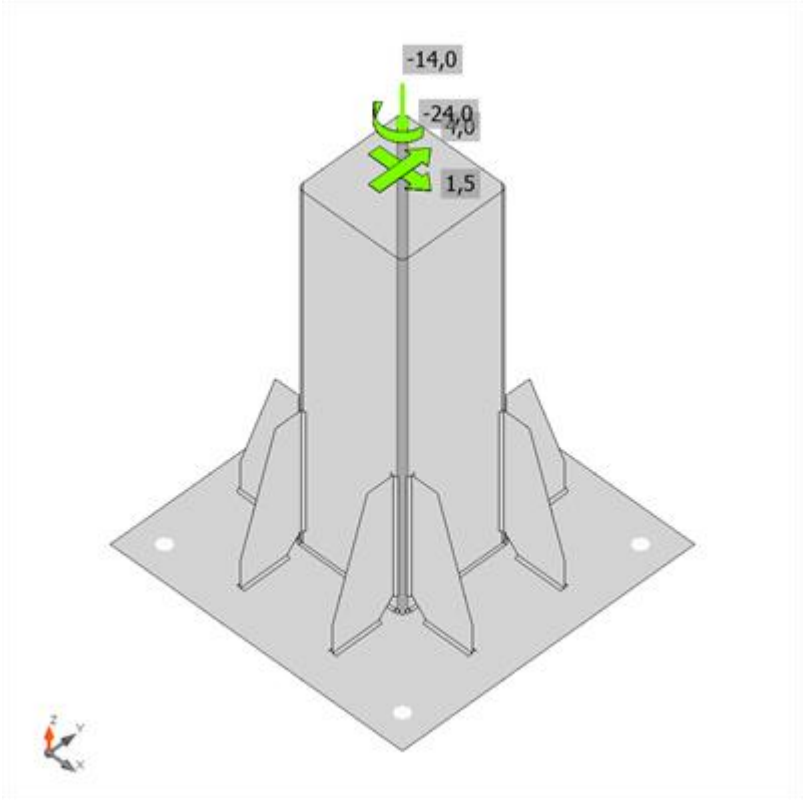


Overall check, Nmin+Mmax



Strain check, Nmin+Mmax

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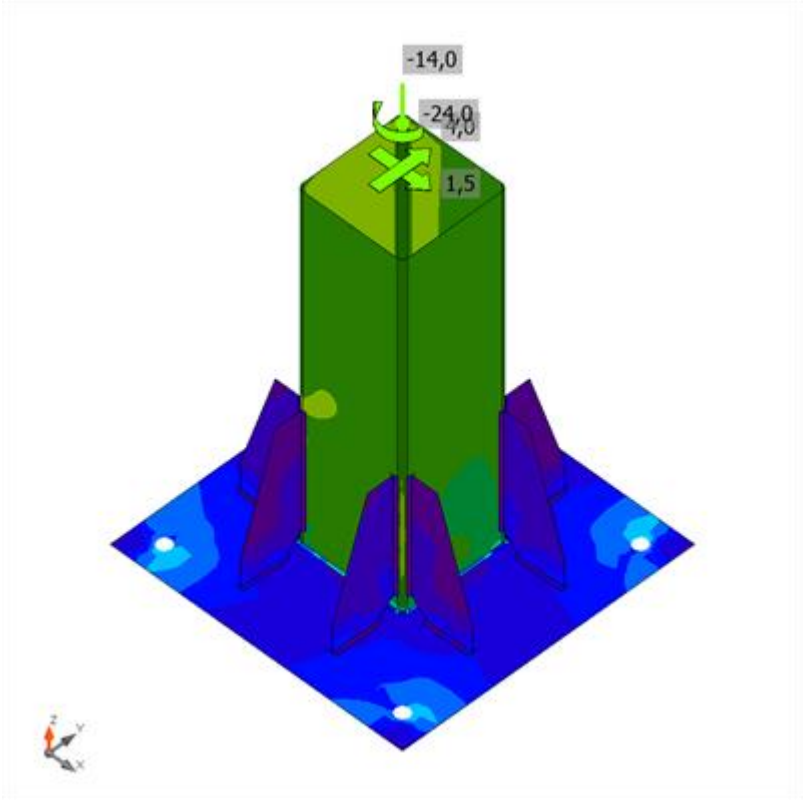
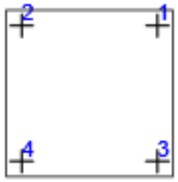


Equivalent stress, Nmin+Mmax

Anchors



A1	Nmin+Mmax	-3,7	19,1	0,7	21,7	88,0	OK	OK
A2	Nmin+Mmax	-3,6	19,8	0,7	22,5	90,3	OK	OK
A3	Nmin+Mmax	-3,4	18,4	0,7	20,9	84,6	OK	OK
A4	Nmin+Mmax	-3,3	19,7	0,7	22,4	90,1	OK	OK

Design data

M24 8.8 - 1 154,6 88,1 0,8

Detailed result for A1

Stand-off anchor compressive resistance (EN 1993-1-1 – Cl. 6.3)

$F_{c,Rd} = \frac{\chi \cdot A_s \cdot f_y}{\gamma_{M1}} =$ 154,6 kN ≥ $F_c =$ 3,7 kN

Where:

$\chi = \min\left(\frac{1}{\Phi + \sqrt{\Phi^2 - \overline{\lambda}^2}}, 1\right) =$ 0,86 – buckling reduction factor

$\Phi = 0,5 \cdot [1 + \alpha \cdot (\overline{\lambda} - 0.2) + \overline{\lambda}^2] =$ 0,68 – value to determine buckling reduction factor

$\alpha =$ 0,49 – imperfection factor

$\overline{\lambda} = \sqrt{\frac{A_s \cdot f_y}{N_{cr}}} =$ 0,48 – relative slenderness

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A_s = 353 mm² – anchor area reduced by thread

$N_{cr} = \frac{\pi^2 \cdot E \cdot I}{L_{cr}^2}$ = 991,1 kN – Euler's critical force

E = 210000,0 MPa – elastic modulus

I = 9916 mm⁴ – moment of inertia of the bolt

-

$I = \frac{\pi \cdot d_s^4}{64}$

, where:

-
  -

d_s =

21 mm – diameter reduced by thread

L_{cr} = 144 mm – buckling length (is it assumed on a safe side that the bolt is fixed in the concrete and able to freely rotate at the base plate)

-

$L_{cr} = 2 \cdot l$

, where:

-
  -

l =

72 mm – effective length

f_y = 640,0 MPa – anchor yield strength

γ_{M2} = 1,25 – safety factor

Concrete pullout resistance (EN 1992-4 – Cl. 7.2.1.5)

$\frac{N_{Rd,p}}{N_{Ed}}$ = 296,9 kN ≥ N_{Ed} = -3,7 kN

$N_{Rk,p} = k_2 \cdot A_h \cdot f_{ck}$ = 534,4 kN

Where:

k_2 = 7,50 – coefficient for cracked/uncracked concrete

A_h = 2375 mm² – area of the load-bearing head of the fastener

-

$A_h = \frac{\pi}{4} \cdot (d_h^2 - d^2)$

, where:

-
  -

d_h =

60 mm

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$\geq 6 \cdot t_h + d$

– effective size of washer plate, where:

- ○
- ▪

$t_h \geq \frac{d_h - d}{6} =$

6 mm – thickness of the head of the headed fastener

- ▪

$d =$

24 mm – diameter of the shank of the fastener

$f_{ck} =$ 30,0 MPa – concrete compressive strength

$\gamma_{Mc} =$ 1,80 – safety factor for concrete

Stand-off anchor shear resistance (EN 1993-1-1 – Cl. 6.2.6)

$V_{pl,Rd} =$ 88,1 kN ≥ $F_v =$ 19,1 kN

Where:

$A_v =$ 298 mm^2 – shear area

- •

$A_v = 0,844 \cdot A_s$

, where:

- •
- ○

$A_s =$

353 mm^2 – anchor area reduced by thread

$f_y =$ 640,0 MPa – anchor yield strength

$\gamma_{M2} =$ 1,25 – safety factor

Stand-off anchor bending resistance (EN 1993-1-1 – Cl. 6.2.5)

$M_{pl,Rd} = \frac{W_{pl} f_y}{\gamma_{M2}} =$ 0,8 kNm ≥ $M =$ 0,7 kNm

Where:

$W_{pl} =$ 1588 mm^3 – plastic section modulus of the fastener

- •

$W_{pl} = \frac{d_s^3}{6}$

, where:

- •
- ○

$d_s =$

21 mm – diameter reduced by thread

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f_y = 640,0 MPa – anchor yield strength

γ_{M2} = 1,25 – safety factor

Interaction of loading

$\frac{F_c}{F_{c,Rd}} +$ 0,88 ≤ 1,0

Where:

F_c = 3,7 kN – design compression force

$F_{c,Rd}$ = 154,6 kN – design compression resistance

M_{Ed} = 0,7 kNm – design bending moment

$M_{pl,Rd}$ = 0,8 kNm – design bending resistance

Supplementary reinforcement (EN 1992-4 – Cl. 7.2.1.9; EN 1992-4 – Cl. 7.2.2.6)
Supplementary reinforcement should resist force of 14,0 kN in tension and 8,5 kN in shear.

Detailed result for A2

Stand-off anchor compressive resistance (EN 1993-1-1 – Cl. 6.3)

$F_{c,Rd} = \frac{\chi \cdot A_s \cdot f_y}{\gamma_{M2}} =$ 154,6 kN ≥ $F_c =$ 3,6 kN

Where:

$\chi = \min\left(\frac{1}{\Phi+\sqrt{\Phi^2-\overline{\lambda}^2}}, 1\right) =$ 0,86 – buckling reduction factor

$\Phi = 0,5 \cdot [1+\alpha \cdot (\overline{\lambda} - 0.2) + \overline{\lambda}^2] =$ 0,68 – value to determine buckling reduction factor

$\alpha =$ 0,49 – imperfection factor

$\overline{\lambda} = \sqrt{\frac{A_s \cdot f_y}{N_{cr}}} =$ 0,48 – relative slenderness

A_s = 353 mm^2 – anchor area reduced by thread

$N_{cr} = \frac{\pi^2 \cdot E \cdot I}{L_{cr}^2} =$ 991,1 kN – Euler's critical force

E = 210000,0 MPa – elastic modulus

I = 9916 mm^4 – moment of inertia of the bolt

-

$I = \frac{\pi \cdot d_s^4}{64}$

, where:

-
  -

$d_s =$

21 mm – diameter reduced by thread

L_{cr} = 144 mm – buckling length (is it assumed on a safe side that the bolt is fixed in the concrete and able to freely rotate at the base plate)

-

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$l_{cr} = 2 \cdot l$

, where:

-
  -

$l =$

72 mm – effective length

$f_y =$ 640,0 MPa – anchor yield strength

$\gamma_{M2} =$ 1,25 – safety factor

Concrete pullout resistance (EN 1992-4 – Cl. 7.2.1.5)

$N_{Rd,p} =$ 296,9 kN ≥ $N_{Ed} =$ -3,6 kN

$N_{Rk,p} = k_2 \cdot A_h \cdot f_{ck} =$ 534,4 kN

Where:

$k_2 =$ 7,50 – coefficient for cracked/uncracked concrete

$A_h =$ 2375 mm^2 – area of the load-bearing head of the fastener

-

$A_h = \frac{\pi}{4} \cdot (d_h^2 - d^2)$

, where:

-
  -

$d_h =$

60 mm

$\leq 6 \cdot t_h + d$

– effective size of washer plate, where:

-
  -

$t_h \geq \frac{d_h - d}{6} =$

6 mm – thickness of the head of the headed fastener

-

$d =$

24 mm – diameter of the shank of the fastener

$f_{ck} =$ 30,0 MPa – concrete compressive strength

$\gamma_{Mc} =$ 1,80 – safety factor for concrete

Stand-off anchor shear resistance (EN 1993-1-1 – Cl. 6.2.6)

$V_{pl,Rd} =$ 88,1 kN ≥ $F_v =$ 19,8 kN

Where:

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A_v = 298 mm² – shear area

-

$A_v = 0,844 \cdot A_s$

, where:

-
  -

A_s =

353 mm² – anchor area reduced by thread

f_y = 640,0 MPa – anchor yield strength

γ_{M2} = 1,25 – safety factor

Stand-off anchor bending resistance (EN 1993-1-1 – Cl. 6.2.5)

$M_{pl,Rd} = \frac{W_{pl} f_y}{\gamma_{M2}}$ = 0,8 kNm ≥ M = 0,7 kNm

Where:

W_{pl} = 1588 mm³ – plastic section modulus of the fastener

-

$W_{pl} = \frac{d_s^3}{6}$

, where:

-
  -

d_s =

21 mm – diameter reduced by thread

f_y = 640,0 MPa – anchor yield strength

γ_{M2} = 1,25 – safety factor

Interaction of loading

$\frac{F_c}{F_{c,Rd}} +$ 0,90 ≤ 1,0

Where:

F_c = 3,6 kN – design compression force

$F_{c,Rd}$ = 154,6 kN – design compression resistance

M_{Ed} = 0,7 kNm – design bending moment

$M_{pl,Rd}$ = 0,8 kNm – design bending resistance

Supplementary reinforcement (EN 1992-4 – Cl. 7.2.1.9; EN 1992-4 – Cl. 7.2.2.6)
Supplementary reinforcement should resist force of 14,0 kN in tension and 8,5 kN in shear.

Detailed result for A3

Stand-off anchor compressive resistance (EN 1993-1-1 – Cl. 6.3)

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$F_{c,Rd} = \frac{\chi \cdot A_s \cdot f_y}{\gamma_{M2}} =$ 154,6 kN ≥ $F_c =$ 3,4 kN

Where:

$\chi = \min\left(\frac{1}{\Phi + \sqrt{\Phi^2 - \overline{\lambda}^2}}, 1\right) =$ 0,86 – buckling reduction factor

$\Phi = 0,5 \cdot [1 + \alpha \cdot (\overline{\lambda} - 0.2) + \overline{\lambda}^2] =$ 0,68 – value to determine buckling reduction factor

$\alpha =$ 0,49 – imperfection factor

$\overline{\lambda} = \sqrt{\frac{A_s f_y}{N_{cr}}} =$ 0,48 – relative slenderness

$A_s =$ 353 mm^2 – anchor area reduced by thread

$N_{cr} = \frac{\pi^2 \cdot E \cdot I}{L_{cr}^2} =$ 991,1 kN – Euler's critical force

$E =$ 210000,0 MPa – elastic modulus

$I =$ 9916 mm^4 – moment of inertia of the bolt

-

$I = \frac{\pi \cdot d_s^4}{64}$

, where:

-
  -

$d_s =$

21 mm – diameter reduced by thread

$L_{cr} =$ 144 mm – buckling length (is it assumed on a safe side that the bolt is fixed in the concrete and able to freely rotate at the base plate)

-

$L_{cr} = 2 \cdot l$

, where:

-
  -

$l =$

72 mm – effective length

$f_y =$ 640,0 MPa – anchor yield strength

$\gamma_{M2} =$ 1,25 – safety factor

Concrete pullout resistance (EN 1992-4 – Cl. 7.2.1.5)

$N_{Rd,p} =$ 296,9 kN ≥ $N_{Ed} =$ -3,4 kN

$N_{Rk,p} = k_2 \cdot A_h \cdot f_{ck} =$ 534,4 kN

Where:

$k_2 =$ 7,50 – coefficient for cracked/uncracked concrete

$A_h =$ 2375 mm^2 – area of the load-bearing head of the fastener

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-

$A_h = \frac{\pi}{4} \cdot (d_h^2 - d^2)$

, where:

  -
  -

$d_h =$

60 mm

$\leq 6 \cdot t_h + d$

– effective size of washer plate, where:

    -
    -

$t_h \geq \frac{d_h - d}{6} =$

6 mm – thickness of the head of the headed fastener

    -

$d =$

24 mm – diameter of the shank of the fastener

f_{ck} = 30,0 MPa – concrete compressive strength

γ_{Mc} = 1,80 – safety factor for concrete

Stand-off anchor shear resistance (EN 1993-1-1 – Cl. 6.2.6)

$V_{pl,Rd} =$ 88,1 kN ≥ $F_v =$ 18,4 kN

Where:

A_v = 298 mm^2 – shear area

-

$A_v = 0,844 \cdot A_s$

, where:

  -
  -

$A_s =$

353 mm^2 – anchor area reduced by thread

f_y = 640,0 MPa – anchor yield strength

γ_{M2} = 1,25 – safety factor

Stand-off anchor bending resistance (EN 1993-1-1 – Cl. 6.2.5)

$M_{pl,Rd} = \frac{W_{pl} f_y}{\gamma_{M2}} =$ 0,8 kNm ≥ $M =$ 0,7 kNm

Where:

W_{pl} = 1588 mm^3 – plastic section modulus of the fastener

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-

$W_{pl} = \frac{d_s^3}{6}$

, where:

-
  -

$d_s =$

21 mm – diameter reduced by thread

$f_y =$ 640,0 MPa – anchor yield strength

$\gamma_{M2} =$ 1,25 – safety factor

Interaction of loading

$\frac{F_c}{F_{c,Rd}} +$ 0,85 ≤ 1,0

Where:

$F_c =$ 3,4 kN – design compression force

$F_{c,Rd} =$ 154,6 kN – design compression resistance

$M_{Ed} =$ 0,7 kNm – design bending moment

$M_{pl,Rd} =$ 0,8 kNm – design bending resistance

Supplementary reinforcement (EN 1992-4 – Cl. 7.2.1.9; EN 1992-4 – Cl. 7.2.2.6)
Supplementary reinforcement should resist force of 14,0 kN in tension and 8,5 kN in shear.

Detailed result for A4

Stand-off anchor compressive resistance (EN 1993-1-1 – Cl. 6.3)

$F_{c,Rd} = \frac{\chi \cdot A_s \cdot f_y}{\gamma_{M2}} =$ 154,6 kN ≥ $F_c =$ 3,3 kN

Where:

$\chi = \min\left(\frac{1}{\Phi + \sqrt{\Phi^2 - \overline{\lambda}^2}}, 1\right) =$ 0,86 – buckling reduction factor

$\Phi = 0,5 \cdot [1 + \alpha \cdot (\overline{\lambda} - 0.2) + \overline{\lambda}^2] =$ 0,68 – value to determine buckling reduction factor

$\alpha =$ 0,49 – imperfection factor

$\overline{\lambda} = \sqrt{\frac{A_s f_y}{N_{cr}}} =$ 0,48 – relative slenderness

$A_s =$ 353 mm² – anchor area reduced by thread

$N_{cr} = \frac{\pi^2 \cdot E \cdot I}{L_{cr}^2} =$ 991,1 kN – Euler's critical force

$E =$ 210000,0 MPa – elastic modulus

$I =$ 9916 mm⁴ – moment of inertia of the bolt

-

$I = \frac{\pi \cdot d_s^4}{64}$

, where:

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-
  -

d_s =

21 mm – diameter reduced by thread

L_{cr} = 144 mm – buckling length (is it assumed on a safe side that the bolt is fixed in the concrete and able to freely rotate at the base plate)

-

$L_{cr} = 2 \cdot l$

, where:

-
  -

l =

72 mm – effective length

f_y = 640,0 MPa – anchor yield strength

γ_{M2} = 1,25 – safety factor

Concrete pullout resistance (EN 1992-4 – Cl. 7.2.1.5)

$N_{Rd,p}$ = 296,9 kN ≥ N_{Ed} = -3,3 kN

$N_{Rk,p} = k_2 \cdot A_h \cdot f_{ck}$ = 534,4 kN

Where:

k_2 = 7,50 – coefficient for cracked/uncracked concrete

A_h = 2375 mm² – area of the load-bearing head of the fastener

-

$A_h = \frac{\pi}{4} \cdot (d_h^2 - d^2)$

, where:

-
  -

d_h =

60 mm

$\leq 6 \cdot t_h + d$

– effective size of washer plate, where:

  -
    -

$t_h \geq \frac{d_h - d}{6}$ =

6 mm – thickness of the head of the headed fastener

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▪

d =

24 mm – diameter of the shank of the fastener

f_{ck} = 30,0 MPa – concrete compressive strength

γ_{Mc} = 1,80 – safety factor for concrete

Stand-off anchor shear resistance (EN 1993-1-1 – Cl. 6.2.6)

$V_{pl,Rd}$ = 88,1 kN ≥ F_v = 19,7 kN

Where:

A_v = 298 mm^2 – shear area

•

$A_v = 0,844 \cdot A_s$

, where:

•

○

A_s =

353 mm^2 – anchor area reduced by thread

f_y = 640,0 MPa – anchor yield strength

γ_{M2} = 1,25 – safety factor

Stand-off anchor bending resistance (EN 1993-1-1 – Cl. 6.2.5)

$M_{pl,Rd} = \frac{W_{pl} f_y}{\gamma_{M2}}$ = 0,8 kNm ≥ M = 0,7 kNm

Where:

W_{pl} = 1588 mm^3 – plastic section modulus of the fastener

•

$W_{pl} = \frac{d_s^3}{6}$

, where:

•

○

d_s =

21 mm – diameter reduced by thread

f_y = 640,0 MPa – anchor yield strength

γ_{M2} = 1,25 – safety factor

Interaction of loading

$\frac{F_s}{F_{s,Rd}} +$ 0,90 ≤ 1,0

Where:

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F_c = 3,3 kN – design compression force

$F_{c,Rd}$ = 154,6 kN – design compression resistance

M_{Ed} = 0,7 kNm – design bending moment

$M_{pl,Rd}$ = 0,8 kNm – design bending resistance

Supplementary reinforcement (EN 1992-4 – Cl. 7.2.1.9; EN 1992-4 – Cl. 7.2.2.6)
Supplementary reinforcement should resist force of 14,0 kN in tension and 8,5 kN in shear.

Welds

BP1	RIB1a	◢ 6,0 ◣	85	Nmin+Mmax	20,3	0,0	-10,2	7,7	-6,7	5,6	4,6	OK
		◢ 6,0 ◣	85	Nmin+Mmax	16,8	0,0	-5,3	-2,9	8,8	4,7	2,7	OK
B28-w1	RIB1a	◢ 6,0 ◣	219	Nmin+Mmax	13,1	0,0	-3,8	5,5	4,7	3,6	0,7	OK
		◢ 6,0 ◣	219	Nmin+Mmax	17,3	0,0	-1,7	-9,5	-3,0	4,8	2,8	OK
BP1	RIB1b	◢ 6,0 ◣	85	Nmin+Mmax	25,6	0,0	2,6	14,5	2,2	7,1	3,9	OK
		◢ 6,0 ◣	85	Nmin+Mmax	27,6	0,0	0,5	15,9	-1,4	7,7	6,1	OK
B28-w1	RIB1b	◢ 6,0 ◣	219	Nmin+Mmax	11,6	0,0	2,2	-6,0	-2,7	3,2	1,6	OK
		◢ 6,0 ◣	219	Nmin+Mmax	7,6	0,0	-2,6	2,7	-3,1	2,1	1,0	OK
BP1	RIB2a	◢ 6,0 ◣	85	Nmin+Mmax	18,6	0,0	-9,8	-6,8	6,1	5,2	4,6	OK
		◢ 6,0 ◣	85	Nmin+Mmax	15,7	0,0	-4,7	1,8	-8,4	4,4	2,7	OK
B28-w2	RIB2a	◢ 6,0 ◣	219	Nmin+Mmax	11,8	0,0	1,2	6,3	-2,4	3,3	0,7	OK
		◢ 6,0 ◣	219	Nmin+Mmax	19,0	0,0	-1,6	-10,6	-2,7	5,3	2,8	OK
BP1	RIB2b	◢ 6,0 ◣	85	Nmin+Mmax	24,6	0,0	2,4	-14,0	-2,1	6,8	3,7	OK
		◢ 6,0 ◣	85	Nmin+Mmax	26,7	0,0	0,6	-15,3	1,5	7,4	5,8	OK
B28-w2	RIB2b	◢ 6,0 ◣	219	Nmin+Mmax	10,8	0,0	2,3	-5,4	-2,8	3,0	1,7	OK
		◢ 6,0 ◣	219	Nmin+Mmax	6,9	0,0	-2,5	2,2	-3,0	1,9	1,0	OK
BP1	RIB3a	◢ 6,0 ◣	85	Nmin+Mmax	18,6	0,0	-7,4	5,8	-8,0	5,2	4,7	OK
		◢ 6,0 ◣	85	Nmin+Mmax	15,2	0,0	-4,4	-1,7	8,2	4,2	2,7	OK
B28-w3	RIB3a	◢ 6,0 ◣	219	Nmin+Mmax	11,9	0,0	1,2	6,4	-2,5	3,3	0,7	OK

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		◢ 6,0 ◣	219	Nmin+Mmax	18,9	0,0	-1,7	-10,4	-2,9	5,2	2,8	OK
BP1	RIB3b	◢ 6,0 ◣	85	Nmin+Mmax	24,1	0,0	2,2	13,7	1,9	6,7	3,8	OK
		◢ 6,0 ◣	85	Nmin+Mmax	25,8	0,0	0,7	14,8	-1,6	7,2	5,7	OK
B28-w3	RIB3b	◢ 6,0 ◣	219	Nmin+Mmax	9,7	0,0	2,4	-4,7	-2,7	2,7	1,6	OK
		◢ 6,0 ◣	219	Nmin+Mmax	6,2	0,0	-2,6	1,4	-3,0	1,7	1,1	OK
BP1	RIB4a	◢ 6,0 ◣	85	Nmin+Mmax	19,3	0,0	-9,8	-7,3	6,2	5,3	4,6	OK
		◢ 6,0 ◣	85	Nmin+Mmax	15,9	0,0	-4,8	2,3	-8,5	4,4	2,6	OK
B28-w4	RIB4a	◢ 6,0 ◣	219	Nmin+Mmax	14,0	0,0	-3,9	6,0	4,9	3,9	0,7	OK
		◢ 6,0 ◣	219	Nmin+Mmax	17,3	0,0	-5,4	-8,4	-4,4	4,8	2,8	OK
BP1	RIB4b	◢ 6,0 ◣	85	Nmin+Mmax	25,6	0,0	2,4	-14,5	-2,1	7,1	3,8	OK
		◢ 6,0 ◣	85	Nmin+Mmax	27,3	0,0	0,5	-15,7	1,4	7,6	6,0	OK
B28-w4	RIB4b	◢ 6,0 ◣	219	Nmin+Mmax	10,6	0,0	2,4	-5,2	-2,9	2,9	1,6	OK
		◢ 6,0 ◣	219	Nmin+Mmax	6,8	0,0	-2,6	2,0	-3,0	1,9	1,1	OK
BP1	B28	◢ 5,0 ◣	757	Nmin+Mmax	61,3	0,0	4,9	34,9	4,8	17,0	13,2	OK
		◢ 5,0 ◣	757	Nmin+Mmax	70,0	0,0	-1,5	-40,4	1,9	19,5	15,6	OK

Design data

S 235	0,80	360,0	259,2

Detailed result for BP1 / RIB1a - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 20,3 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 10,2 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

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$U_t = \max\left(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}\right) =$ 0,06 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 20,3 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = -10,2 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB1a - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 16,8 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 5,3 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max\left(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}\right) =$ 0,05 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 16,8 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = -5,3 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 1 / RIB1a - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 13,1 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 3,8 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max\left(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}\right) =$ 0,04 ≤ 1,0

Where:

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$\sigma_{w,Ed}$ = 13,1 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_{\perp}|$ = -3,8 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 1 / RIB1a - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_{\perp}^2 + 3(\tau_{\perp}^2 + \tau_{\parallel}^2)]^{0.5} =$ 17,3 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_{\perp}| =$ 1,7 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_{\perp}|}{\sigma_{\perp,Rd}}) =$ 0,05 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 17,3 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_{\perp}|$ = -1,7 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB1b - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_{\perp}^2 + 3(\tau_{\perp}^2 + \tau_{\parallel}^2)]^{0.5} =$ 25,6 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_{\perp}| =$ 2,6 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_{\perp}|}{\sigma_{\perp,Rd}}) =$ 0,07 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 25,6 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

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$|\sigma_\perp|$ = 2,6 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB1b - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 27,6 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 0,5 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}}; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,08 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 27,6 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = 0,5 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 1 / RIB1b - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 11,6 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 2,2 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}}; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,03 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 11,6 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = 2,2 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

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Detailed result for B28-w 1 / RIB1b - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 7,6 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 2,6 MPa

where:

$f_u =$ 360,0 MPa – Ultimate strength

$\beta_w =$ 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

$\gamma_{M2} =$ 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,02 ≤ 1,0

Where:

$\sigma_{w,Ed} =$ 7,6 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd} =$ 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp| =$ -2,6 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd} =$ 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB2a - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 18,6 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 9,8 MPa

where:

$f_u =$ 360,0 MPa – Ultimate strength

$\beta_w =$ 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

$\gamma_{M2} =$ 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,05 ≤ 1,0

Where:

$\sigma_{w,Ed} =$ 18,6 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd} =$ 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp| =$ -9,8 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd} =$ 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB2a - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

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$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 15,7 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 4,7 MPa

where:

$f_u =$ 360,0 MPa – Ultimate strength

$\beta_w =$ 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

$\gamma_{M2} =$ 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,04 ≤ 1,0

Where:

$\sigma_{w,Ed} =$ 15,7 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd} =$ 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp| =$ -4,7 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd} =$ 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 2 / RIB2a - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 11,8 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 1,2 MPa

where:

$f_u =$ 360,0 MPa – Ultimate strength

$\beta_w =$ 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

$\gamma_{M2} =$ 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,03 ≤ 1,0

Where:

$\sigma_{w,Ed} =$ 11,8 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd} =$ 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp| =$ 1,2 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd} =$ 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 2 / RIB2a - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 19,0 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 1,6 MPa

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nere:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,05 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 19,0 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = -1,6 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB2b - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 24,6 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 2,4 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,07 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 24,6 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = 2,4 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB2b - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 26,7 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 0,6 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

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γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,07 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 26,7 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = 0,6 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 2 / RIB2b - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 10,8 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 2,3 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,03 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 10,8 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = 2,3 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 2 / RIB2b - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 6,9 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 2,5 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

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$U_t = \max\left(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}\right) =$ 0,02 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 6,9 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = -2,5 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB3a - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 18,6 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 7,4 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max\left(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}\right) =$ 0,05 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 18,6 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = -7,4 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB3a - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 15,2 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 4,4 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max\left(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}\right) =$ 0,04 ≤ 1,0

Where:

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$\sigma_{w,Ed}$ = 15,2 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_{\perp}|$ = -4,4 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 3 / RIB3a - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_{\perp}^2 + 3(\tau_{\perp}^2 + \tau_{\parallel}^2)]^{0.5} =$ 11,9 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_{\perp}| =$ 1,2 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_{\perp}|}{\sigma_{\perp,Rd}}) =$ 0,03 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 11,9 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_{\perp}|$ = 1,2 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 3 / RIB3a - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_{\perp}^2 + 3(\tau_{\perp}^2 + \tau_{\parallel}^2)]^{0.5} =$ 18,9 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_{\perp}| =$ 1,7 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_{\perp}|}{\sigma_{\perp,Rd}}) =$ 0,05 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 18,9 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

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$|\sigma_\perp|$ = -1,7 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB3b - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 24,1 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 2,2 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,07 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 24,1 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = 2,2 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB3b - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 25,8 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 0,7 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,07 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 25,8 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = 0,7 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

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Detailed result for B28-w 3 / RIB3b - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 9,7 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 2,4 MPa

where:

$f_u =$ 360,0 MPa – Ultimate strength

$\beta_w =$ 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

$\gamma_{M2} =$ 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,03 ≤ 1,0

Where:

$\sigma_{w,Ed} =$ 9,7 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd} =$ 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp| =$ 2,4 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd} =$ 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 3 / RIB3b - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 6,2 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 2,6 MPa

where:

$f_u =$ 360,0 MPa – Ultimate strength

$\beta_w =$ 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

$\gamma_{M2} =$ 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,02 ≤ 1,0

Where:

$\sigma_{w,Ed} =$ 6,2 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd} =$ 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp| =$ -2,6 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd} =$ 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB4a - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

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$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 19,3 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 9,8 MPa

where:

$f_u =$ 360,0 MPa – Ultimate strength

$\beta_w =$ 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

$\gamma_{M2} =$ 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,05 ≤ 1,0

Where:

$\sigma_{w,Ed} =$ 19,3 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd} =$ 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp| =$ -9,8 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd} =$ 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB4a - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 15,9 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 4,8 MPa

where:

$f_u =$ 360,0 MPa – Ultimate strength

$\beta_w =$ 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

$\gamma_{M2} =$ 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,04 ≤ 1,0

Where:

$\sigma_{w,Ed} =$ 15,9 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd} =$ 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp| =$ -4,8 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd} =$ 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 4 / RIB4a - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 14,0 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 3,9 MPa

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nere:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,04 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 14,0 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = -3,9 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 4 / RIB4a - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 17,3 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 5,4 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,05 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 17,3 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = -5,4 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB4b - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 25,6 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 2,4 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

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γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,07 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 25,6 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = 2,4 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB4b - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 27,3 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 0,5 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,08 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 27,3 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = 0,5 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 4 / RIB4b - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 10,6 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 2,4 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

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$U_t = \max\left(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}\right) =$ 0,03 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 10,6 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = 2,4 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 4 / RIB4b - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 6,8 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 2,6 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max\left(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}\right) =$ 0,02 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 6,8 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = -2,6 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / B28 - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 61,3 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 4,9 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max\left(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}\right) =$ 0,17 ≤ 1,0

Where:

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$\sigma_{w,Ed}$ = 61,3 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_{\perp}|$ = 4,9 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / B28 - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_{\perp}^2 + 3(\tau_{\perp}^2 + \tau_{\parallel}^2)]^{0.5} =$ 70,0 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_{\perp}| =$ 1,5 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_{\perp}|}{\sigma_{\perp,Rd}}) =$ 0,19 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 70,0 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_{\perp}|$ = -1,5 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Išvados:

- Tripolio skyriklio kolonos ribinis poslinkis lygus 51 mm, traversos – 20 mm. Pagal atliktus skaičiavimus kolonos poslinkis y kryptimi lygus 24,8 mm, traversos poslinkis z kryptimi – 7,5 mm. Gauti rezultatai neviršija ribinio poslinkio reikšmės.
- Viršįtempių ribotuvo atramos labiausiai pagal skerspjūvį išnaudojamas elemento profilis – 200x200x5 mm kvadratinio skerspjūvio kolona. Nustatytos reikšmės neviršija ribinių 0,32 ≤ 1.

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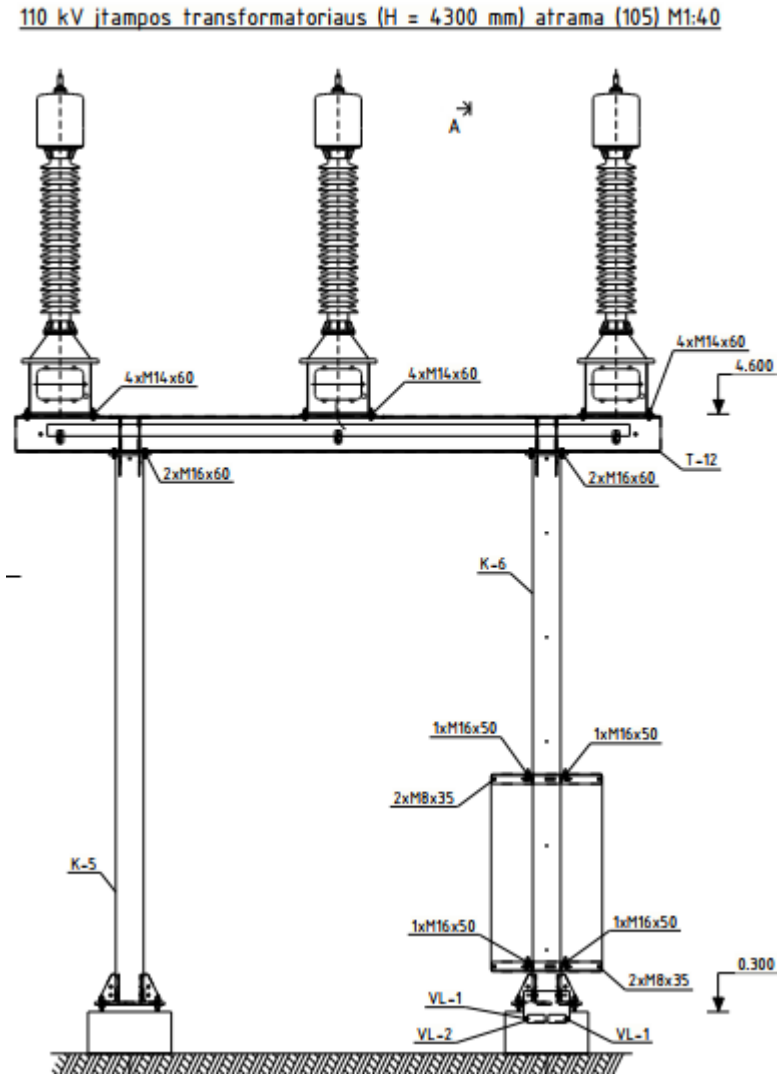
2.3. Įtampos transformatorius (h = 4300 mm)



Pav. 7 Įtampos transformatoriaus atrama

Įtampos transformatoriaus atramai priimtos:

- Dvi vamzdinio profilio kolonos rėmo plokštumoje standžiai sujungtos su pamatu per inkarinius varžtus;
- Sudvejinta traversa iš UPN profilių, kuri tarpusavyje sujungta standžiai IPE ar UPN tipo profiliais.
- Traversa su kolona jungiama varžtais – standžiai.
- Laikančiųjų konstrukcijų plienas S235J2.

Lentelė 26. Atviros skirstomosios įrangos konstrukcijų ribiniai poslinkiai ir įlinkiai

Konstrukcijos apibudinimas ir nuokrypio kryptis	Atramų santykinės nuokrypos	Santykiniai traversų įlinkiai (tarpatramio -1 arba gembės ilgiui -2)			
		Vertikalieji		Horizontalieji	
		Tarpatramyje	Gembėje	Tarpatramyje	Gembėje
Atviros skirstomosios įrangos atramos išilgai laidų	1/100 4,3/100=0,043m	1/200 3/200=0,015	1/70 0,50/70=0,010	1/200 3/200=0,015	1/70 0,5/70=0,010
Atviros skirstomosios įrangos atramos skersai laidų	1/70 4,3/70=0,06m	n/a	n/a	n/a	n/a

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Pastabos:
1. Kai yra avariniai ir montažiniai režimai, atviros skirstomosios įrangos atramų ir oro linijų traversų atramų nuokrypiai nenormuojami.
2. Nuokrypiai ir įlinkiai, turi būti sumažinti, jei įrangos eksploatacijos techninės sąlygos numato griežtesnius apribojimus.

Įtampos transformatoriaus atramą veikiančios nuolatinės ir kintamos apkrovos pateiktos žemiau esančioje lentelėje.

Lentelė 27. Įtapos transformatorių veikiančios apkrovos

Įrenginio apkrovų pasiskirstymas					
Eil. Nr.	Apkrovos pavadinimas	F, kN	q, kN/m	Jėgos veikimo kryptis	Pastaba
1.	**Nuolatinės apkrovos**				
1.1.	Konstrukcijos savasis svoris	BEM	-	↓	γ=78,50 kN/m³
1.2.	Technologiniai įrenginiai	1,50	-	↓	-
1.3.	Laidų svoris	1,62	-	↓	-
2.	**Kintamos apkrovos**				
2.1.	*Vėjas x-x kryptimi*				
2.1.1.	Į koloną	-	0,12	→	X-X
2.1.2.	Į traversą	-	0,11	→	X-X
2.1.3.	Į technologinius įrenginius	-	0,13	→	X-X
2.1.4.	Nuo laidų	0,15	-	-	X-X
2.2.	*Vėjas y-y kryptimi*				
2.2.1.	Į koloną	-	0,12	→	Y-Y
2.2.2.	Į traversą	-	0,11	→	Y-Y
2.2.3.	Į technologinius įrenginius	-	0,13	→	Y-Y
2.2.4.	Nuo laidų	-	-	→	Vėjo kryptis išilgai laidų
2.3.	*Apšalas*				
2.3.1.	Nuo įrenginio	1,01		↓	Z-Z
2.3.2.	Nuo laidų	0,043		↓	Z-Z
2.4.	*Laidų išilginis tempimas*	1,5		→	X-X

Lentelė 28. Apkrovų eksplikacija

Apkrovos nr.	**Apkrovos žymuo**	**Apkrovos pavadinimas**
1	LC1	Savasis svoris
2	LC2	Įrenginių svoris
3	LC3	Laidų svoris
4	LC4	Vėjas X-X
5	LC5	Vėjas Y-Y
6	LC6	Apšalas
7	LC7	Laidų išilginis tempimas

1.3 Materials

Matl. No.	Modulus E [kN/cm²]	Modulus G [kN/cm²]	Poisson's Ratio n [-]	Spec. Weight g [kN/m³]	Coeff. of Th. Exp. a [1/°C]	Partial Factor g_M [-]	Material Model
1	Steel S 275 J2 | BDS EN 10025-2:2004-11						
	21000.00	8076.92	0.300	78.50	1.20E-05	1.00	Isotropic Linear Elastic

1.7 Nodal Supports

Support No.	Nodes No.	Axis System	Column in Z	Support Conditions u_X	u_Y	u_Z	j_X	j_Y	j_Z
1	1,2	Global X,Y,Z	-	x	x	x	x	x	x

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2.13 Cross-Sections

Section No.	Matl. No.	J [cm⁴] A [cm²]	I_y [cm⁴] A_y [cm²]	I_z [cm⁴] A_z [cm²]	Principal Axes a [°]	Rotation a' [°]	Overall Dimensions [mm] Width b	Height h
1	QRO 200x5 | EN 10219-2:2006							
	1	8843.00	5672.00	5672.00	0.00	0.00	250.0	250.0
		57.60	24.56	24.56				
3	UPN 260 | ArcelorMittal (EN 10365:2017)							
	1	9.55	1350.00	114.00	0.00	0.00	70.0	180.0
		28.00	7.14	12.38				

2.1 Load Cases

Load Case	Load Case Description	EN 1990 | LST Action Category	Self-Weight - Factor in Direction Active	X	Y	Z
LC1	Savasis svoris	Permanent	x	0.000	0.000	-1.000
LC2	Irenginiu svoris	Permanent	-			
LC3	Laidu svoris	Permanent	-			
LC4	Vejas X-X kryptimi	Wind	-			
LC5	Vejas Y-Y kryptimi	Wind	-			
LC6	Apsalas	Snow / ice	-			
LC7	Laidu isilginis tempimas	Temperature (non fire)	-			

2.1.1 Load Cases - Calculation Parameters

Load Case	Load Case Description	Calculation Parameters		
LC1	Savasis svoris	Method of analysis	: x	Geometrically linear analysis
		Method for solving system of nonlinear algebraic equations	: x	Newton-Raphson
		Activate stiffness factors of:	: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
LC2	Irenginiu svoris	Method of analysis	: x	Geometrically linear analysis
		Method for solving system of nonlinear algebraic equations	: x	Newton-Raphson
		Activate stiffness factors of:	: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
LC3	Laidu svoris	Method of analysis	: x	Geometrically linear analysis
		Method for solving system of nonlinear algebraic equations	: x	Newton-Raphson
		Activate stiffness factors of:	: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
LC4	Vejas X-X kryptimi	Method of analysis	: x	Geometrically linear analysis
		Method for solving system of nonlinear algebraic equations	: x	Newton-Raphson
		Activate stiffness factors of:	: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
LC5	Vejas Y-Y kryptimi	Method of analysis	: x	Geometrically linear analysis
		Method for solving system of nonlinear algebraic equations	: x	Newton-Raphson
		Activate stiffness factors of:	: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
LC6	Apsalas	Method of analysis	: x	Geometrically linear analysis
		Method for solving system of nonlinear algebraic equations	: x	Newton-Raphson
		Activate stiffness factors of:	: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
LC7	Laidu isilginis tempimas	Method of analysis	: x	Geometrically linear analysis
		Method for solving system of nonlinear algebraic equations	: x	Newton-Raphson
		Activate stiffness factors of:	: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)

2.5 Load Combinations

Load Combin.	DS	Load Combination Description	No.	Factor	Load Case	
CO1	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
CO2	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC4	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris

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1.5 Load Combinations

Load Combin.	DS	Load Combination Description	No.	Factor	Load Case	
			4	1.30	LC4	Vejas X-X kryptimi
CO3	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC5	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	1.30	LC5	Vejas Y-Y kryptimi
CO4	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC4 + 0.78*LC7	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	1.30	LC4	Vejas X-X kryptimi
			5	0.78	LC7	Laidu isilginis tempimas
CO5	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC5 + 0.78*LC7	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	1.30	LC5	Vejas Y-Y kryptimi
			5	0.78	LC7	Laidu isilginis tempimas
CO6	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC4 + 0.91*LC6 + 0.78*LC7	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	1.30	LC4	Vejas X-X kryptimi
			5	0.91	LC6	Apsalas
			6	0.78	LC7	Laidu isilginis tempimas
CO7	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC5 + 0.91*LC6 + 0.78*LC7	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	1.30	LC5	Vejas Y-Y kryptimi
			5	0.91	LC6	Apsalas
			6	0.78	LC7	Laidu isilginis tempimas
CO8	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC4 + 0.91*LC6	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	1.30	LC4	Vejas X-X kryptimi
			5	0.91	LC6	Apsalas
CO9	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC5 + 0.91*LC6	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	1.30	LC5	Vejas Y-Y kryptimi
			5	0.91	LC6	Apsalas
CO10	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC7	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	1.30	LC7	Laidu isilginis tempimas
CO11	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC4 + 1.3*LC7	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	0.78	LC4	Vejas X-X kryptimi
			5	1.30	LC7	Laidu isilginis tempimas
CO12	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC5 + 1.3*LC7	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	0.78	LC5	Vejas Y-Y kryptimi
			5	1.30	LC7	Laidu isilginis tempimas
CO13	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC4 + 0.91*LC6 + 1.3*LC7	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	0.78	LC4	Vejas X-X kryptimi
			5	0.91	LC6	Apsalas
			6	1.30	LC7	Laidu isilginis tempimas
CO14	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC5 + 0.91*LC6 + 1.3*LC7	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	0.78	LC5	Vejas Y-Y kryptimi
			5	0.91	LC6	Apsalas
			6	1.30	LC7	Laidu isilginis tempimas
CO15	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.91*LC6 + 1.3*LC7	1	1.35	LC1	Savasis svoris

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15 Load Combinations

Load Combin.	DS	Load Combination Description	No.	Factor	Load Case	
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	0.91	LC6	Apsalas
			5	1.30	LC7	Laidu isilginis tempimas
CO16	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC6	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	1.30	LC6	Apsalas
CO17	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC4 + 1.3*LC6	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	0.78	LC4	Vejas X-X kryptimi
			5	1.30	LC6	Apsalas
CO18	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC5 + 1.3*LC6	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	0.78	LC5	Vejas Y-Y kryptimi
			5	1.30	LC6	Apsalas
CO19	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC4 + 1.3*LC6 + 0.78*LC7	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	0.78	LC4	Vejas X-X kryptimi
			5	1.30	LC6	Apsalas
			6	0.78	LC7	Laidu isilginis tempimas
CO20	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC5 + 1.3*LC6 + 0.78*LC7	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	0.78	LC5	Vejas Y-Y kryptimi
			5	1.30	LC6	Apsalas
			6	0.78	LC7	Laidu isilginis tempimas
CO21	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC6 + 0.78*LC7	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	1.30	LC6	Apsalas
			5	0.78	LC7	Laidu isilginis tempimas
CO22	STR	LC1 + LC2 + LC3	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
CO23	STR	LC1 + LC2 + LC3 + 1.3*LC4	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.30	LC4	Vejas X-X kryptimi
CO24	STR	LC1 + LC2 + LC3 + 1.3*LC5	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.30	LC5	Vejas Y-Y kryptimi
CO25	STR	LC1 + LC2 + LC3 + 1.3*LC4 + 0.78*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.30	LC4	Vejas X-X kryptimi
			5	0.78	LC7	Laidu isilginis tempimas
CO26	STR	LC1 + LC2 + LC3 + 1.3*LC5 + 0.78*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.30	LC5	Vejas Y-Y kryptimi
			5	0.78	LC7	Laidu isilginis tempimas
CO27	STR	LC1 + LC2 + LC3 + 1.3*LC4 + 0.91*LC6 + 0.78*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.30	LC4	Vejas X-X kryptimi
			5	0.91	LC6	Apsalas
			6	0.78	LC7	Laidu isilginis tempimas
CO28	STR	LC1 + LC2 + LC3 + 1.3*LC5 + 0.91*LC6 + 0.78*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.30	LC5	Vejas Y-Y kryptimi

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7.5 Load Combinations

Load Combin.	DS	Load Combination Description	No.	Factor	Load Case	
			5	0.91	LC6	Apsalas
			6	0.78	LC7	Laidu isilginis tempimas
CO29	STR	LC1 + LC2 + LC3 + 1.3*LC4 + 0.91*LC6	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.30	LC4	Vejas X-X kryptimi
			5	0.91	LC6	Apsalas
CO30	STR	LC1 + LC2 + LC3 + 1.3*LC5 + 0.91*LC6	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.30	LC5	Vejas Y-Y kryptimi
			5	0.91	LC6	Apsalas
CO31	STR	LC1 + LC2 + LC3 + 1.3*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.30	LC7	Laidu isilginis tempimas
CO32	STR	LC1 + LC2 + LC3 + 0.78*LC4 + 1.3*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.78	LC4	Vejas X-X kryptimi
			5	1.30	LC7	Laidu isilginis tempimas
CO33	STR	LC1 + LC2 + LC3 + 0.78*LC5 + 1.3*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.78	LC5	Vejas Y-Y kryptimi
			5	1.30	LC7	Laidu isilginis tempimas
CO34	STR	LC1 + LC2 + LC3 + 0.78*LC4 + 0.91*LC6 + 1.3*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.78	LC4	Vejas X-X kryptimi
			5	0.91	LC6	Apsalas
			6	1.30	LC7	Laidu isilginis tempimas
CO35	STR	LC1 + LC2 + LC3 + 0.78*LC5 + 0.91*LC6 + 1.3*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.78	LC5	Vejas Y-Y kryptimi
			5	0.91	LC6	Apsalas
			6	1.30	LC7	Laidu isilginis tempimas
CO36	STR	LC1 + LC2 + LC3 + 0.91*LC6 + 1.3*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.91	LC6	Apsalas
			5	1.30	LC7	Laidu isilginis tempimas
CO37	STR	LC1 + LC2 + LC3 + 1.3*LC6	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.30	LC6	Apsalas
CO38	STR	LC1 + LC2 + LC3 + 0.78*LC4 + 1.3*LC6	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.78	LC4	Vejas X-X kryptimi
			5	1.30	LC6	Apsalas
CO39	STR	LC1 + LC2 + LC3 + 0.78*LC5 + 1.3*LC6	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.78	LC5	Vejas Y-Y kryptimi
			5	1.30	LC6	Apsalas
CO40	STR	LC1 + LC2 + LC3 + 0.78*LC4 + 1.3*LC6 + 0.78*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.78	LC4	Vejas X-X kryptimi
			5	1.30	LC6	Apsalas
			6	0.78	LC7	Laidu isilginis tempimas
CO41	STR	LC1 + LC2 + LC3 + 0.78*LC5 + 1.3*LC6 + 0.78*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.78	LC5	Vejas Y-Y kryptimi

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15.5 Load Combinations

Load Combin.	DS	Load Combination Description	No.	Factor	Load Case	
			5	1.30	LC6	Apsalas
			6	0.78	LC7	Laidu isilginis tempimas
CO42	STR	LC1 + LC2 + LC3 + 1.3*LC6 + 0.78*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.30	LC6	Apsalas
			5	0.78	LC7	Laidu isilginis tempimas
CO43	S Ch	LC1 + LC2 + LC3	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
CO44	S Ch	LC1 + LC2 + LC3 + LC4	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.00	LC4	Vejas X-X kryptimi
CO45	S Ch	LC1 + LC2 + LC3 + LC5	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.00	LC5	Vejas Y-Y kryptimi
CO46	S Ch	LC1 + LC2 + LC3 + LC4 + 0.6*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.00	LC4	Vejas X-X kryptimi
			5	0.60	LC7	Laidu isilginis tempimas
CO47	S Ch	LC1 + LC2 + LC3 + LC5 + 0.6*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.00	LC5	Vejas Y-Y kryptimi
			5	0.60	LC7	Laidu isilginis tempimas
CO48	S Ch	LC1 + LC2 + LC3 + LC4 + 0.7*LC6 + 0.6*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.00	LC4	Vejas X-X kryptimi
			5	0.70	LC6	Apsalas
			6	0.60	LC7	Laidu isilginis tempimas
CO49	S Ch	LC1 + LC2 + LC3 + LC5 + 0.7*LC6 + 0.6*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.00	LC5	Vejas Y-Y kryptimi
			5	0.70	LC6	Apsalas
			6	0.60	LC7	Laidu isilginis tempimas
CO50	S Ch	LC1 + LC2 + LC3 + LC4 + 0.7*LC6	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.00	LC4	Vejas X-X kryptimi
			5	0.70	LC6	Apsalas
CO51	S Ch	LC1 + LC2 + LC3 + LC5 + 0.7*LC6	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.00	LC5	Vejas Y-Y kryptimi
			5	0.70	LC6	Apsalas
CO52	S Ch	LC1 + LC2 + LC3 + LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.00	LC7	Laidu isilginis tempimas
CO53	S Ch	LC1 + LC2 + LC3 + 0.6*LC4 + LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.60	LC4	Vejas X-X kryptimi
			5	1.00	LC7	Laidu isilginis tempimas
CO54	S Ch	LC1 + LC2 + LC3 + 0.6*LC5 + LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.60	LC5	Vejas Y-Y kryptimi
			5	1.00	LC7	Laidu isilginis tempimas
CO55	S Ch	LC1 + LC2 + LC3 + 0.6*LC4 + 0.7*LC6 + LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris

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2.5 Load Combinations

Load Combin.	DS	Load Combination Description	No.	Factor	Load Case	
			4	0.60	LC4	Vejas X-X kryptimi
			5	0.70	LC6	Apsalas
			6	1.00	LC7	Laidu isilginis tempimas
CO56	S Ch	LC1 + LC2 + LC3 + 0.6*LC5 + 0.7*LC6 + LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.60	LC5	Vejas Y-Y kryptimi
			5	0.70	LC6	Apsalas
			6	1.00	LC7	Laidu isilginis tempimas
CO57	S Ch	LC1 + LC2 + LC3 + 0.7*LC6 + LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.70	LC6	Apsalas
			5	1.00	LC7	Laidu isilginis tempimas
CO58	S Ch	LC1 + LC2 + LC3 + LC6	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.00	LC6	Apsalas
CO59	S Ch	LC1 + LC2 + LC3 + 0.6*LC4 + LC6	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.60	LC4	Vejas X-X kryptimi
			5	1.00	LC6	Apsalas
CO60	S Ch	LC1 + LC2 + LC3 + 0.6*LC5 + LC6	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.60	LC5	Vejas Y-Y kryptimi
			5	1.00	LC6	Apsalas
CO61	S Ch	LC1 + LC2 + LC3 + 0.6*LC4 + LC6 + 0.6*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.60	LC4	Vejas X-X kryptimi
			5	1.00	LC6	Apsalas
			6	0.60	LC7	Laidu isilginis tempimas
CO62	S Ch	LC1 + LC2 + LC3 + 0.6*LC5 + LC6 + 0.6*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.60	LC5	Vejas Y-Y kryptimi
			5	1.00	LC6	Apsalas
			6	0.60	LC7	Laidu isilginis tempimas
CO63	S Ch	LC1 + LC2 + LC3 + LC6 + 0.6*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.00	LC6	Apsalas
			5	0.60	LC7	Laidu isilginis tempimas

2.5.2 Load Combinations - Calculation Parameters

Load Combin.	Description	Calculation Parameters		
CO1	1.35*LC1 + 1.35*LC2 + 1.35*LC3	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO2	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC4	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:

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15.5.2 Load Combinations - Calculation Parameters

Load Combin.	Description	Calculation Parameters		
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO3	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC5	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO4	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC4 + 0.78*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO5	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC5 + 0.78*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO6	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC4 + 0.91*LC6 + 0.78*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO7	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC5 + 0.91*LC6 + 0.78*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO8	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC4 + 0.91*LC6	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard

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15.5.2 Load Combinations - Calculation Parameters

Load Combin.	Description	Calculation Parameters		
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO9	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC5 + 0.91*LC6	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO10	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO11	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC4 + 1.3*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO12	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC5 + 1.3*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO13	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC4 + 0.91*LC6 + 1.3*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO14	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC5 + 0.91*LC6 + 1.3*LC7	Method of analysis	: x	Second order analysis (P-Delta)

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15.5.2 Load Combinations - Calculation Parameters

Load Combin.	Description	Calculation Parameters		
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO15	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.91*LC6 + 1.3*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO16	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC6	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO17	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC4 + 1.3*LC6	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO18	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC5 + 1.3*LC6	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO19	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC4 + 1.3*LC6 + 0.78*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)

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1.5.2 Load Combinations - Calculation Parameters

Load Combin.	Description	Calculation Parameters		
CO20	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC5 + 1.3*LC6 + 0.78*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
			x	Normal forces N
			x	Shear forces V_y and V_z
			x	Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO21	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC6 + 0.78*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
			x	Normal forces N
			x	Shear forces V_y and V_z
			x	Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO22	LC1 + LC2 + LC3	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
			x	Normal forces N
			x	Shear forces V_y and V_z
			x	Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO23	LC1 + LC2 + LC3 + 1.3*LC4	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
			x	Normal forces N
			x	Shear forces V_y and V_z
			x	Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO24	LC1 + LC2 + LC3 + 1.3*LC5	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
			x	Normal forces N
			x	Shear forces V_y and V_z
			x	Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO25	LC1 + LC2 + LC3 + 1.3*LC4 + 0.78*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
			x	Normal forces N
			x	Shear forces V_y and V_z
			x	Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)

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1.5.2 Load Combinations - Calculation Parameters

Load Combin.	Description	Calculation Parameters		
CO26	LC1 + LC2 + LC3 + 1.3*LC5 + 0.78*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
			x	Normal forces N
			x	Shear forces V_y and V_z
			x	Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO27	LC1 + LC2 + LC3 + 1.3*LC4 + 0.91*LC6 + 0.78*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
			x	Normal forces N
			x	Shear forces V_y and V_z
			x	Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO28	LC1 + LC2 + LC3 + 1.3*LC5 + 0.91*LC6 + 0.78*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
			x	Normal forces N
			x	Shear forces V_y and V_z
			x	Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO29	LC1 + LC2 + LC3 + 1.3*LC4 + 0.91*LC6	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
			x	Normal forces N
			x	Shear forces V_y and V_z
			x	Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO30	LC1 + LC2 + LC3 + 1.3*LC5 + 0.91*LC6	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
			x	Normal forces N
			x	Shear forces V_y and V_z
			x	Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO31	LC1 + LC2 + LC3 + 1.3*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
			x	Normal forces N
			x	Shear forces V_y and V_z
			x	Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)

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Load Combin.	Description	Calculation Parameters		
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO32	LC1 + LC2 + LC3 + 0.78*LC4 + 1.3*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
			x	Normal forces N
			x	Shear forces V_y and V_z
			x	Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO33	LC1 + LC2 + LC3 + 0.78*LC5 + 1.3*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
			x	Normal forces N
			x	Shear forces V_y and V_z
			x	Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO34	LC1 + LC2 + LC3 + 0.78*LC4 + 0.91*LC6 + 1.3*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
			x	Normal forces N
			x	Shear forces V_y and V_z
			x	Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO35	LC1 + LC2 + LC3 + 0.78*LC5 + 0.91*LC6 + 1.3*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
			x	Normal forces N
			x	Shear forces V_y and V_z
			x	Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO36	LC1 + LC2 + LC3 + 0.91*LC6 + 1.3*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
			x	Normal forces N
			x	Shear forces V_y and V_z
			x	Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO37	LC1 + LC2 + LC3 + 1.3*LC6	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
			x	Normal forces N
			x	Shear forces V_y and V_z
			x	Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)

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1.5.2 Load Combinations - Calculation Parameters

Load Combin.	Description	Calculation Parameters		
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO38	LC1 + LC2 + LC3 + 0.78*LC4 + 1.3*LC6	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO39	LC1 + LC2 + LC3 + 0.78*LC5 + 1.3*LC6	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO40	LC1 + LC2 + LC3 + 0.78*LC4 + 1.3*LC6 + 0.78*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO41	LC1 + LC2 + LC3 + 0.78*LC5 + 1.3*LC6 + 0.78*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO42	LC1 + LC2 + LC3 + 1.3*LC6 + 0.78*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO43	LC1 + LC2 + LC3	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T

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Load Combin.	Description	Calculation Parameters		
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO44	LC1 + LC2 + LC3 + LC4	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO45	LC1 + LC2 + LC3 + LC5	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO46	LC1 + LC2 + LC3 + LC4 + 0.6*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO47	LC1 + LC2 + LC3 + LC5 + 0.6*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO48	LC1 + LC2 + LC3 + LC4 + 0.7*LC6 + 0.6*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO49	LC1 + LC2 + LC3 + LC5 + 0.7*LC6 + 0.6*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)

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15.5.2 Load Combinations - Calculation Parameters

Load Combin.	Description	Calculation Parameters		
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO50	LC1 + LC2 + LC3 + LC4 + 0.7*LC6	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO51	LC1 + LC2 + LC3 + LC5 + 0.7*LC6	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO52	LC1 + LC2 + LC3 + LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO53	LC1 + LC2 + LC3 + 0.6*LC4 + LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO54	LC1 + LC2 + LC3 + 0.6*LC5 + LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO55	LC1 + LC2 + LC3 + 0.6*LC4 + 0.7*LC6 + LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)

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15.5.2 Load Combinations - Calculation Parameters

Load Combin.	Description	Calculation Parameters		
CO56	LC1 + LC2 + LC3 + 0.6*LC5 + 0.7*LC6 + LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
			x	Normal forces N
			x	Shear forces V_y and V_z
			x	Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO57	LC1 + LC2 + LC3 + 0.7*LC6 + LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
			x	Normal forces N
			x	Shear forces V_y and V_z
			x	Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO58	LC1 + LC2 + LC3 + LC6	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
			x	Normal forces N
			x	Shear forces V_y and V_z
			x	Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO59	LC1 + LC2 + LC3 + 0.6*LC4 + LC6	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
			x	Normal forces N
			x	Shear forces V_y and V_z
			x	Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO60	LC1 + LC2 + LC3 + 0.6*LC5 + LC6	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
			x	Normal forces N
			x	Shear forces V_y and V_z
			x	Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO61	LC1 + LC2 + LC3 + 0.6*LC4 + LC6 + 0.6*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
			x	Normal forces N
			x	Shear forces V_y and V_z
			x	Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO62	LC1 + LC2 + LC3 + 0.6*LC5 + LC6 +	Method of analysis	: x	Second order analysis (P-Delta)

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2.5.2 Load Combinations - Calculation Parameters

Load Combin.	Description	Calculation Parameters		
	0.6*LC7			
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
			x	Normal forces N
			x	Shear forces V_y and V_z
			x	Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO63	LC1 + LC2 + LC3 + LC6 + 0.6*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
			x	Normal forces N
			x	Shear forces V_y and V_z
			x	Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)

2.7 Result Combinations

Result Combin	Description	Loading
RC1	ULS (STR/GEO) - Permanent / transient - Eq. 6.10	CO1/p or to CO42
RC2	SLS - Characteristic	CO43/p or to CO63

LC2

Irenginiu svoris

3.1 Nodal Loads - By Components - Coordinate System

LC2: Irenginiu svoris

No.	On Nodes No.	Coordinate System	Force [kN] P_X / P_U	P_Y / P_V	P_Z / P_W	Moment [kNm] M_X / M_U	M_Y / M_V	M_Z / M_W
1	26,28,29	0 | Global XYZ	0.000	0.000	-0.490	0.000	0.000	0.000

LC2: Irenginiu svoris

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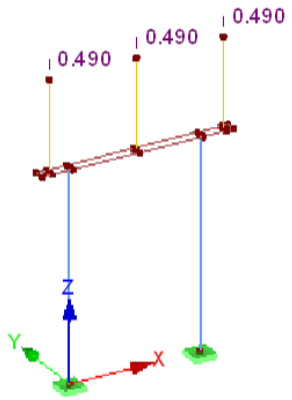

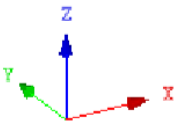

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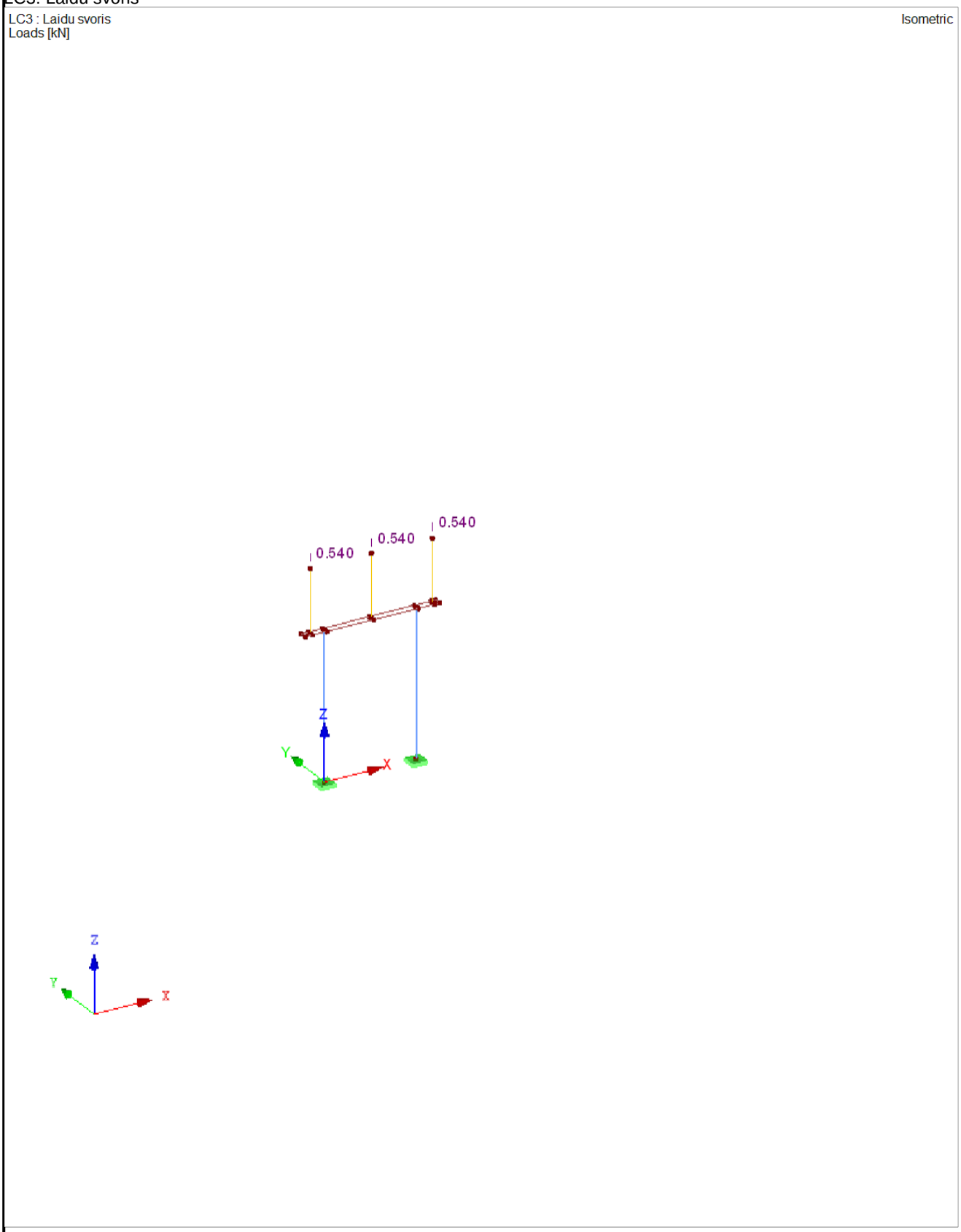
LC3
Laidu svoris

3.1 Nodal Loads - By Components - Coordinate System

No.	On Nodes No.	Coordinate System	Force [kN] P_X / P_U	P_Y / P_V	P_Z / P_W	Moment [kNm] M_X / M_U	M_Y / M_V	M_Z / M_W
1	26,28,29	0 | Global XYZ	0.000	0.000	-0.540	0.000	0.000	0.000

LC3: Laidu svoris



LC4

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3.2 Member Loads

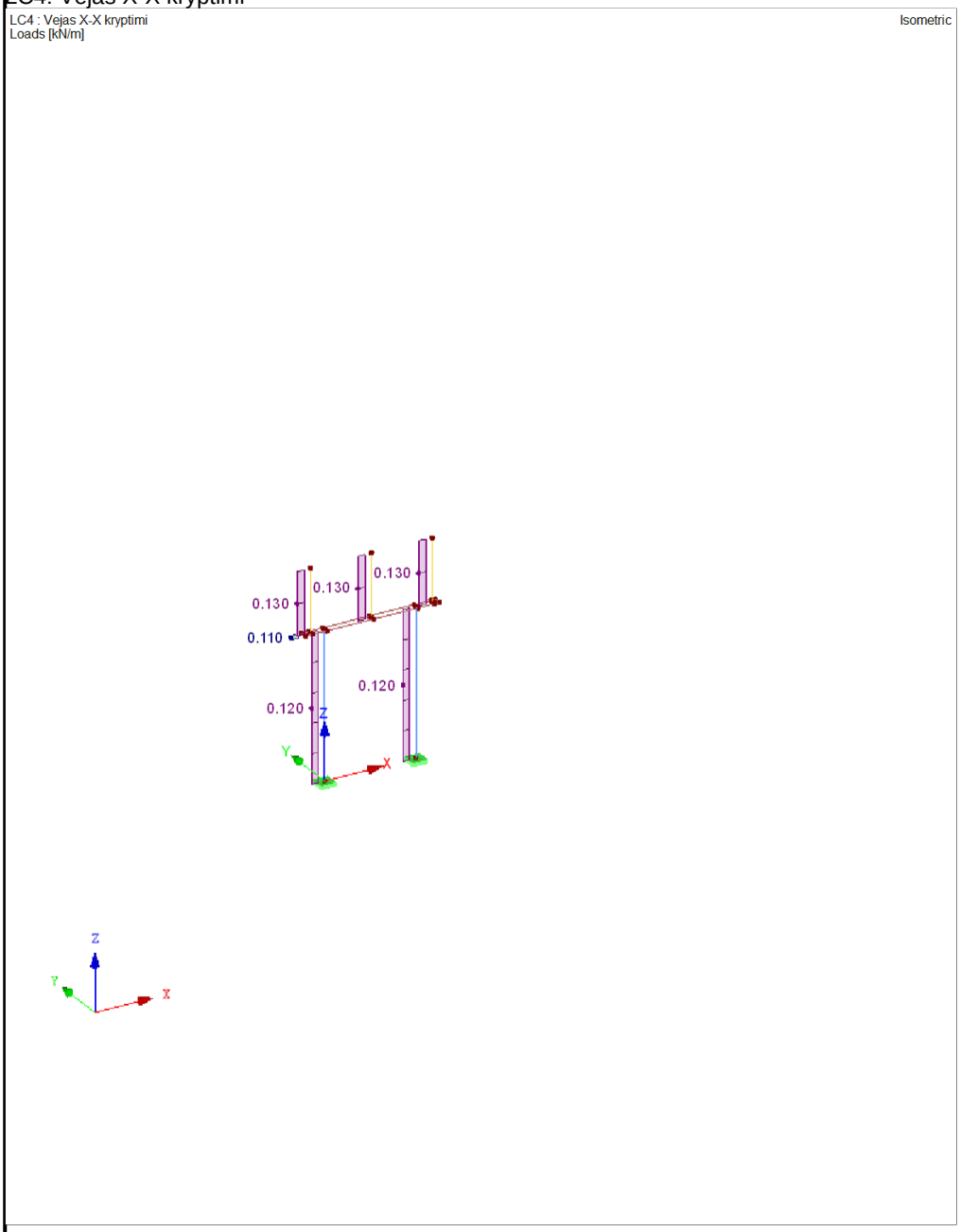
No.	Reference to	On Members No.	Load Type	Load Distribution	Load Direction	Reference Length	Load Parameters Symbol	Value	Unit
2	Members	5	Force	Uniform	y	True Length	p	0.110	kN/m
3	Members	16	Force	Uniform	z	True Length	p	-0.120	kN/m
4	Members	15	Force	Uniform	z	True Length	p	-0.120	kN/m
5	Members	17-19	Force	Uniform	z	True Length	p	-0.130	kN/m

LC4: Vejas X-X kryptimi

3.2/1 Member Loads - Load Eccentricity

No.	Reference to	On Members No.	Absolute Offset Mbr. Start e_Y [mm]	Absolute Offset Mbr. Start e_Z [mm]	Absolute Offset Mbr. End e_Y [mm]	Absolute Offset Mbr. End e_Z [mm]	Relative Offset Mbr. Start y-Axis	Relative Offset Mbr. Start z-Axis	Relative Offset Mbr. End y-Axis	Relative Offset Mbr. End z-Axis
2	Members	5	0.0	0.0	0.0	0.0	Middle	Middle	Middle	Middle
3	Members	16	0.0	0.0	0.0	0.0	Middle	Middle	Middle	Middle
4	Members	15	0.0	0.0	0.0	0.0	Middle	Middle	Middle	Middle
5	Members	17-19	0.0	0.0	0.0	0.0	Middle	Middle	Middle	Middle

LC4: Vejas X-X kryptimi



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3.2 Member Loads

No.	Reference to	On Members No.	Load Type	Load Distribution	Load Direction	Reference Length	Load Parameters Symbol	Value	Unit
2	Members	4	Force	Uniform	y	True Length	p	-0.110	kN/m
3	Members	15,16	Force	Uniform	y	True Length	p	0.120	kN/m
4	Members	17-19	Force	Uniform	y	True Length	p	0.130	kN/m

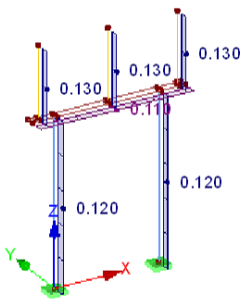
3.2/1 Member Loads - Load Eccentricity

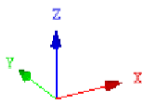
No.	Reference to	On Members No.	Absolute Offset Mbr. Start e_Y [mm]	Absolute Offset Mbr. Start e_Z [mm]	Absolute Offset Mbr. End e_Y [mm]	Absolute Offset Mbr. End e_Z [mm]	Relative Offset Mbr. Start y-Axis	Relative Offset Mbr. Start z-Axis	Relative Offset Mbr. End y-Axis	Relative Offset Mbr. End z-Axis
2	Members	4	0.0	0.0	0.0	0.0	Middle	Middle	Middle	Middle
3	Members	15,16	0.0	0.0	0.0	0.0	Middle	Middle	Middle	Middle
4	Members	17-19	0.0	0.0	0.0	0.0	Middle	Middle	Middle	Middle

LC5: Vejas Y-Y kryptimi

LC5 : Vejas Y-Y kryptimi
Loads [kN/m]

Isometric





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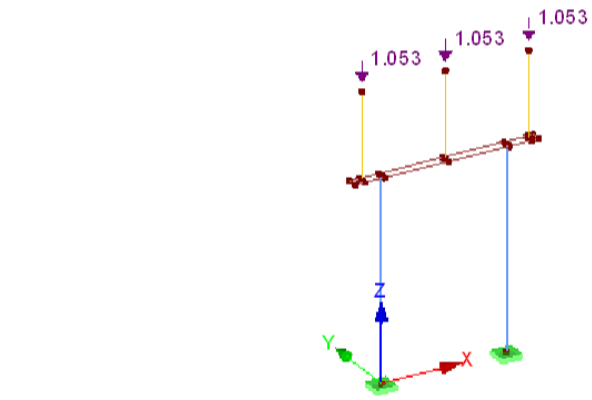
3.1 Nodal Loads - By Components - Coordinate System

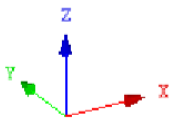
No.	On Nodes No.	Coordinate System	Force [kN] P_X / P_U	P_Y / P_V	P_Z / P_W	Moment [kNm] M_X / M_U	M_Y / M_V	M_Z / M_W
1	26,28,29	0 | Global XYZ	0.000	0.000	-1.053	0.000	0.000	0.000

LC6: Apsalas

LC6 : Apsalas
Loads [kN]

Isometric





LC7

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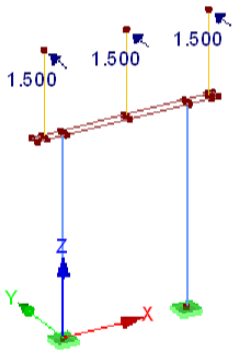
3.1 Nodal Loads - By Components - Coordinate System

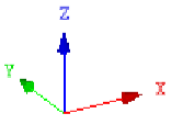
No.	On Nodes No.	Coordinate System	Force [kN] P_X / P_U	P_Y / P_V	P_Z / P_W	Moment [kNm] M_X / M_U	M_Y / M_V	M_Z / M_W
1	26,28,29	0 | Global XYZ	0.000	1.500	0.000	0.000	0.000	0.000

LC7: Laidu isilginis tempimas

LC7 : Laidu isilginis tempimas
Loads [kN]

Isometric





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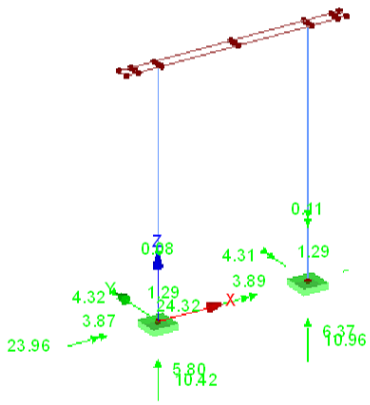
7.1 Nodes - Support Forces

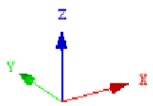
Node No.	RC		Support Forces [kN] $P_{X'}$	$P_{Y'}$	$P_{Z'}$	Support Moments [kNm] $M_{X'}$	$M_{Y'}$	$M_{Z'}$	
1	RC1	Max	1.29	3.87	-5.80	0.00	4.32	0.08	
									ULS (STR/GEO) - Permanent / transient - Eq. 6.10
		Min	0.00	0.00	-10.42	-23.96	0.00	0.00	
									ULS (STR/GEO) - Permanent / transient - Eq. 6.10
	RC2	Max	0.99	2.97	-5.90	0.00	3.32	0.06	SLS - Characteristic
		Min	0.00	0.00	-7.77	-18.38	0.00	0.00	SLS - Characteristic
2	RC1	Max	1.29	3.89	-6.37	0.00	4.31	0.11	
									ULS (STR/GEO) - Permanent / transient - Eq. 6.10
		Min	0.00	0.00	-10.96	-24.32	0.00	0.00	
									ULS (STR/GEO) - Permanent / transient - Eq. 6.10
	RC2	Max	0.99	2.99	-6.37	0.00	3.31	0.09	SLS - Characteristic
		Min	0.00	0.00	-8.18	-18.66	0.00	0.00	SLS - Characteristic

Support Reactions

RC1 : ULS (STR/GEO) - Permanent / transient - Eq. 6.10
Support Reactions[kN], [kNm]
Result Combinations: Max and Min Values

Isometric





Max P-X': 1.29, Min P-X': 0.00 kN
Max P-Y': 3.89, Min P-Y': 0.00 kN
Max P-Z': -5.80, Min P-Z': -10.96 kN
Max M-X': 0.00, Min M-X': -24.32 kNm
Max M-Y': 4.32, Min M-Y': 0.00 kNm
Max M-Z': 0.11, Min M-Z': 0.00 kNm

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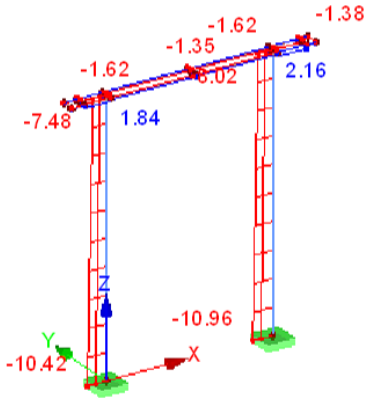
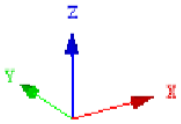
RC1 : ULS (STR/GEO) - Permanent / transient - Eq. 6.10
Internal Forces N
Result Combinations: Max and Min Values





Max N: 2.16, Min N: -10.96 [kN]

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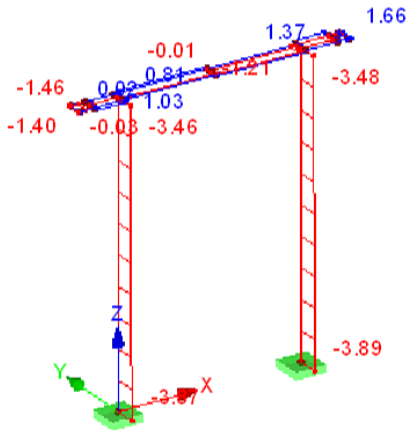
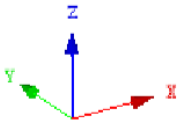
ternal forces Vy

RC1 : ULS (STR/GEO) - Permanent / transient - Eq. 6.10
Internal Forces V-y
Result Combinations: Max and Min Values





Max V-y: 1.66, Min V-y: -3.89 [kN]

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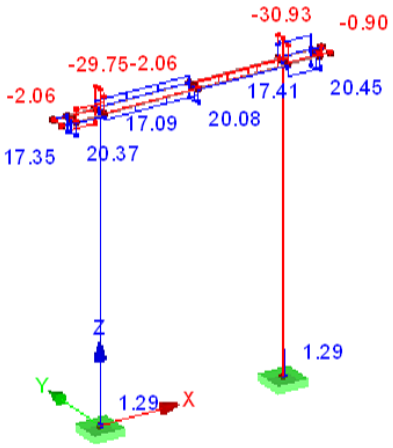
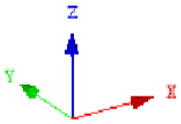
ternal forces Vz

RC1 : ULS (STR/GEO) - Permanent / transient - Eq. 6.10
Internal Forces V-z
Result Combinations: Max and Min Values





Max V-z: 20.45, Min V-z: -30.93 [kN]

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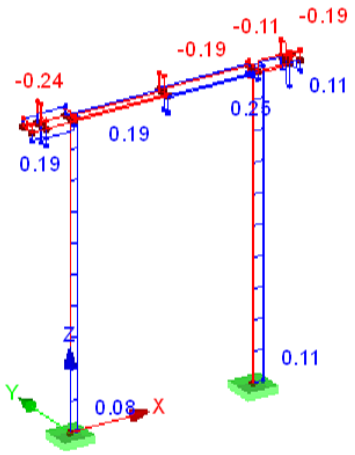
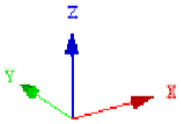
RC1 : ULS (STR/GEO) - Permanent / transient - Eq. 6.10
Internal Forces M-T
Result Combinations: Max and Min Values





Max M-T: 0.25, Min M-T: -0.24 [kNm]

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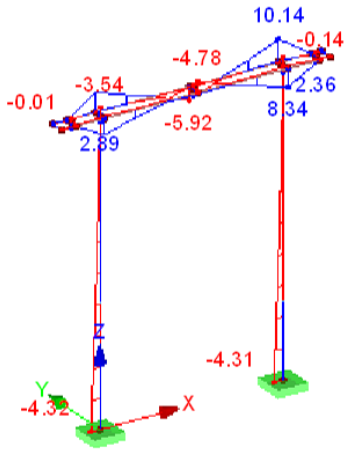
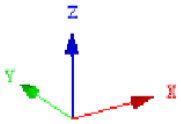
ternal forces My

RC1 : ULS (STR/GEO) - Permanent / transient - Eq. 6.10
Internal Forces M-y
Result Combinations: Max and Min Values





Max M-y: 10.14, Min M-y: -5.92 [kNm]

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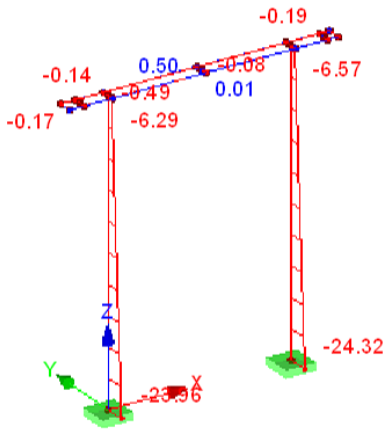
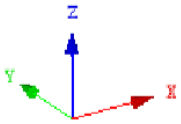
ternal forces Mz

RC1 : ULS (STR/GEO) - Permanent / transient - Eq. 6.10
Internal Forces M-z
Result Combinations: Max and Min Values





Max M-z: 0.50, Min M-z: -24.32 [kNm]

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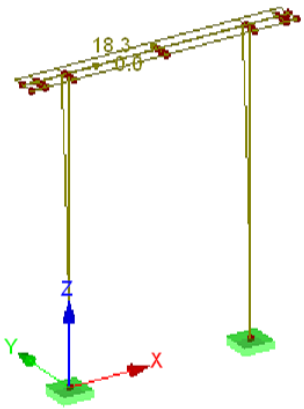
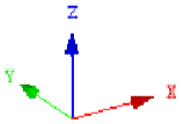
obal Deformations uY

RC1 : ULS (STR/GEO) - Permanent / transient - Eq. 6.10
Global Deformations u-Y [mm]
Result Combinations: Max and Min Values

Cross-Sections
1: QRO 250x
3: UPN 180 |





Factor of deformations: 12.00
Max u-Y: 18.3, Min u-Y: 0.0 mm

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1.5 Effective Lengths - Members

Member No.	Buckling Possible	Buckling About Axis y			Buckling About Axis z			Lateral-Torsional Buckling				
		Possible	$k_{cr,y}$	$L_{cr,y}$ [m]	Possible	$k_{cr,z}$	$L_{cr,z}$ [m]	Possible	k_z	k_w	L_w [m]	L_T [m]
3	x	x	1.00	4.400	x	1.00	4.400	x	1.0	1.0	4.400	4.400
4	x	x	1.00	4.400	x	1.00	4.400	x	1.0	1.0	4.400	4.400
5	x	x	1.00	0.230	x	1.00	0.230	x	1.0	1.0	0.230	0.230
6	x	x	1.00	0.230	x	1.00	0.230	x	1.0	1.0	0.230	0.230
7	x	x	1.00	0.230	x	1.00	0.230	-	1.0	1.0	0.230	0.230
8	x	x	1.00	0.230	x	1.00	0.230	x	1.0	1.0	0.230	0.230
9	x	x	1.00	0.230	x	1.00	0.230	x	1.0	1.0	0.230	0.230
15	x	x	1.00	4.810	x	1.00	4.810	-	1.0	1.0	4.810	4.810
16	x	x	1.00	4.810	x	1.00	4.810	-	1.0	1.0	4.810	4.810

4.3 Design by cross-sections

Section No.	Member No.	Location x [m]	Load-ing	Design Ratio		Design According to Formula
1	QRO 200x5 | EN 10219-2:2006					
	16	3.848	LC1	0.00	£ 1	CS100) Negligible internal forces
	16	0.000	CO19	0.01	£ 1	CS102) Cross-section check - Compression acc. to 6.2.4
	15	0.000	LC4	0.03	£ 1	CS112) Cross-section check - Bending about y-axis acc. to 6.2.5 - Class 3
	16	0.000	LC7	0.12	£ 1	CS117) Cross-section check - Bending about z-axis acc. to 6.2.5 - Class 3
	15	0.000	CO6	0.00	£ 1	CS122) Cross-section check - Shear force in z-axis acc. to 6.2.6(4) - Class 3 or 4
	16	4.329	CO9	0.00	£ 1	CS123) Cross-section check - Shear force in y-axis acc. to 6.2.6
	16	0.000	CO33	0.01	£ 1	CS124) Cross-section check - Shear force in y-axis acc. to 6.2.6(4) - Class 3 or 4
	15	0.000	LC4	0.00	£ 1	CS126) Cross-section check - Shear buckling acc. to 6.2.6(6)
	15	0.000	LC4	0.03	£ 1	CS142) Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	16	0.000	LC7	0.12	£ 1	CS152) Cross-section check - Bending about z-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	16	0.000	CO8	0.04	£ 1	CS182) Cross-section check - Bending, shear and axial force acc. to 6.2.9.2 - Class 3
	16	3.367	CO18	0.01	£ 1	CS201) Cross-section check - Bending about z-axis, shear and axial force acc. to 6.2.9.1
	16	0.000	CO14	0.20	£ 1	CS202) Cross-section check - Bending about z-axis, shear and axial force acc. to 6.2.9.2 - Class 3
	16	0.000	CO13	0.19	£ 1	CS222) Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
3	UPN 260 | ArcelorMittal (EN 10365:2017)					
	4	1.189	CO9	0.00	£ 1	CS100) Negligible internal forces
	4	0.166	CO33	0.00	£ 1	CS101) Cross-section check - Tension acc. to 6.2.3
	3	0.700	CO33	0.00	£ 1	CS102) Cross-section check - Compression acc. to 6.2.4
	7	0.115	CO55	0.06	£ 1	CS111) Cross-section check - Bending about y-axis acc. to 6.2.5 - Class 1 or 2
	6	0.230	CO32	0.01	£ 1	CS116) Cross-section check - Bending about z-axis acc. to 6.2.5 - Class 1 or 2
	9	0.115	CO14	0.13	£ 1	CS121) Cross-section check - Shear force in z-axis acc. to 6.2.6
	9	0.230	CO14	0.01	£ 1	CS123) Cross-section check - Shear force in y-axis acc. to 6.2.6

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	3	0.000	LC7	0.00	£ 1	CS126) Cross-section check - Shear buckling acc. to 6.2.6(6)
	6	0.115	CO6	0.17	£ 1	CS131) Cross-section check - Torsion acc. to 6.2.7
	7	0.115	CO13	0.12	£ 1	CS132) Cross-section check - Torsion and shear force acc. to 6.2.7(9)
	6	0.115	CO13	0.01	£ 1	CS137) Cross-section check - Torsion and shear force acc. to 6.2.7(9)
	7	0.115	CO55	0.06	£ 1	CS141) Cross-section check - Bending and shear force acc. to 6.2.5 and 6.2.8
	6	0.115	CO14	0.05	£ 1	CS146) Cross-section check - Bending, shear force and torsion acc. to 6.2.5 to 6.2.8
	6	0.230	CO32	0.01	£ 1	CS151) Cross-section check - Bending about z-axis and shear force acc. to 6.2.5 and 6.2.8
	6	0.000	CO33	0.01	£ 1	CS156) Cross-section check - Bending about z-axis, shear force and torsion acc. to 6.2.5 to 6.2.8
	3	0.700	CO14	0.27	£ 1	CS161) Cross-section check - Biaxial bending and shear force acc. to 6.2.6, 6.2.7 and 6.2.9
	3	0.700	CO55	0.19	£ 1	CS166) Cross-section check - Biaxial bending, shear force and torsion acc. to 6.2.5 to 6.2.8
	7	0.115	CO13	0.08	£ 1	CS186) Cross-section check - Bending, shear, torsion and axial force acc. to 6.2.9.1
	9	0.115	CO14	0.09	£ 1	CS221) Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9
	3	0.700	CO14	0.26	£ 1	CS226) Cross-section check - Biaxial bending, shear, torsion and axial force acc. to 6.2.10 and 6.2.9
	3	0.700	CO14	0.32	£ 1	CS271) Cross-section check - Axial stress and torsion - Elastic design
	3	0.700	CO14	0.69	£ 1	ST333) Stability analysis - Lateral torsional buckling acc. to 6.3.2.1 and 6.3.2.2 - General Section

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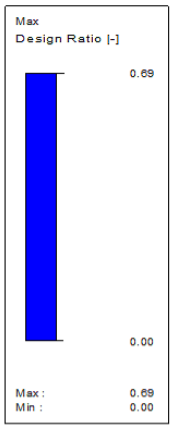
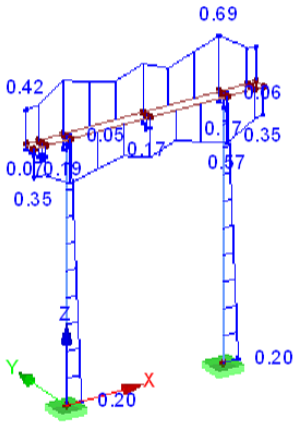
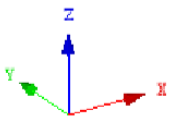
Design Ratio

RF-STEEL EC3 CA1
Ultimate Limit State: Cross-Section Design, Stability Design, Weld Design, Pressure Design, Plastic Design

Isometric







Max Design Ratio: 0.69

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Material

Steel	S 235
Concrete	C30/37

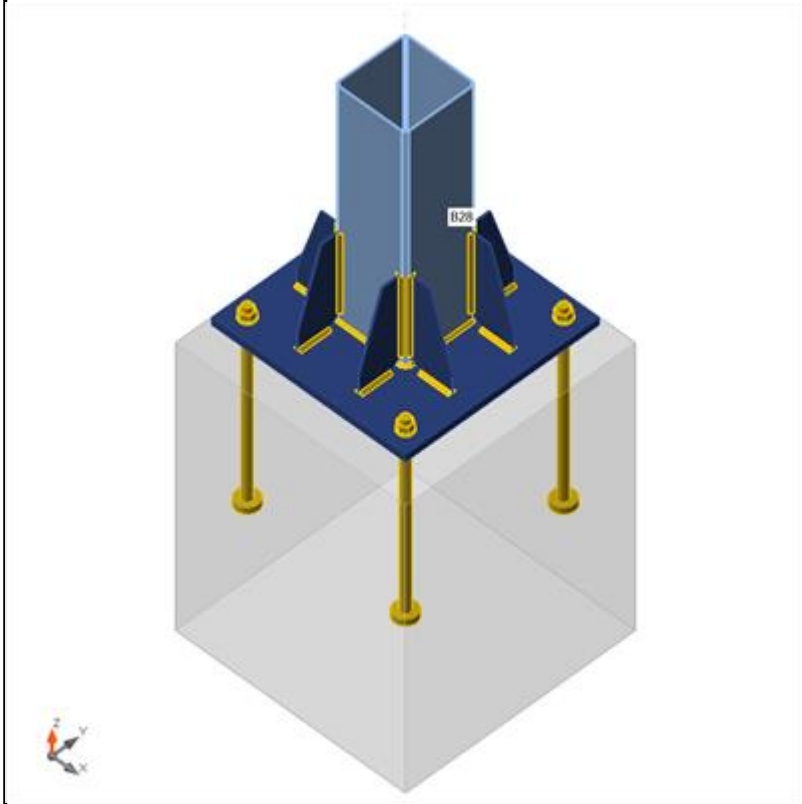
Design

Name	Con N112
Description	
Analysis	Stress, strain/ simplified loading

Members

Geometry

B28 1 - SHS200/200/5.0 0,0 90,0 -90,0 0 0 0 Position



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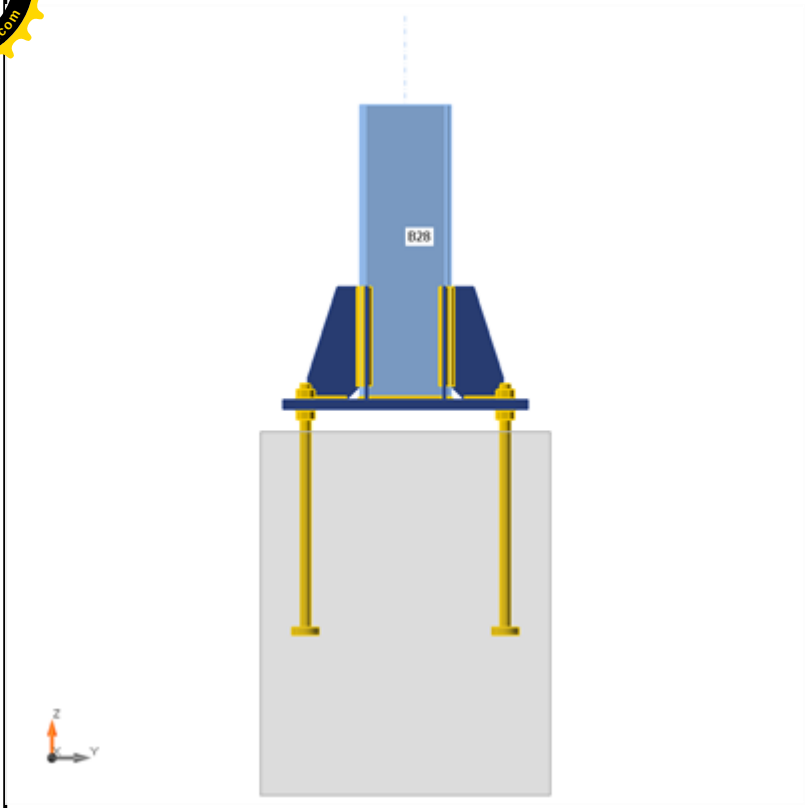

Cross-sections

1 - SHS200/200/5.0 S 235

Anchors

M24 8.8 M24 8.8 24 800,0 452

Load effects (Equilibrium not required)

Nmin+Mmax B28 -11,0 1,0 3,0 -25,0 0,0 0,0

Foundation block

CB 1

Dimensions	640 x 640	mm
Depth	800	mm
Anchor	M24 8.8	
Anchoring length	430	mm
Shear force transfer	Anchors	
Gap	50	mm

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Check

Summary

Analysis	100,0%	OK
Plates	0,0 < 5,0%	OK
Anchors	91,0 < 100%	OK
Welds	19,9 < 100%	OK
Concrete block	Not calculated	
Buckling	Not calculated	

Plates

B28	5,0	Nmin+Mmax	130,0	0,0	0,0	OK
BP1	20,0	Nmin+Mmax	76,2	0,0	0,0	OK
RIB1a	5,0	Nmin+Mmax	39,6	0,0	0,0	OK
RIB1b	5,0	Nmin+Mmax	44,4	0,0	0,0	OK
RIB2a	5,0	Nmin+Mmax	40,2	0,0	0,0	OK
RIB2b	5,0	Nmin+Mmax	43,1	0,0	0,0	OK
RIB3a	5,0	Nmin+Mmax	41,0	0,0	0,0	OK
RIB3b	5,0	Nmin+Mmax	42,9	0,0	0,0	OK
RIB4a	5,0	Nmin+Mmax	41,1	0,0	0,0	OK
RIB4b	5,0	Nmin+Mmax	44,2	0,0	0,0	OK

Design data

S 235	235,0	5,0

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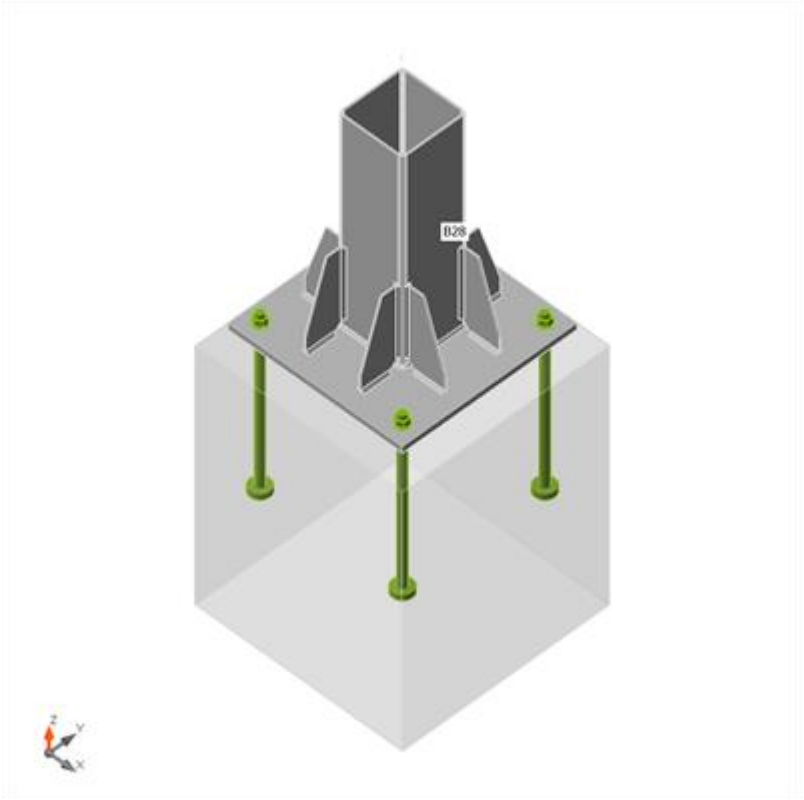
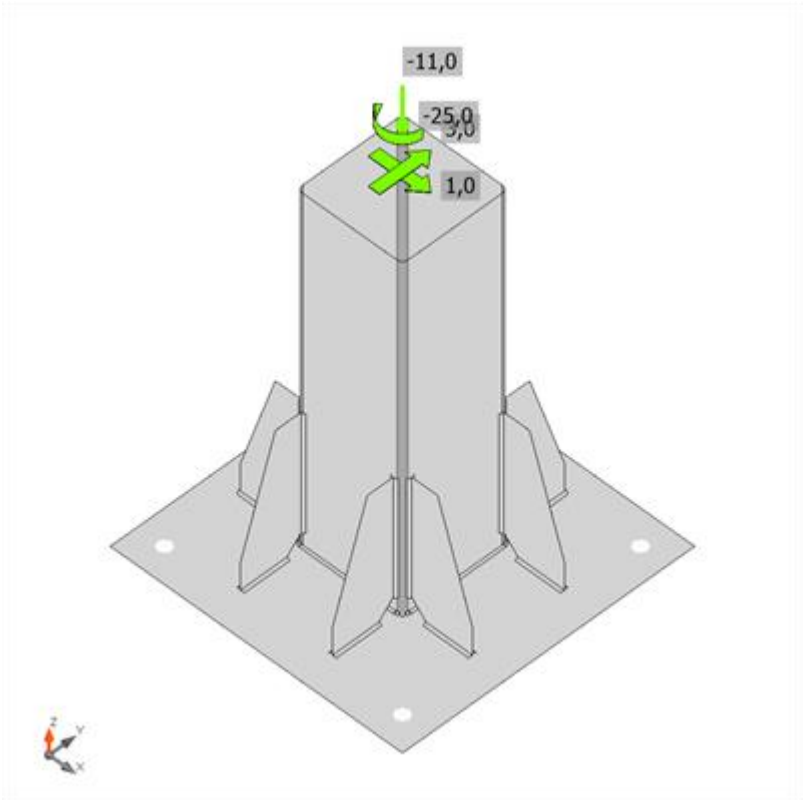
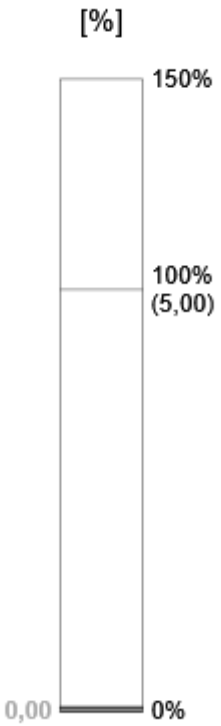


Overall check, Nmin+Mmax





Strain check, Nmin+Mmax

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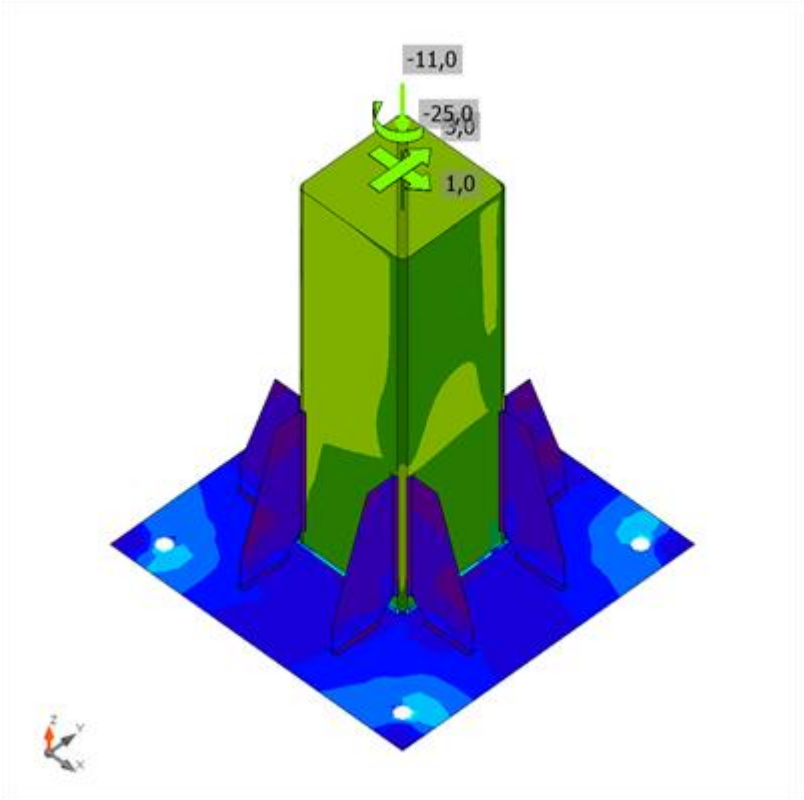
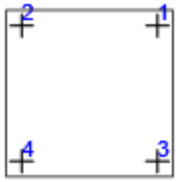


Equivalent stress, Nmin+Mmax

Anchors



A1	Nmin+Mmax	-2,9	20,0	0,7	22,7	90,6	OK	OK
A2	Nmin+Mmax	-2,8	20,1	0,7	22,8	91,0	OK	OK
A3	Nmin+Mmax	-2,7	20,0	0,7	22,7	90,5	OK	OK
A4	Nmin+Mmax	-2,6	20,1	0,7	22,8	90,9	OK	OK

Design data

M24 8.8 - 1 154,6 88,1 0,8

Detailed result for A1

Stand-off anchor compressive resistance (EN 1993-1-1 – Cl. 6.3)

$F_{c,Rd} = \frac{\chi \cdot A_s \cdot f_y}{\gamma_{M1}} =$ 154,6 kN ≥ $F_c =$ 2,9 kN

Where:

$\chi = \min\left(\frac{1}{\Phi + \sqrt{\Phi^2 - \overline{\lambda}^2}}, 1\right) =$ 0,86 – buckling reduction factor

$\Phi = 0,5 \cdot [1 + \alpha \cdot (\overline{\lambda} - 0.2) + \overline{\lambda}^2] =$ 0,68 – value to determine buckling reduction factor

$\alpha =$ 0,49 – imperfection factor

$\overline{\lambda} = \sqrt{\frac{A_s \cdot f_y}{N_{cr}}} =$ 0,48 – relative slenderness

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A_s = 353 mm² – anchor area reduced by thread

$N_{cr} = \frac{\pi^2 \cdot E \cdot I}{L_{cr}^2}$ = 991,1 kN – Euler's critical force

E = 210000,0 MPa – elastic modulus

I = 9916 mm⁴ – moment of inertia of the bolt

-

$I = \frac{\pi \cdot d_s^4}{64}$

, where:

-
  -

d_s =

21 mm – diameter reduced by thread

L_{cr} = 144 mm – buckling length (is it assumed on a safe side that the bolt is fixed in the concrete and able to freely rotate at the base plate)

-

$L_{cr} = 2 \cdot l$

, where:

-
  -

l =

72 mm – effective length

f_y = 640,0 MPa – anchor yield strength

γ_{M2} = 1,25 – safety factor

Concrete pullout resistance (EN 1992-4 – Cl. 7.2.1.5)

$\frac{N_{Rd,p}}{N_{Rd,c}}$ = 296,9 kN ≥ N_{Ed} = -2,9 kN

$N_{Rk,p} = k_2 \cdot A_h \cdot f_{ck}$ = 534,4 kN

Where:

k_2 = 7,50 – coefficient for cracked/uncracked concrete

A_h = 2375 mm² – area of the load-bearing head of the fastener

-

$A_h = \frac{\pi}{4} \cdot (d_h^2 - d^2)$

, where:

-
  -

d_h =

60 mm

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$\geq 6 \cdot t_h + d$

– effective size of washer plate, where:

- ○
- ▪

$t_h \geq \frac{d_h - d}{6} =$

6 mm – thickness of the head of the headed fastener

- ▪

$d =$

24 mm – diameter of the shank of the fastener

$f_{ck} =$ 30,0 MPa – concrete compressive strength

$\gamma_{Mc} =$ 1,80 – safety factor for concrete

Stand-off anchor shear resistance (EN 1993-1-1 – Cl. 6.2.6)

$V_{pl,Rd} =$ 88,1 kN ≥ $F_v =$ 20,0 kN

Where:

$A_v =$ 298 mm^2 – shear area

- •

$A_v = 0,844 \cdot A_s$

, where:

- •
- ○

$A_s =$

353 mm^2 – anchor area reduced by thread

$f_y =$ 640,0 MPa – anchor yield strength

$\gamma_{M2} =$ 1,25 – safety factor

Stand-off anchor bending resistance (EN 1993-1-1 – Cl. 6.2.5)

$M_{pl,Rd} = \frac{W_{pl} f_y}{\gamma_{M2}} =$ 0,8 kNm ≥ $M =$ 0,7 kNm

Where:

$W_{pl} =$ 1588 mm^3 – plastic section modulus of the fastener

- •

$W_{pl} = \frac{d_s^3}{6}$

, where:

- •
- ○

$d_s =$

21 mm – diameter reduced by thread

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f_y = 640,0 MPa – anchor yield strength

γ_{M2} = 1,25 – safety factor

Interaction of loading

$\frac{F_c}{F_{c,Rd}} +$ 0,91 ≤ 1,0

Where:

F_c = 2,9 kN – design compression force

$F_{c,Rd}$ = 154,6 kN – design compression resistance

M_{Ed} = 0,7 kNm – design bending moment

$M_{pl,Rd}$ = 0,8 kNm – design bending resistance

Supplementary reinforcement (EN 1992-4 – Cl. 7.2.1.9; EN 1992-4 – Cl. 7.2.2.6)
Supplementary reinforcement should resist force of 11,0 kN in tension and 6,3 kN in shear.

Detailed result for A2

Stand-off anchor compressive resistance (EN 1993-1-1 – Cl. 6.3)

$F_{c,Rd} = \frac{\chi \cdot A_s \cdot f_y}{\gamma_{M2}} =$ 154,6 kN ≥ $F_c =$ 2,8 kN

Where:

$\chi = \min\left(\frac{1}{\Phi+\sqrt{\Phi^2-\overline{\lambda}^2}}, 1\right) =$ 0,86 – buckling reduction factor

$\Phi = 0,5 \cdot [1+\alpha \cdot (\overline{\lambda} - 0.2) + \overline{\lambda}^2] =$ 0,68 – value to determine buckling reduction factor

$\alpha =$ 0,49 – imperfection factor

$\overline{\lambda} = \sqrt{\frac{A_s \cdot f_y}{N_{cr}}} =$ 0,48 – relative slenderness

A_s = 353 mm^2 – anchor area reduced by thread

$N_{cr} = \frac{\pi^2 \cdot E \cdot I}{L_{cr}^2} =$ 991,1 kN – Euler's critical force

E = 210000,0 MPa – elastic modulus

I = 9916 mm^4 – moment of inertia of the bolt

-

$I = \frac{\pi \cdot d_s^4}{64}$

, where:

-
  -

$d_s =$

21 mm – diameter reduced by thread

L_{cr} = 144 mm – buckling length (is it assumed on a safe side that the bolt is fixed in the concrete and able to freely rotate at the base plate)

-

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$l_{cr} = 2 \cdot l$

, where:

-
  -

$l =$

72 mm – effective length

$f_y =$ 640,0 MPa – anchor yield strength

$\gamma_{M2} =$ 1,25 – safety factor

Concrete pullout resistance (EN 1992-4 – Cl. 7.2.1.5)

$N_{Rd,p} =$ 296,9 kN ≥ $N_{Ed} =$ -2,8 kN

$N_{Rk,p} = k_2 \cdot A_h \cdot f_{ck} =$ 534,4 kN

Where:

$k_2 =$ 7,50 – coefficient for cracked/uncracked concrete

$A_h =$ 2375 mm^2 – area of the load-bearing head of the fastener

-

$A_h = \frac{\pi}{4} \cdot (d_h^2 - d^2)$

, where:

-
  -

$d_h =$

60 mm

$\leq 6 \cdot t_h + d$

– effective size of washer plate, where:

-
  -

$t_h \geq \frac{d_h - d}{6} =$

6 mm – thickness of the head of the headed fastener

-

$d =$

24 mm – diameter of the shank of the fastener

$f_{ck} =$ 30,0 MPa – concrete compressive strength

$\gamma_{Mc} =$ 1,80 – safety factor for concrete

Stand-off anchor shear resistance (EN 1993-1-1 – Cl. 6.2.6)

$V_{pl,Rd} =$ 88,1 kN ≥ $F_v =$ 20,1 kN

Where:

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A_v = 298 mm² – shear area

- $A_v = 0,844 \cdot A_s$

, where:

- A_s =

353 mm² – anchor area reduced by thread

f_y = 640,0 MPa – anchor yield strength

γ_{M2} = 1,25 – safety factor

Stand-off anchor bending resistance (EN 1993-1-1 – Cl. 6.2.5)

$M_{pl,Rd} = \frac{W_{pl} f_y}{\gamma_{M2}}$ = 0,8 kNm ≥ M = 0,7 kNm

Where:

W_{pl} = 1588 mm³ – plastic section modulus of the fastener

- $W_{pl} = \frac{d_s^3}{6}$

, where:

- d_s =

21 mm – diameter reduced by thread

f_y = 640,0 MPa – anchor yield strength

γ_{M2} = 1,25 – safety factor

Interaction of loading

$\frac{F_c}{F_{c,Rd}} +$ 0,91 ≤ 1,0

Where:

F_c = 2,8 kN – design compression force

$F_{c,Rd}$ = 154,6 kN – design compression resistance

M_{Ed} = 0,7 kNm – design bending moment

$M_{pl,Rd}$ = 0,8 kNm – design bending resistance

Supplementary reinforcement (EN 1992-4 – Cl. 7.2.1.9; EN 1992-4 – Cl. 7.2.2.6)
Supplementary reinforcement should resist force of 11,0 kN in tension and 6,3 kN in shear.

Detailed result for A3

Stand-off anchor compressive resistance (EN 1993-1-1 – Cl. 6.3)

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$F_{c,Rd} = \frac{\chi \cdot A_s \cdot f_y}{\gamma_{M2}} =$ 154,6 kN ≥ $F_c =$ 2,7 kN

Where:

$\chi = \min\left(\frac{1}{\Phi + \sqrt{\Phi^2 - \overline{\lambda}^2}}, 1\right) =$ 0,86 – buckling reduction factor

$\Phi = 0,5 \cdot [1 + \alpha \cdot (\overline{\lambda} - 0.2) + \overline{\lambda}^2] =$ 0,68 – value to determine buckling reduction factor

$\alpha =$ 0,49 – imperfection factor

$\overline{\lambda} = \sqrt{\frac{A_s f_y}{N_{cr}}} =$ 0,48 – relative slenderness

$A_s =$ 353 mm^2 – anchor area reduced by thread

$N_{cr} = \frac{\pi^2 \cdot E \cdot I}{L_{cr}^2} =$ 991,1 kN – Euler's critical force

$E =$ 210000,0 MPa – elastic modulus

$I =$ 9916 mm^4 – moment of inertia of the bolt

-

$I = \frac{\pi \cdot d_s^4}{64}$

, where:

-
  -

$d_s =$

21 mm – diameter reduced by thread

$L_{cr} =$ 144 mm – buckling length (is it assumed on a safe side that the bolt is fixed in the concrete and able to freely rotate at the base plate)

-

$L_{cr} = 2 \cdot l$

, where:

-
  -

$l =$

72 mm – effective length

$f_y =$ 640,0 MPa – anchor yield strength

$\gamma_{M2} =$ 1,25 – safety factor

Concrete pullout resistance (EN 1992-4 – Cl. 7.2.1.5)

$N_{Rd,p} =$ 296,9 kN ≥ $N_{Ed} =$ -2,7 kN

$N_{Rk,p} = k_2 \cdot A_h \cdot f_{ck} =$ 534,4 kN

Where:

$k_2 =$ 7,50 – coefficient for cracked/uncracked concrete

$A_h =$ 2375 mm^2 – area of the load-bearing head of the fastener

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-

$A_h = \frac{\pi}{4} \cdot (d_h^2 - d^2)$

, where:

-
  -

$d_h =$

60 mm

$\leq 6 \cdot t_h + d$

– effective size of washer plate, where:

  -
    -

$t_h \geq \frac{d_h - d}{6} =$

6 mm – thickness of the head of the headed fastener

    -

$d =$

24 mm – diameter of the shank of the fastener

$f_{ck} =$ 30,0 MPa – concrete compressive strength

$\gamma_{Mc} =$ 1,80 – safety factor for concrete

Stand-off anchor shear resistance (EN 1993-1-1 – Cl. 6.2.6)

$V_{pl,Rd} =$ 88,1 kN ≥ $F_v =$ 20,0 kN

Where:

$A_v =$ 298 mm^2 – shear area

-

$A_v = 0,844 \cdot A_s$

, where:

-
  -

$A_s =$

353 mm^2 – anchor area reduced by thread

$f_y =$ 640,0 MPa – anchor yield strength

$\gamma_{M2} =$ 1,25 – safety factor

Stand-off anchor bending resistance (EN 1993-1-1 – Cl. 6.2.5)

$M_{pl,Rd} = \frac{W_{pl} f_y}{\gamma_{M2}} =$ 0,8 kNm ≥ $M =$ 0,7 kNm

Where:

$W_{pl} =$ 1588 mm^3 – plastic section modulus of the fastener

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-

$W_{pl} = \frac{d_s^3}{6}$

, where:

-
  -

d_s =

21 mm – diameter reduced by thread

f_y = 640,0 MPa – anchor yield strength

γ_{M2} = 1,25 – safety factor

Interaction of loading

$\frac{F_c}{F_{c,Rd}} +$ 0,90 ≤ 1,0

Where:

F_c = 2,7 kN – design compression force

$F_{c,Rd}$ = 154,6 kN – design compression resistance

M_{Ed} = 0,7 kNm – design bending moment

$M_{pl,Rd}$ = 0,8 kNm – design bending resistance

Supplementary reinforcement (EN 1992-4 – Cl. 7.2.1.9; EN 1992-4 – Cl. 7.2.2.6)
Supplementary reinforcement should resist force of 11,0 kN in tension and 6,3 kN in shear.

Detailed result for A4

Stand-off anchor compressive resistance (EN 1993-1-1 – Cl. 6.3)

$F_{c,Rd} = \frac{\chi \cdot A_s \cdot f_y}{\gamma_{M2}} =$ 154,6 kN ≥ $F_c =$ 2,6 kN

Where:

$\chi = \min\left(\frac{1}{\Phi + \sqrt{\Phi^2 - \overline{\lambda}^2}}, 1\right) =$ 0,86 – buckling reduction factor

$\Phi = 0,5 \cdot [1 + \alpha \cdot (\overline{\lambda} - 0.2) + \overline{\lambda}^2] =$ 0,68 – value to determine buckling reduction factor

$\alpha =$ 0,49 – imperfection factor

$\overline{\lambda} = \sqrt{\frac{A_s f_y}{N_{cr}}} =$ 0,48 – relative slenderness

$A_s =$ 353 mm² – anchor area reduced by thread

$N_{cr} = \frac{\pi^2 \cdot E \cdot I}{L_{cr}^2} =$ 991,1 kN – Euler's critical force

$E =$ 210000,0 MPa – elastic modulus

$I =$ 9916 mm⁴ – moment of inertia of the bolt

-

$I = \frac{\pi \cdot d_s^4}{64}$

, where:

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-
  -

d_s =
21 mm – diameter reduced by thread

L_{cr} = 144 mm – buckling length (is it assumed on a safe side that the bolt is fixed in the concrete and able to freely rotate at the base plate)

-

$L_{cr} = 2 \cdot l$
, where:

-
  -

l =
72 mm – effective length

f_y = 640,0 MPa – anchor yield strength

γ_{M2} = 1,25 – safety factor

Concrete pullout resistance (EN 1992-4 – Cl. 7.2.1.5)

$N_{Rd,p}$ = 296,9 kN ≥ N_{Ed} = -2,6 kN

$N_{Rk,p} = k_2 \cdot A_h \cdot f_{ck}$ = 534,4 kN

Where:

k_2 = 7,50 – coefficient for cracked/uncracked concrete

A_h = 2375 mm² – area of the load-bearing head of the fastener

-

$A_h = \frac{\pi}{4} \cdot (d_h^2 - d^2)$
, where:

-
  -

d_h =
60 mm
$\leq 6 \cdot t_h + d$
– effective size of washer plate, where:

    -
      -

$t_h \geq \frac{d_h - d}{6}$ =
6 mm – thickness of the head of the headed fastener

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▪

d =

24 mm – diameter of the shank of the fastener

f_{ck} = 30,0 MPa – concrete compressive strength

γ_{Mc} = 1,80 – safety factor for concrete

Stand-off anchor shear resistance (EN 1993-1-1 – Cl. 6.2.6)

$V_{pl,Rd}$ = 88,1 kN ≥ F_v = 20,1 kN

Where:

A_v = 298 mm^2 – shear area

•

$A_v = 0,844 \cdot A_s$

, where:

•

○

A_s =

353 mm^2 – anchor area reduced by thread

f_y = 640,0 MPa – anchor yield strength

γ_{M2} = 1,25 – safety factor

Stand-off anchor bending resistance (EN 1993-1-1 – Cl. 6.2.5)

$M_{pl,Rd} = \frac{W_{pl} f_y}{\gamma_{M2}}$ = 0,8 kNm ≥ M = 0,7 kNm

Where:

W_{pl} = 1588 mm^3 – plastic section modulus of the fastener

•

$W_{pl} = \frac{d_s^3}{6}$

, where:

•

○

d_s =

21 mm – diameter reduced by thread

f_y = 640,0 MPa – anchor yield strength

γ_{M2} = 1,25 – safety factor

Interaction of loading

$\frac{F_s}{F_{s,Rd}} +$ 0,91 ≤ 1,0

Where:

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F_c = 2,6 kN – design compression force

$F_{c,Rd}$ = 154,6 kN – design compression resistance

M_{Ed} = 0,7 kNm – design bending moment

$M_{pl,Rd}$ = 0,8 kNm – design bending resistance

Supplementary reinforcement (EN 1992-4 – Cl. 7.2.1.9; EN 1992-4 – Cl. 7.2.2.6)
Supplementary reinforcement should resist force of 11,0 kN in tension and 6,3 kN in shear.

Welds

BP1	RIB1a	◢ 6,0 ◣	85	Nmin+Mmax	18,8	0,0	-7,6	5,4	-8,3	5,2	4,6	OK
		◢ 6,0 ◣	85	Nmin+Mmax	13,5	0,0	-3,2	-0,5	7,6	3,8	2,4	OK
B28-w1	RIB1a	◢ 6,0 ◣	219	Nmin+Mmax	11,6	0,0	-3,4	4,6	4,4	3,2	0,7	OK
		◢ 6,0 ◣	219	Nmin+Mmax	17,1	0,0	-1,8	-9,4	-3,0	4,8	2,7	OK
BP1	RIB1b	◢ 6,0 ◣	85	Nmin+Mmax	23,6	0,0	2,8	13,3	2,4	6,6	3,6	OK
		◢ 6,0 ◣	85	Nmin+Mmax	26,7	0,0	1,2	15,2	-2,1	7,4	5,9	OK
B28-w1	RIB1b	◢ 6,0 ◣	219	Nmin+Mmax	12,7	0,0	2,3	-6,6	-2,9	3,5	1,8	OK
		◢ 6,0 ◣	219	Nmin+Mmax	8,0	0,0	-2,5	3,1	-3,2	2,2	1,0	OK
BP1	RIB2a	◢ 6,0 ◣	85	Nmin+Mmax	19,5	0,0	-7,7	-5,8	8,6	5,4	4,7	OK
		◢ 6,0 ◣	85	Nmin+Mmax	13,2	0,0	-2,7	-0,5	-7,4	3,7	2,4	OK
B28-w2	RIB2a	◢ 6,0 ◣	219	Nmin+Mmax	11,2	0,0	1,5	5,9	-2,6	3,1	0,7	OK
		◢ 6,0 ◣	219	Nmin+Mmax	18,4	0,0	-1,7	-10,2	-2,8	5,1	2,7	OK
BP1	RIB2b	◢ 6,0 ◣	85	Nmin+Mmax	23,9	0,0	2,8	-13,5	-2,4	6,6	3,5	OK
		◢ 6,0 ◣	85	Nmin+Mmax	26,8	0,0	1,0	-15,3	1,9	7,4	5,8	OK
B28-w2	RIB2b	◢ 6,0 ◣	219	Nmin+Mmax	11,8	0,0	2,3	-6,1	-2,8	3,3	1,8	OK
		◢ 6,0 ◣	219	Nmin+Mmax	7,5	0,0	-2,5	2,7	-3,0	2,1	1,0	OK
BP1	RIB3a	◢ 6,0 ◣	85	Nmin+Mmax	19,8	0,0	-7,9	5,8	-8,7	5,5	4,8	OK
		◢ 6,0 ◣	85	Nmin+Mmax	13,6	0,0	-3,0	-0,2	7,6	3,8	2,4	OK
B28-w3	RIB3a	◢ 6,0 ◣	219	Nmin+Mmax	11,4	0,0	1,4	6,0	-2,7	3,2	0,7	OK

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		◢ 6,0 ◣	219	Nmin+Mmax	18,5	0,0	-1,9	-10,2	-3,1	5,1	2,8	OK
BP1	RIB3b	◢ 6,0 ◣	85	Nmin+Mmax	21,8	0,0	2,5	12,3	2,2	6,1	3,4	OK
		◢ 6,0 ◣	85	Nmin+Mmax	25,0	0,0	7,7	6,4	-12,2	7,0	5,5	OK
B28-w3	RIB3b	◢ 6,0 ◣	219	Nmin+Mmax	11,4	0,0	2,3	-5,8	-2,8	3,2	1,9	OK
		◢ 6,0 ◣	219	Nmin+Mmax	6,9	0,0	-2,5	2,2	-3,0	1,9	1,0	OK
BP1	RIB4a	◢ 6,0 ◣	85	Nmin+Mmax	18,9	0,0	-7,8	-5,3	8,4	5,3	4,7	OK
		◢ 6,0 ◣	85	Nmin+Mmax	14,4	0,0	-3,7	1,1	-8,0	4,0	2,4	OK
B28-w4	RIB4a	◢ 6,0 ◣	219	Nmin+Mmax	12,9	0,0	-3,7	5,3	4,7	3,6	0,7	OK
		◢ 6,0 ◣	219	Nmin+Mmax	17,4	0,0	-1,9	-9,5	-3,1	4,8	2,8	OK
BP1	RIB4b	◢ 6,0 ◣	85	Nmin+Mmax	22,7	0,0	2,7	-12,8	-2,3	6,3	3,4	OK
		◢ 6,0 ◣	85	Nmin+Mmax	25,7	0,0	8,0	-6,6	12,5	7,1	5,7	OK
B28-w4	RIB4b	◢ 6,0 ◣	219	Nmin+Mmax	12,1	0,0	2,4	-6,1	-3,0	3,4	1,9	OK
		◢ 6,0 ◣	219	Nmin+Mmax	7,4	0,0	-2,5	2,6	-3,1	2,1	1,0	OK
BP1	B28	◢ 5,0 ◣	757	Nmin+Mmax	62,7	0,0	4,9	35,8	4,8	17,4	13,8	OK
		◢ 5,0 ◣	757	Nmin+Mmax	71,7	0,0	-1,8	-41,3	2,2	19,9	16,3	OK

Design data

S 235 0,80 360,0 259,2

Detailed result for BP1 / RIB1a - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 18,8 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 7,6 MPa

where:

$f_u =$ 360,0 MPa – Ultimate strength

$\beta_w =$ 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

$\gamma_{M2} =$ 1,25 – Safety factor

Stress utilization

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$U_t = \max\left(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}\right) =$ 0,05 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 18,8 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = -7,6 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB1a - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 13,5 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 3,2 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max\left(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}\right) =$ 0,04 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 13,5 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = -3,2 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 1 / RIB1a - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 11,6 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 3,4 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max\left(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}\right) =$ 0,03 ≤ 1,0

Where:

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$\sigma_{w,Ed}$ = 11,6 MPa – Maximum normal stress transverse to the axis of the weld
$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance
$|\sigma_{\perp}|$ = -3,4 MPa – Normal stress perpendicular to the throat
$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 1 / RIB1a - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_{\perp}^2 + 3(\tau_{\perp}^2 + \tau_{\parallel}^2)]^{0.5} =$ 17,1 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_{\perp}| =$ 1,8 MPa

where:

f_u = 360,0 MPa – Ultimate strength
β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1
γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_{\perp}|}{\sigma_{\perp,Rd}}) =$ 0,05 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 17,1 MPa – Maximum normal stress transverse to the axis of the weld
$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance
$|\sigma_{\perp}|$ = -1,8 MPa – Normal stress perpendicular to the throat
$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB1b - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_{\perp}^2 + 3(\tau_{\perp}^2 + \tau_{\parallel}^2)]^{0.5} =$ 23,6 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_{\perp}| =$ 2,8 MPa

where:

f_u = 360,0 MPa – Ultimate strength
β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1
γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_{\perp}|}{\sigma_{\perp,Rd}}) =$ 0,07 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 23,6 MPa – Maximum normal stress transverse to the axis of the weld
$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

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$|\sigma_\perp|$ = 2,8 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB1b - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 26,7 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 1,2 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,07 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 26,7 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = 1,2 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 1 / RIB1b - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 12,7 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 2,3 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,04 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 12,7 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = 2,3 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

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Detailed result for B28-w 1 / RIB1b - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 8,0 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 2,5 MPa

where:

$f_u =$ 360,0 MPa – Ultimate strength

$\beta_w =$ 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

$\gamma_{M2} =$ 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,02 ≤ 1,0

Where:

$\sigma_{w,Ed} =$ 8,0 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd} =$ 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp| =$ -2,5 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd} =$ 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB2a - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 19,5 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 7,7 MPa

where:

$f_u =$ 360,0 MPa – Ultimate strength

$\beta_w =$ 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

$\gamma_{M2} =$ 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,05 ≤ 1,0

Where:

$\sigma_{w,Ed} =$ 19,5 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd} =$ 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp| =$ -7,7 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd} =$ 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB2a - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

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$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 13,2 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 2,7 MPa

where:

$f_u =$ 360,0 MPa – Ultimate strength

$\beta_w =$ 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

$\gamma_{M2} =$ 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,04 ≤ 1,0

Where:

$\sigma_{w,Ed} =$ 13,2 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd} =$ 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp| =$ -2,7 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd} =$ 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 2 / RIB2a - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 11,2 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 1,5 MPa

where:

$f_u =$ 360,0 MPa – Ultimate strength

$\beta_w =$ 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

$\gamma_{M2} =$ 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,03 ≤ 1,0

Where:

$\sigma_{w,Ed} =$ 11,2 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd} =$ 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp| =$ 1,5 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd} =$ 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 2 / RIB2a - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 18,4 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 1,7 MPa

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nere:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,05 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 18,4 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = -1,7 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB2b - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 23,9 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 2,8 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,07 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 23,9 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = 2,8 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB2b - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 26,8 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 1,0 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

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γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,07 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 26,8 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = 1,0 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 2 / RIB2b - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 11,8 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 2,3 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,03 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 11,8 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = 2,3 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 2 / RIB2b - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 7,5 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 2,5 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

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$U_t = \max\left(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}\right) =$ 0,02 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 7,5 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = -2,5 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB3a - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 19,8 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 7,9 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max\left(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}\right) =$ 0,05 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 19,8 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = -7,9 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB3a - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 13,6 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 3,0 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max\left(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}\right) =$ 0,04 ≤ 1,0

Where:

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$\sigma_{w,Ed}$ = 13,6 MPa – Maximum normal stress transverse to the axis of the weld
$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance
$|\sigma_{\perp}|$ = -3,0 MPa – Normal stress perpendicular to the throat
$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 3 / RIB3a - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_{\perp}^2 + 3(\tau_{\perp}^2 + \tau_{\parallel}^2)]^{0.5} =$ 11,4 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_{\perp}| =$ 1,4 MPa

where:

f_u = 360,0 MPa – Ultimate strength
β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1
γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_{\perp}|}{\sigma_{\perp,Rd}}) =$ 0,03 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 11,4 MPa – Maximum normal stress transverse to the axis of the weld
$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance
$|\sigma_{\perp}|$ = 1,4 MPa – Normal stress perpendicular to the throat
$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 3 / RIB3a - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_{\perp}^2 + 3(\tau_{\perp}^2 + \tau_{\parallel}^2)]^{0.5} =$ 18,5 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_{\perp}| =$ 1,9 MPa

where:

f_u = 360,0 MPa – Ultimate strength
β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1
γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_{\perp}|}{\sigma_{\perp,Rd}}) =$ 0,05 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 18,5 MPa – Maximum normal stress transverse to the axis of the weld
$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

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$|\sigma_\perp|$ = -1,9 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB3b - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 21,8 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 2,5 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,06 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 21,8 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = 2,5 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB3b - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 25,0 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 7,7 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,07 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 25,0 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = 7,7 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

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Detailed result for B28-w 3 / RIB3b - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 11,4 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 2,3 MPa

where:

$f_u =$ 360,0 MPa – Ultimate strength

$\beta_w =$ 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

$\gamma_{M2} =$ 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,03 ≤ 1,0

Where:

$\sigma_{w,Ed} =$ 11,4 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd} =$ 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp| =$ 2,3 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd} =$ 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 3 / RIB3b - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 6,9 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 2,5 MPa

where:

$f_u =$ 360,0 MPa – Ultimate strength

$\beta_w =$ 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

$\gamma_{M2} =$ 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,02 ≤ 1,0

Where:

$\sigma_{w,Ed} =$ 6,9 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd} =$ 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp| =$ -2,5 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd} =$ 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB4a - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

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$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 18,9 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 7,8 MPa

where:

$f_u =$ 360,0 MPa – Ultimate strength

$\beta_w =$ 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

$\gamma_{M2} =$ 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,05 ≤ 1,0

Where:

$\sigma_{w,Ed} =$ 18,9 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd} =$ 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp| =$ -7,8 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd} =$ 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB4a - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 14,4 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 3,7 MPa

where:

$f_u =$ 360,0 MPa – Ultimate strength

$\beta_w =$ 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

$\gamma_{M2} =$ 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,04 ≤ 1,0

Where:

$\sigma_{w,Ed} =$ 14,4 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd} =$ 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp| =$ -3,7 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd} =$ 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 4 / RIB4a - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 12,9 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 3,7 MPa

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Where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,04 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 12,9 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = -3,7 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 4 / RIB4a - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 17,4 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 1,9 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,05 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 17,4 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = -1,9 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB4b - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 22,7 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 2,7 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

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γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,06 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 22,7 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = 2,7 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB4b - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 25,7 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 8,0 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,07 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 25,7 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = 8,0 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 4 / RIB4b - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 12,1 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 2,4 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

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$U_t = \max\left(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}\right) =$ 0,03 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 12,1 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = 2,4 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 4 / RIB4b - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 7,4 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 2,5 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max\left(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}\right) =$ 0,02 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 7,4 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = -2,5 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / B28 - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 62,7 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 4,9 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max\left(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}\right) =$ 0,17 ≤ 1,0

Where:

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$\sigma_{w,Ed}$ = 62,7 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_{\perp}|$ = 4,9 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / B28 - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_{\perp}^2 + 3(\tau_{\perp}^2 + \tau_{\parallel}^2)]^{0.5} =$ 71,7 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_{\perp}| =$ 1,8 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_{\perp}|}{\sigma_{\perp,Rd}}) =$ 0,20 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 71,7 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_{\perp}|$ = -1,8 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Išvados:

- Įtampos transformatoriaus kolonos ribinis poslinkis lygus 49 mm, traversos – 15 mm. Pagal atliktus skaičiavimus kolonos poslinkis y kryptimi lygus 13,7 mm, traversos poslinkis z kryptimi – 1,6 mm. Gauti rezultatai neviršija ribinio poslinkio reikšmės.
- Viršįtempių ribotuvo atramos labiausiai pagal skerspjūvį išnaudojamas elemento profilis – UPN 260. Nustatytos reikšmės neviršija ribinių 0,69 ≤ 1.

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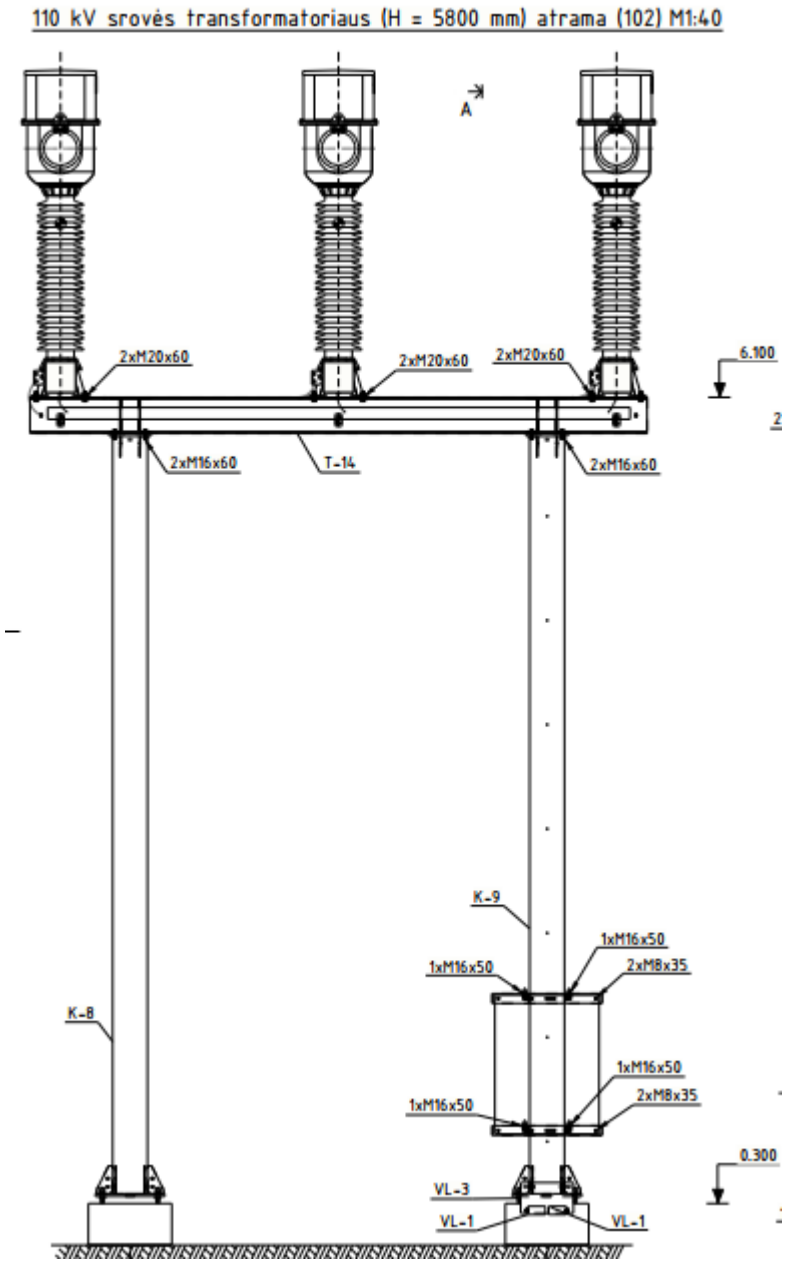
2.4. Srovės transformatorius (h = 5800 mm)



Pav. 8 Srovės transformatoriaus atrama

Srovės transformatoriaus atramai priimtos:

- Dvi vamzdinio profilio kolonos rėmo plokštumoje standžiai sujungtos su pamatu per inkarinius varžtus;
- Sudvejinta traversa iš UPN profilių, kuri tarpusavyje sujungta standžiai IPE ar UPN tipo profiliais.
- Traversa su kolona jungiama varžtais – standžiai.
- Laikančiųjų konstrukcijų plienas S275J2.

Lentelė 1. Atviros skirstomosios įrangos konstrukcijų ribiniai poslinkiai ir įlinkiai

Konstrukcijos apibudinimas ir nuokrypio kryptis	Atramų santykinės nuokrypos	Santykiniai traversų įlinkiai (tarpatramio -1 arba gembės ilgiui -2)			
		Vertikalieji		Horizontalieji	
		Tarpatramyje	Gembėje	Tarpatramyje	Gembėje
Atviros skirstomosios įrangos atramos išilgai laidų	1/100 5,8/100=0,058 m	1/200 3/200=0,015	1/70 0,50/70=0,010	1/200 3/200=0,015	1/70 0,5/70=0,010

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Atviros skirstomosios įrangos atramos skersai laidų	1/70 5,8/70=0,082 m	n/a	n/a	n/a	n/a

Pastabos:
1. Kai yra avariniai ir montažiniai režimai, atviros skirstomosios įrangos atramų ir oro linijų traversų atramų nuokrypiai nenormuojami.
2. Nuokrypiai ir įlinkiai, turi būti sumažinti, jei įrangos eksploatacijos techninės sąlygos numato griežtesnius apribojimus.

Srovės transformatoriaus atramą veikiančios nuolatinės ir kintamos apkrovos pateiktos žemiau esančioje lentelėje.

Lentelė 30. Atviros skirstomosios įrangos konstrukcijų ribiniai poslinkiai ir įlinkiai

Įrenginio apkrovų pasiskirstymas					
Eil. Nr.	Apkrovos pavadinimas	F, kN	q, kN/m	Jėgos veikimo kryptis	Pastaba
1.	**Nuolatinės apkrovos**				
1.1.	Konstrukcijos savasis svoris	BEM	-	↓	γ=78,50 kN/m^3
1.2.	Technologiniai įrenginiai	1,50	-	↓	-
1.3.	Laidų svoris	0,21	-	↓	-
2.	**Kintamos apkrovos**				
2.1.	*Vėjas x-x kryptimi*				
2.1.1.	Į koloną	-	0,087	→	X-X
2.1.2.	Į traversą	-	0,078	→	X-X
2.1.3.	Į technologinius įrenginius	-	0,34	→	X-X
2.1.4.	Nuo laidų	0,15	-	-	X-X
2.2.	*Vėjas y-y kryptimi*				
2.2.1.	Į koloną	-	0,087	→	Y-Y
2.2.2.	Į traversą	-	0,078	→	Y-Y
2.2.3.	Į technologinius įrenginius	-	0,34	→	Y-Y
2.2.4.	Nuo laidų	-	-	→	Vėjo kryptis išilgai laidų
2.3.	*Apšalas*				
2.3.1.	Nuo įrenginio	0,97		↓	Z-Z
2.3.2.	Nuo laidų	0,015		↓	Z-Z
2.4.	*Laidų išilginis tempimas*	1,5		→	X-X

Lentelė 31. Apkrovų eksplikacija

Apkrovos nr.	**Apkrovos žymuo**	**Apkrovos pavadinimas**
1	LC1	Savasis svoris
2	LC2	Įrenginių svoris
3	LC3	Laidų svoris
4	LC4	Vėjas X-X
5	LC5	Vėjas Y-Y
6	LC6	Apšalas
7	LC7	Laidų išilginis tempimas

1.3 Materials

Matl. No.	Modulus E [kN/cm^2]	Modulus G [kN/cm^2]	Poisson's Ratio n [-]	Spec. Weight g [kN/m^3]	Coeff. of Th. Exp. a [1/°C]	Partial Factor g_M [-]	Material Model
2	Steel S 235 J2 | BDS EN 10025-2:2004-11						
	21000.00	8076.92	0.300	78.50	1.20E-05	1.00	Isotropic Linear Elastic

1.7 Nodal Supports

Support No.	Nodes No.	Axis System	Column in Z	Support Conditions u_X	u_Y	u_Z	j_X	j_Y	j_Z
1	1,3	Global X,Y,Z	-	x	x	x	x	x	x

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1.13 Cross-Sections

Section No.	Matl. No.	J [cm⁴] A [cm²]	I_y [cm⁴] A_y [cm²]	I_z [cm⁴] A_z [cm²]	Principal Axes a [°]	Rotation a' [°]	Overall Dimensions [mm] Width b	Height h
1	QRO 250x6 | EN 10219-2:2006							
	2	8843.00	5672.00	5672.00	0.00	0.00	250.0	250.0
		57.60	24.56	24.56				
2	UPN 260 | ArcelorMittal (EN 10365:2017)							
	2	7.39	925.00	85.30	0.00	0.00	65.0	160.0
		24.00	6.49	10.22				
		188.00	93.91	93.91				

1.17 Members

Mbr. No.	Line No.	Member	Rotation Type	Rotation b [°]	Cross-Section Start	Cross-Section End	Hinge No. Start	Hinge No. End	Ecc. No.	Div. No.	Length L [m]	
1	1	Beam	Angle	0.00	1	1	-	-	-	-	5.620	Z
2	2	Beam	Angle	0.00	1	1	-	-	-	-	5.620	Z
3	4	Beam	Angle	0.00	3	3	-	-	-	-	0.220	Y
9	13	Beam	Angle	180.00	2	2	-	-	-	-	4.500	X
10	15	Beam	Angle	180.00	2	2	-	-	-	-	4.500	X
13	33	Beam	Angle	0.00	3	3	-	-	-	-	0.220	Y
25	9	Beam	Angle	180.00	3	3	-	-	-	-	0.440	Y
28	29	Beam	Angle	0.00	3	3	-	-	-	-	0.220	Y
29	26	Beam	Angle	0.00	3	3	-	-	-	-	0.440	Y
30	17	Beam	Angle	0.00	3	3	-	-	-	-	0.220	Y
31	14	Beam	Angle	0.00	3	3	-	-	-	-	0.440	Y
33	24	Beam	Angle	0.00	3	3	-	-	-	-	0.220	Y
35	48	Beam	Angle	0.00	3	3	-	-	-	-	0.220	Y
50	34	Beam	Angle	0.00	4	4	-	-	-	-	2.100	Z
51	35	Beam	Angle	0.00	4	4	-	-	-	-	2.100	Z
55	23	Beam	Angle	0.00	3	3	-	-	-	-	0.220	Y
57	27	Beam	Angle	0.00	3	3	-	-	-	-	0.220	Y
58	45	Beam	Angle	0.00	4	4	-	-	-	-	2.100	Z

2.1 Load Cases

Load Case	Load Case Description	EN 1990 | LST Action Category	Self-Weight - Factor in Direction Active	X	Y	Z
LC1	Savasis svoris	Permanent	x	0.000	0.000	-1.000
LC2	Irenginiu svoris	Permanent	-			
LC3	Laidu svoris	Permanent	-			
LC4	Vejas X-X	Wind	-			
LC5	Vejas Y-Y	Wind	-			
LC6	Apsalas	Snow / ice	-			
LC7	Laidu isilginis tempimas	Temperature (non fire)	-			

2.1.1 Load Cases - Calculation Parameters

Load Case	Load Case Description	Calculation Parameters		
LC1	Savasis svoris	Method of analysis	: x	Geometrically linear analysis
		Method for solving system of nonlinear algebraic equations	: x	Newton-Raphson
		Activate stiffness factors of:	: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
LC2	Irenginiu svoris	Method of analysis	: x	Geometrically linear analysis
		Method for solving system of nonlinear algebraic equations	: x	Newton-Raphson
		Activate stiffness factors of:	: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
LC3	Laidu svoris	Method of analysis	: x	Geometrically linear analysis
		Method for solving system of nonlinear algebraic equations	: x	Newton-Raphson
		Activate stiffness factors of:	: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
LC4	Vejas X-X	Method of analysis	: x	Geometrically linear analysis
		Method for solving system of nonlinear algebraic equations	: x	Newton-Raphson
		Activate stiffness factors of:	: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
LC5	Vejas Y-Y	Method of analysis	: x	Geometrically linear analysis
		Method for solving system of nonlinear	: x	Newton-Raphson

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2.1.1 Load Cases - Calculation Parameters

Load Case	Load Case Description	Calculation Parameters
		algebraic equations
		Activate stiffness factors of: : x Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
		: x Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
LC6	Apsalas	Method of analysis : x Geometrically linear analysis
		Method for solving system of nonlinear algebraic equations : x Newton-Raphson
		Activate stiffness factors of: : x Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
		: x Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
LC7	Laidu isilginis tempimas	Method of analysis : x Geometrically linear analysis
		Method for solving system of nonlinear algebraic equations : x Newton-Raphson
		Activate stiffness factors of: : x Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
		: x Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)

2.5 Load Combinations

Load Combin.	DS	Load Combination Description	No.	Factor	Load Case	
CO1	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
CO2	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC4	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	1.30	LC4	Vejas X-X
CO3	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC5	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	1.30	LC5	Vejas Y-Y
CO4	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC4 + 0.91*LC6	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	1.30	LC4	Vejas X-X
			5	0.91	LC6	Apsalas
CO5	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC5 + 0.91*LC6	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	1.30	LC5	Vejas Y-Y
			5	0.91	LC6	Apsalas
CO6	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC4 + 0.91*LC6 + 0.78*LC7	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	1.30	LC4	Vejas X-X
			5	0.91	LC6	Apsalas
			6	0.78	LC7	Laidu isilginis tempimas
CO7	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC5 + 0.91*LC6 + 0.78*LC7	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	1.30	LC5	Vejas Y-Y
			5	0.91	LC6	Apsalas
			6	0.78	LC7	Laidu isilginis tempimas
CO8	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC4 + 0.78*LC7	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	1.30	LC4	Vejas X-X
			5	0.78	LC7	Laidu isilginis tempimas
CO9	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC5 + 0.78*LC7	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	1.30	LC5	Vejas Y-Y
			5	0.78	LC7	Laidu isilginis tempimas
CO10	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC6	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	1.30	LC6	Apsalas
CO11	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC4 + 1.3*LC6	1	1.35	LC1	Savasis svoris

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.5 Load Combinations

Load Combin.	DS	Load Combination Description	No.	Factor	Load Case	
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	0.78	LC4	Vejas X-X
			5	1.30	LC6	Apsalas
CO12	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC5 + 1.3*LC6	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	0.78	LC5	Vejas Y-Y
			5	1.30	LC6	Apsalas
CO13	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC4 + 1.3*LC6 + 0.78*LC7	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	0.78	LC4	Vejas X-X
			5	1.30	LC6	Apsalas
			6	0.78	LC7	Laidu isilginis tempimas
CO14	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC5 + 1.3*LC6 + 0.78*LC7	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	0.78	LC5	Vejas Y-Y
			5	1.30	LC6	Apsalas
			6	0.78	LC7	Laidu isilginis tempimas
CO15	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC6 + 0.78*LC7	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	1.30	LC6	Apsalas
			5	0.78	LC7	Laidu isilginis tempimas
CO16	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC7	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	1.30	LC7	Laidu isilginis tempimas
CO17	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC4 + 1.3*LC7	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	0.78	LC4	Vejas X-X
			5	1.30	LC7	Laidu isilginis tempimas
CO18	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC5 + 1.3*LC7	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	0.78	LC5	Vejas Y-Y
			5	1.30	LC7	Laidu isilginis tempimas
CO19	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC4 + 0.91*LC6 + 1.3*LC7	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	0.78	LC4	Vejas X-X
			5	0.91	LC6	Apsalas
			6	1.30	LC7	Laidu isilginis tempimas
CO20	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC5 + 0.91*LC6 + 1.3*LC7	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	0.78	LC5	Vejas Y-Y
			5	0.91	LC6	Apsalas
			6	1.30	LC7	Laidu isilginis tempimas
CO21	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.91*LC6 + 1.3*LC7	1	1.35	LC1	Savasis svoris
			2	1.35	LC2	Irenginiu svoris
			3	1.35	LC3	Laidu svoris
			4	0.91	LC6	Apsalas
			5	1.30	LC7	Laidu isilginis tempimas
CO22	S Ch	LC1 + LC2 + LC3	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
CO23	S Ch	LC1 + LC2 + LC3 + LC4	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.00	LC4	Vejas X-X

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2.5 Load Combinations

Load Combin.	DS	Load Combination Description	No.	Factor	Load Case	
CO24	S Ch	LC1 + LC2 + LC3 + LC5	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.00	LC5	Vejas Y-Y
CO25	S Ch	LC1 + LC2 + LC3 + LC4 + 0.7*LC6	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.00	LC4	Vejas X-X
			5	0.70	LC6	Apsalas
CO26	S Ch	LC1 + LC2 + LC3 + LC5 + 0.7*LC6	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.00	LC5	Vejas Y-Y
			5	0.70	LC6	Apsalas
CO27	S Ch	LC1 + LC2 + LC3 + LC4 + 0.7*LC6 + 0.6*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.00	LC4	Vejas X-X
			5	0.70	LC6	Apsalas
			6	0.60	LC7	Laidu isilginis tempimas
CO28	S Ch	LC1 + LC2 + LC3 + LC5 + 0.7*LC6 + 0.6*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.00	LC5	Vejas Y-Y
			5	0.70	LC6	Apsalas
			6	0.60	LC7	Laidu isilginis tempimas
CO29	S Ch	LC1 + LC2 + LC3 + LC4 + 0.6*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.00	LC4	Vejas X-X
			5	0.60	LC7	Laidu isilginis tempimas
CO30	S Ch	LC1 + LC2 + LC3 + LC5 + 0.6*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.00	LC5	Vejas Y-Y
			5	0.60	LC7	Laidu isilginis tempimas
CO31	S Ch	LC1 + LC2 + LC3 + LC6	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.00	LC6	Apsalas
CO32	S Ch	LC1 + LC2 + LC3 + 0.6*LC4 + LC6	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.60	LC4	Vejas X-X
			5	1.00	LC6	Apsalas
CO33	S Ch	LC1 + LC2 + LC3 + 0.6*LC5 + LC6	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.60	LC5	Vejas Y-Y
			5	1.00	LC6	Apsalas
CO34	S Ch	LC1 + LC2 + LC3 + 0.6*LC4 + LC6 + 0.6*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.60	LC4	Vejas X-X
			5	1.00	LC6	Apsalas
			6	0.60	LC7	Laidu isilginis tempimas
CO35	S Ch	LC1 + LC2 + LC3 + 0.6*LC5 + LC6 + 0.6*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.60	LC5	Vejas Y-Y
			5	1.00	LC6	Apsalas
			6	0.60	LC7	Laidu isilginis tempimas
CO36	S Ch	LC1 + LC2 + LC3 + LC6 + 0.6*LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.00	LC6	Apsalas
			5	0.60	LC7	Laidu isilginis tempimas

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2.5 Load Combinations

Load Combin.	DS	Load Combination Description	No.	Factor	Load Case	
CO37	S Ch	LC1 + LC2 + LC3 + LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	1.00	LC7	Laidu isilginis tempimas
CO38	S Ch	LC1 + LC2 + LC3 + 0.6*LC4 + LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.60	LC4	Vejas X-X
			5	1.00	LC7	Laidu isilginis tempimas
CO39	S Ch	LC1 + LC2 + LC3 + 0.6*LC5 + LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.60	LC5	Vejas Y-Y
			5	1.00	LC7	Laidu isilginis tempimas
CO40	S Ch	LC1 + LC2 + LC3 + 0.6*LC4 + 0.7*LC6 + LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.60	LC4	Vejas X-X
			5	0.70	LC6	Apsalas
			6	1.00	LC7	Laidu isilginis tempimas
CO41	S Ch	LC1 + LC2 + LC3 + 0.6*LC5 + 0.7*LC6 + LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.60	LC5	Vejas Y-Y
			5	0.70	LC6	Apsalas
			6	1.00	LC7	Laidu isilginis tempimas
CO42	S Ch	LC1 + LC2 + LC3 + 0.7*LC6 + LC7	1	1.00	LC1	Savasis svoris
			2	1.00	LC2	Irenginiu svoris
			3	1.00	LC3	Laidu svoris
			4	0.70	LC6	Apsalas
			5	1.00	LC7	Laidu isilginis tempimas

2.5.2 Load Combinations - Calculation Parameters

Load Combin.	Description	Calculation Parameters		
CO1	1.35*LC1 + 1.35*LC2 + 1.35*LC3	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
			x	Normal forces N
			x	Shear forces V_y and V_z
			x	Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO2	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC4	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
			x	Normal forces N
			x	Shear forces V_y and V_z
			x	Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO3	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC5	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
			x	Normal forces N
			x	Shear forces V_y and V_z
			x	Moments M_y, M_z and M_T

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1.5.2 Load Combinations - Calculation Parameters

Load Combin.	Description	Calculation Parameters		
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO4	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC4 + 0.91*LC6	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO5	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC5 + 0.91*LC6	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO6	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC4 + 0.91*LC6 + 0.78*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO7	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC5 + 0.91*LC6 + 0.78*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO8	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC4 + 0.78*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO9	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC5 + 0.78*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N

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1.5.2 Load Combinations - Calculation Parameters

Load Combin.	Description	Calculation Parameters
		x Shear forces V_y and V_z x Moments M_y, M_z and M_T Activate stiffness factors of: : x Materials (partial factor gM) : x Cross-sections (factor for J, I_y, I_z, A, A_y, A_z) : x Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO10	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC6	Method of analysis : x Second order analysis (P-Delta) Method for solving system of nonlinear algebraic equations : x Picard Options : x Consider favorable effects due to tension : x Refer internal forces to deformed system for: x Normal forces N x Shear forces V_y and V_z x Moments M_y, M_z and M_T Activate stiffness factors of: : x Materials (partial factor gM) : x Cross-sections (factor for J, I_y, I_z, A, A_y, A_z) : x Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO11	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC4 + 1.3*LC6	Method of analysis : x Second order analysis (P-Delta) Method for solving system of nonlinear algebraic equations : x Picard Options : x Consider favorable effects due to tension : x Refer internal forces to deformed system for: x Normal forces N x Shear forces V_y and V_z x Moments M_y, M_z and M_T Activate stiffness factors of: : x Materials (partial factor gM) : x Cross-sections (factor for J, I_y, I_z, A, A_y, A_z) : x Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO12	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC5 + 1.3*LC6	Method of analysis : x Second order analysis (P-Delta) Method for solving system of nonlinear algebraic equations : x Picard Options : x Consider favorable effects due to tension : x Refer internal forces to deformed system for: x Normal forces N x Shear forces V_y and V_z x Moments M_y, M_z and M_T Activate stiffness factors of: : x Materials (partial factor gM) : x Cross-sections (factor for J, I_y, I_z, A, A_y, A_z) : x Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO13	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC4 + 1.3*LC6 + 0.78*LC7	Method of analysis : x Second order analysis (P-Delta) Method for solving system of nonlinear algebraic equations : x Picard Options : x Consider favorable effects due to tension : x Refer internal forces to deformed system for: x Normal forces N x Shear forces V_y and V_z x Moments M_y, M_z and M_T Activate stiffness factors of: : x Materials (partial factor gM) : x Cross-sections (factor for J, I_y, I_z, A, A_y, A_z) : x Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO14	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC5 + 1.3*LC6 + 0.78*LC7	Method of analysis : x Second order analysis (P-Delta) Method for solving system of nonlinear algebraic equations : x Picard Options : x Consider favorable effects due to tension : x Refer internal forces to deformed system for: x Normal forces N x Shear forces V_y and V_z x Moments M_y, M_z and M_T Activate stiffness factors of: : x Materials (partial factor gM) : x Cross-sections (factor for J, I_y, I_z, A, A_y, A_z) : x Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO15	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC6 + 0.78*LC7	Method of analysis : x Second order analysis (P-Delta) Method for solving system of nonlinear algebraic equations : x Picard Options : x Consider favorable effects due to tension

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4.5.2 Load Combinations - Calculation Parameters

Load Combin.	Description	Calculation Parameters		
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO16	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.3*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO17	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC4 + 1.3*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO18	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC5 + 1.3*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO19	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC4 + 0.91*LC6 + 1.3*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO20	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.78*LC5 + 0.91*LC6 + 1.3*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO21	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 0.91*LC6 + 1.3*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear	: x	Picard

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15.5.2 Load Combinations - Calculation Parameters

Load Combin.	Description	Calculation Parameters		
		algebraic equations		
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO22	LC1 + LC2 + LC3	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO23	LC1 + LC2 + LC3 + LC4	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO24	LC1 + LC2 + LC3 + LC5	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO25	LC1 + LC2 + LC3 + LC4 + 0.7*LC6	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO26	LC1 + LC2 + LC3 + LC5 + 0.7*LC6	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO27	LC1 + LC2 + LC3 + LC4 + 0.7*LC6 + 0.6*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension

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2.5.2 Load Combinations - Calculation Parameters

Load Combin.	Description	Calculation Parameters		
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO28	LC1 + LC2 + LC3 + LC5 + 0.7*LC6 + 0.6*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO29	LC1 + LC2 + LC3 + LC4 + 0.6*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO30	LC1 + LC2 + LC3 + LC5 + 0.6*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO31	LC1 + LC2 + LC3 + LC6	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO32	LC1 + LC2 + LC3 + 0.6*LC4 + LC6	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO33	LC1 + LC2 + LC3 + 0.6*LC5 + LC6	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N

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2.5.2 Load Combinations - Calculation Parameters

Load Combin.	Description	Calculation Parameters		
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO34	LC1 + LC2 + LC3 + 0.6*LC4 + LC6 + 0.6*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO35	LC1 + LC2 + LC3 + 0.6*LC5 + LC6 + 0.6*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO36	LC1 + LC2 + LC3 + LC6 + 0.6*LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO37	LC1 + LC2 + LC3 + LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO38	LC1 + LC2 + LC3 + 0.6*LC4 + LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO39	LC1 + LC2 + LC3 + 0.6*LC5 + LC7	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z

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2.5.2 Load Combinations - Calculation Parameters

Load Combin.	Description	Calculation Parameters
		x Moments M_y, M_z and M_T
		Activate stiffness factors of: : x Materials (partial factor gM)
		: x Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
		: x Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO40	LC1 + LC2 + LC3 + 0.6*LC4 + 0.7*LC6 + LC7	Method of analysis : x Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations : x Picard
		Options : x Consider favorable effects due to tension
		: x Refer internal forces to deformed system for:
		x Normal forces N
		x Shear forces V_y and V_z
		x Moments M_y, M_z and M_T
		Activate stiffness factors of: : x Materials (partial factor gM)
		: x Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
		: x Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO41	LC1 + LC2 + LC3 + 0.6*LC5 + 0.7*LC6 + LC7	Method of analysis : x Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations : x Picard
		Options : x Consider favorable effects due to tension
		: x Refer internal forces to deformed system for:
		x Normal forces N
		x Shear forces V_y and V_z
		x Moments M_y, M_z and M_T
		Activate stiffness factors of: : x Materials (partial factor gM)
		: x Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
		: x Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO42	LC1 + LC2 + LC3 + 0.7*LC6 + LC7	Method of analysis : x Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations : x Picard
		Options : x Consider favorable effects due to tension
		: x Refer internal forces to deformed system for:
		x Normal forces N
		x Shear forces V_y and V_z
		x Moments M_y, M_z and M_T
		Activate stiffness factors of: : x Materials (partial factor gM)
		: x Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
		: x Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)

2.7 Result Combinations

Result Combin	Description	Loading
RC1	ULS (STR/GEO) - Permanent / transient - Eq. 6.10	CO1/p or to CO21
RC2	SLS - Characteristic	CO22/p or to CO42

LC2
Irenginiu svoris

3.1 Nodal Loads - By Components - Coordinate System

LC2: Irenginiu svoris

No.	On Nodes No.	Coordinate System	Force [kN] P_X / P_U	P_Y / P_V	P_Z / P_W	Moment [kNm] M_X / M_U	M_Y / M_V	M_Z / M_W
1	29,31,33	0 | Global XYZ	0.000	0.000	-0.500	0.000	0.000	0.000

LC2: Irenginiu svoris

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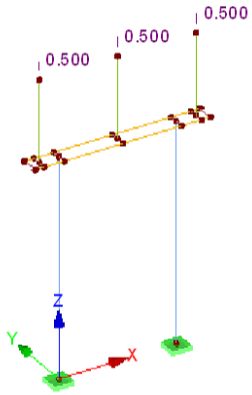
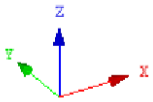
: Irenginiu svoris
ads [kN]

Isometric





ED2201-XX-RDP-SK-T1.IS	LAPAS	LAPŲ	LAIDA
	232	643	0

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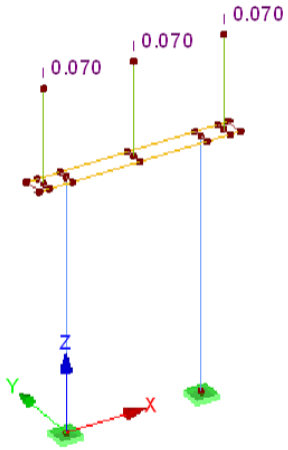
3.1 Nodal Loads - By Components - Coordinate System

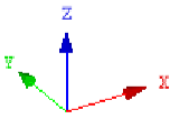
No.	On Nodes No.	Coordinate System	Force [kN] P_X / P_U	P_Y / P_V	P_Z / P_W	Moment [kNm] M_X / M_U	M_Y / M_V	M_Z / M_W
1	29,31,33	0 | Global XYZ	0.000	0.000	-0.070	0.000	0.000	0.000

LC3: Laidu svoris

LC3 : Laidu svoris
Loads [kN]

Isometric





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LC4
Vejas X-X

3.2 Member Loads

LC4: Vejas X-X

No.	Reference to	On Members No.	Load Type	Load Distribution	Load Direction	Reference Length	Load Parameters Symbol	Value	Unit
1	Members	1,2	Force	Uniform	z	True Length	p	-0.087	kN/m
3	Members	50,51,58	Force	Uniform	z	True Length	p	-0.340	kN/m

3.2/1 Member Loads - Load Eccentricity

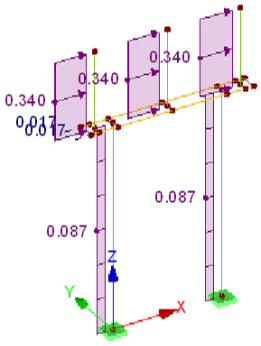
LC4: Vejas X-X

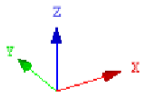
No.	Reference to	On Members No.	Absolute Offset Mbr. Start e_Y [mm]	Absolute Offset Mbr. Start e_Z [mm]	Absolute Offset Mbr. End e_Y [mm]	Absolute Offset Mbr. End e_Z [mm]	Relative Offset Mbr. Start y-Axis	Relative Offset Mbr. Start z-Axis	Relative Offset Mbr. End y-Axis	Relative Offset Mbr. End z-Axis
1	Members	1,2	0.0	0.0	0.0	0.0	Middle	Middle	Middle	Middle
3	Members	50,51,58	0.0	0.0	0.0	0.0	Middle	Middle	Middle	Middle

LC4: Vejas X-X

LC4 : Vejas X-X
Loads [kN/m], [kN]

Isometric





LC5
Vejas Y-Y

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3.2 Member Loads

LC5: Ve

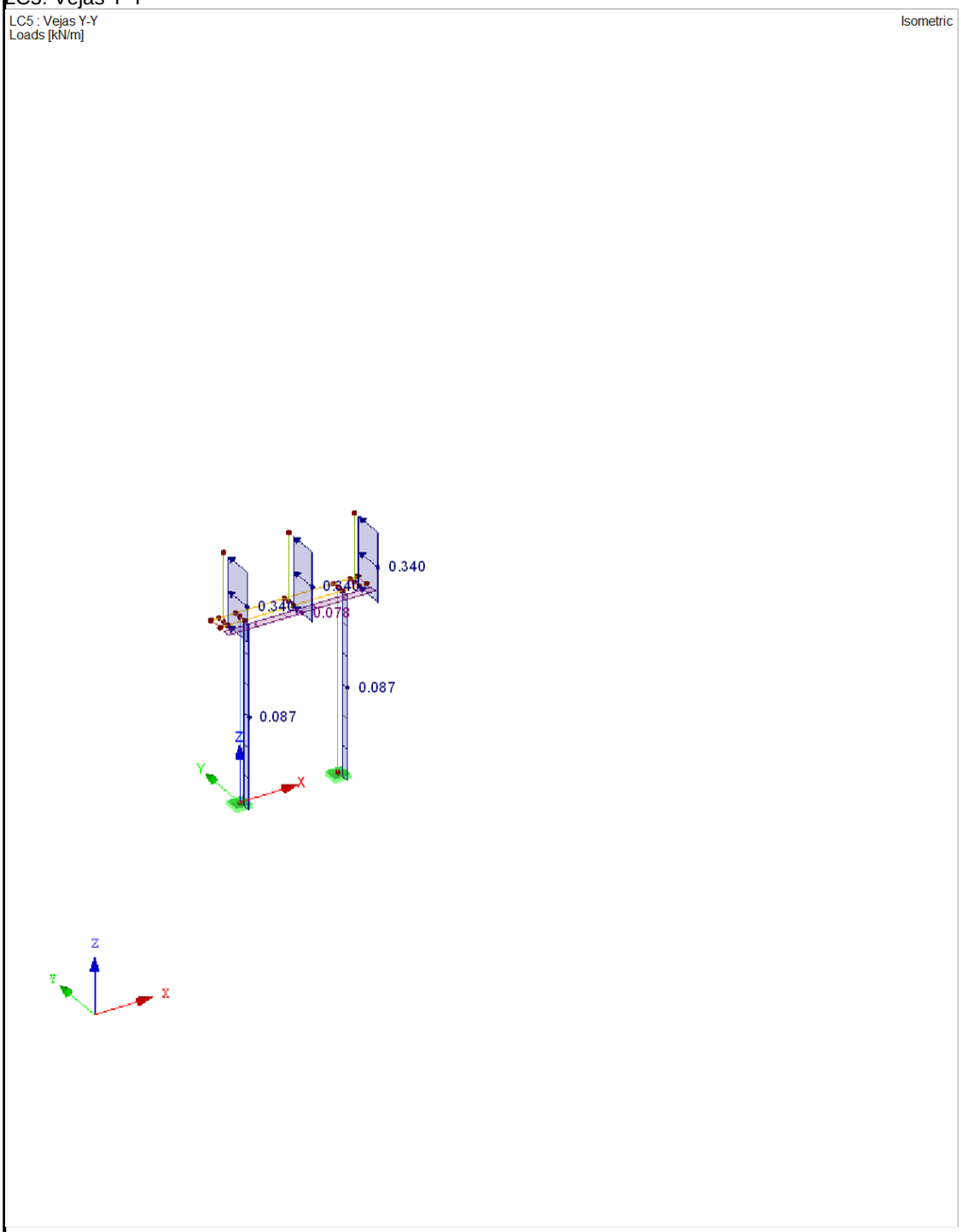
No.	Reference to	On Members No.	Load Type	Load Distribution	Load Direction	Reference Length	Load Parameters Symbol	Value	Unit
1	Members	1,2	Force	Uniform	y	True Length	p	0.087	kN/m
2	Members	9	Force	Uniform	y	True Length	p	-0.078	kN/m
3	Members	50,51,58	Force	Uniform	y	True Length	p	0.340	kN/m

3.2/1 Member Loads - Load Eccentricity

LC5: Vejas Y-Y

No.	Reference to	On Members No.	Absolute Offset Mbr. Start e_Y [mm]	Absolute Offset Mbr. Start e_Z [mm]	Absolute Offset Mbr. End e_Y [mm]	Absolute Offset Mbr. End e_Z [mm]	Relative Offset Mbr. Start y-Axis	Relative Offset Mbr. Start z-Axis	Relative Offset Mbr. End y-Axis	Relative Offset Mbr. End z-Axis
1	Members	1,2	0.0	0.0	0.0	0.0	Middle	Middle	Middle	Middle
2	Members	9	0.0	0.0	0.0	0.0	Middle	Middle	Middle	Middle
3	Members	50,51,58	0.0	0.0	0.0	0.0	Middle	Middle	Middle	Middle

LC5: Vejas Y-Y



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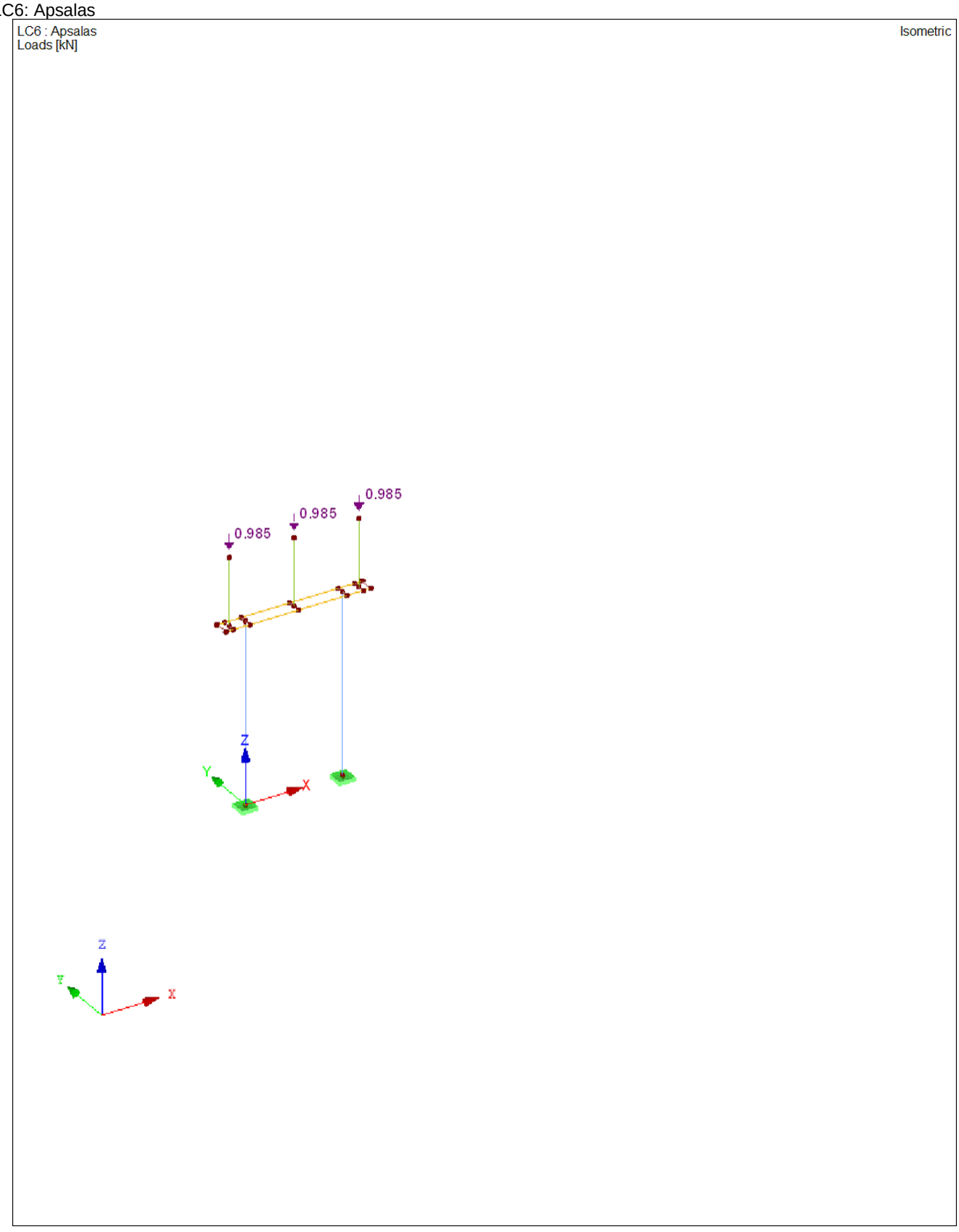
3.1 Nodal Loads - By Components - Coordinate System

No.	On Nodes No.	Coordinate System	Force [kN] P_X / P_U	P_Y / P_V	P_Z / P_W	Moment [kNm] M_X / M_U	M_Y / M_V	M_Z / M_W
1	29,31,33	0 | Global XYZ	0.000	0.000	-0.985	0.000	0.000	0.000

LC6: Apsalas



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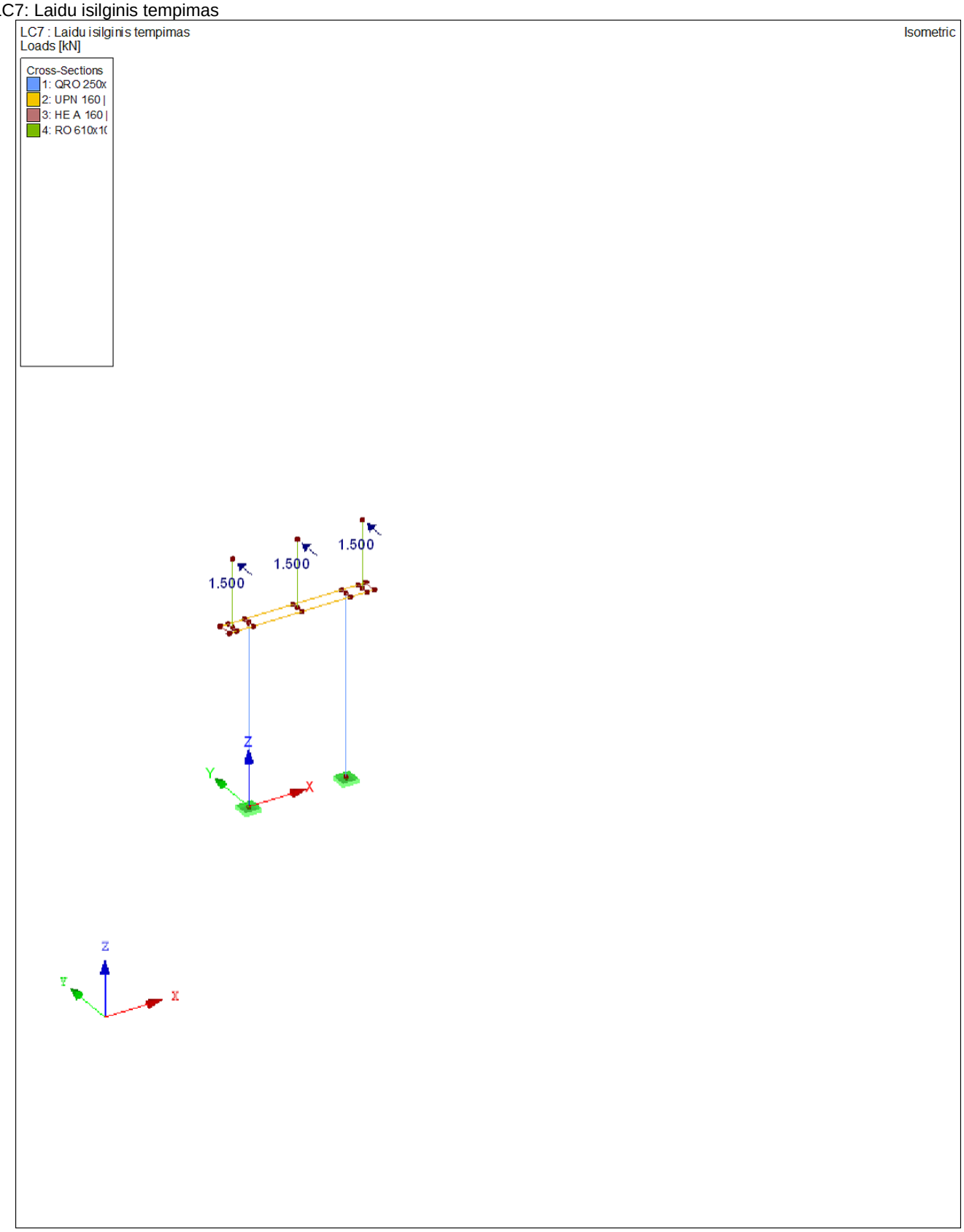
3.1 Nodal Loads - By Components - Coordinate System

No.	On Nodes No.	Coordinate System	Force [kN] P_X / P_U	P_Y / P_V	P_Z / P_W	Moment [kNm] M_X / M_U	M_Y / M_V	M_Z / M_W
1	29,31,33	0 | Global XYZ	0.000	1.500	0.000	0.000	0.000	0.000

LC7: Laidu isilginis tempimas



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Result Combi

7.1 Nodes - Support Forces

Node No.	RC		Support Forces [kN] $P_{X'}$	$P_{Y'}$	$P_{Z'}$	Support Moments [kNm] $M_{X'}$	$M_{Y'}$	$M_{Z'}$	
1	RC1	Max	2.06	4.28	-11.48	0.00	9.67	0.00	
									ULS (STR/GEO) - Permanent / transient - Eq. 6.10
		Min	0.00	0.00	-14.56	-30.50	0.01	-0.01	
									ULS (STR/GEO) - Permanent / transient - Eq. 6.10
	RC2	Max	1.58	3.29	-8.48	0.00	7.42	0.00	SLS - Characteristic
		Min	0.00	0.00	-10.84	-23.36	0.01	-0.01	SLS - Characteristic
3	RC1	Max	2.04	4.28	-12.64	0.00	9.64	0.01	
									ULS (STR/GEO) - Permanent / transient - Eq. 6.10
		Min	-0.01	0.00	-15.28	-30.50	-0.01	0.00	
									ULS (STR/GEO) - Permanent / transient - Eq. 6.10
	RC2	Max	1.57	3.29	-9.36	0.00	7.40	0.01	SLS - Characteristic
		Min	0.00	0.00	-11.38	-23.36	-0.01	0.00	SLS - Characteristic

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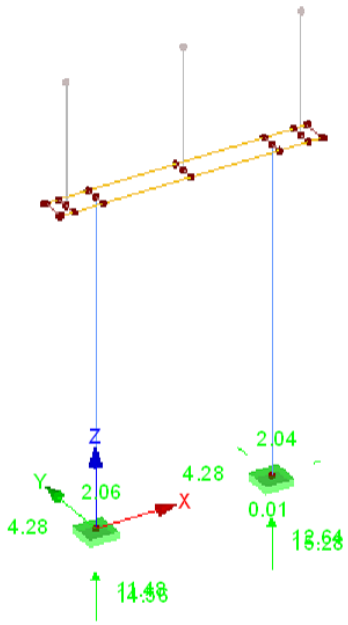
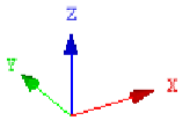
Support Reactions

RC1 : ULS (STR/GEO) - Permanent / transient - Eq. 6.10
Support Reactions[kN]
Result Combinations: Max and Min Values

Cross-Sections
1: QRO 250x
2: UPN 160 |
3: HE A 160 |





Max P-X': 2.06, Min P-X': -0.01 kN
Max P-Y': 4.28, Min P-Y': 0.00 kN
Max P-Z': -11.48, Min P-Z': -15.28 kN

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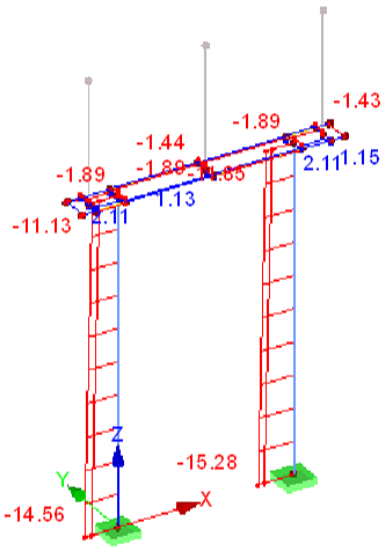
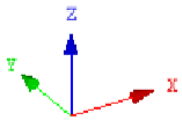
ternal forces N

RC1 : ULS (STR/GEO) - Permanent / transient - Eq. 6.10
Internal Forces N
Result Combinations: Max and Min Values

Cross-Sections
1: QRO 250x
2: UPN 160 |
3: HE A 160 |





Max N: 2.11, Min N: -15.28 [kN]

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2 Nodes - displacements

Member No.	Node No.	Location x [m]		Displacements [mm] u_x	u_y	u_z	Cross-Section
1	1	0.000	Max u_x	**0.0**	0.0	0.0	1 - QRO 250x6 ; EN 10219-2:2006
	2	5.620	Min u_x	**0.0**	0.0	0.0	
	2	5.620	Max u_y	0.0	**23.0**	0.0	
	1	0.000	Min u_y	0.0	**0.0**	0.0	
	2	5.620	Max u_z	0.0	8.8	**0.0**	
	2	5.620	Min u_z	0.0	0.0	**-6.2**	
2	3	0.000	Max u_x	**0.0**	0.0	0.0	1 - QRO 250x6 ; EN 10219-2:2006
	4	5.620	Min u_x	**0.0**	0.0	-3.7	
	4	5.620	Max u_y	0.0	**23.0**	0.0	
	3	0.000	Min u_y	0.0	**0.0**	0.0	
		3.934	Max u_z	0.0	5.7	**0.0**	
	4	5.620	Min u_z	0.0	0.0	**-6.2**	
3	32	0.000	Max u_x	**0.0**	0.0	-0.1	3 - HE A 160 ; Euronorm 53-62
	32	0.000	Min u_x	**-23.8**	0.0	-0.1	
	32	0.000	Max u_y	0.0	**6.2**	-0.1	
	32	0.000	Min u_y	0.0	**0.0**	-0.1	
	43	0.220	Max u_z	-23.8	0.0	**1.6**	
	32	0.000	Min u_z	0.0	3.7	**-0.1**	
9		4.473	Max u_x	**6.2**	-10.7	-0.7	2 - UPN 160 ; ArcelorMittal (EN 10365:2017)
	9	0.000	Min u_x	**0.0**	-23.1	-2.1	
		3.000	Max u_y	6.2	**0.0**	0.0	
		2.250	Min u_y	0.0	**-23.8**	-1.6	
	10	4.500	Max u_z	6.2	0.0	**0.4**	
	9	0.000	Min u_z	0.0	-23.0	**-2.1**	
10	5	0.000	Max u_x	**6.2**	-10.7	1.3	2 - UPN 160 ; ArcelorMittal (EN 10365:2017)
		4.473	Min u_x	**0.0**	-23.0	2.6	
		1.500	Max u_y	6.2	**0.0**	0.1	
		2.250	Min u_y	0.0	**-23.8**	1.9	
	5	0.000	Max u_z	0.0	-23.1	**2.7**	
		3.000	Min u_z	6.2	0.0	**0.0**	
13	46	0.220	Max u_x	**0.0**	6.2	-0.1	3 - HE A 160 ; Euronorm 53-62
	30	0.000	Min u_x	**-23.1**	0.0	-0.2	
	30	0.000	Max u_y	0.0	**6.2**	-0.1	
	46	0.220	Min u_y	-23.1	**0.0**	1.9	
	46	0.220	Max u_z	-23.0	0.0	**1.9**	
	30	0.000	Min u_z	-16.0	0.0	**-0.2**	
25	35	0.000	Max u_x	**0.0**	-6.2	0.1	3 - HE A 160 ; Euronorm 53-62
	35	0.000	Min u_x	**-23.1**	0.0	2.6	
	36	0.440	Max u_y	-23.1	**0.0**	-2.0	
	35	0.000	Min u_y	-10.7	**-6.2**	1.3	
	35	0.000	Max u_z	-23.1	0.0	**2.6**	
	36	0.440	Min u_z	-23.0	0.0	**-2.1**	
28	42	0.000	Max u_x	**0.0**	0.0	-0.1	3 - HE A 160 ; Euronorm 53-62

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	32	0.220	Min u_x	**-23.8**	0.0	-0.1	
	32	0.220	Max u_y	0.0	**6.2**	-0.1	
	42	0.000	Min u_y	0.0	**0.0**	-0.1	
	42	0.000	Max u_z	0.0	0.0	**-0.1**	
	42	0.000	Min u_z	-23.8	0.0	**-1.9**	
29	12	0.440	Max u_x	**0.0**	6.2	-0.1	3 - HE A 160 ; Euronorm 53-62
	12	0.440	Min u_x	**-23.0**	0.0	1.5	
	12	0.440	Max u_y	-10.7	**6.2**	0.7	
	25	0.000	Min u_y	-23.0	**0.0**	-1.6	
	12	0.440	Max u_z	-23.0	0.0	**1.5**	
	25	0.000	Min u_z	-23.0	0.0	**-1.6**	
30	45	0.000	Max u_x	**0.0**	6.2	-0.3	3 - HE A 160 ; Euronorm 53-62
	34	0.220	Min u_x	**-23.1**	0.0	-0.2	
	34	0.220	Max u_y	0.0	**6.2**	-0.3	
	45	0.000	Min u_y	-23.0	**0.0**	-2.3	
	45	0.000	Max u_z	0.0	0.0	**-0.2**	
	45	0.000	Min u_z	-23.1	0.0	**-2.3**	
31	18	0.440	Max u_x	**0.0**	6.2	-0.4	3 - HE A 160 ; Euronorm 53-62
	17	0.000	Min u_x	**-23.1**	0.0	-2.6	
	18	0.440	Max u_y	-10.7	**6.2**	0.7	
	17	0.000	Min u_y	-23.0	**0.0**	-2.6	
	18	0.440	Max u_z	-23.0	0.0	**2.1**	
	17	0.000	Min u_z	-23.1	0.0	**-2.6**	
33	2	0.000	Max u_x	**0.0**	0.0	0.0	3 - HE A 160 ; Euronorm 53-62
	11	0.220	Min u_x	**-23.0**	0.0	1.5	
	11	0.220	Max u_y	0.0	**6.2**	-0.1	
	11	0.220	Min u_y	-23.0	**0.0**	1.5	
	11	0.220	Max u_z	-23.0	0.0	**1.5**	
	11	0.220	Min u_z	0.0	0.0	**-0.1**	
35	34	0.000	Max u_x	**0.0**	0.0	-0.2	3 - HE A 160 ; Euronorm 53-62
	34	0.000	Min u_x	**-23.1**	0.0	-0.2	
	47	0.220	Max u_y	-10.7	**6.2**	0.7	
	34	0.000	Min u_y	0.0	**0.0**	-0.2	
	47	0.220	Max u_z	-23.0	0.0	**1.9**	
	34	0.000	Min u_z	-10.7	6.2	**-0.3**	
50	32	0.000	Max u_x	**-0.1**	23.8	0.0	4 - RO 610x10 ; EN 10219-2:2006
	31	2.100	Min u_x	**-0.1**	0.0	-15.0	
	31	2.100	Max u_y	-0.1	**40.7**	0.0	
	32	0.000	Min u_y	-0.1	**0.0**	0.0	
	32	0.000	Max u_z	-0.1	0.0	**0.0**	
	31	2.100	Min u_z	-0.1	0.0	**-24.9**	
51	34	0.000	Max u_x	**-0.2**	0.0	0.0	4 - RO 610x10 ; EN 10219-2:2006
	33	2.100	Min u_x	**-0.3**	20.5	-26.1	
	33	2.100	Max u_y	-0.2	**43.3**	-0.8	
	34	0.000	Min u_y	-0.2	**0.0**	0.0	
	34	0.000	Max u_z	-0.2	0.0	**0.0**	

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	33	2.100	Min u_z	-0.3	20.5	**-26.1**	
55	39	0.000	Max u_x	**0.0**	6.2	0.0	3 - HE A 160 ; Euronorm 53-62
	39	0.000	Min u_x	**-23.0**	0.0	-1.6	
	39	0.000	Max u_y	-10.7	**6.2**	-0.8	
	2	0.220	Min u_y	-8.8	**0.0**	0.0	
	2	0.220	Max u_z	0.0	6.2	**0.0**	
	39	0.000	Min u_z	-23.0	0.0	**-1.6**	
57	7	0.000	Max u_x	**0.0**	0.0	-0.2	3 - HE A 160 ; Euronorm 53-62
	30	0.220	Min u_x	**-23.1**	0.0	-0.2	
	30	0.220	Max u_y	0.0	**6.2**	-0.1	
	30	0.220	Min u_y	-8.8	**0.0**	-0.2	
	7	0.000	Max u_z	0.0	6.2	**-0.1**	
	7	0.000	Min u_z	-23.1	0.0	**-2.3**	
58	30	0.000	Max u_x	**-0.1**	0.0	-6.2	4 - RO 610x10 ; EN 10219-2:2006
	29	2.100	Min u_x	**-0.2**	29.7	0.8	
	29	2.100	Max u_y	-0.2	**43.3**	0.8	
	30	0.000	Min u_y	-0.2	**0.0**	0.0	
	29	2.100	Max u_z	-0.2	29.7	**0.8**	
	29	2.100	Min u_z	-0.1	0.0	**-24.6**	

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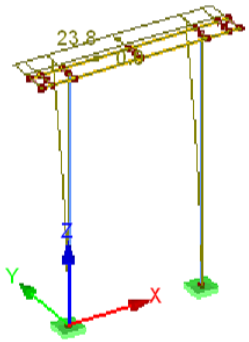
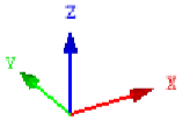
Global Deformations u_Y

RC2 : SLS - Characteristic
Global Deformations u-Y [mm]
Result Combinations: Max and Min Values

Isometric

Cross-Sections
1: QRO 250x
2: UPN 160 |
3: HE A 160 |





Factor of deformations: 26.00
Max u-Y: 23.8, Min u-Y: 0.0 mm

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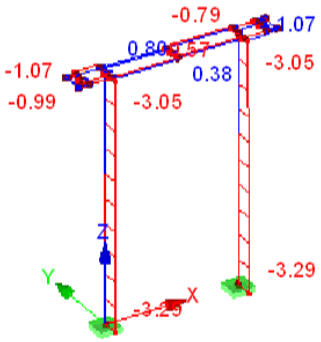
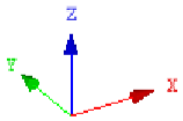
ternal forces Vy

RC2 : SLS - Characteristic
Internal Forces V-y
Result Combinations: Max and Min Values





Max V-y: 1.07, Min V-y: -3.29 [kN]

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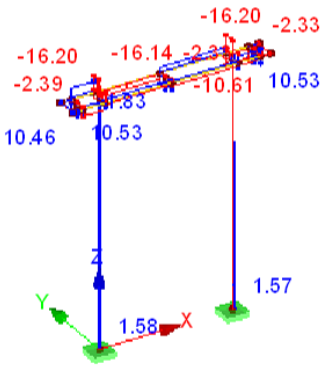
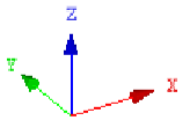
ternal forces Vz

RC2 : SLS - Characteristic
Internal Forces V-z
Result Combinations: Max and Min Values





Max V-z: 10.61, Min V-z: -16.20 [kN]

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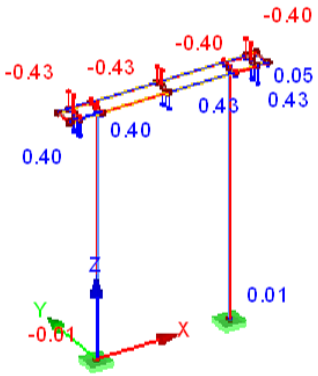
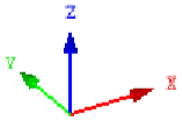
Internal forces M_T

RC2 : SLS - Characteristic
Internal Forces M-T
Result Combinations: Max and Min Values





Max M-T: 0.43, Min M-T: -0.43 [kNm]

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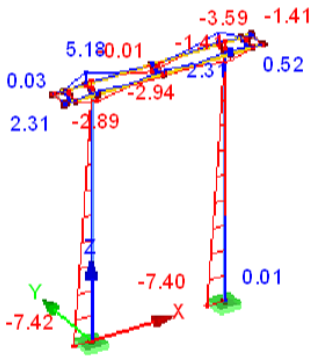
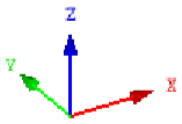
Internal forces My

RC2 : SLS - Characteristic
Internal Forces M-y
Result Combinations: Max and Min Values





Max M-y: 5.18, Min M-y: -7.42 [kNm]

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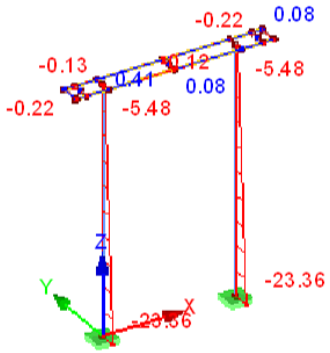
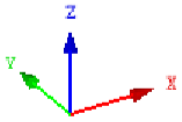
ternal forces Mz

RC2 : SLS - Characteristic
Internal Forces M-z
Result Combinations: Max and Min Values





Max M-z: 0.41, Min M-z: -23.36 [kNm]

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4.5 Effective Lengths - Members

Member No.	Buckling Possible	Buckling About Axis y			Buckling About Axis z			Lateral-Torsional Buckling				
		Possible	$k_{cr,y}$	$L_{cr,y}$ [m]	Possible	$k_{cr,z}$	$L_{cr,z}$ [m]	Possible	k_z	k_w	L_w [m]	L_T [m]
1	x	x	2.00	11.240	x	2.00	11.240	-	1.0	1.0	5.620	5.620
2	x	x	2.00	11.240	x	2.00	11.240	-	1.0	1.0	5.620	5.620
9	x	x	1.00	4.500	x	1.00	4.500	x	1.0	1.0	4.500	4.500
10	x	x	1.00	4.500	x	1.00	4.500	x	1.0	1.0	4.500	4.500

4.3 Design by cross-sections

Section No.	Member No.	Location x [m]	Load-ing	Design Ratio		Design According to Formula
1	QRO 250x6 | EN 10219-2:2006					
	1	0.000	LC6	0.00	£ 1	CS100) Negligible internal forces
	1	0.000	LC1	0.01	£ 1	CS102) Cross-section check - Compression acc. to 6.2.4
	1	0.000	LC4	0.06	£ 1	CS112) Cross-section check - Bending about y-axis acc. to 6.2.5 - Class 3
	1	0.000	LC7	0.14	£ 1	CS117) Cross-section check - Bending about z-axis acc. to 6.2.5 - Class 3
	1	0.000	LC4	0.00	£ 1	CS122) Cross-section check - Shear force in z-axis acc. to 6.2.6(4) - Class 3 or 4
	1	0.000	LC7	0.01	£ 1	CS124) Cross-section check - Shear force in y-axis acc. to 6.2.6(4) - Class 3 or 4
	1	0.000	LC4	0.00	£ 1	CS126) Cross-section check - Shear buckling acc. to 6.2.6(6)
	1	0.000	LC4	0.06	£ 1	CS142) Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	1	0.000	LC7	0.14	£ 1	CS152) Cross-section check - Bending about z-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
2	UPN 260 | ArcelorMittal (EN 10365:2017)					
	9	2.250	LC2	0.00	£ 1	CS100) Negligible internal forces
	9	0.750	LC1	0.03	£ 1	CS111) Cross-section check - Bending about y-axis acc. to 6.2.5 - Class 1 or 2
	10	0.250	LC5	0.01	£ 1	CS116) Cross-section check - Bending about z-axis acc. to 6.2.5 - Class 1 or 2
	9	0.250	LC7	0.04	£ 1	CS121) Cross-section check - Shear force in z-axis acc. to 6.2.6
	9	0.250	LC7	0.00	£ 1	CS123) Cross-section check - Shear force in y-axis acc. to 6.2.6
	9	0.250	LC1	0.00	£ 1	CS126) Cross-section check - Shear buckling acc. to 6.2.6(6)
	9	0.750	LC1	0.03	£ 1	CS141) Cross-section check - Bending and shear force acc. to 6.2.5 and 6.2.8
	10	0.250	LC5	0.01	£ 1	CS151) Cross-section check - Bending about z-axis and shear force acc. to 6.2.5 and 6.2.8
	9	0.750	LC7	0.13	£ 1	CS161) Cross-section check - Biaxial bending and shear force acc. to 6.2.6, 6.2.7 and 6.2.9

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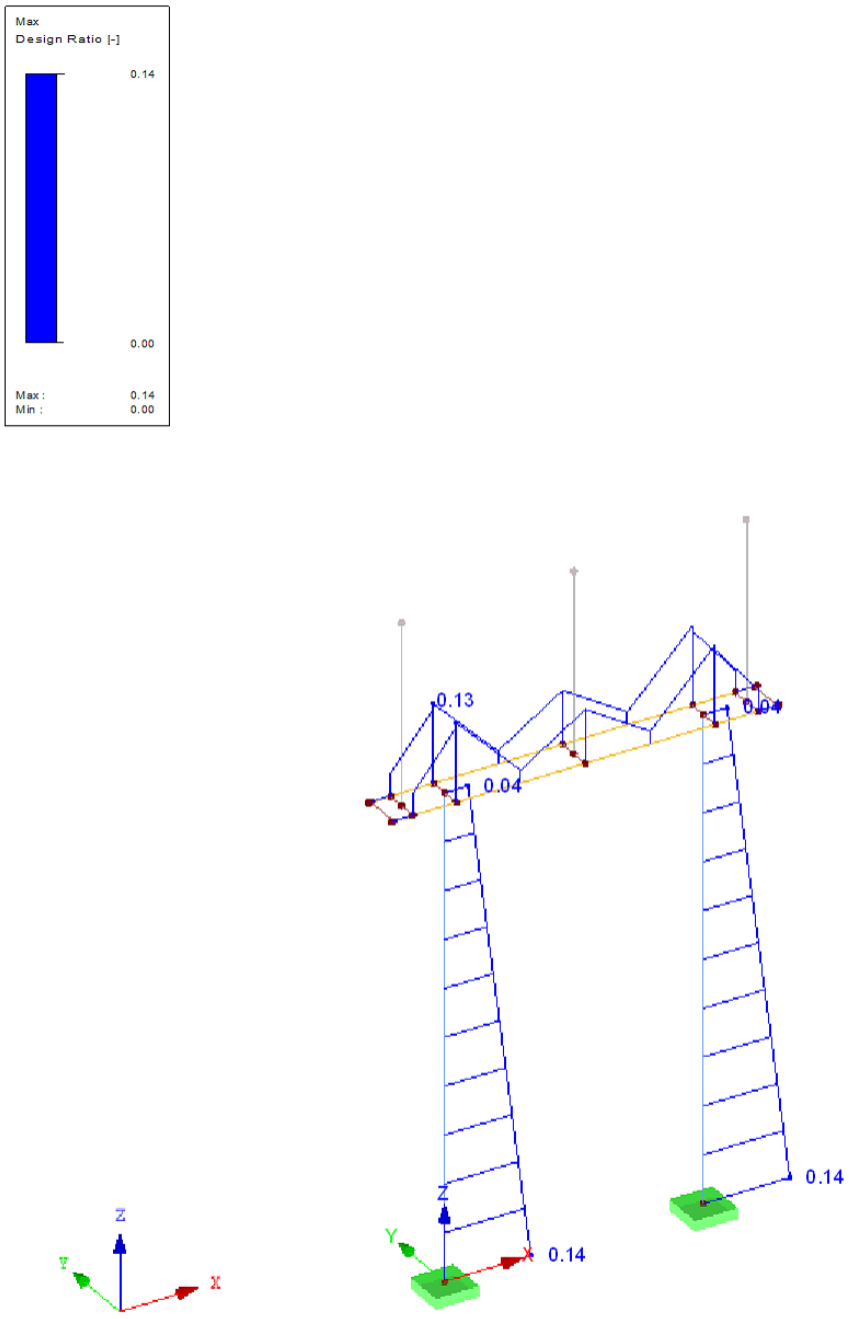
Design Ratio

RF-STEEL EC3 CA1
Ultimate Limit State: Cross-Section Design, Stability Design, Weld Design, Pressure Design, Plastic Design

Isometric



Max Design Ratio: 0.14

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aterial

Steel	S 235
Concrete	C30/37

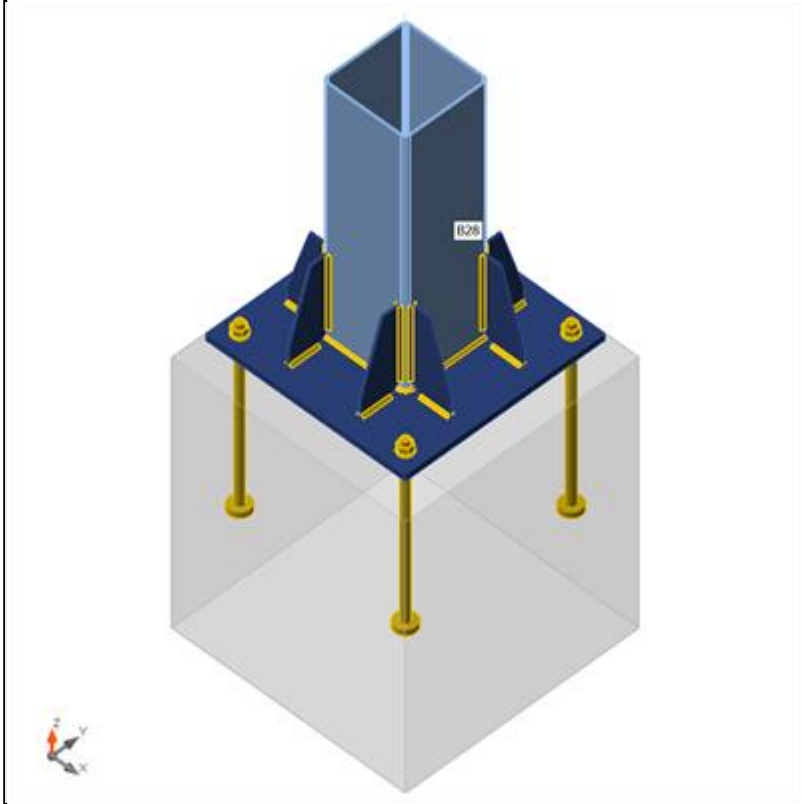
Design

Name	Con N112
Description	
Analysis	Stress, strain/ simplified loading

Members

Geometry

B28 1 - SHS250/250/6.3 0,0 90,0 -90,0 0 0 0 Position



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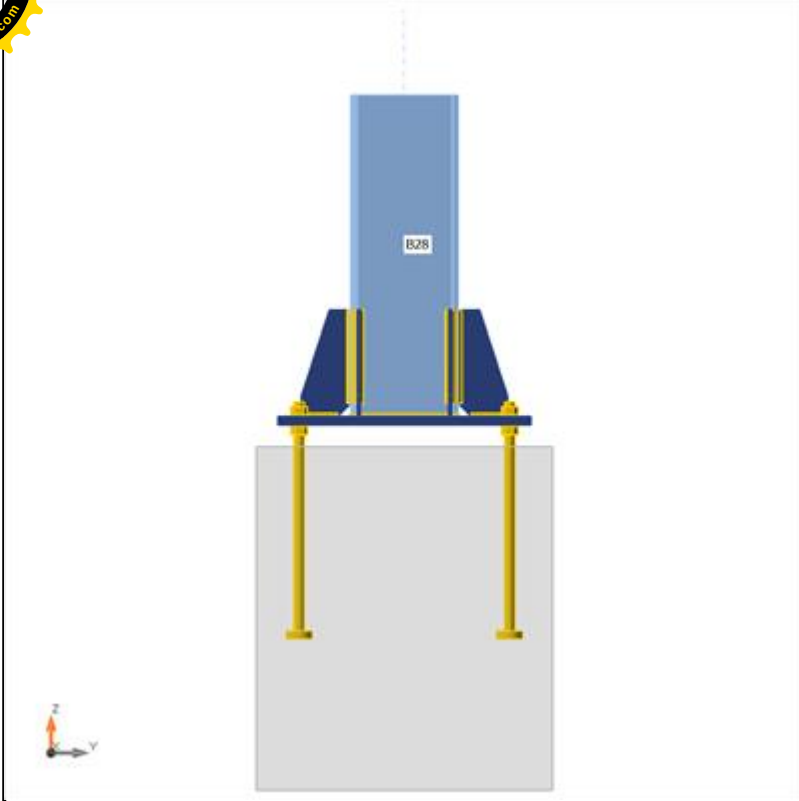

Cross-sections

1 - SHS250/250/6.3 S 235

Anchors

M24 8.8 M24 8.8 24 800,0 452

Load effects (Equilibrium not required)

Nmin+Mmax B28 -16,0 1,6 3,3 -30,5 0,0 0,0

Foundation block

CB 1

Dimensions	690 x 690	mm
Depth	800	mm
Anchor	M24 8.8	
Anchoring length	430	mm
Shear force transfer	Anchors	
Gap	50	mm

Check

Summary

Analysis	100,0%	OK
Plates	0,0 < 5,0%	OK
Anchors	70,1 < 100%	OK
Welds	17,7 < 100%	OK

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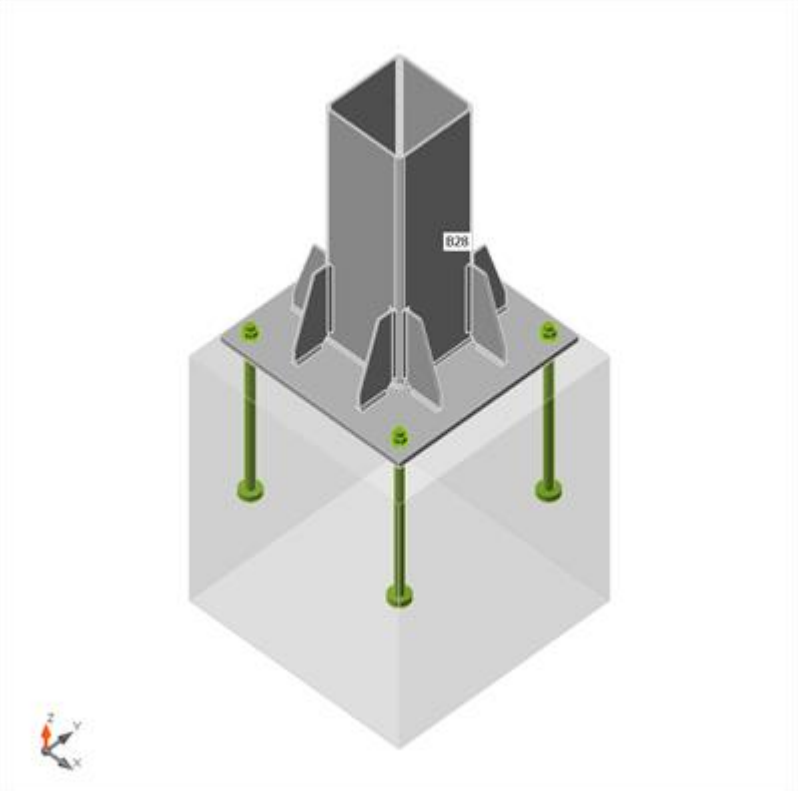
Concrete block	Not calculated
Buckling	Not calculated

Plates

B28	6,3	Nmin+Mmax	81,6	0,0	0,0	OK
BP1	20,0	Nmin+Mmax	85,1	0,0	0,0	OK
RIB1a	6,3	Nmin+Mmax	23,2	0,0	0,0	OK
RIB1b	6,3	Nmin+Mmax	54,4	0,0	0,0	OK
RIB2a	6,3	Nmin+Mmax	24,2	0,0	0,0	OK
RIB2b	6,3	Nmin+Mmax	52,9	0,0	0,0	OK
RIB3a	6,3	Nmin+Mmax	24,6	0,0	0,0	OK
RIB3b	6,3	Nmin+Mmax	51,1	0,0	0,0	OK
RIB4a	6,3	Nmin+Mmax	23,7	0,0	0,0	OK
RIB4b	6,3	Nmin+Mmax	52,2	0,0	0,0	OK

Design data

S 235	235,0	5,0



Overall check, Nmin+Mmax

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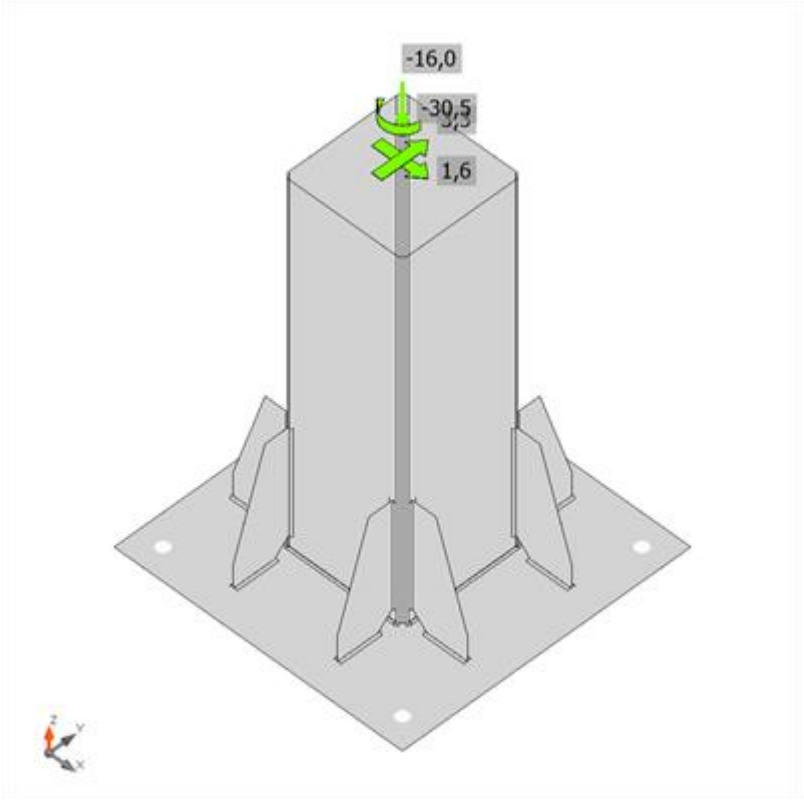
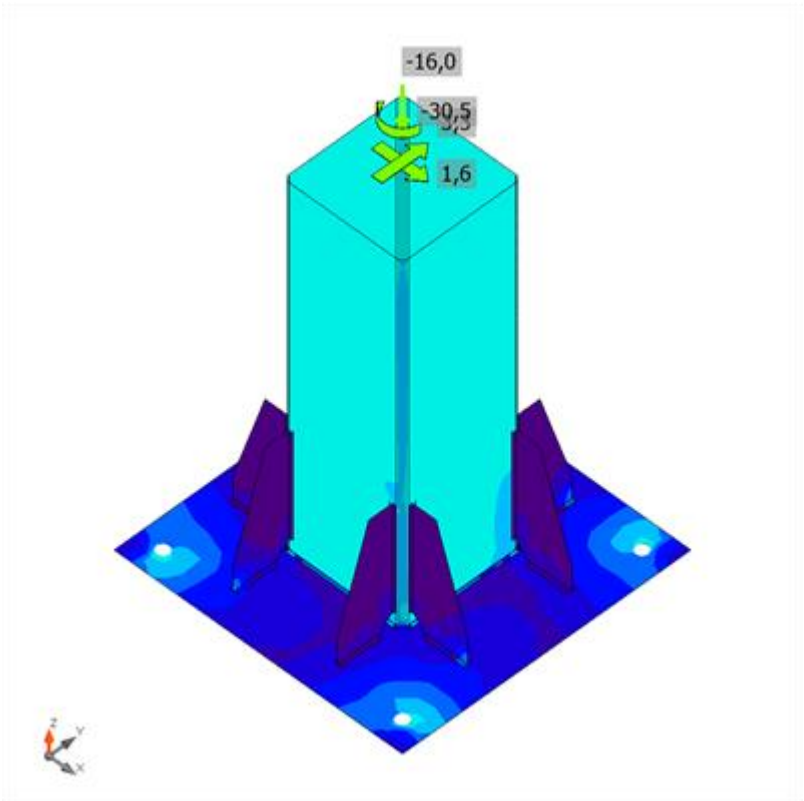


Strain check, Nmin+Mmax



Equivalent stress, Nmin+Mmax

Anchors

A1	Nmin+Mmax	-4,2	21,8	0,8	24,8	69,3	OK	OK
A2	Nmin+Mmax	-4,0	22,1	0,8	25,1	70,1	OK	OK

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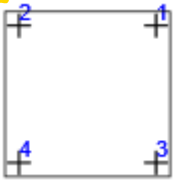

A3	Nmin+Mmax	-3,9	21,7	0,8	24,6	68,8	OK	OK
A4	Nmin+Mmax	-3,9	22,0	0,8	24,9	69,6	OK	OK

Design data

M24 8.8 - 1	154,6	88,1	1,2

Detailed result for A1

Stand-off anchor compressive resistance (EN 1993-1-1 – Cl. 6.3)

$F_{c,Rd} = \frac{\chi \cdot A_s \cdot f_y}{\gamma_{M2}} =$ 154,6 kN ≥ $F_c =$ 4,2 kN

Where:

$\chi = \min\left(\frac{1}{\Phi + \sqrt{\Phi^2 - \overline{\lambda}^2}}, 1\right) =$ 0,86 – buckling reduction factor

$\Phi = 0,5 \cdot [1 + \alpha \cdot (\overline{\lambda} - 0.2) + \overline{\lambda}^2] =$ 0,68 – value to determine buckling reduction factor

$\alpha =$ 0,49 – imperfection factor

$\overline{\lambda} = \sqrt{\frac{A_s f_y}{N_{cr}}} =$ 0,48 – relative slenderness

$A_s =$ 353 mm^2 – anchor area reduced by thread

$N_{cr} = \frac{\pi^2 \cdot E \cdot I}{L_{cr}^2} =$ 991,1 kN – Euler's critical force

$E =$ 210000,0 MPa – elastic modulus

$I =$ 9916 mm^4 – moment of inertia of the bolt

-

$I = \frac{\pi \cdot d_s^4}{64}$

, where:

-
  -

$d_s =$

21 mm – diameter reduced by thread

$L_{cr} =$ 144 mm – buckling length (is it assumed on a safe side that the bolt is fixed in the concrete and able to freely rotate at the base plate)

-

$L_{cr} = 2 \cdot l$

, where:

-
  -

$l =$

72 mm – effective length

$f_y =$ 640,0 MPa – anchor yield strength

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γ_{M2} = 1,25 – safety factor

Concrete pullout resistance (EN 1992-4 – Cl. 7.2.1.5)

$N_{Rd,p}$ = 296,9 kN ≥ N_{Ed} = -4,2 kN

$N_{Rk,p} = k_2 \cdot A_h \cdot f_{ck}$ = 534,4 kN

Where:

k_2 = 7,50 – coefficient for cracked/uncracked concrete

A_h = 2375 mm² – area of the load-bearing head of the fastener

-

$A_h = \frac{\pi}{4} \cdot (d_h^2 - d^2)$

, where:

-
-

d_h =

60 mm

$\leq 6 \cdot t_h + d$

– effective size of washer plate, where:

-
-

$t_h \geq \frac{d_h - d}{6}$ =

6 mm – thickness of the head of the headed fastener

-

d =

24 mm – diameter of the shank of the fastener

f_{ck} = 30,0 MPa – concrete compressive strength

γ_{Mc} = 1,80 – safety factor for concrete

Stand-off anchor shear resistance (EN 1993-1-1 – Cl. 6.2.6)

$V_{pl,Rd}$ = 88,1 kN ≥ F_v = 21,8 kN

Where:

A_v = 298 mm² – shear area

-

$A_v = 0,844 \cdot A_s$

, where:

-
-

A_s =

353 mm² – anchor area reduced by thread

f_y = 640,0 MPa – anchor yield strength

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γ_{M2} = 1,25 – safety factor

Stand-off anchor bending resistance (EN 1993-1-1 – Cl. 6.2.5)

$M_{pl,Rd} = \frac{W_{pl} f_y}{\gamma_{M2}} =$ 1,2 kNm ≥ $M =$ 0,8 kNm

Where:

W_{pl} = 2304 mm^3 – plastic section modulus of the fastener

-

$W_{pl} = \frac{d_s^3}{6}$

, where:

-
  -

$d_s =$

21 mm – diameter reduced by thread

f_y = 640,0 MPa – anchor yield strength

γ_{M2} = 1,25 – safety factor

Interaction of loading

$\frac{F_c}{F_{c,Rd}} +$ 0,69 ≤ 1,0

Where:

F_c = 4,2 kN – design compression force

$F_{c,Rd}$ = 154,6 kN – design compression resistance

M_{Ed} = 0,8 kNm – design bending moment

$M_{pl,Rd}$ = 1,2 kNm – design bending resistance

Supplementary reinforcement (EN 1992-4 – Cl. 7.2.1.9; EN 1992-4 – Cl. 7.2.2.6)
Supplementary reinforcement should resist force of 16,0 kN in tension and 7,3 kN in shear.

Detailed result for A2

Stand-off anchor compressive resistance (EN 1993-1-1 – Cl. 6.3)

$F_{c,Rd} = \frac{\chi \cdot A_s \cdot f_y}{\gamma_{M2}} =$ 154,6 kN ≥ $F_c =$ 4,0 kN

Where:

$\chi = \min\left(\frac{1}{\Phi + \sqrt{\Phi^2 - \overline{\lambda}^2}}, 1\right) =$ 0,86 – buckling reduction factor

$\Phi = 0,5 \cdot [1 + \alpha \cdot (\overline{\lambda} - 0.2) + \overline{\lambda}^2] =$ 0,68 – value to determine buckling reduction factor

α = 0,49 – imperfection factor

$\overline{\lambda} = \sqrt{\frac{A_s f_y}{N_{cr}}} =$ 0,48 – relative slenderness

A_s = 353 mm^2 – anchor area reduced by thread

$N_{cr} = \frac{\pi^2 \cdot E \cdot I}{L_{cr}^2} =$ 991,1 kN – Euler's critical force

E = 210000,0 MPa – elastic modulus

I = 9916 mm^4 – moment of inertia of the bolt

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-

$I = \frac{\pi \cdot d_s^4}{64}$

, where:

-
  -

$d_s =$

21 mm – diameter reduced by thread

$L_{cr} =$ 144 mm – buckling length (is it assumed on a safe side that the bolt is fixed in the concrete and able to freely rotate at the base plate)

-

$L_{cr} = 2 \cdot l$

, where:

-
  -

$l =$

72 mm – effective length

$f_y =$ 640,0 MPa – anchor yield strength

$\gamma_{M2} =$ 1,25 – safety factor

Concrete pullout resistance (EN 1992-4 – Cl. 7.2.1.5)

$N_{Rd,p} =$ 296,9 kN ≥ $N_{Ed} =$ -4,0 kN

$N_{Rk,p} = k_2 \cdot A_h \cdot f_{ck} =$ 534,4 kN

Where:

$k_2 =$ 7,50 – coefficient for cracked/uncracked concrete

$A_h =$ 2375 mm^2 – area of the load-bearing head of the fastener

-

$A_h = \frac{\pi}{4} \cdot (d_h^2 - d^2)$

, where:

-
  -

$d_h =$

60 mm

$\leq 6 \cdot t_h + d$

– effective size of washer plate, where:

  -
    -

$t_h \geq \frac{d_h - d}{6} =$

6 mm – thickness of the head of the headed fastener

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▪

d =
24 mm – diameter of the shank of the fastener

f_{ck} = 30,0 MPa – concrete compressive strength

γ_{Mc} = 1,80 – safety factor for concrete

Stand-off anchor shear resistance (EN 1993-1-1 – Cl. 6.2.6)

$V_{pl,Rd}$ = 88,1 kN ≥ F_V = 22,1 kN

Where:

A_v = 298 mm^2 – shear area

•

$A_v = 0,844 \cdot A_s$
, where:

•
○

A_s =
353 mm^2 – anchor area reduced by thread

f_y = 640,0 MPa – anchor yield strength

γ_{M2} = 1,25 – safety factor

Stand-off anchor bending resistance (EN 1993-1-1 – Cl. 6.2.5)

$M_{pl,Rd} = \frac{W_{pl} f_y}{\gamma_{M2}}$ = 1,2 kNm ≥ M = 0,8 kNm

Where:

W_{pl} = 2304 mm^3 – plastic section modulus of the fastener

•

$W_{pl} = \frac{d^3}{6}$
, where:

•
○

d_s =
21 mm – diameter reduced by thread

f_y = 640,0 MPa – anchor yield strength

γ_{M2} = 1,25 – safety factor

Interaction of loading

$\frac{F_c}{F_{c,Rd}} +$ 0,70 ≤ 1,0

Where:

F_c = 4,0 kN – design compression force

$F_{c,Rd}$ = 154,6 kN – design compression resistance

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M_{Ed} = 0,8 kNm – design bending moment

$M_{pl,Rd}$ = 1,2 kNm – design bending resistance

Supplementary reinforcement (EN 1992-4 – Cl. 7.2.1.9; EN 1992-4 – Cl. 7.2.2.6)
Supplementary reinforcement should resist force of 16,0 kN in tension and 7,3 kN in shear.

Detailed result for A3

Stand-off anchor compressive resistance (EN 1993-1-1 – Cl. 6.3)

$F_{c,Rd} = \frac{\chi \cdot A_s \cdot f_y}{\gamma_{M2}} =$ 154,6 kN ≥ $F_c =$ 3,9 kN

Where:

$\chi = \min\left(\frac{1}{\Phi+\sqrt{\Phi^2-\overline{\lambda}^2}}, 1\right) =$ 0,86 – buckling reduction factor

$\Phi = 0,5 \cdot [1+\alpha \cdot (\overline{\lambda}-0.2)+\overline{\lambda}^2] =$ 0,68 – value to determine buckling reduction factor

$\alpha =$ 0,49 – imperfection factor

$\overline{\lambda} = \sqrt{\frac{A_s \cdot f_y}{N_{cr}}} =$ 0,48 – relative slenderness

$A_s =$ 353 mm^2 – anchor area reduced by thread

$N_{cr} = \frac{\pi^2 \cdot E \cdot I}{L_{cr}^2} =$ 991,1 kN – Euler's critical force

$E =$ 210000,0 MPa – elastic modulus

$I =$ 9916 mm^4 – moment of inertia of the bolt

-

$I = \frac{\pi \cdot d_s^4}{64}$

, where:

-
  -

$d_s =$

21 mm – diameter reduced by thread

$L_{cr} =$ 144 mm – buckling length (is it assumed on a safe side that the bolt is fixed in the concrete and able to freely rotate at the base plate)

-

$L_{cr} = 2 \cdot l$

, where:

-
  -

$l =$

72 mm – effective length

$f_y =$ 640,0 MPa – anchor yield strength

$\gamma_{M2} =$ 1,25 – safety factor

Concrete pullout resistance (EN 1992-4 – Cl. 7.2.1.5)

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$N_{Rd,p}$ = 296,9 kN ≥ N_{Ed} = -3,9 kN

$N_{Rk,p} = k_2 \cdot A_h \cdot f_{ck}$ = 534,4 kN

Where:

k_2 = 7,50 – coefficient for cracked/uncracked concrete

A_h = 2375 mm^2 – area of the load-bearing head of the fastener

-

$A_h = \frac{\pi}{4} \cdot (d_h^2 - d^2)$

, where:

-
  -

d_h =

60 mm

$\leq 6 \cdot t_h + d$

– effective size of washer plate, where:

  -
    -

$t_h \geq \frac{d_h - d}{6}$ =

6 mm – thickness of the head of the headed fastener

    -

d =

24 mm – diameter of the shank of the fastener

f_{ck} = 30,0 MPa – concrete compressive strength

γ_{Mc} = 1,80 – safety factor for concrete

Stand-off anchor shear resistance (EN 1993-1-1 – Cl. 6.2.6)

$V_{pl,Rd}$ = 88,1 kN ≥ F_v = 21,7 kN

Where:

A_v = 298 mm^2 – shear area

-

$A_v = 0,844 \cdot A_s$

, where:

-
  -

A_s =

353 mm^2 – anchor area reduced by thread

f_y = 640,0 MPa – anchor yield strength

γ_{M2} = 1,25 – safety factor

Stand-off anchor bending resistance (EN 1993-1-1 – Cl. 6.2.5)

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$M_{pl,Rd} = \frac{W_{pl} \cdot f_y}{\gamma_{M2}} =$ 1,2 kNm ≥ $M =$ 0,8 kNm

Where:

$W_{pl} =$ 2304 mm^3 – plastic section modulus of the fastener

-

$W_{pl} = \frac{d_s^3}{6}$

, where:

-
  -

$d_s =$

21 mm – diameter reduced by thread

$f_y =$ 640,0 MPa – anchor yield strength

$\gamma_{M2} =$ 1,25 – safety factor

Interaction of loading

$\frac{F_c}{F_{c,Rd}} +$ 0,69 ≤ 1,0

Where:

$F_c =$ 3,9 kN – design compression force

$F_{c,Rd} =$ 154,6 kN – design compression resistance

$M_{Ed} =$ 0,8 kNm – design bending moment

$M_{pl,Rd} =$ 1,2 kNm – design bending resistance

Supplementary reinforcement (EN 1992-4 – Cl. 7.2.1.9; EN 1992-4 – Cl. 7.2.2.6)
Supplementary reinforcement should resist force of 16,0 kN in tension and 7,3 kN in shear.

Detailed result for A4

Stand-off anchor compressive resistance (EN 1993-1-1 – Cl. 6.3)

$F_{c,Rd} = \frac{\chi \cdot A_s \cdot f_y}{\gamma_{M2}} =$ 154,6 kN ≥ $F_c =$ 3,9 kN

Where:

$\chi = \min\left(\frac{1}{\Phi + \sqrt{\Phi^2 - \overline{\lambda}^2}}, 1\right) =$ 0,86 – buckling reduction factor

$\Phi = 0,5 \cdot [1 + \alpha \cdot (\overline{\lambda} - 0.2) + \overline{\lambda}^2] =$ 0,68 – value to determine buckling reduction factor

$\alpha =$ 0,49 – imperfection factor

$\overline{\lambda} = \sqrt{\frac{A_s \cdot f_y}{N_{cr}}} =$ 0,48 – relative slenderness

$A_s =$ 353 mm^2 – anchor area reduced by thread

$N_{cr} = \frac{\pi^2 \cdot E \cdot I}{L_{cr}^2} =$ 991,1 kN – Euler's critical force

$E =$ 210000,0 MPa – elastic modulus

$I =$ 9916 mm^4 – moment of inertia of the bolt

-

$I = \frac{\pi \cdot d_s^4}{64}$

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where:

-
  -

d_s =
21 mm – diameter reduced by thread

L_{cr} = 144 mm – buckling length (is it assumed on a safe side that the bolt is fixed in the concrete and able to freely rotate at the base plate)

-

$L_{cr} = 2 \cdot l$
, where:

-
  -

l =
72 mm – effective length

f_y = 640,0 MPa – anchor yield strength

γ_{M2} = 1,25 – safety factor

Concrete pullout resistance (EN 1992-4 – Cl. 7.2.1.5)

$N_{Rd,p}$ = 296,9 kN ≥ N_{Ed} = -3,9 kN

$N_{Rk,p} = k_2 \cdot A_h \cdot f_{ck}$ = 534,4 kN

Where:

k_2 = 7,50 – coefficient for cracked/uncracked concrete

A_h = 2375 mm^2 – area of the load-bearing head of the fastener

-

$A_h = \frac{\pi}{4} \cdot (d_h^2 - d^2)$
, where:

-
  -

d_h =
60 mm
$\leq 6 \cdot t_h + d$
– effective size of washer plate, where:

  -
    -

$t_h \geq \frac{d_h - d}{6}$ =
6 mm – thickness of the head of the headed fastener

    -

d =
24 mm – diameter of the shank of the fastener

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f_{ck} = 30,0 MPa – concrete compressive strength

γ_{Mc} = 1,80 – safety factor for concrete

Stand-off anchor shear resistance (EN 1993-1-1 – Cl. 6.2.6)

$V_{pl,Rd}$ = 88,1 kN ≥ F_v = 22,0 kN

Where:

A_v = 298 mm^2 – shear area

-

$A_v = 0,844 \cdot A_s$

, where:

-
  -

A_s = 353 mm^2 – anchor area reduced by thread

f_y = 640,0 MPa – anchor yield strength

γ_{M2} = 1,25 – safety factor

Stand-off anchor bending resistance (EN 1993-1-1 – Cl. 6.2.5)

$M_{pl,Rd} = \frac{W_{pl} \cdot f_y}{\gamma_{M2}}$ = 1,2 kNm ≥ M = 0,8 kNm

Where:

W_{pl} = 2304 mm^3 – plastic section modulus of the fastener

-

$W_{pl} = \frac{d_s^3}{6}$

, where:

-
  -

d_s = 21 mm – diameter reduced by thread

f_y = 640,0 MPa – anchor yield strength

γ_{M2} = 1,25 – safety factor

Interaction of loading

$\frac{F_c}{F_{c,Rd}} +$ 0,70 ≤ 1,0

Where:

F_c = 3,9 kN – design compression force

$F_{c,Rd}$ = 154,6 kN – design compression resistance

M_{Ed} = 0,8 kNm – design bending moment

$M_{pl,Rd}$ = 1,2 kNm – design bending resistance

Supplementary reinforcement (EN 1992-4 – Cl. 7.2.1.9; EN 1992-4 – Cl. 7.2.2.6)
Supplementary reinforcement should resist force of 16,0 kN in tension and 7,3 kN in shear.

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BP1	RIB1a	◢ 6,0 ◣	85	Nmin+Mmax	14,0	0,0	-3,5	5,9	-5,1	3,9	2,7	OK
		◢ 6,0 ◣	84	Nmin+Mmax	11,5	0,0	-5,1	-5,0	3,3	3,2	2,0	OK
B28-w 1	RIB1a	◢ 6,0 ◣	219	Nmin+Mmax	8,0	0,0	1,1	4,4	-1,3	2,2	0,5	OK
		◢ 6,0 ◣	219	Nmin+Mmax	10,7	0,0	-1,5	-5,9	-1,6	3,0	1,6	OK
BP1	RIB1b	◢ 6,0 ◣	85	Nmin+Mmax	51,9	0,0	-22,3	24,5	-11,5	14,4	6,2	OK
		◢ 6,0 ◣	85	Nmin+Mmax	41,2	0,0	-10,1	-9,7	20,9	11,4	7,6	OK
B28-w 1	RIB1b	◢ 6,0 ◣	219	Nmin+Mmax	6,0	0,0	-0,5	3,0	1,8	1,7	0,5	OK
		◢ 6,0 ◣	219	Nmin+Mmax	9,3	0,0	-2,4	-5,0	-1,1	2,6	1,4	OK
BP1	RIB2a	◢ 6,0 ◣	84	Nmin+Mmax	15,4	0,0	-3,6	-6,8	5,3	4,3	2,9	OK
		◢ 6,0 ◣	85	Nmin+Mmax	12,8	0,0	-5,3	5,7	-3,4	3,5	2,3	OK
B28-w 2	RIB2a	◢ 6,0 ◣	219	Nmin+Mmax	8,7	0,0	1,1	4,8	-1,3	2,4	0,5	OK
		◢ 6,0 ◣	219	Nmin+Mmax	11,4	0,0	-1,5	-6,3	-1,7	3,2	1,6	OK
BP1	RIB2b	◢ 6,0 ◣	85	Nmin+Mmax	50,2	0,0	-21,8	-23,6	11,2	14,0	6,0	OK
		◢ 6,0 ◣	85	Nmin+Mmax	40,1	0,0	-9,9	9,2	-20,4	11,1	7,2	OK
B28-w 2	RIB2b	◢ 6,0 ◣	219	Nmin+Mmax	4,8	0,0	-0,3	2,2	1,6	1,3	0,4	OK
		◢ 6,0 ◣	219	Nmin+Mmax	8,1	0,0	-2,3	-4,4	-0,9	2,2	1,3	OK
BP1	RIB3a	◢ 6,0 ◣	85	Nmin+Mmax	14,6	0,0	-3,6	6,3	-5,2	4,1	2,9	OK
		◢ 6,0 ◣	85	Nmin+Mmax	12,4	0,0	-5,3	-5,5	3,4	3,4	2,1	OK
B28-w 3	RIB3a	◢ 6,0 ◣	219	Nmin+Mmax	8,7	0,0	1,2	4,8	-1,4	2,4	0,5	OK
		◢ 6,0 ◣	219	Nmin+Mmax	11,5	0,0	-1,6	-6,4	-1,7	3,2	1,6	OK
BP1	RIB3b	◢ 6,0 ◣	85	Nmin+Mmax	47,0	0,0	-20,7	22,0	-10,5	13,1	5,8	OK
		◢ 6,0 ◣	85	Nmin+Mmax	37,4	0,0	-9,1	-8,1	19,3	10,4	6,9	OK
B28-w 3	RIB3b	◢ 6,0 ◣	219	Nmin+Mmax	3,6	0,0	2,0	-1,6	-0,7	1,0	0,4	OK
		◢ 6,0 ◣	219	Nmin+Mmax	7,1	0,0	-4,3	1,2	-3,0	2,0	1,3	OK
BP1	RIB4a	◢ 6,0 ◣	85	Nmin+Mmax	13,1	0,0	-3,6	-5,2	5,1	3,6	2,7	OK
		◢ 6,0 ◣	85	Nmin+Mmax	12,0	0,0	-4,9	5,5	-3,2	3,3	1,9	OK
B28-w 4	RIB4a	◢ 6,0 ◣	219	Nmin+Mmax	8,0	0,0	1,1	4,4	-1,3	2,2	0,5	OK
		◢ 6,0 ◣	219	Nmin+Mmax	10,8	0,0	-1,5	-5,9	-1,7	3,0	1,6	OK
BP1	RIB4b	◢ 6,0 ◣	85	Nmin+Mmax	48,8	0,0	-21,2	-22,9	10,9	13,6	5,8	OK
		◢ 6,0 ◣	85	Nmin+Mmax	38,7	0,0	-9,5	8,7	-19,8	10,7	7,1	OK
B28-w 4	RIB4b	◢ 6,0 ◣	219	Nmin+Mmax	4,2	0,0	2,0	-2,0	-0,8	1,2	0,4	OK
		◢ 6,0 ◣	219	Nmin+Mmax	7,4	0,0	-4,3	1,6	-3,1	2,1	1,3	OK
BP1	B28	◢ 5,0 ◣	949	Nmin+Mmax	63,0	0,0	7,8	35,9	3,9	17,5	11,5	OK
		◢ 5,0 ◣	949	Nmin+Mmax	63,9	0,0	-0,6	-36,9	1,4	17,7	13,4	OK

Design data

S 235 0,80 360,0 259,2

Detailed result for BP1 / RIB1a - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 14,0 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 3,5 MPa

where:

$f_u =$ 360,0 MPa – Ultimate strength

$\beta_w =$ 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

$\gamma_{M2} =$ 1,25 – Safety factor

Stress utilization

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$U_t = \max\left(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}\right) =$ 0,04 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 14,0 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = -3,5 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB1a - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 11,5 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 5,1 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max\left(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}\right) =$ 0,03 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 11,5 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = -5,1 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 1 / RIB1a - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 8,0 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 1,1 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max\left(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}\right) =$ 0,02 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 8,0 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

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$|\sigma_\perp|$ = 1,1 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 1 / RIB1a - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 10,7 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 1,5 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,03 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 10,7 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = -1,5 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB1b - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 51,9 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 22,3 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,14 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 51,9 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = -22,3 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

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Detailed result for BP1 / RIB1b - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 41,2 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 10,1 MPa

where:

$f_u =$ 360,0 MPa – Ultimate strength

$\beta_w =$ 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

$\gamma_{M2} =$ 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,11 ≤ 1,0

Where:

$\sigma_{w,Ed} =$ 41,2 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd} =$ 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp| =$ -10,1 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd} =$ 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 1 / RIB1b - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 6,0 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 0,5 MPa

where:

$f_u =$ 360,0 MPa – Ultimate strength

$\beta_w =$ 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

$\gamma_{M2} =$ 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,02 ≤ 1,0

Where:

$\sigma_{w,Ed} =$ 6,0 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd} =$ 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp| =$ -0,5 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd} =$ 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 1 / RIB1b - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 9,3 MPa

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$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 2,4 MPa

where:

$f_u =$ 360,0 MPa – Ultimate strength

$\beta_w =$ 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

$\gamma_{M2} =$ 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,03 ≤ 1,0

Where:

$\sigma_{w,Ed} =$ 9,3 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd} =$ 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp| =$ -2,4 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd} =$ 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB2a - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 15,4 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 3,6 MPa

where:

$f_u =$ 360,0 MPa – Ultimate strength

$\beta_w =$ 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

$\gamma_{M2} =$ 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,04 ≤ 1,0

Where:

$\sigma_{w,Ed} =$ 15,4 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd} =$ 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp| =$ -3,6 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd} =$ 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB2a - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 12,8 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 5,3 MPa

where:

$f_u =$ 360,0 MPa – Ultimate strength

$\beta_w =$ 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

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γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,04 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 12,8 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = -5,3 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 2 / RIB2a - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 8,7 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 1,1 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,02 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 8,7 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = 1,1 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 2 / RIB2a - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 11,4 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 1,5 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,03 ≤ 1,0

Where:

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$\sigma_{w,Ed}$ = 11,4 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_{\perp}|$ = -1,5 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB2b - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_{\perp}^2 + 3(\tau_{\perp}^2 + \tau_{\parallel}^2)]^{0.5} =$ 50,2 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_{\perp}| =$ 21,8 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_{\perp}|}{\sigma_{\perp,Rd}}) =$ 0,14 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 50,2 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_{\perp}|$ = -21,8 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB2b - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_{\perp}^2 + 3(\tau_{\perp}^2 + \tau_{\parallel}^2)]^{0.5} =$ 40,1 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_{\perp}| =$ 9,9 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_{\perp}|}{\sigma_{\perp,Rd}}) =$ 0,11 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 40,1 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_{\perp}|$ = -9,9 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

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Detailed result for B28-w 2 / RIB2b - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 4,8 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 0,3 MPa

where:

$f_u =$ 360,0 MPa – Ultimate strength

$\beta_w =$ 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

$\gamma_{M2} =$ 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,01 ≤ 1,0

Where:

$\sigma_{w,Ed} =$ 4,8 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd} =$ 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp| =$ -0,3 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd} =$ 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 2 / RIB2b - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 8,1 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 2,3 MPa

where:

$f_u =$ 360,0 MPa – Ultimate strength

$\beta_w =$ 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

$\gamma_{M2} =$ 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,02 ≤ 1,0

Where:

$\sigma_{w,Ed} =$ 8,1 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd} =$ 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp| =$ -2,3 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd} =$ 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB3a - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

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$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 14,6 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 3,6 MPa

where:

$f_u =$ 360,0 MPa – Ultimate strength

$\beta_w =$ 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

$\gamma_{M2} =$ 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,04 ≤ 1,0

Where:

$\sigma_{w,Ed} =$ 14,6 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd} =$ 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp| =$ -3,6 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd} =$ 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB3a - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 12,4 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 5,3 MPa

where:

$f_u =$ 360,0 MPa – Ultimate strength

$\beta_w =$ 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

$\gamma_{M2} =$ 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,03 ≤ 1,0

Where:

$\sigma_{w,Ed} =$ 12,4 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd} =$ 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp| =$ -5,3 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd} =$ 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 3 / RIB3a - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 8,7 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 1,2 MPa

where:

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f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max\left(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}}; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}\right) =$ 0,02 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 8,7 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = 1,2 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 3 / RIB3a - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 11,5 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 1,6 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max\left(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}}; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}\right) =$ 0,03 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 11,5 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = -1,6 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB3b - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 47,0 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 20,7 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

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Stress utilization

$U_t = \max\left(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}\right) =$ 0,13 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 47,0 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = -20,7 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB3b - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 37,4 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 9,1 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max\left(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}\right) =$ 0,10 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 37,4 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = -9,1 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 3 / RIB3b - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 3,6 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 2,0 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max\left(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}\right) =$ 0,01 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 3,6 MPa – Maximum normal stress transverse to the axis of the weld

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$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_{\perp}|$ = 2,0 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 3 / RIB3b - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_{\perp}^2 + 3(\tau_{\perp}^2 + \tau_{\parallel}^2)]^{0.5} =$ 7,1 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_{\perp}| =$ 4,3 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_{\perp}|}{\sigma_{\perp,Rd}}) =$ 0,02 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 7,1 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_{\perp}|$ = -4,3 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB4a - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_{\perp}^2 + 3(\tau_{\perp}^2 + \tau_{\parallel}^2)]^{0.5} =$ 13,1 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_{\perp}| =$ 3,6 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_{\perp}|}{\sigma_{\perp,Rd}}) =$ 0,04 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 13,1 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_{\perp}|$ = -3,6 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

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Detailed result for BP1 / RIB4a - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 12,0 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 4,9 MPa

where:

$f_u =$ 360,0 MPa – Ultimate strength

$\beta_w =$ 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

$\gamma_{M2} =$ 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,03 ≤ 1,0

Where:

$\sigma_{w,Ed} =$ 12,0 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd} =$ 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp| =$ -4,9 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd} =$ 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 4 / RIB4a - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 8,0 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 1,1 MPa

where:

$f_u =$ 360,0 MPa – Ultimate strength

$\beta_w =$ 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

$\gamma_{M2} =$ 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,02 ≤ 1,0

Where:

$\sigma_{w,Ed} =$ 8,0 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd} =$ 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp| =$ 1,1 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd} =$ 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 4 / RIB4a - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 10,8 MPa

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$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 1,5 MPa

where:

$f_u =$ 360,0 MPa – Ultimate strength

$\beta_w =$ 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

$\gamma_{M2} =$ 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,03 ≤ 1,0

Where:

$\sigma_{w,Ed} =$ 10,8 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd} =$ 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp| =$ -1,5 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd} =$ 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB4b - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 48,8 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 21,2 MPa

where:

$f_u =$ 360,0 MPa – Ultimate strength

$\beta_w =$ 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

$\gamma_{M2} =$ 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,14 ≤ 1,0

Where:

$\sigma_{w,Ed} =$ 48,8 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd} =$ 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp| =$ -21,2 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd} =$ 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / RIB4b - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 38,7 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 9,5 MPa

where:

$f_u =$ 360,0 MPa – Ultimate strength

$\beta_w =$ 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

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γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,11 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 38,7 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = -9,5 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 4 / RIB4b - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 4,2 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 2,0 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,01 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 4,2 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = 2,0 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for B28-w 4 / RIB4b - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 7,4 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_\perp| =$ 4,3 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,02 ≤ 1,0

Where:

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$\sigma_{w,Ed}$ = 7,4 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_{\perp}|$ = -4,3 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / B28 - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_{\perp}^2 + 3(\tau_{\perp}^2 + \tau_{\parallel}^2)]^{0.5} =$ 63,0 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_{\perp}| =$ 7,8 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_{\perp}|}{\sigma_{\perp,Rd}}) =$ 0,17 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 63,0 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_{\perp}|$ = 7,8 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

Detailed result for BP1 / B28 - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 360,0 MPa ≥ $\sigma_{w,Ed} = [\sigma_{\perp}^2 + 3(\tau_{\perp}^2 + \tau_{\parallel}^2)]^{0.5} =$ 63,9 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 259,2 MPa ≥ $|\sigma_{\perp}| =$ 0,6 MPa

where:

f_u = 360,0 MPa – Ultimate strength

β_w = 0,80 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_{\perp}|}{\sigma_{\perp,Rd}}) =$ 0,18 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 63,9 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 360,0 MPa – Equivalent stress resistance

$|\sigma_{\perp}|$ = -0,6 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 259,2 MPa – Perpendicular stress resistance

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Išvados:

- Viršįtampių ribotuvo kolonos ribinis poslinkis lygus 57 mm, traversos – 15 mm. Pagal atliktus skaičiavimus kolonos poslinkis y kryptimi lygus 23 mm, traversos poslinkis z kryptimi – 2,7 mm. Gauti rezultatai neviršija ribinio poslinkio reikšmės.
- Viršįtempių ribotuvo atramos labiausiai pagal skerspjūvį išnaudojamas elemento profilis – 250x250x6 kvadratinio skerspjūvio kolona. Nustatytos reikšmės neviršija ribinių 0,14 ≤ 1.

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3. AS PAMATŲ PROJEKTAVIMAS

Pamatai skaičiuoti ir parinkti pagal nepalankiausių apkrovų derinius. Pamatai parinkti priklausomai nuo pamatą veikiančių rovimo, gniuždymo ir skersinių jėgų reikšmių bei geologinių ir hidrogeologinių sąlygų.

3.1. AS pamatų laikomosios galios skaičiavimas (GR-2)

Geometry

Pile profile: circular

Dimensions

Diameter d = 0,40 m
Length l = 2,00 m

Calculated cross-sectional characteristics

Area A = 1,26E-01 m^2
Moment of inertia I = 1,26E-03 m^4

Location

Off ground height h = -0,10 m
Depth of finished grade h_z = 0,00 m
Technology: CFA piles

Material of structure

Unit weight γ = 23,00 kN/m^3
Analysis of concrete structures carried out according to the standard EN 1992-1-1 (EC2).

Concrete: C 25/30

Cylinder compressive strength f_{ck} = 25,00 MPa
Tensile strength f_{ctm} = 2,60 MPa
Elasticity modulus E_{cm} = 31000,00 MPa
Shear modulus G = 12917,00 MPa

Longitudinal steel: B500A

Yield strength f_{yk} = 500,00 MPa

Transverse steel: B500A

Yield strength f_{yk} = 500,00 MPa

Geological profile and assigned soils

No.	Thickness of layer t [m]	Depth z [m]	Assigned soil	Pattern
1	0,70	0,00 .. 0,70	IGS-2. Vidutinio tankumo, vidutinio rupumo smėlis, mažai drėgnas, geltonas	
2	0,60	0,70 .. 1,30	IGS-2. Vidutinio tankumo, vidutinio rupumo smėlis, mažai drėgnas, geltonas	
3	0,60	1,30 .. 1,90	IGS-3. Tankus, mažai dulkingas molingas smėlis, su tolygiai išruošiuoto smėlio tarpsluoksniais	
4	2,80	1,90 .. 4,70	IGS-4. Labai tankus, žvyringas smėlis, vietomis mažai dulkingas molingas gerai išrūšiuotas žvyringas smėlis	
5	1,60	4,70 .. 6,30	IGS-3. Tankus, mažai dulkingas molingas smėlis, su tolygiai išruošiuoto smėlio tarpsluoksniais	
6	1,00	6,30 .. 7,30	IGS-4. Labai tankus, žvyringas smėlis, vietomis mažai dulkingas molingas gerai išrūšiuotas žvyringas smėlis	
7	1,50	7,30 .. 8,80	IGS-3. Tankus, mažai dulkingas molingas smėlis, su tolygiai išruošiuoto smėlio tarpsluoksniais	
8	-	8,80 .. □	IGS-3. Tankus, mažai dulkingas molingas smėlis, su tolygiai išruošiuoto smėlio tarpsluoksniais	

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Load

No.	Load new	Load change	Name	Type	N [kN]	M_x [kNm]	M_y [kNm]	H_x [kN]	H_y [kN]
1	Yes		102 atrm. transformatoriaus atrama	Design	15,28	30,50	0,00	2,06	4,28
2	Yes		103 atrm. Jungtuvo atrama	Design	17,91	25,83	0,00	0,00	0,00
3	Yes		104/1 atrm. Skyriklio atrama	Design	11,56	16,06	0,00	0,96	3,64
4	Yes		104/2 atrm. Skyriklio atrama h=5,05	Design	12,77	23,67	0,00	1,49	3,78
5	Yes		105 atrm. Įtampos transformatoriaus atrama	Design	10,96	24,32	0,00	1,29	3,89

Ground water table

The ground water table is at a depth of 7,50 m from the original terrain.

Global settings

Analysis of vertical bearing capacity : analytical solution
Analysis type : analysis for drained conditions

Settings of the stage of construction

Design situation : permanent
Verification methodology : without reduction of soil parameters

Verification No. 1

Verification of pile bearing capacity according to NAVFAC DM 7.2 - partial results

Pile base bearing capacity:
The soil under the base is cohesionless
Coefficient of bearing capacity N_q = 66,00
Area of pile transverse cross-section A_p = 1,26E-01 m^2
Pile shaft resistance:

Depth [m]	Thickness [m]	c_{ud} [kPa]	α [–]	K [–]	δ [°]	σ_{or} [kPa]	R_{si} [kN]
0,00	-	-	-	-	-	-	-
0,30	0,30	-	-	1,25	21,75	3,60	0,68
0,30	-	-	-	-	-	-	-

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Depth [m]	Thickness [m]	c_{ud} [kPa]	α [–]	K [–]	δ [°]	σ_{or} [kPa]	R_s [kN]
0,60	0,30	-	-	1,25	21,75	7,20	1,35
0,60	-	-	-	-	-	-	-
1,20	0,60	-	-	1,25	21,75	7,20	2,70
1,20	-	-	-	-	-	-	-
1,80	0,60	-	-	1,53	27,38	7,20	4,31
1,80	-	-	-	-	-	-	-
2,00	0,20	-	-	1,69	29,62	7,20	1,74

Verification of bearing capacity : NAVFAC DM 7.2

Analysis carried out with automatic selection of the most unfavourable load cases.
Factor determining critical depth k_{dc} = 1,00

Verification of compressive pile:
Most unfavorable load case No. 2. (103 atrm. Jungtuvo atrama)
Pile skin bearing capacity R_S = 10,78 kN
Pile base bearing capacity R_b = 318,57 kN

Pile bearing capacity R_c = 329,34 kN
Ultimate vertical force V_d = 23,69 kN

Safety factor = 13,90 > 2,00

Pile bearing capacity is SATISFACTORY

Verification No. 1

Analysis of load settlement curve - input data

Layer No.	Origin [m]	End [m]	E_S [MPa]
1	0,00	0,70	15,00
2	0,70	1,30	15,00
3	1,30	1,90	15,00
4	1,90	2,10	15,00

Maximum pile settlement s_{lim} = 25,0 mm

Analysis of load settlement curve - partial results

Correction factor for pile compressibility C_k = 0,99
Correction factor for Poisson's ratio of soil C_v = 0,80
Correction factor for stiffness of bearing stratum C_b = 1,96
Base-load proportion for incompressible pile β_0 = 0,18
Proportion of applied load transferred to pile base β = 0,28

Influence coefficients of settlement :
Basic - dependent on ratio l/d I_0 = 0,20
Correction factor for pile compressibility R_k = 1,00
Correction factor for finite depth of layer on a rigid base R_h = 1,00
Correction factor for Poisson's ratio of soil R_v = 0,90

Analysis of load settlement curve - results

Load at the onset of mobilization of skin friction R_{yu} = 14,92 kN
The settlement for the force R_{yu} s_y = 0,4 mm
Total resistance R_c = 236,95 kN
Maximum settlement s_{lim} = 25,0 mm

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3.2. AS pamatų laikomosios galios skaičiavimas (GR- 3)

Materials and standards

Concrete structures :	EN 1992-1-1 (EC2)
Coefficients EN 1992-1-1 :	standard
Steel structures :	EN 1993-1-1 (EC3)
Partial factor on bearing capacity of steel cross section :	γ_{M0} = 1,00
Timber structures :	EN 1995-1-1 (EC5)
Partial factor for timber property :	γ_M = 1,30
Modif. factor of load duration and moisture content :	k_{mod} = 0,50
Coeff. of effective width for shear stress :	k_{cr} = 0,67

Pile

Verification methodology :	Safety factors (ASD)
Analysis for drained conditions :	NAVFAC DM 7.2
Load settlement curve :	linear (Poulos)
Horizontal bearing capacity :	Elastic subsoil (p-y method)

Safety factors			
Permanent design situation			
Safety factor for compressive pile :	SF_{cp} =	2,00	[–]
Safety factor for tensile pile :	SF_{tp} =	3,00	[–]

Basic soil parameters

No.	Name	Pattern	γ [kN/m3]	v [–]
1	IGS-2. Vidutinio tankumo, vidutinio rupumo smėlis, mažai drėgnas, geltonas		18,00	0,30
2	IGS-3. Tankus, mažai dulkingas molingas smėlis, su tolygiai išruošiuoto smėlio tarpsluoksniais		18,48	0,28
3	IGS-4. Labai tankus, žvyringas smėlis, vietomis mažai dulkingas molingas gerai išrūšiuotas žvyringas smėlis		19,61	0,28
4	IGS-5. Vidutinio stiprumo, smėlingas, mažo plastiškumo molis ir dilkis, moreninis		21,31	0,40
5	IGS-1. Planingai supiltas smėlis		18,00	0,30

No.	Name	Pattern	E_{oed} [MPa]	E_{def} [MPa]	γ_{sat} [kN/m3]	γ_s [kN/m3]	n [–]
1	IGS-2. Vidutinio tankumo, vidutinio rupumo smėlis, mažai drėgnas, geltonas		-	12,00	18,00	-	-
2	IGS-3. Tankus, mažai dulkingas molingas smėlis, su tolygiai išruošiuoto smėlio tarpsluoksniais		-	50,00	18,48	-	-
3	IGS-4. Labai tankus, žvyringas smėlis, vietomis mažai dulkingas molingas gerai išrūšiuotas žvyringas smėlis		-	96,00	19,61	-	-
4	IGS-5. Vidutinio stiprumo, smėlingas, mažo plastiškumo molis ir dilkis, moreninis		-	16,00	21,31	-	-
5	IGS-1. Planingai supiltas smėlis		-	4,00	18,00	-	-

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No.	Name	Pattern	φef [°]	δ [°]	K [–]	cu [kPa]	α [–]
1	IGS-2. Vidutinio tankumo, vidutinio rupumo smėlis, mažai drėgnas, geltonas		29,00	-	-	-	-
2	IGS-3. Tankus, mažai dulkingas molingas smėlis, su tolygiai išruošiuoto smėlio tarpsluoksniais		36,50	-	-	-	-
3	IGS-4. Labai tankus, žvyringas smėlis, vietomis mažai dulkingas molingas gerai išrūšiuotas žvyringas smėlis		39,50	-	-	-	-
4	IGS-5. Vidutinio stiprumo, smėlingas, mažo plastiškumo molis ir dilkis, moreninis		19,00	-	-	-	-
5	IGS-1. Planingai supiltas smėlis		29,00	-	-	-	-

Soil parameters

IGS-2. Vidutinio tankumo, vidutinio rupumo smėlis, mažai drėgnas, geltonas

Unit weight :	γ	=	18,00	kN/m3
Poisson's ratio :	v	=	0,30	
Deformation modulus :	Edef	=	12,00	MPa
Saturated unit weight :	γsat	=	18,00	kN/m3
Angle of internal friction :	φef	=	29,00	°

IGS-3. Tankus, mažai dulkingas molingas smėlis, su tolygiai išruošiuoto smėlio tarpsluoksniais

Unit weight :	γ	=	18,48	kN/m3
Poisson's ratio :	v	=	0,28	
Deformation modulus :	Edef	=	50,00	MPa
Saturated unit weight :	γsat	=	18,48	kN/m3
Angle of internal friction :	φef	=	36,50	°

IGS-4. Labai tankus, žvyringas smėlis, vietomis mažai dulkingas molingas gerai išrūšiuotas žvyringas smėlis

Unit weight :	γ	=	19,61	kN/m3
Poisson's ratio :	v	=	0,28	
Deformation modulus :	Edef	=	96,00	MPa
Saturated unit weight :	γsat	=	19,61	kN/m3
Angle of internal friction :	φef	=	39,50	°

IGS-5. Vidutinio stiprumo, smėlingas, mažo plastiškumo molis ir dilkis, moreninis

Unit weight :	γ	=	21,31	kN/m3
Poisson's ratio :	v	=	0,40	
Deformation modulus :	Edef	=	16,00	MPa
Saturated unit weight :	γsat	=	21,31	kN/m3
Angle of internal friction :	φef	=	19,00	°

IGS-1. Planingai supiltas smėlis

Unit weight :	γ	=	18,00	kN/m3
Poisson's ratio :	v	=	0,30	
Deformation modulus :	Edef	=	4,00	MPa
Saturated unit weight :	γsat	=	18,00	kN/m3
Angle of internal friction :	φef	=	29,00	°

Geometry

Pile profile: circular

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Dimensions
Diameter d = 0,40 m
Length l = 2,00 m
Calculated cross-sectional characteristics
Area A = 1,26E-01 m^2
Moment of inertia I = 1,26E-03 m^4
Location
Off ground height h = 0,00 m
Depth of finished grade h_z = 0,00 m
Technology: CFA piles
Material of structure
Unit weight γ = 23,00 kN/m^3
Analysis of concrete structures carried out according to the standard EN 1992-1-1 (EC2).

Concrete: C 25/30
Cylinder compressive strength f_{ck} = 25,00 MPa
Tensile strength f_{ctm} = 2,60 MPa
Elasticity modulus E_{cm} = 31000,00 MPa
Shear modulus G = 12917,00 MPa
Longitudinal steel: B500A
Yield strength f_{yk} = 500,00 MPa
Transverse steel: B500A
Yield strength f_{yk} = 500,00 MPa
Geological profile and assigned soils

No.	Thickness of layer t [m]	Depth z [m]	Assigned soil	Pattern
1	0,80	0,00 .. 0,80	IGS-1. Planingai supiltas smėlis	
2	1,00	0,80 .. 1,80	IGS-3. Tankus, mažai dulkingas molingas smėlis, su tolygiai išruošiuoto smėlio tarpsluoksniais	
3	1,40	1,80 .. 3,20	IGS-4. Labai tankus, žvyringas smėlis, vietomis mažai dulkingas molingas gerai išrūšiuotas žvyringas smėlis	
4	0,50	3,20 .. 3,70	IGS-3. Tankus, mažai dulkingas molingas smėlis, su tolygiai išruošiuoto smėlio tarpsluoksniais	
5	1,10	3,70 .. 4,80	IGS-4. Labai tankus, žvyringas smėlis, vietomis mažai dulkingas molingas gerai išrūšiuotas žvyringas smėlis	
6	3,50	4,80 .. 8,30	IGS-3. Tankus, mažai dulkingas molingas smėlis, su tolygiai išruošiuoto smėlio tarpsluoksniais	
7	0,50	8,30 .. 8,80	IGS-4. Labai tankus, žvyringas smėlis, vietomis mažai dulkingas molingas gerai išrūšiuotas žvyringas smėlis	
8	-	8,80 .. □	IGS-4. Labai tankus, žvyringas smėlis, vietomis mažai dulkingas molingas gerai išrūšiuotas žvyringas smėlis	

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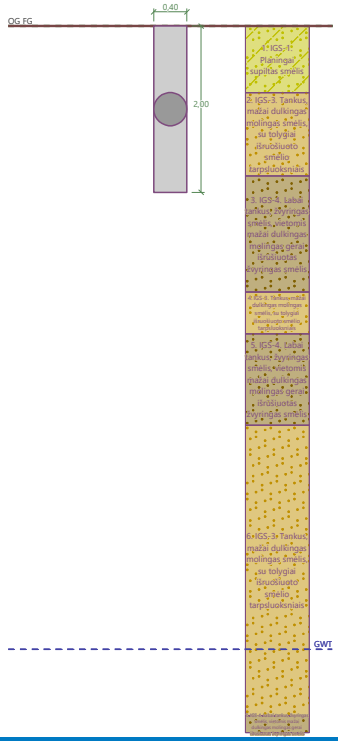
Name : Gręžinys Nr. 1	Stage - analysis : 1 - 0



Name : Profile and assignment	Stage - analysis : 1 - 0

Load

No.	Load new	Load change	Name	Type	N [kN]	M_x [kNm]	M_y [kNm]	H_x [kN]	H_y [kN]
1	Yes		102 atrm. transformatoriaus atrama	Design	15,28	30,50	0,00	2,06	4,28
2	Yes		103 atrm. Jungtuvo atrama	Design	17,91	25,83	0,00	0,00	0,00
3	Yes		104/1 atrm. Skyriklio atrama	Design	11,56	16,06	0,00	0,96	3,64
4	Yes		104/2 atrm. Skyriklio atrama h=5,05	Design	12,77	23,67	0,00	1,49	3,78
5	Yes		105 atrm. Įtampos transformatoriaus atrama	Design	10,96	24,32	0,00	1,29	3,89

Ground water table
The ground water table is at a depth of 7,50 m from the original terrain.
Global settings
Analysis of vertical bearing capacity : analytical solution
Analysis type : analysis for drained conditions
Settings of the stage of construction
Design situation : permanent
Verification methodology : without reduction of soil parameters
Verification No. 1
Verification of pile bearing capacity according to NAVFAC DM 7.2 - partial results
Pile base bearing capacity:
The soil under the base is cohesionless
Coefficient of bearing capacity N_q = 66,00
Area of pile transverse cross-section A_p = 1,26E-01 m^2
Pile shaft resistance:

Depth [m]	Thickness [m]	c_{ud} [kPa]	α [–]	K [–]	δ [°]	σ_{or} [kPa]	R_{si} [kN]
0,00	-	-	-	-	-	-	-
0,40	0,40	-	-	1,25	21,75	3,60	0,90
0,40	-	-	-	-	-	-	-
0,80	0,40	-	-	1,25	21,75	7,20	1,80

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epth [m]	Thickness [m]	c_{ud} [kPa]	α [–]	K [–]	δ [°]	σ_{or} [kPa]	R_{si} [kN]
0,80	-	-	-	-	-	-	-
1,80	1,00	-	-	1,53	27,38	7,20	7,18
1,80	-	-	-	-	-	-	-
2,00	0,20	-	-	1,69	29,62	7,20	1,74

Verification of bearing capacity : NAVFAC DM 7.2
Analysis carried out with automatic selection of the most unfavourable load cases.
Factor determining critical depth k_{dc} = 1,00

Verification of compressive pile:
Most unfavorable load case No. 2. (103 atrm. Jungtuvo atrama)
Pile skin bearing capacity R_s = 11,62 kN
Pile base bearing capacity R_b = 305,23 kN

Pile bearing capacity R_c = 316,85 kN
Ultimate vertical force V_d = 23,69 kN

Safety factor = 13,37 > 2,00

Pile bearing capacity is SATISFACTORY
Verification No. 1
Analysis of load settlement curve - input data

Layer No.	Origin [m]	End [m]	E_S [MPa]
1	0,00	0,80	15,00
2	0,80	1,80	15,00
3	1,80	2,00	15,00

Maximum pile settlement s_{lim} = 25,0 mm
Analysis of load settlement curve - partial results

Correction factor for pile compressibility C_k = 0,99
Correction factor for Poisson's ratio of soil C_v = 0,80
Correction factor for stiffness of bearing stratum C_b = 1,85
Base-load proportion for incompressible pile β_0 = 0,18
Proportion of applied load transferred to pile base β = 0,26

Influence coefficients of settlement :
Basic - dependent on ratio l/d I_0 = 0,20
Correction factor for pile compressibility R_k = 1,00
Correction factor for finite depth of layer on a rigid base R_h = 1,00
Correction factor for Poisson's ratio of soil R_v = 0,90
Analysis of load settlement curve - results

Load at the onset of mobilization of skin friction R_{yu} = 15,73 kN
The settlement for the force R_{yu} s_y = 0,5 mm
Total resistance R_c = 224,87 kN
Maximum settlement s_{lim} = 25,0 mm

3.3. AS pamatų laikomosios galios skaičiavimas (GR- 4 arch)

Materials and standards

Concrete structures : EN 1992-1-1 (EC2)
Coefficients EN 1992-1-1 : standard
Steel structures : EN 1993-1-1 (EC3)

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Partial factor on bearing capacity of steel cross section : γ_{M0} = 1,00
Timber structures : EN 1995-1-1 (EC5)
Partial factor for timber property : γ_M = 1,30
Modif. factor of load duration and moisture content : k_{mod} = 0,50
Coeff. of effective width for shear stress : k_{cr} = 0,67
Pile

Verification methodology : Safety factors (ASD)
Analysis for drained conditions : NAVFAC DM 7.2
Load settlement curve : linear (Poulos)
Horizontal bearing capacity : Elastic subsoil (p-y method)

Safety factors			
Permanent design situation			
Safety factor for compressive pile :	SF_{cp} =	2,00	[–]
Safety factor for tensile pile :	SF_{tp} =	3,00	[–]

Basic soil parameters

No.	Name	Pattern	γ [kN/m3]	v [–]
1	IGS-2. Vidutinio tankumo, vidutinio rupumo smėlis, mažai drėgnas, geltonas		18,00	0,30
2	IGS-3. Tankus, mažai dulkingas molingas smėlis, su tolygiai išruošiuoto smėlio tarpsluoksniais		18,48	0,28
3	IGS-4. Labai tankus, žvyringas smėlis, vietomis mažai dulkingas molingas gerai išrūšiuotas žvyringas smėlis		19,61	0,28
4	IGS-5. Vidutinio stiprumo, smėlingas, mažo plastiškumo molis ir dilkis, moreninis		21,31	0,40
5	IGS-1. Planingai supiltas smėlis		18,00	0,30

No.	Name	Pattern	Eoed [MPa]	Edef [MPa]	γsat [kN/m3]	γs [kN/m3]	n [–]
1	IGS-2. Vidutinio tankumo, vidutinio rupumo smėlis, mažai drėgnas, geltonas		-	12,00	18,00	-	-
2	IGS-3. Tankus, mažai dulkingas molingas smėlis, su tolygiai išruošiuoto smėlio tarpsluoksniais		-	50,00	18,48	-	-
3	IGS-4. Labai tankus, žvyringas smėlis, vietomis mažai dulkingas molingas gerai išrūšiuotas žvyringas smėlis		-	96,00	19,61	-	-
4	IGS-5. Vidutinio stiprumo, smėlingas, mažo plastiškumo molis ir dilkis, moreninis		-	16,00	21,31	-	-
5	IGS-1. Planingai supiltas smėlis		-	4,00	18,00	-	-

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No.	Name	Pattern	φef [°]	δ [°]	K [–]	c [kPa]	α [–]
1	IGS-2. Vidutinio tankumo, vidutinio rupumo smėlis, mažai drėgnas, geltonas		29,00	-	-	-	-
2	IGS-3. Tankus, mažai dulkingas molingas smėlis, su tolygiai išruošiuoto smėlio tarpsluoksniais		36,50	-	-	-	-
3	IGS-4. Labai tankus, žvyringas smėlis, vietomis mažai dulkingas molingas gerai išrūšiuotas žvyringas smėlis		39,50	-	-	-	-
4	IGS-5. Vidutinio stiprumo, smėlingas, mažo plastiškumo molis ir dilkis, moreninis		19,00	-	-	-	-
5	IGS-1. Planingai supiltas smėlis		29,00	-	-	-	-

Soil parameters

IGS-2. Vidutinio tankumo, vidutinio rupumo smėlis, mažai drėgnas, geltonas

Unit weight :	γ	=	18,00	kN/m3
Poisson's ratio :	v	=	0,30	
Deformation modulus :	E_{def}	=	12,00	MPa
Saturated unit weight :	γ_{sat}	=	18,00	kN/m3
Angle of internal friction :	φ_{ef}	=	29,00	°

IGS-3. Tankus, mažai dulkingas molingas smėlis, su tolygiai išruošiuoto smėlio tarpsluoksniais

Unit weight :	γ	=	18,48	kN/m3
Poisson's ratio :	v	=	0,28	
Deformation modulus :	E_{def}	=	50,00	MPa
Saturated unit weight :	γ_{sat}	=	18,48	kN/m3
Angle of internal friction :	φ_{ef}	=	36,50	°

IGS-4. Labai tankus, žvyringas smėlis, vietomis mažai dulkingas molingas gerai išrūšiuotas žvyringas smėlis

Unit weight :	γ	=	19,61	kN/m3
Poisson's ratio :	v	=	0,28	
Deformation modulus :	E_{def}	=	96,00	MPa
Saturated unit weight :	γ_{sat}	=	19,61	kN/m3
Angle of internal friction :	φ_{ef}	=	39,50	°

IGS-5. Vidutinio stiprumo, smėlingas, mažo plastiškumo molis ir dilkis, moreninis

Unit weight :	γ	=	21,31	kN/m3
Poisson's ratio :	v	=	0,40	
Deformation modulus :	E_{def}	=	16,00	MPa
Saturated unit weight :	γ_{sat}	=	21,31	kN/m3
Angle of internal friction :	φ_{ef}	=	19,00	°

IGS-1. Planingai supiltas smėlis

Unit weight :	γ	=	18,00	kN/m3
Poisson's ratio :	v	=	0,30	
Deformation modulus :	E_{def}	=	4,00	MPa
Saturated unit weight :	γ_{sat}	=	18,00	kN/m3
Angle of internal friction :	φ_{ef}	=	29,00	°

Geometry
Pile profile: circular
Dimensions
Diameter d = 0,40 m

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ength l = 2,00 m
Calculated cross-sectional characteristics
Area A = 1,26E-01 m^2
Moment of inertia I = 1,26E-03 m^4
Location
Off ground height h = 0,00 m
Depth of finished grade h_z = 0,00 m
Technology: CFA piles
Material of structure
Unit weight γ = 23,00 kN/m^3
Analysis of concrete structures carried out according to the standard EN 1992-1-1 (EC2).

Concrete: C 25/30
Cylinder compressive strength f_{ck} = 25,00 MPa
Tensile strength f_{ctm} = 2,60 MPa
Elasticity modulus E_{cm} = 31000,00 MPa
Shear modulus G = 12917,00 MPa
Longitudinal steel: B500A
Yield strength f_{yk} = 500,00 MPa
Transverse steel: B500A
Yield strength f_{yk} = 500,00 MPa
Geological profile and assigned soils

No.	Thickness of layer t [m]	Depth z [m]	Assigned soil	Pattern
1	0,50	0,00 .. 0,50	IGS-1. Planingai supiltas smėlis	
2	1,20	0,50 .. 1,70	IGS-2. Vidutinio tankumo, vidutinio rupumo smėlis, mažai drėgnas, geltonas	
3	0,50	1,70 .. 2,20	IGS-4. Labai tankus, žvyringas smėlis, vietomis mažai dulkingas molingas gerai išrūšiuotas žvyringas smėlis	
4	0,90	2,20 .. 3,10	IGS-3. Tankus, mažai dulkingas molingas smėlis, su tolygiai išruošiuoto smėlio tarpsluoksniais	
5	3,20	3,10 .. 6,30	IGS-4. Labai tankus, žvyringas smėlis, vietomis mažai dulkingas molingas gerai išrūšiuotas žvyringas smėlis	
6	0,40	6,30 .. 6,70	IGS-3. Tankus, mažai dulkingas molingas smėlis, su tolygiai išruošiuoto smėlio tarpsluoksniais	
7	1,60	6,70 .. 8,30	IGS-4. Labai tankus, žvyringas smėlis, vietomis mažai dulkingas molingas gerai išrūšiuotas žvyringas smėlis	
8	1,20	8,30 .. 9,50	IGS-3. Tankus, mažai dulkingas molingas smėlis, su tolygiai išruošiuoto smėlio tarpsluoksniais	
9	4,20	9,50 .. 13,70	IGS-4. Labai tankus, žvyringas smėlis, vietomis mažai dulkingas molingas gerai išrūšiuotas žvyringas smėlis	
10	-	13,70 .. □	IGS-4. Labai tankus, žvyringas smėlis, vietomis mažai dulkingas molingas gerai išrūšiuotas žvyringas smėlis	

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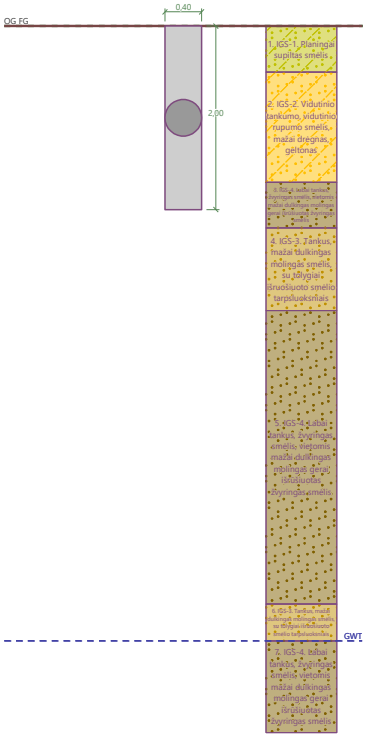
Name : Gręžinys Nr. 1	Stage - analysis : 1 - 0



Name : Profile and assignment	Stage - analysis : 1 - 0

Load

No.	Load new	Load change	Name	Type	N [kN]	M_x [kNm]	M_y [kNm]	H_x [kN]	H_y [kN]
1	Yes		102 atrm. transformatoriaus atrama	Design	15,28	30,50	0,00	2,06	4,28
2	Yes		103 atrm. Jungtuvo atrama	Design	17,91	25,83	0,00	0,00	0,00
3	Yes		104/1 atrm. Skyriklio atrama	Design	11,56	16,06	0,00	0,96	3,64
4	Yes		104/2 atrm. Skyriklio atrama h=5,05	Design	12,77	23,67	0,00	1,49	3,78
5	Yes		105 atrm. Įtampos transformatoriaus atrama	Design	10,96	24,32	0,00	1,29	3,89

Ground water table
The ground water table is at a depth of 6,70 m from the original terrain.
Global settings
Analysis of vertical bearing capacity : analytical solution
Analysis type : analysis for drained conditions
Settings of the stage of construction
Design situation : permanent
Verification methodology : without reduction of soil parameters
Verification No. 1
Verification of pile bearing capacity according to NAVFAC DM 7.2 - partial results
Pile base bearing capacity:
The soil under the base is cohesionless
Coefficient of bearing capacity N_q = 66,00
Area of pile transverse cross-section A_p = 1,26E-01 m^2
Pile shaft resistance:

Depth [m]	Thickness [m]	c_{ud} [kPa]	α [–]	K [–]	δ [°]	σ_{or} [kPa]	R_{si} [kN]
0,00	-	-	-	-	-	-	-
0,40	0,40	-	-	1,25	21,75	3,60	0,90
0,40	-	-	-	-	-	-	-
0,50	0,10	-	-	1,25	21,75	7,20	0,45

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epth [m]	Thickness [m]	c_{ud} [kPa]	α [–]	K [–]	δ [°]	σ_{or} [kPa]	R_{si} [kN]
0,50	-	-	-	-	-	-	-
1,70	1,20	-	-	1,25	21,75	7,20	5,41
1,70	-	-	-	-	-	-	-
2,00	0,30	-	-	1,69	29,62	7,20	2,61

Verification of bearing capacity : NAVFAC DM 7.2
Analysis carried out with automatic selection of the most unfavourable load cases.
Factor determining critical depth k_{dc} = 1,00

Verification of compressive pile:
Most unfavorable load case No. 2. (103 atrm. Jungtuvo atrama)
Pile skin bearing capacity R_s = 9,37 kN
Pile base bearing capacity R_b = 302,58 kN

Pile bearing capacity R_c = 311,96 kN
Ultimate vertical force V_d = 23,69 kN

Safety factor = 13,17 > 2,00

Pile bearing capacity is SATISFACTORY
Verification No. 1
Analysis of load settlement curve - input data

Layer No.	Origin [m]	End [m]	E_S [MPa]
1	0,00	0,50	15,00
2	0,50	1,70	15,00
3	1,70	2,00	15,00

Maximum pile settlement s_{lim} = 25,0 mm
Analysis of load settlement curve - partial results

Correction factor for pile compressibility C_k = 0,99
Correction factor for Poisson's ratio of soil C_v = 0,80
Correction factor for stiffness of bearing stratum C_b = 2,26
Base-load proportion for incompressible pile β_0 = 0,18
Proportion of applied load transferred to pile base β = 0,32

Influence coefficients of settlement :
Basic - dependent on ratio l/d I_0 = 0,20
Correction factor for pile compressibility R_k = 1,00
Correction factor for finite depth of layer on a rigid base R_h = 1,00
Correction factor for Poisson's ratio of soil R_v = 0,91
Analysis of load settlement curve - results

Load at the onset of mobilization of skin friction R_{yu} = 13,79 kN
The settlement for the force R_{yu} s_y = 0,4 mm
Total resistance R_c = 269,01 kN
Maximum settlement s_{lim} = 25,0 mm

4.

Išvados:

- Atliktus skaičiavimus ir patikrinus gręžtinius pamatus visų įrenginių apkrovoms skirtinguose gręžiniuose gauta, jog priimti pamatai 400mm skersmens ir 2 metrų ilgio yra pakankami. Laikomosios galios sąlygos tenkinamos. Saugumo keof. visais atvejais > 2,0.

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3.4 AS pamatų inkarinių varžtų laikomosios galios skaičiavimas labiausiai apkrautai atramai (srovės transformatorius 5700 mm)

Pamatų inkariniai varžtai parenkami remiantis gautomis didžiausiomis plieninių atramų įražomis t. y. srovės transformatorius. Inkariniai varžtai „Peikko“ HPM 20L.

Skaičiavimams naudojamos įrąžos:

Nd = -11,38 kN; Mxd = 0,00 kNm; Myd = 4,44 kNm; Vxd = 0,0 kN; Vyd = 0,0 kN;

Nd = -10,84 kN; Mxd = 23,36 kNm; Myd = 0,01 kNm; Vxd = 0,0 kN; Vyd = 0,0 kN;

Nd = -9,50 kN; Mxd = 10,56 kNm; Myd = 7,42 kNm; Vxd = 0,0 kN; Vyd = 0,0 kN.

Designer:
Company:
Address:
Phone:
E-Mail:
Name:

Project:
Title: New Project
Location:
Contact Person:
Comments:
Design Norm: EN Eurocodes (without NA)
Unit system: SI

This design applies exclusively to proprietary PEIKKO products and can't be used to validate properties of third party products, might they appear to be identical.

Summary

Name	Stage	#	Load Case	Page No.	Max Utilization	Status
Column 1	Final	1	Nd=-11.4, Mxd=0.0, Myd=4.4, Vxd=0.0, Vyd=0.0	4	8%	OK
	Final	2	Nd=-10.8, Mxd=23.4, Myd=0.0, Vxd=0.0, Vyd=0.0	5	64%	OK
	Final	3	Nd=-9.5, Mxd=10.6, Myd=7.4, Vxd=0.0, Vyd=0.0	6	21%	OK

Column 1

Note:

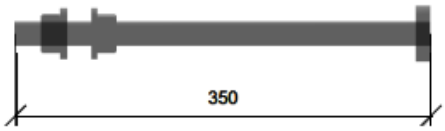
Number of Columns: 1

Peikko Products

Bolts: 4 x HPM20L

Totals

Product	Amount
HPM20L	4



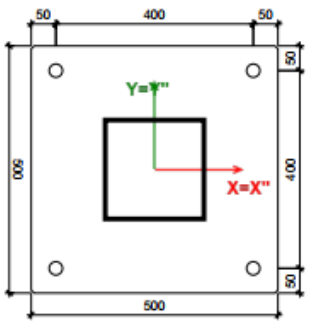
Minimum required torque value of nuts : T_{min} = 150 Nm
Maximum allowed torque value of nuts : T_{max} = 250 Nm
Bolt installation template: PPL20-4 400x400

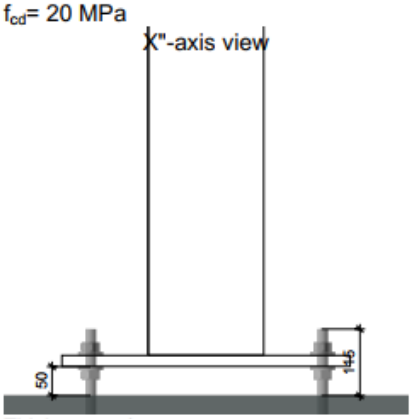
Materials and Geometry

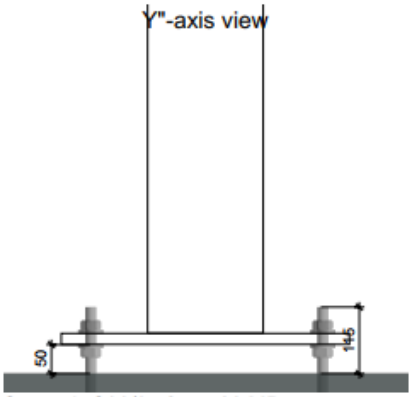
Column: 200x200

f_{cd}= 20 MPa

Plane View







Grouting:

Thickness: 50 mm

Strength C30/37 f_{cd} = 20 MPa

X; Y = local coordinate system of profile
X"; Y" = local coordinate system of anchors

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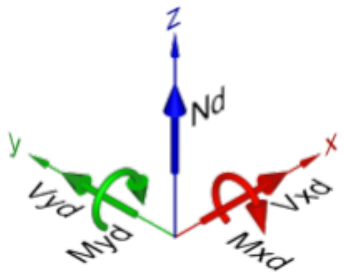
Load Cases

NOTE: Loads are defined in the local coordinate system of the profile.

(Design loads)



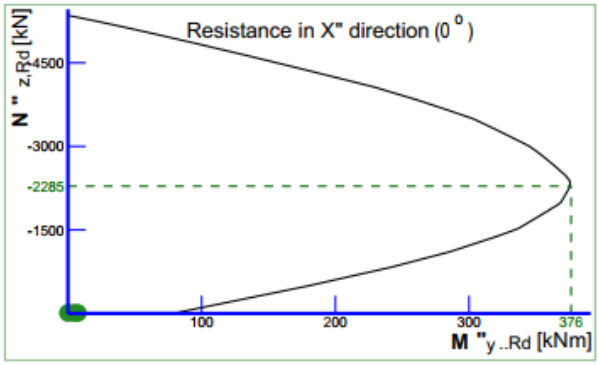
Final Stage

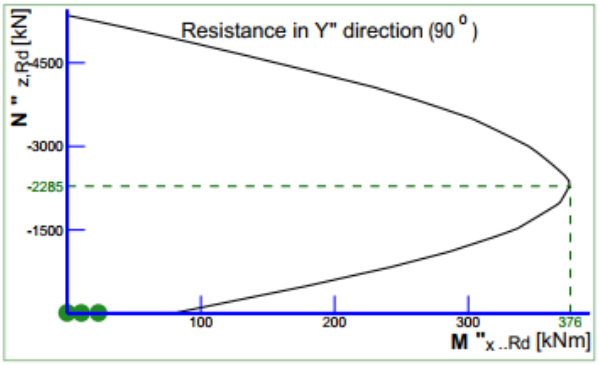
#	Name	N_d [kN]	M_{xd} [kNm]	M_{yd} [kNm]	V_{xd} [kN]	V_{yd} [kN]
1		-11.4	0.0	4.4	0.0	0.0
2		-10.8	23.4	0.0	0.0	0.0
3		-9.5	10.6	7.4	0.0	0.0

Erection stage

No load case for this stage defined

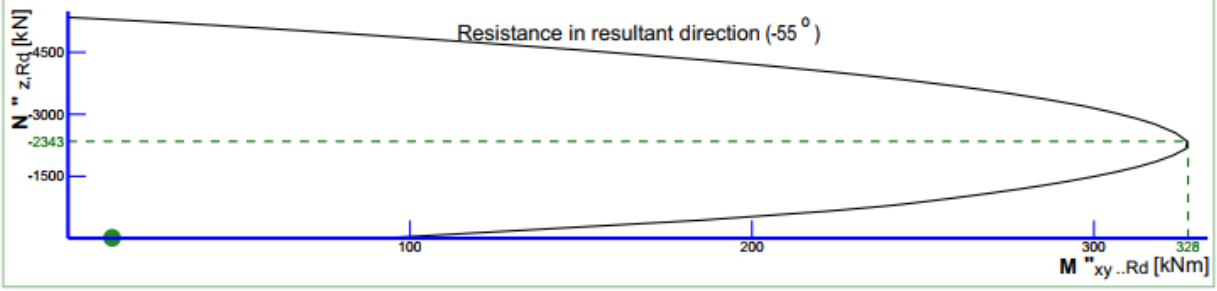
Resistance Diagrams





Resultant Diagrams per Load

Nd=-9.5, Mxd=10.6, Myd=7.4, Vxd=0.0, Vyd=0.0
(loads in coordinate system of profile)
N"d=-9.5, M"xd=10.6, M"yd=7.4, V"xd=0.0, V"yd=0.0
(loads in coordinate system of anchors)



Base Structure

Concrete	C25/30
Uncracked	No
Aggregate size	16 mm
Footing dimension X-axis direction (b)	700 mm
Footing dimension Y-axis direction (h)	700 mm
Height of Footing	800 mm
Eccentricity of bolted column (e_x)	0 mm
Eccentricity of bolted column (e_y)	0 mm

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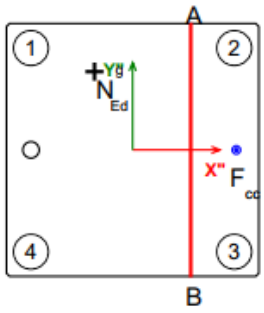
Load Case #1 : Nd=-11.4, Mxd=0.0, Myd=4.4, Vxd=0.0, Vyd=0.0

Steel Failure: Sufficient capacity **Concrete failure: Sufficient capacity**

Steel failure verification

Design value of normal compressive force in the column	$N_{c,Ed}$	-11.4	kN
Friction coefficient (between base plate and grout layer)	C_{fd}	0.2	
Joint friction resistance	$F_{f,Rd}$	2.28	kN
Resultant shear force	V_{sd}	0	kN
Resultant shear force taking account friction contribution	$V_{sd,f}$	0	kN



Neutral axis in (X"/Y") = A(113.5 / 250.0); B(113.5 / -250.0)
Resultant tension force in (X"/Y") = N_{Ed}(-200.0/0.0)
Resultant compression force (concrete) in (X"/Y") = F_{cc}(203.9/0.0)

Bolt Pos.	Acting axial force [kN]	Design tension resistance [kN]	Axial capacity usage [%]	Acting shear force [kN]	Design shear resistance [kN]	Shear capacity usage [%]	Interaction [%]
1	2.63	88.2	3.0	0.0	31.3	0.0	n/r
2	-0.726	88.2	0.8	0.0	31.3	0.0	n/r
3	-0.726	88.2	0.8	0.0	31.3	0.0	n/r
4	2.63	88.2	3.0	0.0	31.3	0.0	n/r

Concrete failure verifications

Proof	Load [kN]	Capacity [kN]	Utilization [%]	Status
Pull-Out Failure	2.6	161.7	1.6	Ok
Cone failure				Ok
Covered with reinforcement:				
1) Foundation (Plain Concrete)	5.3	34.0	15.5	
2) Assigned Hanger Reinforcement	2.6	74.1	3.5	
3) Requirement of Strut and Tie Model	12.6	43.7	28.8	
Splitting Failure				Ok
Concrete decisive:				
1) Foundation (Plain Concrete)	5.3	62.7	8.4	
2)Assigned Splitting Reinforcement || X	0.0	87.4	n/r	
3)Assigned Splitting Reinforcement || Y	0.0	87.4	n/r	
Blow-Out Failure	0.0	0.0	n/r	Ok
Pry-out failure	0.0	0.0	n/r	Ok
Edge failure				Ok
Concrete decisive:				
1) -X (Left) Edge (Plain Concrete)	0.0	0.0	n/r	
2) +X (Right) Edge (Plain Concrete)	0.0	0.0	n/r	
3) +Y (Top) Edge (Plain Concrete)	0.0	0.0	n/r	
4) -Y (Bottom) Edge (Plain Concrete)	0.0	0.0	n/r	
5)Assigned Edge Reinforcement (-X)	0.0	0.0	n/r	
6)Assigned Edge Reinforcement (+X)	0.0	0.0	n/r	
7)Assigned Edge Reinforcement (+Y)	0.0	0.0	n/r	
8)Assigned Edge Reinforcement (-Y)	0.0	0.0	n/r	
Combined Resistance	$\beta_N \leq 1$		8.4	Ok

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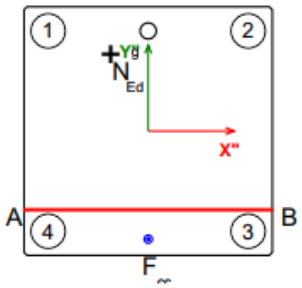
Load Case #2 : Nd=-10.8, Mxd=23.4, Myd=0.0, Vxd=0.0, Vyd=0.0

Steel Failure: Sufficient capacity **Concrete failure: Sufficient capacity**

Steel failure verification

Design value of normal compressive force in the column	$N_{c,Ed}$	-10.8	kN
Friction coefficient (between base plate and grout layer)	C_{fd}	0.2	
Joint friction resistance	$F_{f,Rd}$	2.16	kN
Resultant shear force	V_{sd}	0	kN
Resultant shear force taking account friction contribution	$V_{sd,f}$	0	kN



Neutral axis in (X"/Y") = A(-250.0 / -158.6); B(250.0 / -158.5)
Resultant tension force in (X"/Y") = N^{g}_{Ed}(0.0/200.0)
Resultant compression force (concrete) in (X"/Y") = F_{cc}(0.1/-215.8)

Bolt Pos.	Acting axial force [kN]	Design tension resistance [kN]	Axial capacity usage [%]	Acting shear force [kN]	Design shear resistance [kN]	Shear capacity usage [%]	Interaction [%]
1	25.4	88.2	28.8	0.0	31.3	0.0	n/r
2	25.4	88.2	28.8	0.0	31.3	0.0	n/r
3	-2.94	88.2	3.3	0.0	31.3	0.0	n/r
4	-2.93	88.2	3.3	0.0	31.3	0.0	n/r

Concrete failure verifications

Proof	Load [kN]	Capacity [kN]	Utilization [%]	Status
Pull-Out Failure	25.4	161.7	15.7	Ok
Cone failure				Ok
Covered with reinforcement:				
1) Foundation (Plain Concrete)	50.8	47.0	108.1	
2) Assigned Hanger Reinforcement	25.4	74.1	34.3	
3) Requirement of Strut and Tie Model	12.6	43.7	28.8	
Splitting Failure				Ok
Concrete decisive:				
1) Foundation (Plain Concrete)	50.8	79.1	64.2	
2)Assigned Splitting Reinforcement || X	0.0	87.4	n/r	
3)Assigned Splitting Reinforcement || Y	0.0	87.4	n/r	
Blow-Out Failure	0.0	0.0	n/r	Ok
Pry-out failure	0.0	0.0	n/r	Ok
Edge failure				Ok
Concrete decisive:				
1) -X (Left) Edge (Plain Concrete)	0.0	0.0	n/r	
2) +X (Right) Edge (Plain Concrete)	0.0	0.0	n/r	
3) +Y (Top) Edge (Plain Concrete)	0.0	0.0	n/r	
4) -Y (Bottom) Edge (Plain Concrete)	0.0	0.0	n/r	
5)Assigned Edge Reinforcement (-X)	0.0	0.0	n/r	
6)Assigned Edge Reinforcement (+X)	0.0	0.0	n/r	
7)Assigned Edge Reinforcement (+Y)	0.0	0.0	n/r	
8)Assigned Edge Reinforcement (-Y)	0.0	0.0	n/r	
Combined Resistance	$\beta_N \le 1$		64.2	Ok

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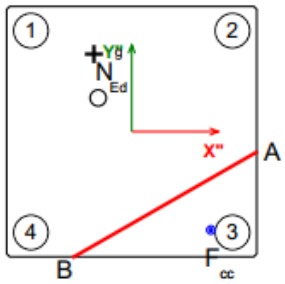
Load Case #3 : Nd=-9.5, Mxd=10.6, Myd=7.4, Vxd=0.0, Vyd=0.0

Steel Failure: Sufficient capacity **Concrete failure: Sufficient capacity**

Steel failure verification

Design value of normal compressive force in the column	$N_{c,Ed}$	-9.5	kN
Friction coefficient (between base plate and grout layer)	C_{fd}	0.2	
Joint friction resistance	$F_{f,Rd}$	1.9	kN
Resultant shear force	V_{sd}	0	kN
Resultant shear force taking account friction contribution	$V_{sd,f}$	0	kN



Neutral axis in (X"/Y") = A(250.0 / -38.8); B(-118.1 / -250.0)
Resultant tension force in (X"/Y") = N^{g}_{Ed}(-75.8/155.0)
Resultant compression force (concrete) in (X"/Y") = F_{cc}(157.1/-195.1)

Bolt Pos.	Acting axial force [kN]	Design tension resistance [kN]	Axial capacity usage [%]	Acting shear force [kN]	Design shear resistance [kN]	Shear capacity usage [%]	Interaction [%]
1	14.3	88.2	16.2	0.0	31.3	0.0	n/r
2	7.71	88.2	8.7	0.0	31.3	0.0	n/r
3	-3.82	88.2	4.3	0.0	31.3	0.0	n/r
4	2.80	88.2	3.2	0.0	31.3	0.0	n/r

Concrete failure verifications

Proof	Load [kN]	Capacity [kN]	Utilization [%]	Status
Pull-Out Failure	14.3	161.7	8.9	Ok
Cone failure				Ok
Covered with reinforcement:				
1) Foundation (Plain Concrete)	24.8	70.3	35.3	
2) Assigned Hanger Reinforcement	14.3	74.1	19.3	
3) Requirement of Strut and Tie Model	12.6	43.7	28.8	
Splitting Failure				Ok
Concrete decisive:				
1) Foundation (Plain Concrete)	24.8	118.4	21.0	
2)Assigned Splitting Reinforcement || X	0.0	87.4	n/r	
3)Assigned Splitting Reinforcement || Y	0.0	87.4	n/r	
Blow-Out Failure	0.0	0.0	n/r	Ok
Pry-out failure	0.0	0.0	n/r	Ok
Edge failure				Ok
Concrete decisive:				
1) -X (Left) Edge (Plain Concrete)	0.0	0.0	n/r	
2) +X (Right) Edge (Plain Concrete)	0.0	0.0	n/r	
3) +Y (Top) Edge (Plain Concrete)	0.0	0.0	n/r	
4) -Y (Bottom) Edge (Plain Concrete)	0.0	0.0	n/r	
5)Assigned Edge Reinforcement (-X)	0.0	0.0	n/r	
6)Assigned Edge Reinforcement (+X)	0.0	0.0	n/r	
7)Assigned Edge Reinforcement (+Y)	0.0	0.0	n/r	
8)Assigned Edge Reinforcement (-Y)	0.0	0.0	n/r	
Combined Resistance	$\beta_N \le 1$		21.0	Ok

Supplementary Bolt Reinforcement

Concrete side cover	20 mm
Concrete top cover	20 mm

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Concrete bottom cover	50 mm
Rebar Material	B500B
f_{yd}= 434.8	

Hanger reinforcement for tension force

Calculated stirrups per bolt	2 Ø10
The stirrups are located with a radial distance to the leg not further than R	75 mm
Splitting reinforcement parallel to X ($A_{sp,x}$)	302 mm²
Splitting reinforcement parallel to Y ($A_{sp,y}$)	302 mm²

Detailing of required reinforcement must be executed according to product technical manual. See also CEN/TS 1992-4-2, Figure 2

Išvados:

- Parenkami pamatų inkariniai varžtai HPM20L.
- Nepalankiausiu apkrovų derinių apkrautų inkarinių varžtų išnaudojimas 64%.

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3.5. Poliaus armavimo ir inkarinio ilgio skaičiavimai

Tikrinamas polių po įrenginiais armavimas. Poliai įrenginiams parinkti L=2,0m ir d=400mm. Armuoti 6 d12 armatūros strypais.

General

Design code: Eurocode 2
Analysis: Check section

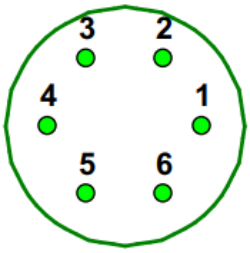
Loads: N, Mx
N>0 is compression !

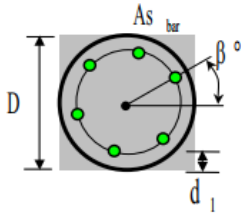
Section

Data [cm]

D =40

d1 =7





Materials

Concrete: C25/30
SSR: Rectangular

fck = 25,00 MPa
Ec = 30471,58 MPa
ecu = -3,500 o/oo

Reinforcing steel: S500
SSR: Standard

fyk = 500,00 MPa
Es = 200000,00 MPa
esu = 10,000 o/oo

Factors

Concrete: gama_c = 1,50
Steel: gama_s = 1,15

Reinforcement

Bars =6
beta = 0,00 deg
As,bar =1,13cm2

Loads

Load	N [kN]	Mx [kNm]
L1	11	24

Solve data

II order moments: No

Results: Legend

Np, Mp - Maximal permissible loads

Ratio = Applied load / Maximal permissible load

Load	Np [kN]	Mxp[kNm]	Ratio	Permissible
L1	20,70	45,16	0,531	Yes

Išvados:

- Priimtas poliaus armavimas pakankamas ir tenkina laikomosios galios sąlygas. Išnaudojimas 0,531 < 1,0.

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Skaičiuojamas inkaravimo ilgis galvenoje:

		VALUES				COMMENTS
	σ_{sd}:	500 MPa				
	f_{ck}:	30 MPa				
	γ_c:	1,5				EN1992-1-1, 2.4.2.4 (1).
	α_{ct}:	1				EN1992-1-1, 3.1.6 (2).
$0,3*(f_{ck})^{(2/3)}$	f_{ctm}:	2,89 MPa				EN1992-1-1, table 3.1.
$0,7*f_{ctm}$	$f_{ctk0,05}$:	2,02 MPa				
$\alpha_{ct}*f_{ctk0,05}/\gamma_c$	f_{ctd}:	1,35 MPa				EN1992-1-1, 3.1.6 (2).
Form of reinforcing bar:		Straigth				
		Tension bar		Compression bar		
		Poor bond conditions	Good bond conditions	Poor bond conditions	Good bond conditions	EN1992-1-1, fig. 8.2.
Coefficient realted to the quality of the bond condition and the bar during concreting:	μ_1:	0,7	1	0,7	1	EN1992-1-1, 8.4.2 (2).
Coefficient related to the bar diameter, when d≤32mm: μ_2=1,0; when d>32mm: μ_2=(132-d)/100:	μ_2:	1,00		1,00		
$2,25*\mu_1*\mu_2*f_{ctd}$	f_{bd}:	2,12 MPa	3,03 MPa	2,12 MPa	3,03 MPa	EN1992-1-1, 8.4.2 (2).
	d:	12 mm				
	α_1:	1,0		1,0		EN1992-1-1, table 8.2.
1-0,15(c.d-d)/d if 0,7≤1-0,15*(c.d-d)/d≤1,0; 0,7 if 1-0,15*(c.d-d)/d<0,7; 1,0 if 1-0,15*(cd-d)/d>1,0*	α_2:	0,700		1,0		
$\alpha_3=1-K\lambda$	α_3:	1,0		1,0		
	λ:	0				
	$\sum A_{st}$:	0				
	$\sum A_{st,min}$:	0				
	A_s:	1				
	K:	0				
	α_4:	1,0		1,0		
	α_5:	1,000		-		
	p:	0 MPa				
	c_d:	40 mm				
$(d/4)*(\sigma_{sd}/f_{bd})$	$l_{b,rqd}$:	706 mm	494 mm	706 mm	494 mm	EN1992-1-1, 8.4.3 (2).
$\alpha_1*\alpha_2*\alpha_3*\alpha_4*\alpha_5*l_{b,rqd}$	l_{bd}:	494 mm	346 mm	706 mm	494 mm	EN1992-1-1, 8.4.4 (1).
$max(0,3*l_{b,rqd}; 10*d; 100mm)$	$l_{b,min,tens.}$:	212 mm	148 mm	-	-	
$max(0,6*l_{b,rqd}; 10*d; 100mm)$	$l_{b,min,compr.}$:	-	-	424 mm	297 mm	
$max(l_{bd}; l_{b,min,tens.}; l_{b,min,compr.})$	l_{bd}:	**495 mm**	**346 mm**	**707 mm**	**495 mm**	
l_{bd}/d		**42**	**29**	**59**	**42**	
	α_6:	1,5				EN1992-1-1, table 8.3.
$\alpha_1*\alpha_2*\alpha_3*\alpha_4*\alpha_5*\alpha_6*l_{b,rqd}$	l_0:	741 mm	519 mm	1 059 mm	741 mm	EN1992-1-1, 8.7.3 (1).
$max(0,3*\alpha_6*l_{b,rqd}; 15*d; 200mm)$	$l_{0,min}$:	318 mm	222 mm	318 mm	222 mm	
$max(l_0, l_{0,min})$	l_0:	**742 mm**	**519 mm**	**1 060 mm**	**742 mm**	
l_0/d		**62**	**44**	**89**	**62**	

Išvados:

- Reikalingas minimalus inkaravimo ilgis esant parinktai d12 armatūrai: tempimui – 346mm, gniuždymui – 495mm. Priimtas inakravimo ilgis 650mm tenkina laikomosios galios sąlygas.

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4. 110 KV PORTALO PL110-11.5-9-71-1-1Ž SKAIČIAVIMAI

Portalo plieninės konstrukcijos suprojektuotos naudojant europinį plieną ir europinio tipo profilius. Naudojamas S355J2 stiprumo klasės plienas. Konstrukcijų elementai tarpusavyje jungiami virintiniais sujungimais ir varžtais. Linijiniai portalai montuojami statmenai linijai. Portalas skirtas atlaikyti laidų tempimus nuo inkarinės - galinės atramos į skirstyklą. Portalas suprojektuotas, darant prielaidą, kad atstumas portalas-inkarinė atrama neviršys – 71 m. Portalas skaičiuojamos kaip erdvinis spragotinis elementas. Konstrukcija sudaryta iš įvairaus skerspjūvio kampuočių, kurie tarpusavyje jungiamai varžtais – lankstu. Spyriai- elementai skaičiuojami nuo ašinės jėgos.

Lentelė 32. Apkrovos veikiančios portalo konstrukciją

Eil. Nr.	Apkrovos pavadinimas	Fx, kN	Fy, kN	Fz, kN	Pastaba
1.	**Nuolatinės apkrovos**				
1.1.	**Laidų apkrovos poveikis į AS pusę**				
1.1.1.	AS-243/39, d=21,8mm, g=0,01 kN/m,l_{max}=25 m į AS pusę	-	-	-0,125	
1.2.	**Laidų apkrovos poveikis į OL pusę**				
1.2.1.	AS-243/39, d=21,8mm, g=0,01 kN/m, l_{max}=37,5m į OL pusę	-	-	-0,200	
1.2.2.	TK-70, d=12 mm, g=0,0061 kN/m, l_{max}=37,5 m tik į OL pusę	-	-	-0,115	
1.3.	**Tvirtinimo armatūros (girliandų) savasis svoris**				
1.4.	Fazinių laidų tempiama girlianda	-	-	-0,500	
1.5.	Troso tvirtinimo armatūra	-	-	-0,200	
2.	**Kintamos apkrovos**				
2.1.	**Vėjas I-as raj. 24 m/s, q_{ref}=0,36 kN/m^2**				
2.2.	**Laidų poveikis į AS pusę, kai L=25 m**				
2.2.1.	Vėjo poveikis statmenai laidams	0,305	-	-	X-X
2.2.2.	Vėjo poveikis α=45^0 laidams	0,385	-	-	X-Y
2.2.3.	Vėjo poveikis nuo tempiamos girliandos	0,550	-	-	X-X
2.3.	**Laidų poveikis į OL pusę, kai L=37,5m**				
2.3.1.	Vėjo poveikis statmenai laidams	0,458	-	-	X-X
2.3.2.	Vėjo poveikis α=45^0 laidams	0,572	-	-	X-Y
2.3.3.	Vėjo poveikis nuo tempiamos girliandos	0,550	-	-	X-X
2.3.4.	Vėjo poveikis nuo troso	0,252	-	-	X-X
2.3.5.	Vėjo poveikis α=45^0 trosui	0,315	-	-	X-Y
2.4.	**Apledėjimas I-as raj. 14,5 m aukštyje RSN 156-94 (8.6 lentelė), t_{led}=6,2 mm**				
2.4.1.	**Laidų poveikis į AS pusę, kai L=25 m**				
2.4.2.	Ledo svoris nuo tempiamos girliandos	-	-	-0,245	
2.4.3.	Ledo svoris nuo laidų	-	-	-0,185	
2.4.4.	**Laidų poveikis į OL pusę, kai L=71m**				
2.4.5.	Ledo svoris nuo tempiamos girliandos	-	-	-0,245	
2.4.6.	Ledo svoris nuo laidų	-	-	-0,275	
2.4.7.	Ledo svoris nuo troso tvirtinimo armat.	-	-	-0,100	
2.4.8.	Ledo svoris nuo troso	-	-	-0,180	
2.5.	**Laidų, trosų tempimo poveikis į atrama**				
4.5.1.	Laido tempimas portalas-atrama	-	5,40	-	
4.5.2.	Laido tempimas portalas-skirstykla	-	-	-	
4.5.3	Troso tempimas portalas-atrama	-	5,90	-	

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Lentelė 33. Portalų poslinkiai

Statiniai	Pagrindo ir statinio ribiniai poslinkiai		
	santykinis nuosėdis $(\Delta s / L)_u$	posvyris i_u	vidutinės $s_{m,u}$ (skliausteliuose maksimaliosios) $s_{max,u}$ nuosėdžių reikšmės, cm
8. Elektros perdavimo oro linijų atramos:			
atskirų skirstomųjų įrenginių portalai	0,0025	0,0025	–

Pastabos.

a. Žymuo L, nustatant santykinį nuosėdį pagal 8 p., nustato atstumą tarp pamatų blokų ašių horizontalios jėgos veikimo kryptimi, o atramoms su atotampomis – atstumą tarp suspausto pamato ir inkaro ašių.

b. Kai pagrindo grunto sluoksniai horizontalūs (nuolydis ne didesnis negu 0,1) ir vienodo storio, ribines nuosėdžių vidutines ir maksimaliąsias vertes galima didinti 20 %.

Lentelė 41. Vėjo apkrovų į portalo konstrukciją suvestinė lentelė

Vėjo kryptis	**Veikiamo elemento pavadinimas**	**Vėjo rajonas**	**K-jos aukštis, m**	**Vėjo apkrova į išorinį paviršių, kN/m²**	**Vėjo apkrova į vidinį paviršių, kN/m²**
X-X	1 dalis (apatinė dalis)	I-as	5,65	0,983	0,393
	2 dalis (vidurinė dalis)	I-as	11,50	0,999	0,399
	3 dalis (traversa)	I-as	11,75	-	-
	4 dalis (viršutinė dalis)	I-as	14,50	1,076	0,430
Y-Y	1 dalis (apatinė dalis)	I-as	5,65	0,983	0,393
	2 dalis (vidurinė dalis)	I-as	11,50	0,999	0,399
	3 dalis (traversa)	I-as	11,75	1,488	0,595
	4 dalis (viršutinė dalis)	I-as	14,50	1,076	0,430
X-Y	1 dalis (apatinė dalis)	I-as	5,65	1,174	0,469
	2 dalis (vidurinė dalis)	I-as	11,50	1,208	0,483
	3 dalis (traversa)	I-as	11,75	1,760	0,704
	4 dalis (viršutinė dalis)	I-as	14,50	1,296	0,518

Detalūs vėjo apkrovų skaičiavimai pateikti 5 skyriuje „Portalo vėjo apkrovos skaičiavimas“.

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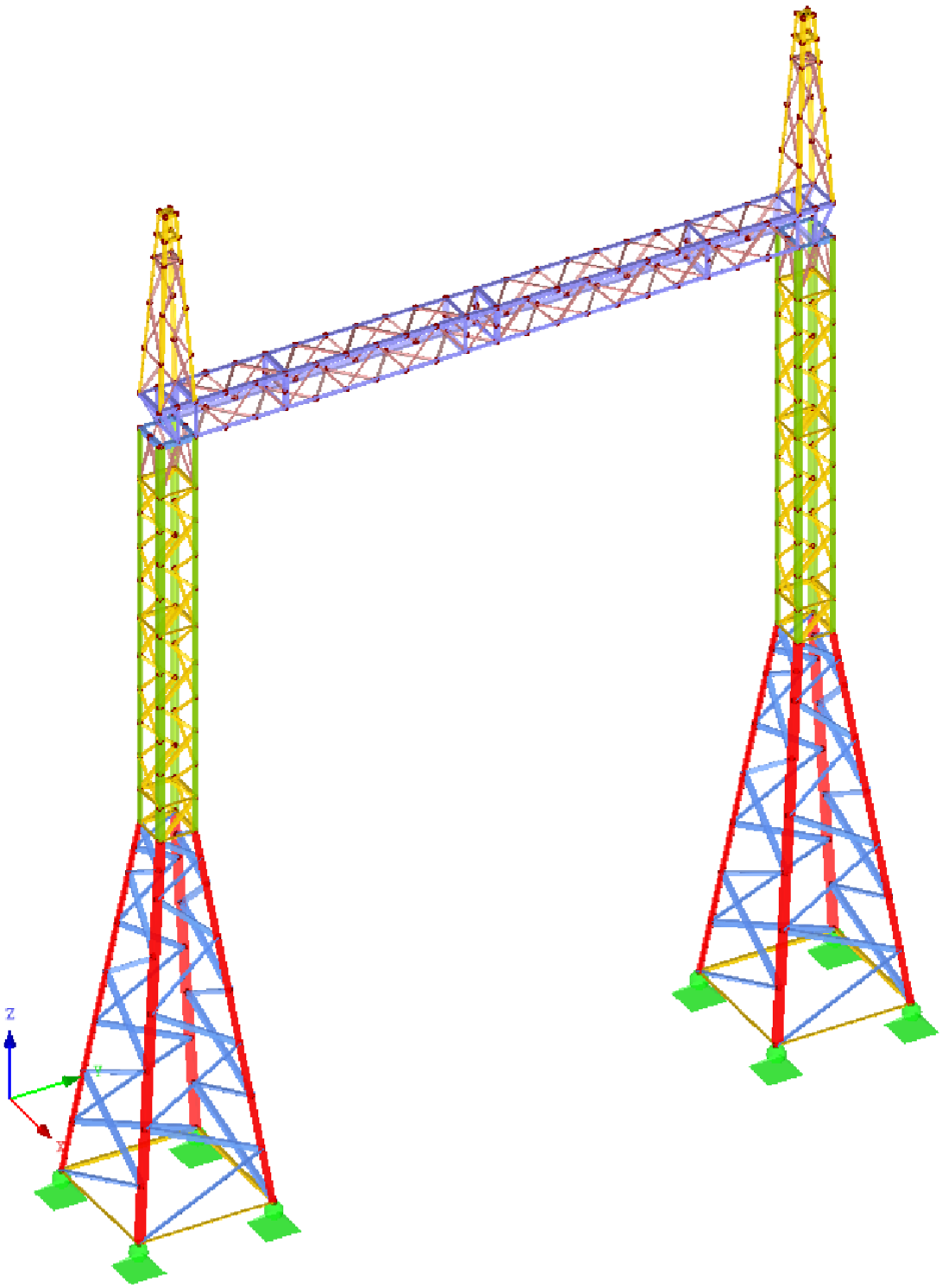
4.1. Detalūs portalo konstrukcijų skaičiavimai

RF-STEEL EC3 CA1 Isometric



Model - General Data

	General	Model name	:	Portalas Nemencine
		Project name	:	Portalas Nemencine
		Project description	:	110kV placiabazis
		Type of model	:	3D

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Model - General Data

Positive direction of global axis Z	:	Upward
Classification of load cases and combinations	:	According to Standard: EN 1990 National Annex: CEN - EU
x Automatically create combinations	:	x Load Combinations

Options	-	RF-FORM-FINDING - Find initial equilibrium shapes of membrane and cable structures
	-	RF-CUTTING-PATTERN
	-	Piping analysis
	-	Use CQC Rule
	-	Enable CAD/BIM model

Standard Gravity

g : 10.00 m/s²

FE Mesh Settings

General	Target length of finite elements	l_{FE}	:	0.500 m
	Maximum distance between a node and a line to integrate it into the line	ε	:	0.001 m
	Maximum number of mesh nodes (in thousands)		:	500
Members	Number of divisions of members with cable, elastic foundation, taper, or plastic characteristic		:	10
	x Activate member divisions for large deformation or post-critical analysis			
	x Use division for members with node lying on them			
Surfaces	Maximum ratio of FE rectangle diagonals	Δ_D	:	1.800
	Maximum out-of-plane inclination of two finite elements	α	:	0.50 °
	Shape direction of finite elements		:	Triangles and quadrangles x Same squares where possible

1.3 Materials

Matl. No.	Modulus E [kN/cm²]	Modulus G [kN/cm²]	Poisson's Ratio ν [-]	Spec. Weight γ [kN/m³]	Coeff. of Th. Exp. α [1/°C]	Partial Factor γ_M [-]	Material Model
1	Steel S 355 J2 | DIN EN 10025-2:2005-04						
	21000.00	8076.92	0.300	78.50	1.20E-05	1.10	Isotropic Linear Elastic
	S355J2						

1.7 Nodal Supports

Support No.	Nodes No.	Axis System	Column in Z	Support Conditions u_X	u_Y	u_Z	φ_X	φ_Y	φ_Z
1	36-39,72,74,75,108	Global X,Y,Z	-	x	x	x	-	-	x

1.13 Cross-Sections

Section No.	Matl. No.	J [cm⁴] / A [cm²]	I_u [cm⁴] / A_u [cm²]	I_v [cm⁴] / A_v [cm²]	Principal Axes α [°]	Rotation α' [°]	Overall Dimensions [mm] Width b	Height h
1	L 70x70x7 | EN 10056-1:1998							
	1	1.52	67.10	17.50	-45.00	0.00	70.0	70.0
		9.40	3.96	3.87				
	L70*7							
2	L 50x50x5 | EN 10056-1:1998							
	1	0.40	17.40	4.55	-45.00	0.00	50.0	50.0
		4.80	2.01	1.97				
	L50*5							
3	L 35x35x5 | ArcelorMittal (EN 10056-1:2017)							
	1	0.26	5.64	1.49	-45.00	0.00	35.0	35.0
		3.28	1.47	1.37				

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1.13 Cross-Sections

Section No.	Matl. No.	J [cm⁴] A [cm²]	I_u [cm⁴] A_u [cm²]	I_v [cm⁴] A_v [cm²]	Principal Axes α [°]	Rotation α' [°]	Overall Dimensions [mm] Width b	Height h
	L35*5							
4	L 90x90x7 | EN 10056-1:1998							
	1	1.98	147.00	38.30	-45.00	0.00	90.0	90.0
		12.20	5.08	5.01				
	L90*90*7							
5	L 100x100x8 | EN 10056-1:1998							
	1	3.28	230.00	59.90	-45.00	0.00	100.0	100.0
		15.50	6.46	6.36				
	L100*8							
6	L 65x65x7 | EN 10056-1:1998							
	1	1.41	53.00	13.80	-45.00	0.00	65.0	65.0
		8.70	3.68	3.58				
	L65*7							

1.17 Members

Mbr. No.	Line No.	Member	Rotation Type	Rotation β [°]	Cross-Section Start	Cross-Section End	Hinge No. Start	Hinge No. End	Ecc. No.	Div. No.	Length L [m]	
1	1	Beam	Angle	270.00	1	1	-	-	-	-	1.423	
2	2	Beam	Angle	270.00	1	1	-	-	-	-	1.777	
3	3	Beam	Angle	270.00	1	1	-	-	-	-	1.597	
4	4	Beam	Angle	270.00	1	1	-	-	-	-	1.257	
5	5	Beam	Angle	270.00	1	1	-	-	-	-	1.103	
6	6	Beam	Angle	270.00	1	1	-	-	-	-	0.753	
7	7	Beam	Angle	270.00	1	1	-	-	-	-	0.668	
8	8	Beam	Angle	360.00	2	2	-	-	-	-	0.700	XZ
9	9	Beam	Angle	360.00	2	2	-	-	-	-	0.700	XZ
10	10	Beam	Angle	0.00	2	2	-	-	-	-	0.700	XZ
11	11	Beam	Angle	360.00	2	2	-	-	-	-	0.700	XZ
12	12	Beam	Angle	360.00	2	2	-	-	-	-	0.743	XZ
13	13	Beam	Angle	0.00	2	2	-	-	-	-	0.743	XZ
14	14	Beam	Angle	0.00	2	2	-	-	-	-	0.700	XZ
15	15	Beam	Angle	0.00	2	2	-	-	-	-	0.700	XZ
16	16	Beam	Angle	0.00	2	2	-	-	-	-	0.700	XZ
17	17	Beam	Angle	270.00	2	2	-	-	-	-	0.500	X
18	18	Beam	Angle	270.00	3	3	-	-	-	-	0.786	XZ
19	19	Beam	Angle	270.00	3	3	-	-	-	-	0.786	XZ
20	20	Beam	Angle	270.00	2	2	-	-	-	-	0.500	X
21	21	Beam	Angle	270.00	3	3	-	-	-	-	0.816	
22	22	Beam	Angle	270.00	3	3	-	-	-	-	0.733	
23	23	Beam	Angle	270.00	4	4	-	-	-	-	0.490	Z
24	24	Beam	Angle	0.00	4	4	-	-	-	-	0.490	Z
25	25	Beam	Angle	180.00	4	4	-	-	-	-	0.490	Z
26	26	Beam	Angle	90.00	4	4	-	-	-	-	0.490	Z
27	413	Beam	Angle	270.00	2	2	-	-	-	-	0.500	X
28	417	Beam	Angle	270.00	2	2	-	-	-	-	0.500	X
29	425	Beam	Angle	270.00	4	4	-	-	-	-	0.550	Z
30	30	Beam	Angle	315.00	5	5	-	-	-	-	5.344	
31	31	Beam	Angle	270.00	1	1	-	-	-	-	1.777	
32	32	Beam	Angle	315.00	2	2	-	-	-	-	0.678	
33	426	Beam	Angle	0.00	4	4	-	-	-	-	0.550	Z
34	427	Beam	Angle	180.00	4	4	-	-	-	-	0.550	Z
35	428	Beam	Angle	90.00	4	4	-	-	-	-	0.550	Z
36	429	Beam	Angle	90.00	4	4	-	-	-	-	0.550	Z
37	37	Beam	Angle	270.00	1	1	-	-	-	-	1.961	
38	38	Beam	Angle	270.00	2	2	-	-	-	-	1.910	Y
39	39	Beam	Angle	315.00	2	2	-	-	-	-	0.678	
40	40	Beam	Angle	315.00	2	2	-	-	-	-	0.678	
41	41	Beam	Angle	270.00	1	1	-	-	-	-	1.597	
42	42	Beam	Angle	315.00	2	2	-	-	-	-	0.678	
43	43	Beam	Angle	270.00	1	1	-	-	-	-	1.423	
44	44	Beam	Angle	360.00	2	2	-	-	-	-	0.700	YZ
45	45	Beam	Angle	360.00	2	2	-	-	-	-	0.700	YZ
46	46	Beam	Angle	360.00	2	2	-	-	-	-	0.700	YZ
47	47	Beam	Angle	270.00	1	1	-	-	-	-	0.668	

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..17 Members

Mbr. No.	Line No.	Member	Rotation Type	Rotation β [°]	Cross-Section Start	Cross-Section End	Hinge No. Start	Hinge No. End	Ecc. No.	Div. No.	Length L [m]	
48	48	Beam	Angle	270.00	1	1	-	-	-	-	0.753	
49	49	Beam	Angle	270.00	1	1	-	-	-	-	1.103	
50	50	Beam	Angle	270.00	1	1	-	-	-	-	1.257	
51	51	Beam	Angle	0.00	2	2	-	-	-	-	0.700	YZ
52	52	Beam	Angle	0.00	1	1	-	-	-	-	0.500	X
53	53	Beam	Angle	0.00	2	2	-	-	-	-	0.700	YZ
54	54	Beam	Angle	0.00	2	2	-	-	-	-	0.700	YZ
55	55	Beam	Angle	0.00	2	2	-	-	-	-	0.700	YZ
56	56	Beam	Angle	0.00	2	2	-	-	-	-	0.743	YZ
57	57	Beam	Angle	360.00	2	2	-	-	-	-	0.743	YZ
58	58	Beam	Angle	360.00	2	2	-	-	-	-	0.700	YZ
59	59	Beam	Angle	0.00	1	1	-	-	-	-	0.250	Y
60	60	Beam	Angle	315.00	5	5	-	-	-	-	5.344	
61	61	Beam	Angle	315.00	5	5	-	-	-	-	5.344	
62	62	Beam	Angle	270.00	2	2	-	-	-	-	1.910	Y
63	63	Beam	Angle	270.00	1	1	-	-	-	-	1.961	
64	64	Beam	Angle	270.00	1	1	-	-	-	-	1.777	
65	65	Beam	Angle	270.00	1	1	-	-	-	-	1.423	
66	66	Beam	Angle	270.00	1	1	-	-	-	-	1.257	
67	67	Beam	Angle	270.00	1	1	-	-	-	-	1.103	
68	68	Beam	Angle	360.00	2	2	-	-	-	-	0.700	YZ
69	69	Beam	Angle	270.00	1	1	-	-	-	-	0.668	
70	70	Beam	Angle	360.00	2	2	-	-	-	-	0.700	YZ
71	71	Beam	Angle	270.00	1	1	-	-	-	-	0.753	
72	72	Beam	Angle	360.00	2	2	-	-	-	-	0.700	XZ
73	73	Beam	Angle	360.00	2	2	-	-	-	-	0.700	YZ
74	74	Beam	Angle	0.00	2	2	-	-	-	-	0.700	YZ
75	75	Beam	Angle	360.00	2	2	-	-	-	-	0.700	YZ
76	76	Beam	Angle	0.00	2	2	-	-	-	-	0.743	YZ
77	77	Beam	Angle	0.00	2	2	-	-	-	-	0.700	YZ
78	78	Beam	Angle	270.00	1	1	-	-	-	-	1.597	
79	79	Beam	Angle	0.00	2	2	-	-	-	-	0.700	YZ
80	80	Beam	Angle	270.00	3	3	-	-	-	-	0.785	YZ
81	81	Beam	Angle	270.00	3	3	-	-	-	-	0.787	YZ
82	82	Beam	Angle	270.00	2	2	-	-	-	-	0.500	Y
83	83	Beam	Angle	270.00	2	2	-	-	-	-	0.500	Y
84	84	Beam	Angle	270.00	3	3	-	-	-	-	0.733	
85	85	Beam	Angle	315.00	2	2	-	-	-	-	0.678	
86	86	Beam	Angle	315.00	2	2	-	-	-	-	0.678	
87	87	Beam	Angle	270.00	2	2	-	-	-	-	0.500	Y
88	88	Beam	Angle	270.00	3	3	-	-	-	-	0.816	
89	89	Beam	Angle	270.00	3	3	-	-	-	-	0.786	YZ
90	90	Beam	Angle	315.00	5	5	-	-	-	-	5.344	
91	91	Beam	Angle	270.00	3	3	-	-	-	-	0.786	YZ
92	92	Beam	Angle	270.00	2	2	-	-	-	-	0.500	Y
93	93	Beam	Angle	0.00	1	1	-	-	-	-	0.500	X
94	288	Beam	Angle	270.00	6	6	-	-	-	-	0.250	Y
95	95	Beam	Angle	315.00	2	2	-	-	-	-	0.678	
96	96	Beam	Angle	270.00	2	2	-	-	-	-	1.910	X
98	98	Beam	Angle	315.00	2	2	-	-	-	-	0.678	
99	99	Beam	Angle	315.00	2	2	-	-	-	-	0.339	
100	100	Beam	Angle	270.00	1	1	-	-	-	-	1.961	
101	101	Beam	Angle	315.00	2	2	-	-	-	-	0.678	
102	102	Beam	Angle	315.00	2	2	-	-	-	-	0.678	
103	103	Beam	Angle	315.00	2	2	-	-	-	-	0.339	
104	104	Beam	Angle	315.00	2	2	-	-	-	-	0.339	
105	105	Beam	Angle	315.00	2	2	-	-	-	-	0.678	
106	106	Beam	Angle	315.00	2	2	-	-	-	-	0.678	
107	107	Beam	Angle	270.00	3	3	-	-	-	-	0.770	
108	165	Beam	Angle	270.00	2	2	-	-	-	-	0.500	Y
109	414	Beam	Angle	270.00	2	2	-	-	-	-	0.500	Y
110	418	Beam	Angle	270.00	2	2	-	-	-	-	0.500	Y
111	419	Beam	Angle	270.00	2	2	-	-	-	-	0.500	Y
112	112	Beam	Angle	270.00	3	3	-	-	-	-	0.733	
113	113	Beam	Angle	360.00	2	2	-	-	-	-	0.743	YZ

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..17 Members

Mbr. No.	Line No.	Member	Rotation Type	Rotation β [°]	Cross-Section Start	Cross-Section End	Hinge No. Start	Hinge No. End	Ecc. No.	Div. No.	Length L [m]	
114	114	Beam	Angle	270.00	3	3	-	-	-	-	0.817	
115	115	Beam	Angle	270.00	2	2	-	-	-	-	1.910	X
116	116	Beam	Angle	270.00	1	1	-	-	-	-	0.668	
117	117	Beam	Angle	270.00	3	3	-	-	-	-	0.770	
118	118	Beam	Angle	270.00	1	1	-	-	-	-	1.103	
119	119	Beam	Angle	270.00	1	1	-	-	-	-	1.257	
120	120	Beam	Angle	270.00	1	1	-	-	-	-	1.423	
121	121	Beam	Angle	270.00	1	1	-	-	-	-	1.597	
122	122	Beam	Angle	270.00	1	1	-	-	-	-	1.777	
123	123	Beam	Angle	270.00	1	1	-	-	-	-	1.961	
124	124	Beam	Angle	270.00	1	1	-	-	-	-	0.753	
125	125	Beam	Angle	315.00	5	5	-	-	-	-	5.344	
126	126	Beam	Angle	270.00	2	2	-	-	-	-	1.910	X
127	127	Beam	Angle	270.00	1	1	-	-	-	-	1.961	
128	128	Beam	Angle	270.00	1	1	-	-	-	-	1.777	
129	129	Beam	Angle	270.00	1	1	-	-	-	-	1.597	
130	130	Beam	Angle	270.00	1	1	-	-	-	-	1.423	
131	131	Beam	Angle	270.00	1	1	-	-	-	-	1.103	
132	132	Beam	Angle	270.00	1	1	-	-	-	-	0.753	
133	133	Beam	Angle	270.00	1	1	-	-	-	-	0.668	
134	134	Beam	Angle	360.00	2	2	-	-	-	-	0.700	XZ
135	135	Beam	Angle	360.00	2	2	-	-	-	-	0.700	XZ
136	136	Beam	Angle	360.00	2	2	-	-	-	-	0.700	XZ
137	137	Beam	Angle	0.00	2	2	-	-	-	-	0.700	XZ
138	138	Beam	Angle	360.00	2	2	-	-	-	-	0.700	XZ
139	139	Beam	Angle	360.00	2	2	-	-	-	-	0.743	XZ
140	140	Beam	Angle	0.00	2	2	-	-	-	-	0.743	XZ
141	141	Beam	Angle	0.00	2	2	-	-	-	-	0.700	XZ
142	142	Beam	Angle	0.00	2	2	-	-	-	-	0.700	XZ
143	143	Beam	Angle	270.00	3	3	-	-	-	-	0.786	XZ
144	144	Beam	Angle	270.00	2	2	-	-	-	-	0.500	X
145	145	Beam	Angle	270.00	3	3	-	-	-	-	0.786	XZ
146	146	Beam	Angle	270.00	2	2	-	-	-	-	0.500	X
147	147	Beam	Angle	270.00	3	3	-	-	-	-	0.816	
148	148	Beam	Angle	270.00	3	3	-	-	-	-	0.733	
149	149	Beam	Angle	0.00	2	2	-	-	-	-	0.700	XZ
150	150	Beam	Angle	0.00	2	2	-	-	-	-	0.743	XZ
151	151	Beam	Angle	360.00	2	2	-	-	-	-	0.743	XZ
152	152	Beam	Angle	360.00	2	2	-	-	-	-	0.700	XZ
153	153	Beam	Angle	0.00	2	2	-	-	-	-	0.700	XZ
154	154	Beam	Angle	360.00	2	2	-	-	-	-	0.700	XZ
155	155	Beam	Angle	360.00	2	2	-	-	-	-	0.700	XZ
156	156	Beam	Angle	0.00	2	2	-	-	-	-	0.700	XZ
157	157	Beam	Angle	270.00	3	3	-	-	-	-	0.733	
158	158	Beam	Angle	360.00	2	2	-	-	-	-	0.700	XZ
159	159	Beam	Angle	270.00	3	3	-	-	-	-	0.786	XZ
160	160	Beam	Angle	270.00	3	3	-	-	-	-	0.816	
161	161	Beam	Angle	0.00	2	2	-	-	-	-	0.700	XZ
162	162	Beam	Angle	270.00	2	2	-	-	-	-	0.500	X
163	163	Beam	Angle	0.00	2	2	-	-	-	-	0.700	XZ
164	164	Beam	Angle	270.00	2	2	-	-	-	-	0.500	X
165	27	Beam	Angle	315.00	5	5	-	-	-	-	5.344	
166	166	Beam	Angle	270.00	3	3	-	-	-	-	0.786	XZ
167	29	Beam	Angle	315.00	5	5	-	-	-	-	5.344	
168	168	Beam	Angle	270.00	1	1	-	-	-	-	1.103	
169	169	Beam	Angle	270.00	1	1	-	-	-	-	1.257	
170	170	Beam	Angle	270.00	1	1	-	-	-	-	1.423	
171	171	Beam	Angle	270.00	1	1	-	-	-	-	1.597	
172	172	Beam	Angle	270.00	1	1	-	-	-	-	1.777	
173	173	Beam	Angle	270.00	1	1	-	-	-	-	1.961	
174	174	Beam	Angle	270.00	2	2	-	-	-	-	1.910	Y
175	175	Beam	Angle	270.00	1	1	-	-	-	-	0.753	
176	176	Beam	Angle	0.00	2	2	-	-	-	-	0.743	YZ
177	177	Beam	Angle	360.00	2	2	-	-	-	-	0.700	YZ
178	178	Beam	Angle	0.00	2	2	-	-	-	-	0.700	YZ

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..17 Members

Mbr. No.	Line No.	Member	Rotation Type	Rotation β [°]	Cross-Section Start	Cross-Section End	Hinge No. Start	Hinge No. End	Ecc. No.	Div. No.	Length L [m]	
179	179	Beam	Angle	360.00	2	2	-	-	-	-	0.700	YZ
180	180	Beam	Angle	360.00	2	2	-	-	-	-	0.700	YZ
181	181	Beam	Angle	360.00	2	2	-	-	-	-	0.700	YZ
182	182	Beam	Angle	270.00	1	1	-	-	-	-	0.668	
183	183	Beam	Angle	360.00	2	2	-	-	-	-	0.743	YZ
184	184	Beam	Angle	0.00	2	2	-	-	-	-	0.700	YZ
185	185	Beam	Angle	0.00	2	2	-	-	-	-	0.700	YZ
186	186	Beam	Angle	0.00	2	2	-	-	-	-	0.700	YZ
187	187	Beam	Angle	270.00	1	1	-	-	-	-	1.257	
188	188	Beam	Angle	270.00	2	2	-	-	-	-	0.500	Y
189	189	Beam	Angle	270.00	3	3	-	-	-	-	0.786	YZ
190	190	Beam	Angle	270.00	3	3	-	-	-	-	0.786	YZ
191	191	Beam	Angle	270.00	2	2	-	-	-	-	0.500	Y
192	192	Beam	Angle	270.00	3	3	-	-	-	-	0.814	
193	193	Beam	Angle	270.00	3	3	-	-	-	-	0.733	
194	28	Beam	Angle	315.00	5	5	-	-	-	-	5.344	
195	195	Beam	Angle	270.00	2	2	-	-	-	-	1.910	X
196	196	Beam	Angle	270.00	1	1	-	-	-	-	1.961	
197	197	Beam	Angle	270.00	1	1	-	-	-	-	1.777	
198	198	Beam	Angle	270.00	1	1	-	-	-	-	1.597	
199	199	Beam	Angle	270.00	1	1	-	-	-	-	1.423	
200	200	Beam	Angle	270.00	1	1	-	-	-	-	1.257	
201	201	Beam	Angle	270.00	1	1	-	-	-	-	1.103	
202	202	Beam	Angle	270.00	1	1	-	-	-	-	0.753	
203	203	Beam	Angle	270.00	1	1	-	-	-	-	0.668	
204	204	Beam	Angle	360.00	2	2	-	-	-	-	0.700	XZ
205	205	Beam	Angle	360.00	2	2	-	-	-	-	0.700	XZ
206	206	Beam	Angle	360.00	2	2	-	-	-	-	0.700	XZ
207	207	Beam	Angle	0.00	2	2	-	-	-	-	0.700	XZ
208	208	Beam	Angle	360.00	2	2	-	-	-	-	0.700	XZ
209	209	Beam	Angle	360.00	2	2	-	-	-	-	0.743	XZ
210	210	Beam	Angle	0.00	2	2	-	-	-	-	0.743	XZ
211	211	Beam	Angle	0.00	2	2	-	-	-	-	0.700	XZ
212	212	Beam	Angle	0.00	2	2	-	-	-	-	0.700	XZ
213	213	Beam	Angle	270.00	2	2	-	-	-	-	0.500	X
214	214	Beam	Angle	0.00	2	2	-	-	-	-	0.700	XZ
215	215	Beam	Angle	270.00	3	3	-	-	-	-	0.786	XZ
216	216	Beam	Angle	270.00	3	3	-	-	-	-	0.786	XZ
217	217	Beam	Angle	270.00	2	2	-	-	-	-	0.500	X
218	218	Beam	Angle	270.00	3	3	-	-	-	-	0.816	
219	219	Beam	Angle	270.00	3	3	-	-	-	-	0.733	
220	220	Beam	Angle	0.00	2	2	-	-	-	-	0.700	YZ
221	221	Beam	Angle	270.00	3	3	-	-	-	-	0.770	
222	222	Beam	Angle	270.00	3	3	-	-	-	-	0.770	
223	223	Beam	Angle	270.00	3	3	-	-	-	-	0.770	
224	224	Beam	Angle	270.00	3	3	-	-	-	-	0.770	
225	225	Beam	Angle	270.00	3	3	-	-	-	-	0.770	
226	226	Beam	Angle	180.00	3	3	-	-	-	-	0.500	X
227	227	Beam	Angle	180.00	3	3	-	-	-	-	0.500	X
228	228	Beam	Angle	180.00	3	3	-	-	-	-	0.500	X
229	229	Beam	Angle	180.00	3	3	-	-	-	-	0.500	X
230	230	Beam	Angle	90.00	6	6	-	-	-	-	0.560	YZ
231	231	Beam	Angle	90.00	6	6	-	-	-	-	0.500	YZ
232	232	Beam	Angle	180.23	6	6	-	-	-	-	0.500	YZ
233	233	Beam	Angle	0.00	6	6	-	-	-	-	0.500	X
234	234	Beam	Angle	270.00	6	6	-	-	-	-	0.500	X
235	235	Beam	Angle	0.00	3	3	-	-	-	-	0.656	XY
236	236	Beam	Angle	360.00	3	3	-	-	-	-	0.656	XY
237	237	Beam	Angle	0.00	3	3	-	-	-	-	0.656	XY
238	238	Beam	Angle	360.00	3	3	-	-	-	-	0.656	XY
239	239	Beam	Angle	0.00	3	3	-	-	-	-	0.656	XY
240	240	Beam	Angle	360.00	3	3	-	-	-	-	0.656	XY
241	241	Beam	Angle	0.00	3	3	-	-	-	-	0.656	XY
242	242	Beam	Angle	360.00	3	3	-	-	-	-	0.656	XY
243	243	Beam	Angle	0.00	3	3	-	-	-	-	0.656	XY

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Mbr. No.	Line No.	Member	Rotation Type	Rotation β [°]	Cross-Section Start	Cross-Section End	Hinge No. Start	Hinge No. End	Ecc. No.	Div. No.	Length L [m]	
244	244	Beam	Angle	0.00	3	3	-	-	-	-	0.656	XY
245	245	Beam	Angle	180.00	6	6	-	-	-	-	0.500	Z
246	246	Beam	Angle	90.00	6	6	-	-	-	-	0.500	Z
247	247	Beam	Angle	270.00	3	3	-	-	-	-	0.656	YZ
248	248	Beam	Angle	270.00	3	3	-	-	-	-	0.656	YZ
249	249	Beam	Angle	270.00	3	3	-	-	-	-	0.656	YZ
250	250	Beam	Angle	270.00	3	3	-	-	-	-	0.656	YZ
251	251	Beam	Angle	270.00	3	3	-	-	-	-	0.656	YZ
252	252	Beam	Angle	270.00	3	3	-	-	-	-	0.656	YZ
253	253	Beam	Angle	270.00	3	3	-	-	-	-	0.656	YZ
254	254	Beam	Angle	270.00	3	3	-	-	-	-	0.656	YZ
255	255	Beam	Angle	270.00	3	3	-	-	-	-	0.656	YZ
256	256	Beam	Angle	270.00	3	3	-	-	-	-	0.655	YZ
257	257	Beam	Angle	180.00	6	6	-	-	-	-	0.500	X
258	258	Beam	Angle	90.00	6	6	-	-	-	-	0.500	X
259	259	Beam	Angle	180.00	3	3	-	-	-	-	0.656	XY
260	260	Beam	Angle	180.00	3	3	-	-	-	-	0.656	XY
261	261	Beam	Angle	180.00	3	3	-	-	-	-	0.656	XY
262	262	Beam	Angle	180.00	3	3	-	-	-	-	0.656	XY
263	263	Beam	Angle	180.00	3	3	-	-	-	-	0.656	XY
264	264	Beam	Angle	180.00	3	3	-	-	-	-	0.656	XY
265	265	Beam	Angle	180.00	3	3	-	-	-	-	0.656	XY
266	266	Beam	Angle	180.00	3	3	-	-	-	-	0.656	XY
267	267	Beam	Angle	180.00	3	3	-	-	-	-	0.656	XY
268	268	Beam	Angle	180.00	3	3	-	-	-	-	0.655	XY
269	269	Beam	Angle	180.00	6	6	-	-	-	-	0.500	Z
270	270	Beam	Angle	90.00	6	6	-	-	-	-	0.500	Z
271	271	Beam	Angle	90.00	3	3	-	-	-	-	0.656	YZ
272	272	Beam	Angle	90.00	3	3	-	-	-	-	0.656	YZ
273	273	Beam	Angle	90.00	3	3	-	-	-	-	0.656	YZ
274	274	Beam	Angle	90.00	3	3	-	-	-	-	0.656	YZ
275	275	Beam	Angle	90.00	3	3	-	-	-	-	0.656	YZ
276	276	Beam	Angle	90.00	3	3	-	-	-	-	0.656	YZ
277	277	Beam	Angle	90.00	3	3	-	-	-	-	0.656	YZ
278	278	Beam	Angle	90.00	3	3	-	-	-	-	0.656	YZ
279	279	Beam	Angle	90.00	3	3	-	-	-	-	0.656	YZ
280	280	Beam	Angle	90.00	3	3	-	-	-	-	0.656	YZ
281	281	Beam	Angle	90.00	6	6	-	-	-	-	0.500	YZ
282	282	Beam	Angle	270.00	6	6	-	-	-	-	0.500	X
283	283	Beam	Angle	360.00	6	6	-	-	-	-	0.500	X
284	284	Beam	Angle	90.00	6	6	-	-	-	-	0.560	YZ
285	285	Beam	Angle	270.00	6	6	-	-	-	-	0.500	X
286	286	Beam	Angle	180.00	6	6	-	-	-	-	0.500	X
287	287	Beam	Angle	90.00	6	6	-	-	-	-	0.500	YZ
288	290	Beam	Angle	360.00	6	6	-	-	-	-	0.250	Y
289	94	Beam	Angle	0.00	6	6	-	-	-	-	0.250	Y
290	494	Beam	Angle	270.00	6	6	-	-	-	-	0.850	Y
291	377	Beam	Angle	315.00	2	2	-	-	-	-	0.339	
292	292	Beam	Angle	90.00	6	6	-	-	-	-	0.560	YZ
293	293	Beam	Angle	270.00	6	6	-	-	-	-	0.500	Z
294	294	Beam	Angle	180.23	6	6	-	-	-	-	0.500	YZ
295	295	Beam	Angle	0.00	6	6	-	-	-	-	0.500	X
296	296	Beam	Angle	270.00	6	6	-	-	-	-	0.500	X
297	297	Beam	Angle	0.00	3	3	-	-	-	-	0.656	XY
298	298	Beam	Angle	360.00	3	3	-	-	-	-	0.656	XY
299	299	Beam	Angle	0.00	3	3	-	-	-	-	0.656	XY
300	300	Beam	Angle	360.00	3	3	-	-	-	-	0.656	XY
301	301	Beam	Angle	0.00	3	3	-	-	-	-	0.656	XY
302	302	Beam	Angle	360.00	3	3	-	-	-	-	0.656	XY
303	303	Beam	Angle	0.00	3	3	-	-	-	-	0.656	XY
304	304	Beam	Angle	360.00	3	3	-	-	-	-	0.656	XY
305	305	Beam	Angle	0.00	3	3	-	-	-	-	0.656	XY
306	306	Beam	Angle	0.00	3	3	-	-	-	-	0.656	XY
307	307	Beam	Angle	360.00	6	6	-	-	-	-	0.500	Z
308	308	Beam	Angle	270.00	6	6	-	-	-	-	0.500	Z

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Mbr. No.	Line No.	Member	Rotation Type	Rotation β [°]	Cross-Section Start	Cross-Section End	Hinge No. Start	Hinge No. End	Ecc. No.	Div. No.	Length L [m]	
309	309	Beam	Angle	270.00	3	3	-	-	-	-	0.656	YZ
310	310	Beam	Angle	270.00	3	3	-	-	-	-	0.656	YZ
311	311	Beam	Angle	270.00	3	3	-	-	-	-	0.656	YZ
312	312	Beam	Angle	270.00	3	3	-	-	-	-	0.656	YZ
313	313	Beam	Angle	270.00	3	3	-	-	-	-	0.656	YZ
314	314	Beam	Angle	270.00	3	3	-	-	-	-	0.656	YZ
315	315	Beam	Angle	270.00	3	3	-	-	-	-	0.656	YZ
316	316	Beam	Angle	270.00	3	3	-	-	-	-	0.656	YZ
317	317	Beam	Angle	270.00	3	3	-	-	-	-	0.656	YZ
318	318	Beam	Angle	270.00	3	3	-	-	-	-	0.656	YZ
319	319	Beam	Angle	180.00	6	6	-	-	-	-	0.500	X
320	320	Beam	Angle	90.00	6	6	-	-	-	-	0.500	X
321	321	Beam	Angle	180.00	3	3	-	-	-	-	0.656	XY
322	322	Beam	Angle	180.00	3	3	-	-	-	-	0.656	XY
323	323	Beam	Angle	180.00	3	3	-	-	-	-	0.656	XY
324	324	Beam	Angle	180.00	3	3	-	-	-	-	0.656	XY
325	325	Beam	Angle	180.00	3	3	-	-	-	-	0.656	XY
326	326	Beam	Angle	180.00	3	3	-	-	-	-	0.656	XY
327	327	Beam	Angle	180.00	3	3	-	-	-	-	0.656	XY
328	328	Beam	Angle	180.00	3	3	-	-	-	-	0.656	XY
329	329	Beam	Angle	180.00	3	3	-	-	-	-	0.656	XY
330	330	Beam	Angle	180.00	3	3	-	-	-	-	0.656	XY
331	331	Beam	Angle	0.00	6	6	-	-	-	-	0.500	Z
332	332	Beam	Angle	270.00	6	6	-	-	-	-	0.500	Z
333	333	Beam	Angle	90.00	3	3	-	-	-	-	0.656	YZ
334	334	Beam	Angle	90.00	3	3	-	-	-	-	0.656	YZ
335	335	Beam	Angle	90.00	3	3	-	-	-	-	0.656	YZ
336	336	Beam	Angle	90.00	3	3	-	-	-	-	0.656	YZ
337	337	Beam	Angle	90.00	3	3	-	-	-	-	0.656	YZ
338	338	Beam	Angle	90.00	3	3	-	-	-	-	0.656	YZ
339	339	Beam	Angle	90.00	3	3	-	-	-	-	0.656	YZ
340	340	Beam	Angle	90.00	3	3	-	-	-	-	0.656	YZ
341	341	Beam	Angle	90.00	3	3	-	-	-	-	0.656	YZ
342	342	Beam	Angle	90.00	6	6	-	-	-	-	0.559	YZ
343	343	Beam	Angle	180.00	6	6	-	-	-	-	0.500	XY
344	344	Beam	Angle	270.00	6	6	-	-	-	-	0.500	X
345	345	Beam	Angle	270.00	6	6	-	-	-	-	0.500	Z
346	346	Beam	Angle	270.00	6	6	-	-	-	-	0.250	Y
347	492	Beam	Angle	0.00	6	6	-	-	-	-	3.825	Y
348	348	Beam	Angle	360.00	6	6	-	-	-	-	0.250	Y
349	349	Beam	Angle	90.00	6	6	-	-	-	-	4.925	Y
350	167	Beam	Angle	270.00	2	2	-	-	-	-	0.500	X
351	194	Beam	Angle	270.00	2	2	-	-	-	-	0.500	Y
352	412	Beam	Angle	270.00	2	2	-	-	-	-	0.500	X
353	415	Beam	Angle	270.00	2	2	-	-	-	-	0.500	X
354	354	Beam	Angle	270.00	3	3	-	-	-	-	0.733	
355	355	Beam	Angle	270.00	3	3	-	-	-	-	0.770	
356	356	Beam	Angle	270.00	3	3	-	-	-	-	0.816	
357	357	Beam	Angle	315.00	2	2	-	-	-	-	0.339	
358	358	Beam	Angle	315.00	2	2	-	-	-	-	0.339	
359	359	Beam	Angle	315.00	2	2	-	-	-	-	0.339	
360	360	Beam	Angle	315.00	2	2	-	-	-	-	0.339	
361	361	Beam	Angle	315.00	2	2	-	-	-	-	0.678	
362	362	Beam	Angle	315.00	2	2	-	-	-	-	0.678	
363	363	Beam	Angle	315.00	2	2	-	-	-	-	0.678	
364	364	Beam	Angle	315.00	2	2	-	-	-	-	0.678	
365	365	Beam	Angle	315.00	2	2	-	-	-	-	0.678	
366	366	Beam	Angle	315.00	2	2	-	-	-	-	0.678	
367	367	Beam	Angle	315.00	2	2	-	-	-	-	0.678	
368	368	Beam	Angle	315.00	2	2	-	-	-	-	0.678	
369	369	Beam	Angle	360.00	6	6	-	-	-	-	0.500	X
370	370	Beam	Angle	90.00	3	3	-	-	-	-	0.656	YZ
371	371	Beam	Angle	270.00	6	6	-	-	-	-	0.500	Z
372	372	Beam	Angle	270.00	6	6	-	-	-	-	0.500	X
373	373	Beam	Angle	270.00	2	2	-	-	-	-	0.500	Y

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Mbr. No.	Line No.	Member	Rotation Type	Rotation β [°]	Cross-Section Start	Cross-Section End	Hinge No. Start	Hinge No. End	Ecc. No.	Div. No.	Length L [m]	
374	374	Beam	Angle	270.00	3	3	-	-	-	-	0.786	YZ
375	375	Beam	Angle	270.00	3	3	-	-	-	-	0.786	YZ
376	376	Beam	Angle	0.00	1	1	-	-	-	-	0.500	X
377	347	Beam	Angle	360.00	1	1	-	-	-	-	0.247	Y
378	378	Beam	Angle	0.00	1	1	-	-	-	-	0.500	X
379	379	Beam	Angle	0.00	1	1	-	-	-	-	0.500	Y
380	380	Beam	Angle	270.00	2	2	-	-	-	-	0.500	Y
381	381	Beam	Angle	0.00	2	2	-	-	-	-	0.700	YZ
382	382	Beam	Angle	0.00	2	2	-	-	-	-	0.700	YZ
383	383	Beam	Angle	0.00	2	2	-	-	-	-	0.700	YZ
384	384	Beam	Angle	0.00	2	2	-	-	-	-	0.743	YZ
385	385	Beam	Angle	360.00	2	2	-	-	-	-	0.743	YZ
386	386	Beam	Angle	360.00	2	2	-	-	-	-	0.700	YZ
387	387	Beam	Angle	0.00	2	2	-	-	-	-	0.700	YZ
388	388	Beam	Angle	360.00	2	2	-	-	-	-	0.700	YZ
389	389	Beam	Angle	360.00	2	2	-	-	-	-	0.700	YZ
390	390	Beam	Angle	360.00	2	2	-	-	-	-	0.700	YZ
391	391	Beam	Angle	270.00	1	1	-	-	-	-	0.668	
392	392	Beam	Angle	270.00	1	1	-	-	-	-	0.753	
393	393	Beam	Angle	270.00	1	1	-	-	-	-	1.103	
394	394	Beam	Angle	270.00	1	1	-	-	-	-	1.257	
395	395	Beam	Angle	270.00	1	1	-	-	-	-	1.423	
396	396	Beam	Angle	270.00	1	1	-	-	-	-	1.597	
397	397	Beam	Angle	270.00	1	1	-	-	-	-	1.777	
398	398	Beam	Angle	270.00	1	1	-	-	-	-	1.961	
399	399	Beam	Angle	270.00	2	2	-	-	-	-	1.910	Y
400	416	Beam	Angle	270.00	2	2	-	-	-	-	0.500	Y
401	420	Beam	Angle	270.00	2	2	-	-	-	-	0.500	X
402	421	Beam	Angle	270.00	2	2	-	-	-	-	0.500	X
403	422	Beam	Angle	270.00	2	2	-	-	-	-	0.500	Y
404	404	Beam	Angle	315.00	2	2	-	-	-	-	0.678	
405	405	Beam	Angle	315.00	2	2	-	-	-	-	0.678	
406	406	Beam	Angle	315.00	2	2	-	-	-	-	0.678	
407	407	Beam	Angle	315.00	2	2	-	-	-	-	0.678	
408	408	Beam	Angle	90.00	4	4	-	-	-	-	0.490	Z
409	409	Beam	Angle	180.00	4	4	-	-	-	-	0.490	Z
410	410	Beam	Angle	360.00	4	4	-	-	-	-	5.765	Z
411	411	Beam	Angle	270.00	4	4	-	-	-	-	0.490	Z
412	423	Beam	Angle	270.00	2	2	-	-	-	-	0.500	X
413	424	Beam	Angle	270.00	2	2	-	-	-	-	0.500	Y
414	430	Beam	Angle	180.00	4	4	-	-	-	-	0.550	Z
415	431	Beam	Angle	270.00	4	4	-	-	-	-	0.550	Z
416	432	Beam	Angle	270.00	4	4	-	-	-	-	0.490	Z
417	433	Beam	Angle	270.00	4	4	-	-	-	-	0.490	Z
418	434	Beam	Angle	270.00	4	4	-	-	-	-	0.490	Z
419	435	Beam	Angle	270.00	4	4	-	-	-	-	0.490	Z
420	436	Beam	Angle	270.00	4	4	-	-	-	-	0.550	Z
421	437	Beam	Angle	0.00	4	4	-	-	-	-	0.490	Z
422	438	Beam	Angle	0.00	4	4	-	-	-	-	0.490	Z
423	439	Beam	Angle	0.00	4	4	-	-	-	-	0.490	Z
424	440	Beam	Angle	0.00	4	4	-	-	-	-	0.490	Z
425	441	Beam	Angle	0.00	4	4	-	-	-	-	0.550	Z
426	442	Beam	Angle	180.00	4	4	-	-	-	-	0.490	Z
427	443	Beam	Angle	180.00	4	4	-	-	-	-	0.490	Z
428	444	Beam	Angle	180.00	4	4	-	-	-	-	0.490	Z
429	445	Beam	Angle	180.00	4	4	-	-	-	-	0.490	Z
430	446	Beam	Angle	180.00	4	4	-	-	-	-	0.550	Z
431	447	Beam	Angle	90.00	4	4	-	-	-	-	0.490	Z
432	448	Beam	Angle	90.00	4	4	-	-	-	-	0.490	Z
433	449	Beam	Angle	90.00	4	4	-	-	-	-	0.490	Z
434	450	Beam	Angle	90.00	4	4	-	-	-	-	0.490	Z
435	451	Beam	Angle	90.00	4	4	-	-	-	-	0.550	Z
436	470	Beam	Angle	270.00	4	4	-	-	-	-	0.490	Z
437	471	Beam	Angle	270.00	4	4	-	-	-	-	0.745	Z
438	472	Beam	Angle	0.00	4	4	-	-	-	-	0.490	Z

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Mbr. No.	Line No.	Member	Rotation Type	Rotation β [°]	Cross-Section Start	Cross-Section End	Hinge No. Start	Hinge No. End	Ecc. No.	Div. No.	Length L [m]	
439	473	Beam	Angle	0.00	4	4	-	-	-	-	0.490	Z
440	474	Beam	Angle	0.00	4	4	-	-	-	-	0.490	Z
441	475	Beam	Angle	0.00	4	4	-	-	-	-	0.745	Z
442	476	Beam	Angle	180.00	4	4	-	-	-	-	0.490	Z
443	477	Beam	Angle	180.00	4	4	-	-	-	-	0.490	Z
444	478	Beam	Angle	90.00	4	4	-	-	-	-	0.490	Z
445	479	Beam	Angle	90.00	4	4	-	-	-	-	0.490	Z
446	480	Beam	Angle	90.00	4	4	-	-	-	-	0.490	Z
447	481	Beam	Angle	90.00	4	4	-	-	-	-	0.745	Z
448	482	Beam	Angle	90.00	4	4	-	-	-	-	0.490	Z
449	483	Beam	Angle	90.00	4	4	-	-	-	-	0.490	Z
450	484	Beam	Angle	90.00	4	4	-	-	-	-	0.745	Z
451	452	Beam	Angle	180.00	6	6	-	-	-	-	0.422	Y
452	453	Beam	Angle	90.00	6	6	-	-	-	-	0.422	Y
453	454	Beam	Angle	180.00	6	6	-	-	-	-	0.850	Y
454	455	Beam	Angle	90.00	4	4	-	-	-	-	0.490	Z
455	456	Beam	Angle	90.00	4	4	-	-	-	-	0.490	Z
456	457	Beam	Angle	90.00	4	4	-	-	-	-	0.490	Z
457	458	Beam	Angle	90.00	4	4	-	-	-	-	0.490	Z
458	459	Beam	Angle	90.00	4	4	-	-	-	-	0.550	Z
459	460	Beam	Angle	180.00	4	4	-	-	-	-	0.490	Z
460	461	Beam	Angle	180.00	4	4	-	-	-	-	0.490	Z
461	462	Beam	Angle	180.00	4	4	-	-	-	-	0.490	Z
462	463	Beam	Angle	180.00	4	4	-	-	-	-	0.490	Z
463	464	Beam	Angle	180.00	4	4	-	-	-	-	0.550	Z
464	465	Beam	Angle	270.00	4	4	-	-	-	-	0.490	Z
465	466	Beam	Angle	270.00	4	4	-	-	-	-	0.490	Z
466	467	Beam	Angle	270.00	4	4	-	-	-	-	0.490	Z
467	468	Beam	Angle	270.00	4	4	-	-	-	-	0.490	Z
468	469	Beam	Angle	270.00	4	4	-	-	-	-	0.550	Z
469	485	Beam	Angle	180.00	4	4	-	-	-	-	0.490	Z
470	486	Beam	Angle	180.00	4	4	-	-	-	-	0.490	Z
471	487	Beam	Angle	180.00	4	4	-	-	-	-	0.490	Z
472	488	Beam	Angle	180.00	4	4	-	-	-	-	0.745	Z
473	489	Beam	Angle	270.00	4	4	-	-	-	-	0.490	Z
474	490	Beam	Angle	270.00	4	4	-	-	-	-	0.490	Z
475	491	Beam	Angle	270.00	4	4	-	-	-	-	0.490	Z
476	291	Beam	Angle	180.00	6	6	-	-	-	-	0.425	Y
477	493	Beam	Angle	360.00	1	1	-	-	-	-	0.250	Y
478	520	Beam	Angle	0.00	6	6	-	-	-	-	0.250	Y
479	496	Beam	Angle	270.00	6	6	-	-	-	-	0.425	Y
480	521	Beam	Angle	270.00	6	6	-	-	-	-	0.425	Y
481	516	Beam	Angle	270.00	4	4	-	-	-	-	0.490	Z
482	517	Beam	Angle	180.00	4	4	-	-	-	-	0.490	Z
483	518	Beam	Angle	90.00	4	4	-	-	-	-	0.490	Z
484	497	Beam	Angle	180.00	6	6	-	-	-	-	0.425	Y
485	498	Beam	Angle	180.00	6	6	-	-	-	-	0.425	Y
486	499	Beam	Angle	180.00	6	6	-	-	-	-	0.850	Y
487	500	Beam	Angle	180.00	6	6	-	-	-	-	0.850	Y
488	501	Beam	Angle	180.00	6	6	-	-	-	-	0.425	Y
489	502	Beam	Angle	90.00	6	6	-	-	-	-	0.425	Y
490	503	Beam	Angle	90.00	6	6	-	-	-	-	0.425	Y
491	504	Beam	Angle	90.00	6	6	-	-	-	-	0.425	Y
492	505	Beam	Angle	90.00	6	6	-	-	-	-	0.425	Y
493	506	Beam	Angle	90.00	6	6	-	-	-	-	0.425	Y
494	507	Beam	Angle	90.00	6	6	-	-	-	-	0.425	Y
495	508	Beam	Angle	90.00	6	6	-	-	-	-	0.425	Y
496	509	Beam	Angle	90.00	6	6	-	-	-	-	0.425	Y
497	510	Beam	Angle	180.00	6	6	-	-	-	-	0.425	Y
498	511	Beam	Angle	180.00	6	6	-	-	-	-	0.425	Y
499	512	Beam	Angle	180.00	6	6	-	-	-	-	0.850	Y
500	513	Beam	Angle	180.00	6	6	-	-	-	-	0.850	Y
501	514	Beam	Angle	180.00	6	6	-	-	-	-	0.425	Y
502	515	Beam	Angle	180.00	6	6	-	-	-	-	0.425	Y
503	519	Beam	Angle	270.00	4	4	-	-	-	-	0.745	Z

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..17 Members

Mbr. No.	Line No.	Member	Rotation Type	Rotation β [°]	Cross-Section Start	Cross-Section End	Hinge No. Start	Hinge No. End	Ecc. No.	Div. No.	Length L [m]	
504	289	Beam	Angle	360.00	1	1	-	-	-	-	0.250	Y
505	495	Beam	Angle	0.00	1	1	-	-	-	-	0.250	Y
506	522	Beam	Angle	360.00	1	1	-	-	-	-	0.253	Y
507	524	Beam	Angle	270.00	4	4	-	-	-	-	0.490	Z
508	525	Beam	Angle	180.00	4	4	-	-	-	-	0.745	Z
509	523	Beam	Angle	180.00	6	6	-	-	-	-	0.425	Y
510	526	Beam	Angle	270.00	6	6	-	-	-	-	0.425	Y
511	527	Beam	Angle	270.00	6	6	-	-	-	-	0.250	Y
512	528	Beam	Angle	270.00	6	6	-	-	-	-	0.850	Y
513	529	Beam	Angle	270.00	6	6	-	-	-	-	0.250	Y
514	530	Beam	Angle	270.00	6	6	-	-	-	-	0.425	Y
515	531	Beam	Angle	270.00	6	6	-	-	-	-	0.425	Y
516	532	Beam	Angle	270.00	6	6	-	-	-	-	0.425	Y
517	533	Beam	Angle	270.00	6	6	-	-	-	-	0.850	Y
518	534	Beam	Angle	270.00	6	6	-	-	-	-	0.850	Y
519	535	Beam	Angle	270.00	6	6	-	-	-	-	0.425	Y
520	536	Beam	Angle	270.00	6	6	-	-	-	-	0.850	Y
521	537	Beam	Angle	270.00	6	6	-	-	-	-	1.275	Y
522	538	Beam	Angle	360.00	6	6	-	-	-	-	0.850	Y
523	539	Beam	Angle	360.00	6	6	-	-	-	-	0.425	Y
524	540	Beam	Angle	360.00	6	6	-	-	-	-	0.425	Y
525	541	Beam	Angle	360.00	6	6	-	-	-	-	0.850	Y
526	542	Beam	Angle	360.00	6	6	-	-	-	-	0.850	Y
527	543	Beam	Angle	360.00	6	6	-	-	-	-	0.850	Y
528	544	Beam	Angle	360.00	6	6	-	-	-	-	0.425	Y
529	549	Beam	Angle	315.00	2	2	-	-	-	-	0.339	
530	550	Beam	Angle	315.00	2	2	-	-	-	-	0.339	
531	551	Beam	Angle	315.00	2	2	-	-	-	-	0.339	
532	556	Beam	Angle	315.00	2	2	-	-	-	-	0.339	
533	557	Beam	Angle	315.00	2	2	-	-	-	-	0.339	
534	558	Beam	Angle	315.00	2	2	-	-	-	-	0.339	
535	559	Beam	Angle	315.00	2	2	-	-	-	-	0.339	
536	97	Beam	Angle	315.00	2	2	-	-	-	-	0.339	
537	109	Beam	Angle	0.00	3	3	-	-	-	-	0.237	X
538	108	Beam	Angle	0.00	3	3	-	-	-	-	0.237	Y
539	111	Beam	Angle	0.00	3	3	-	-	-	-	0.237	X
540	110	Beam	Angle	0.00	3	3	-	-	-	-	0.237	Y
541	564	Beam	Angle	0.00	3	3	-	-	-	-	0.336	XY
542	353	Beam	Angle	0.00	3	3	-	-	-	-	0.237	X
544	351	Beam	Angle	0.00	3	3	-	-	-	-	0.237	X
545	350	Beam	Angle	0.00	3	3	-	-	-	-	0.237	Y
546	569	Beam	Angle	0.00	3	3	-	-	-	-	0.336	XY
547	552	Beam	Angle	0.00	2	2	-	-	-	-	0.194	X
550	555	Beam	Angle	0.00	2	2	-	-	-	-	0.194	Y
551	400	Beam	Angle	270.00	2	2	-	-	-	-	0.150	X
552	403	Beam	Angle	270.00	2	2	-	-	-	-	0.150	Y
553	402	Beam	Angle	270.00	2	2	-	-	-	-	0.150	X
554	401	Beam	Angle	270.00	2	2	-	-	-	-	0.150	Y
556	545	Beam	Angle	0.00	2	2	-	-	-	-	0.194	X
557	546	Beam	Angle	0.00	2	2	-	-	-	-	0.194	Y
558	547	Beam	Angle	0.00	2	2	-	-	-	-	0.194	X
559	548	Beam	Angle	0.00	2	2	-	-	-	-	0.194	Y
560	35	Beam	Angle	270.00	2	2	-	-	-	-	0.150	X
561	34	Beam	Angle	270.00	2	2	-	-	-	-	0.150	Y
562	33	Beam	Angle	270.00	2	2	-	-	-	-	0.150	X
563	36	Beam	Angle	270.00	2	2	-	-	-	-	0.150	Y
564	580	Beam	Angle	0.00	2	2	-	-	-	-	0.212	XY
565	581	Beam	Angle	270.00	2	2	-	-	-	-	0.212	XY
566	352	Beam	Angle	0.00	3	3	-	-	-	-	0.237	Y
567	553	Beam	Angle	0.00	2	2	-	-	-	-	0.194	Y
568	554	Beam	Angle	0.00	2	2	-	-	-	-	0.194	X

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2.1 Load Cases

Load Case	Load Case Description	EN 1990 | CEN Action Category	Self-Weight - Factor in Direction Active	X	Y	Z
LC1	Nuosavas svoris	Permanent	x	0.000	0.000	-1.000
LC2	Laidř ir trosř apkrova	Permanent/Imposed	-			
LC3	Technologiniř árenginiř apkrova	Permanent/Imposed	-			
LC4	Vėjas X-X kryptimi	Wind	-			
LC5	Vėjas Y-Y kryptimi	Wind	-			
LC6	Vėjas X-Y kryptimi	Wind	-			
LC8	Laidř tempimas	Permanent/Imposed	-			

2.1.1 Load Cases - Calculation Parameters

Load Case	Load Case Description	Calculation Parameters			
LC1	Nuosavas svoris	Method of analysis	: x	Geometrically linear analysis	
		Method for solving system of nonlinear algebraic equations	: x	Newton-Raphson	
		Activate stiffness factors of:	: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)	
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)	
LC2	Laidř ir trosř apkrova	Method of analysis	: x	Geometrically linear analysis	
		Method for solving system of nonlinear algebraic equations	: x	Newton-Raphson	
		Activate stiffness factors of:	: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)	
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)	
LC3	Technologiniř árenginiř apkrova	Method of analysis	: x	Geometrically linear analysis	
		Method for solving system of nonlinear algebraic equations	: x	Newton-Raphson	
		Activate stiffness factors of:	: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)	
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)	
LC4	Vėjas X-X kryptimi	Method of analysis	: x	Geometrically linear analysis	
		Method for solving system of nonlinear algebraic equations	: x	Newton-Raphson	
		Activate stiffness factors of:	: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)	
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)	
LC5	Vėjas Y-Y kryptimi	Method of analysis	: x	Geometrically linear analysis	
		Method for solving system of nonlinear algebraic equations	: x	Newton-Raphson	
		Activate stiffness factors of:	: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)	
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)	
LC6	Vėjas X-Y kryptimi	Method of analysis	: x	Geometrically linear analysis	
		Method for solving system of nonlinear algebraic equations	: x	Newton-Raphson	
		Activate stiffness factors of:	: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)	
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)	
LC8	Laidř tempimas	Method of analysis	: x	Geometrically linear analysis	
		Method for solving system of nonlinear algebraic equations	: x	Newton-Raphson	
		Activate stiffness factors of:	: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)	
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)	

2.5 Load Combinations

Load Combin.	DS	Load Combination Description	No.	Factor	Load Case	
CO1	STR	1.35*LC1	1	1.35	LC1	Nuosavas svoris
CO2	STR	1.35*LC1 + 1.35*LC2	1	1.35	LC1	Nuosavas svoris
			2	1.35	LC2	Laidř ir trosř apkrova
CO3	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3	1	1.35	LC1	Nuosavas svoris
			2	1.35	LC2	Laidř ir trosř apkrova
			3	1.35	LC3	Technologiniř árenginiř apkrova
CO4	STR	1.35*LC1 + 1.35*LC3	1	1.35	LC1	Nuosavas svoris
			2	1.35	LC3	Technologiniř árenginiř apkrova
CO5	STR	1.35*LC1 + 1.5*LC4	1	1.35	LC1	Nuosavas svoris
			2	1.50	LC4	Vėjas X-X kryptimi
CO6	STR	1.35*LC1 + 1.35*LC2 + 1.5*LC4	1	1.35	LC1	Nuosavas svoris
			2	1.35	LC2	Laidř ir trosř apkrova
			3	1.50	LC4	Vėjas X-X kryptimi
CO7	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.5*LC4	1	1.35	LC1	Nuosavas svoris

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.5 Load Combinations

Load Combin.	DS	Load Combination Description	No.	Factor	Load Case	
			2	1.35	LC2	Laidř ir trosř apkrova
			3	1.35	LC3	Technologiniř árenginiř apkrova
			4	1.50	LC4	Vějas X-X kryptimi
CO8	STR	1.35*LC1 + 1.35*LC3 + 1.5*LC4	1	1.35	LC1	Nuosavas svoris
			2	1.35	LC3	Technologiniř árenginiř apkrova
			3	1.50	LC4	Vějas X-X kryptimi
CO9	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.35*LC8	1	1.35	LC1	Nuosavas svoris
			2	1.35	LC2	Laidř ir trosř apkrova
			3	1.35	LC3	Technologiniř árenginiř apkrova
			4	1.35	LC8	Laidř tempimas
CO10	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC8	1	1.35	LC1	Nuosavas svoris
			2	1.35	LC2	Laidř ir trosř apkrova
			3	1.35	LC8	Laidř tempimas
CO11	STR	1.35*LC1 + 1.35*LC3 + 1.35*LC8	1	1.35	LC1	Nuosavas svoris
			2	1.35	LC3	Technologiniř árenginiř apkrova
			3	1.35	LC8	Laidř tempimas
CO12	STR	1.35*LC1 + 1.35*LC8	1	1.35	LC1	Nuosavas svoris
			2	1.35	LC8	Laidř tempimas
CO13	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.5*LC4 + 1.35*LC8	1	1.35	LC1	Nuosavas svoris
			2	1.35	LC2	Laidř ir trosř apkrova
			3	1.35	LC3	Technologiniř árenginiř apkrova
			4	1.50	LC4	Vějas X-X kryptimi
			5	1.35	LC8	Laidř tempimas
CO14	STR	1.35*LC1 + 1.35*LC2 + 1.5*LC4 + 1.35*LC8	1	1.35	LC1	Nuosavas svoris
			2	1.35	LC2	Laidř ir trosř apkrova
			3	1.50	LC4	Vějas X-X kryptimi
			4	1.35	LC8	Laidř tempimas
CO15	STR	1.35*LC1 + 1.35*LC3 + 1.5*LC4 + 1.35*LC8	1	1.35	LC1	Nuosavas svoris
			2	1.35	LC3	Technologiniř árenginiř apkrova
			3	1.50	LC4	Vějas X-X kryptimi
			4	1.35	LC8	Laidř tempimas
CO16	STR	1.35*LC1 + 1.5*LC4 + 1.35*LC8	1	1.35	LC1	Nuosavas svoris
			2	1.50	LC4	Vějas X-X kryptimi
			3	1.35	LC8	Laidř tempimas
CO17	STR	1.35*LC1 + 1.5*LC5	1	1.35	LC1	Nuosavas svoris
			2	1.50	LC5	Vějas Y-Y kryptimi
CO18	STR	1.35*LC1 + 1.35*LC2 + 1.5*LC5	1	1.35	LC1	Nuosavas svoris
			2	1.35	LC2	Laidř ir trosř apkrova
			3	1.50	LC5	Vějas Y-Y kryptimi
CO19	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.5*LC5	1	1.35	LC1	Nuosavas svoris
			2	1.35	LC2	Laidř ir trosř apkrova
			3	1.35	LC3	Technologiniř árenginiř apkrova
			4	1.50	LC5	Vějas Y-Y kryptimi
CO20	STR	1.35*LC1 + 1.35*LC3 + 1.5*LC5	1	1.35	LC1	Nuosavas svoris
			2	1.35	LC3	Technologiniř árenginiř apkrova
			3	1.50	LC5	Vějas Y-Y kryptimi
CO21	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.5*LC5 + 1.35*LC8	1	1.35	LC1	Nuosavas svoris
			2	1.35	LC2	Laidř ir trosř apkrova
			3	1.35	LC3	Technologiniř árenginiř apkrova
			4	1.50	LC5	Vějas Y-Y kryptimi
			5	1.35	LC8	Laidř tempimas
CO22	STR	1.35*LC1 + 1.35*LC2 + 1.5*LC5 + 1.35*LC8	1	1.35	LC1	Nuosavas svoris
			2	1.35	LC2	Laidř ir trosř apkrova
			3	1.50	LC5	Vějas Y-Y kryptimi
			4	1.35	LC8	Laidř tempimas
CO23	STR	1.35*LC1 + 1.35*LC3 + 1.5*LC5 + 1.35*LC8	1	1.35	LC1	Nuosavas svoris
			2	1.35	LC3	Technologiniř árenginiř apkrova
			3	1.50	LC5	Vějas Y-Y kryptimi
			4	1.35	LC8	Laidř tempimas
CO24	STR	1.35*LC1 + 1.5*LC5 + 1.35*LC8	1	1.35	LC1	Nuosavas svoris
			2	1.50	LC5	Vějas Y-Y kryptimi
			3	1.35	LC8	Laidř tempimas
CO25	STR	1.35*LC1 + 1.5*LC6	1	1.35	LC1	Nuosavas svoris
			2	1.50	LC6	Vějas X-Y kryptimi
CO26	STR	1.35*LC1 + 1.35*LC2 + 1.5*LC6	1	1.35	LC1	Nuosavas svoris

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.5 Load Combinations

Load Combin.	DS	Load Combination Description	No.	Factor	Load Case	
			2	1.35	LC2	Laidř ir trosř apkrova
			3	1.50	LC6	Vějas X-Y kryptimi
CO27	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.5*LC6	1	1.35	LC1	Nuosavas svoris
			2	1.35	LC2	Laidř ir trosř apkrova
			3	1.35	LC3	Technologiniř árenginiř apkrova
			4	1.50	LC6	Vějas X-Y kryptimi
CO28	STR	1.35*LC1 + 1.35*LC3 + 1.5*LC6	1	1.35	LC1	Nuosavas svoris
			2	1.35	LC3	Technologiniř árenginiř apkrova
			3	1.50	LC6	Vějas X-Y kryptimi
CO29	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3 + 1.5*LC6 + 1.35*LC8	1	1.35	LC1	Nuosavas svoris
			2	1.35	LC2	Laidř ir trosř apkrova
			3	1.35	LC3	Technologiniř árenginiř apkrova
			4	1.50	LC6	Vějas X-Y kryptimi
			5	1.35	LC8	Laidř tempimas
CO30	STR	1.35*LC1 + 1.35*LC2 + 1.5*LC6 + 1.35*LC8	1	1.35	LC1	Nuosavas svoris
			2	1.35	LC2	Laidř ir trosř apkrova
			3	1.50	LC6	Vějas X-Y kryptimi
			4	1.35	LC8	Laidř tempimas
CO31	STR	1.35*LC1 + 1.35*LC3 + 1.5*LC6 + 1.35*LC8	1	1.35	LC1	Nuosavas svoris
			2	1.35	LC3	Technologiniř árenginiř apkrova
			3	1.50	LC6	Vějas X-Y kryptimi
			4	1.35	LC8	Laidř tempimas
CO32	STR	1.35*LC1 + 1.5*LC6 + 1.35*LC8	1	1.35	LC1	Nuosavas svoris
			2	1.50	LC6	Vějas X-Y kryptimi
			3	1.35	LC8	Laidř tempimas
CO33	S Ch	LC1	1	1.00	LC1	Nuosavas svoris
CO34	S Ch	LC1 + LC2	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC2	Laidř ir trosř apkrova
CO35	S Ch	LC1 + LC2 + LC3	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC2	Laidř ir trosř apkrova
			3	1.00	LC3	Technologiniř árenginiř apkrova
CO36	S Ch	LC1 + LC3	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC3	Technologiniř árenginiř apkrova
CO37	S Ch	LC1 + LC4	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC4	Vějas X-X kryptimi
CO38	S Ch	LC1 + LC2 + LC4	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC2	Laidř ir trosř apkrova
			3	1.00	LC4	Vějas X-X kryptimi
CO39	S Ch	LC1 + LC2 + LC3 + LC4	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC2	Laidř ir trosř apkrova
			3	1.00	LC3	Technologiniř árenginiř apkrova
			4	1.00	LC4	Vějas X-X kryptimi
CO40	S Ch	LC1 + LC3 + LC4	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC3	Technologiniř árenginiř apkrova
			3	1.00	LC4	Vějas X-X kryptimi
CO41	S Ch	LC1 + LC2 + LC3 + LC8	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC2	Laidř ir trosř apkrova
			3	1.00	LC3	Technologiniř árenginiř apkrova
			4	1.00	LC8	Laidř tempimas
CO42	S Ch	LC1 + LC2 + LC8	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC2	Laidř ir trosř apkrova
			3	1.00	LC8	Laidř tempimas
CO43	S Ch	LC1 + LC3 + LC8	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC3	Technologiniř árenginiř apkrova
			3	1.00	LC8	Laidř tempimas
CO44	S Ch	LC1 + LC8	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC8	Laidř tempimas
CO45	S Ch	LC1 + LC2 + LC3 + LC4 + LC8	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC2	Laidř ir trosř apkrova
			3	1.00	LC3	Technologiniř árenginiř apkrova
			4	1.00	LC4	Vějas X-X kryptimi
			5	1.00	LC8	Laidř tempimas
CO46	S Ch	LC1 + LC2 + LC4 + LC8	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC2	Laidř ir trosř apkrova
			3	1.00	LC4	Vějas X-X kryptimi

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.5 Load Combinations

Load Combin.	DS	Load Combination Description	No.	Factor	Load Case	
			4	1.00	LC8	Laidř tempimas
CO47	S Ch	LC1 + LC3 + LC4 + LC8	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC3	Technologiniř árenginiř apkrova
			3	1.00	LC4	Vėjas X-X kryptimi
			4	1.00	LC8	Laidř tempimas
CO48	S Ch	LC1 + LC4 + LC8	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC4	Vėjas X-X kryptimi
			3	1.00	LC8	Laidř tempimas
CO49	S Ch	LC1 + LC5	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC5	Vėjas Y-Y kryptimi
CO50	S Ch	LC1 + LC2 + LC5	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC2	Laidř ir trosř apkrova
			3	1.00	LC5	Vėjas Y-Y kryptimi
CO51	S Ch	LC1 + LC2 + LC3 + LC5	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC2	Laidř ir trosř apkrova
			3	1.00	LC3	Technologiniř árenginiř apkrova
			4	1.00	LC5	Vėjas Y-Y kryptimi
CO52	S Ch	LC1 + LC3 + LC5	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC3	Technologiniř árenginiř apkrova
			3	1.00	LC5	Vėjas Y-Y kryptimi
CO53	S Ch	LC1 + LC2 + LC3 + LC5 + LC8	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC2	Laidř ir trosř apkrova
			3	1.00	LC3	Technologiniř árenginiř apkrova
			4	1.00	LC5	Vėjas Y-Y kryptimi
			5	1.00	LC8	Laidř tempimas
CO54	S Ch	LC1 + LC2 + LC5 + LC8	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC2	Laidř ir trosř apkrova
			3	1.00	LC5	Vėjas Y-Y kryptimi
			4	1.00	LC8	Laidř tempimas
CO55	S Ch	LC1 + LC3 + LC5 + LC8	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC3	Technologiniř árenginiř apkrova
			3	1.00	LC5	Vėjas Y-Y kryptimi
			4	1.00	LC8	Laidř tempimas
CO56	S Ch	LC1 + LC5 + LC8	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC5	Vėjas Y-Y kryptimi
			3	1.00	LC8	Laidř tempimas
CO57	S Ch	LC1 + LC6	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC6	Vėjas X-Y kryptimi
CO58	S Ch	LC1 + LC2 + LC6	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC2	Laidř ir trosř apkrova
			3	1.00	LC6	Vėjas X-Y kryptimi
CO59	S Ch	LC1 + LC2 + LC3 + LC6	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC2	Laidř ir trosř apkrova
			3	1.00	LC3	Technologiniř árenginiř apkrova
			4	1.00	LC6	Vėjas X-Y kryptimi
CO60	S Ch	LC1 + LC3 + LC6	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC3	Technologiniř árenginiř apkrova
			3	1.00	LC6	Vėjas X-Y kryptimi
CO61	S Ch	LC1 + LC2 + LC3 + LC6 + LC8	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC2	Laidř ir trosř apkrova
			3	1.00	LC3	Technologiniř árenginiř apkrova
			4	1.00	LC6	Vėjas X-Y kryptimi
			5	1.00	LC8	Laidř tempimas
CO62	S Ch	LC1 + LC2 + LC6 + LC8	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC2	Laidř ir trosř apkrova
			3	1.00	LC6	Vėjas X-Y kryptimi
			4	1.00	LC8	Laidř tempimas
CO63	S Ch	LC1 + LC3 + LC6 + LC8	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC3	Technologiniř árenginiř apkrova
			3	1.00	LC6	Vėjas X-Y kryptimi
			4	1.00	LC8	Laidř tempimas
CO64	S Ch	LC1 + LC6 + LC8	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC6	Vėjas X-Y kryptimi
			3	1.00	LC8	Laidř tempimas
CO65	S Fr	LC1	1	1.00	LC1	Nuosavas svoris

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.5 Load Combinations

Load Combin.	DS	Load Combination Description	No.	Factor	Load Case	
CO66	S Fr	LC1 + LC2	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC2	Laidř ir trosř apkrova
CO67	S Fr	LC1 + LC2 + LC3	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC2	Laidř ir trosř apkrova
			3	1.00	LC3	Technologiniř árenginiř apkrova
CO68	S Fr	LC1 + LC3	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC3	Technologiniř árenginiř apkrova
CO69	S Fr	LC1 + 0.2*LC4	1	1.00	LC1	Nuosavas svoris
			2	0.20	LC4	Vėjas X-X kryptimi
CO70	S Fr	LC1 + LC2 + 0.2*LC4	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC2	Laidř ir trosř apkrova
			3	0.20	LC4	Vėjas X-X kryptimi
CO71	S Fr	LC1 + LC2 + LC3 + 0.2*LC4	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC2	Laidř ir trosř apkrova
			3	1.00	LC3	Technologiniř árenginiř apkrova
			4	0.20	LC4	Vėjas X-X kryptimi
CO72	S Fr	LC1 + LC3 + 0.2*LC4	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC3	Technologiniř árenginiř apkrova
			3	0.20	LC4	Vėjas X-X kryptimi
CO73	S Fr	LC1 + LC2 + LC3 + LC8	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC2	Laidř ir trosř apkrova
			3	1.00	LC3	Technologiniř árenginiř apkrova
			4	1.00	LC8	Laidř tempimas
CO74	S Fr	LC1 + LC2 + LC8	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC2	Laidř ir trosř apkrova
			3	1.00	LC8	Laidř tempimas
CO75	S Fr	LC1 + LC3 + LC8	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC3	Technologiniř árenginiř apkrova
			3	1.00	LC8	Laidř tempimas
CO76	S Fr	LC1 + LC8	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC8	Laidř tempimas
CO77	S Fr	LC1 + LC2 + LC3 + 0.2*LC4 + LC8	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC2	Laidř ir trosř apkrova
			3	1.00	LC3	Technologiniř árenginiř apkrova
			4	0.20	LC4	Vėjas X-X kryptimi
			5	1.00	LC8	Laidř tempimas
CO78	S Fr	LC1 + LC2 + 0.2*LC4 + LC8	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC2	Laidř ir trosř apkrova
			3	0.20	LC4	Vėjas X-X kryptimi
			4	1.00	LC8	Laidř tempimas
CO79	S Fr	LC1 + LC3 + 0.2*LC4 + LC8	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC3	Technologiniř árenginiř apkrova
			3	0.20	LC4	Vėjas X-X kryptimi
			4	1.00	LC8	Laidř tempimas
CO80	S Fr	LC1 + 0.2*LC4 + LC8	1	1.00	LC1	Nuosavas svoris
			2	0.20	LC4	Vėjas X-X kryptimi
			3	1.00	LC8	Laidř tempimas
CO81	S Fr	LC1 + 0.2*LC5	1	1.00	LC1	Nuosavas svoris
			2	0.20	LC5	Vėjas Y-Y kryptimi
CO82	S Fr	LC1 + LC2 + 0.2*LC5	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC2	Laidř ir trosř apkrova
			3	0.20	LC5	Vėjas Y-Y kryptimi
CO83	S Fr	LC1 + LC2 + LC3 + 0.2*LC5	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC2	Laidř ir trosř apkrova
			3	1.00	LC3	Technologiniř árenginiř apkrova
			4	0.20	LC5	Vėjas Y-Y kryptimi
CO84	S Fr	LC1 + LC3 + 0.2*LC5	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC3	Technologiniř árenginiř apkrova
			3	0.20	LC5	Vėjas Y-Y kryptimi
CO85	S Fr	LC1 + LC2 + LC3 + 0.2*LC5 + LC8	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC2	Laidř ir trosř apkrova
			3	1.00	LC3	Technologiniř árenginiř apkrova
			4	0.20	LC5	Vėjas Y-Y kryptimi
			5	1.00	LC8	Laidř tempimas
CO86	S Fr	LC1 + LC2 + 0.2*LC5 + LC8	1	1.00	LC1	Nuosavas svoris

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2.5 Load Combinations

Load Combin.	DS	Load Combination Description	No.	Factor	Load Case	
			2	1.00	LC2	Laidř ir trosř apkrova
			3	0.20	LC5	Vėjas Y-Y kryptimi
			4	1.00	LC8	Laidř tempimas
CO87	S Fr	LC1 + LC3 + 0.2*LC5 + LC8	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC3	Technologiniř árenginiř apkrova
			3	0.20	LC5	Vėjas Y-Y kryptimi
			4	1.00	LC8	Laidř tempimas
CO88	S Fr	LC1 + 0.2*LC5 + LC8	1	1.00	LC1	Nuosavas svoris
			2	0.20	LC5	Vėjas Y-Y kryptimi
			3	1.00	LC8	Laidř tempimas
CO89	S Fr	LC1 + 0.2*LC6	1	1.00	LC1	Nuosavas svoris
			2	0.20	LC6	Vėjas X-Y kryptimi
CO90	S Fr	LC1 + LC2 + 0.2*LC6	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC2	Laidř ir trosř apkrova
			3	0.20	LC6	Vėjas X-Y kryptimi
CO91	S Fr	LC1 + LC2 + LC3 + 0.2*LC6	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC2	Laidř ir trosř apkrova
			3	1.00	LC3	Technologiniř árenginiř apkrova
			4	0.20	LC6	Vėjas X-Y kryptimi
CO92	S Fr	LC1 + LC3 + 0.2*LC6	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC3	Technologiniř árenginiř apkrova
			3	0.20	LC6	Vėjas X-Y kryptimi
CO93	S Fr	LC1 + LC2 + LC3 + 0.2*LC6 + LC8	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC2	Laidř ir trosř apkrova
			3	1.00	LC3	Technologiniř árenginiř apkrova
			4	0.20	LC6	Vėjas X-Y kryptimi
			5	1.00	LC8	Laidř tempimas
CO94	S Fr	LC1 + LC2 + 0.2*LC6 + LC8	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC2	Laidř ir trosř apkrova
			3	0.20	LC6	Vėjas X-Y kryptimi
			4	1.00	LC8	Laidř tempimas
CO95	S Fr	LC1 + LC3 + 0.2*LC6 + LC8	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC3	Technologiniř árenginiř apkrova
			3	0.20	LC6	Vėjas X-Y kryptimi
			4	1.00	LC8	Laidř tempimas
CO96	S Fr	LC1 + 0.2*LC6 + LC8	1	1.00	LC1	Nuosavas svoris
			2	0.20	LC6	Vėjas X-Y kryptimi
			3	1.00	LC8	Laidř tempimas
CO97	S Qp	LC1	1	1.00	LC1	Nuosavas svoris
CO98	S Qp	LC1 + LC2	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC2	Laidř ir trosř apkrova
CO99	S Qp	LC1 + LC2 + LC3	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC2	Laidř ir trosř apkrova
			3	1.00	LC3	Technologiniř árenginiř apkrova
CO100	S Qp	LC1 + LC3	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC3	Technologiniř árenginiř apkrova
CO101	S Qp	LC1 + LC2 + LC3 + LC8	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC2	Laidř ir trosř apkrova
			3	1.00	LC3	Technologiniř árenginiř apkrova
			4	1.00	LC8	Laidř tempimas
CO102	S Qp	LC1 + LC2 + LC8	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC2	Laidř ir trosř apkrova
			3	1.00	LC8	Laidř tempimas
CO103	S Qp	LC1 + LC3 + LC8	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC3	Technologiniř árenginiř apkrova
			3	1.00	LC8	Laidř tempimas
CO104	S Qp	LC1 + LC8	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC8	Laidř tempimas

2.7 Result Combinations

Result Combin	Description	Loading
RC1	ULS (STR/GEO) - Permanent / transient - Eq. 6.10	CO1/p or to CO32

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..7 Result Combinations

Result Combin	Description	Loading
RC2	SLS - Characteristic	CO33/p or to CO64
RC3	SLS - Frequent	CO65/p or to CO96
RC4	SLS - Quasi-permanent	CO97/p or to CO104

LC2
Laidø ir trosø apkrova

3.1 Nodal Loads - By Components - Coordinate System

LC2: Laidř ir trosř apkrova

No.	On Nodes No.	Coordinate System	Force [kN] P_X / P_U	P_Y / P_V	P_Z / P_W	Moment [kNm] M_X / M_U	M_Y / M_V	M_Z / M_W
1	270,272,332	0 | Global XYZ	0.000	0.000	-0.200	0.000	0.000	0.000
2	46,385	0 | Global XYZ	0.000	0.000	-0.120	0.000	0.000	0.000

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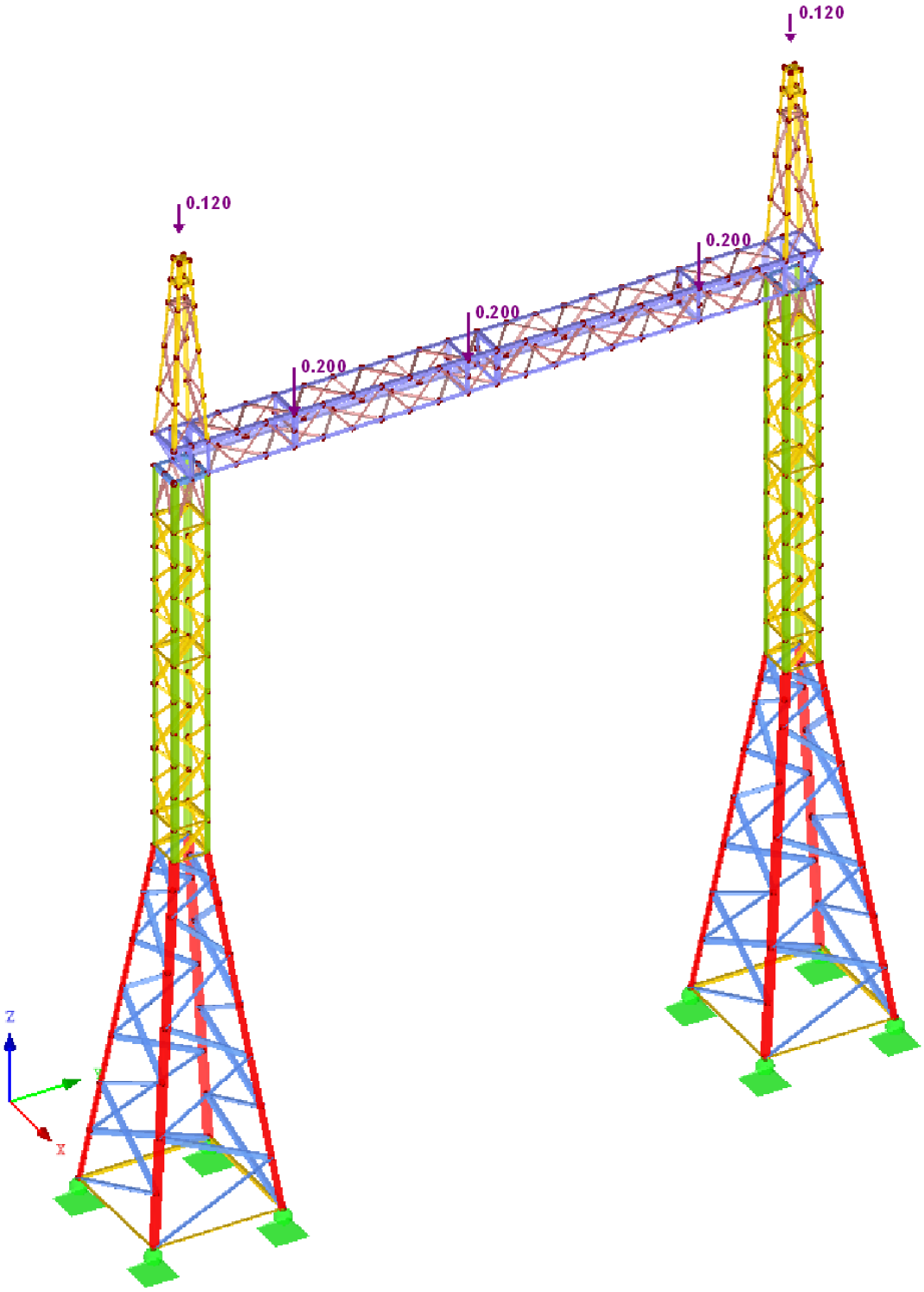
2: Laidø ir trosø apkrova

LC2 : Laidų ir trosų apkrova
Loads [kN]



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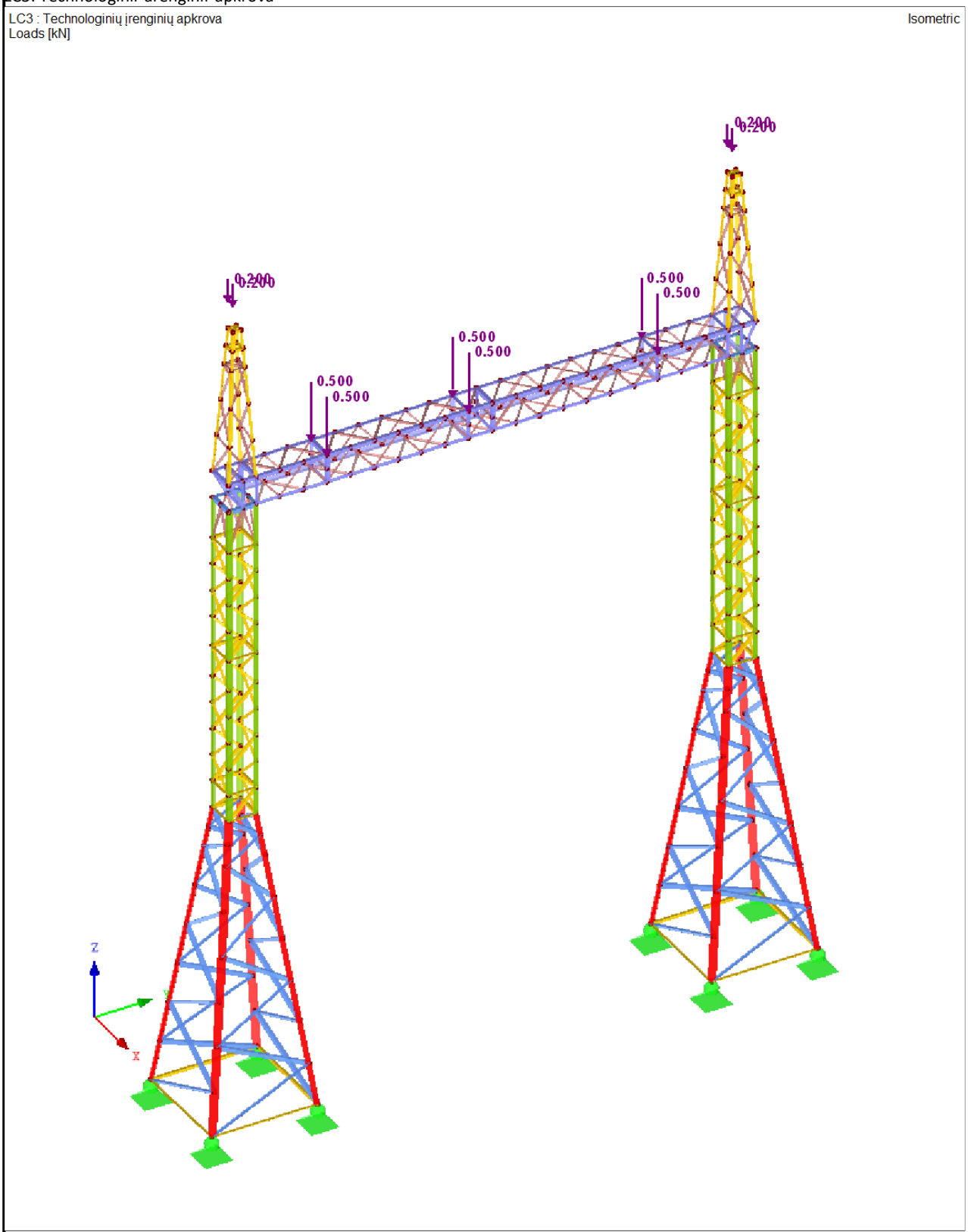
3.1 Nodal Loads - By Components Coordinate System

No.	On Nodes No.	Coordinate System	Force [kN] P_X / P_U	P_Y / P_V	P_Z / P_W	Moment [kNm] M_X / M_U	M_Y / M_V	M_Z / M_W
1	46,47,385,386	0 | Global XYZ	0.000	0.000	-0.200	0.000	0.000	0.000
2	256,258,270,272,332,346	0 | Global XYZ	0.000	0.000	-0.500	0.000	0.000	0.000

LC3: Technologiniř árenginiř apkrova



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3.15 Generated Loads

No.	Load Description			
1	From Area Loads via Plane			
	Area load direction	Global relative to the projected area:	:	x XP
	Area of load application	x Empty, on members only		
	Area load magnitude	x Constant	:	-0.98 kN/m²
	Boundary of the area load plane	Corner nodes	:	39,38,32,34
		Note	:	Each row in the drop down list box denotes one plane
	Generated loads	In X-direction	:	-1.893 kN
		In Y-direction	:	0.000 kN
		In Z-direction	:	0.000 kN
	Convert loads to members No.		:	30,31,37,38,41,43,47-50,108,167
2	From Area Loads via Plane			
	Area load direction	Global relative to the projected area:	:	x XP
	Area of load application	x Empty, on members only		
	Area load magnitude	x Constant	:	-0.98 kN/m²
	Boundary of the area load plane	Corner nodes	:	72,75,126,73
		Note	:	Each row in the drop down list box denotes one plane
	Generated loads	In X-direction	:	-1.893 kN
		In Y-direction	:	0.000 kN
		In Z-direction	:	0.000 kN
	Convert loads to members No.		:	60,62-67,69,71,78,109,125
3	From Area Loads via Plane			
	Area load direction	Global relative to the projected area:	:	x XP
	Area of load application	x Empty, on members only		
	Area load magnitude	x Constant	:	-1.00 kN/m²
	Boundary of the area load plane	Corner nodes	:	34,32,33,35; 73,126,394,313
		Note	:	Each row in the drop down list box denotes one plane
	Generated loads	In X-direction	:	-3.161 kN
		In Y-direction	:	0.000 kN
		In Z-direction	:	0.000 kN
	Convert loads to members No.		:	25,26,34-36,44-46,51,53-59,68,70,73-77,79-83,87,89,91,92,108-111,113,220,377,408,409,414,426-435,442-450,454-463,469-472,482,483,505,506,508
4	From Area Loads via Plane			
	Area load direction	Global relative to the projected area:	:	x XP
	Area of load application	x Empty, on members only		
	Area load magnitude	x Constant	:	-1.48 kN/m²
	Boundary of the area load plane	Corner nodes	:	301,107,311,148
		Note	:	Each row in the drop down list box denotes one plane
	Generated loads	In X-direction	:	-2.955 kN
		In Y-direction	:	0.000 kN
		In Z-direction	:	0.000 kN
	Convert loads to members No.		:	94,269-281,284,287,289,290,292-294,307-318,346,347,377,452,453,478-480,489-502,505,509,512,520,521

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No.	Load Description			
5	From Area Loads via Plane			
	Area load direction	Global relative to the projected area:	:	x XP
	Area of load application	x Empty, on members only		
	Area load magnitude	x Constant	:	-1.08 kN/m²
	Boundary of the area load plane	Corner nodes	:	301,296,45,46; 105,148,384,385
		Note	:	Each row in the drop down list box denotes one plane
	Generated loads	In X-direction	:	-0.889 kN
		In Y-direction	:	0.000 kN
		In Z-direction	:	0.000 kN
	Convert loads to members No.		:	32,39,84,86,88,94,98,99,101,102,112,114,117,221,289,291,346,357,358,363,364,366,367,404,405,478,529,532,533,536,538,552,557,561,566,567
6	From Area Loads via Plane			
	Area load direction	Global relative to the projected area:	:	x XP
	Area of load application	x Empty, on members only		
	Area load magnitude	x Constant	:	-0.39 kN/m²
	Boundary of the area load plane	Corner nodes	:	37,36,28,30; 74,108,109,8
		Note	:	Each row in the drop down list box denotes one plane
	Generated loads	In X-direction	:	-1.518 kN
		In Y-direction	:	0.000 kN
		In Z-direction	:	0.000 kN
	Convert loads to members No.		:	61,90,165,168-175,182,194,351,391-400
7	From Area Loads via Plane			
	Area load direction	Global relative to the projected area:	:	x XP
	Area of load application	x Empty, on members only		
	Area load magnitude	x Constant	:	-0.40 kN/m²
	Boundary of the area load plane	Corner nodes	:	30,28,29,31; 8,109,395,356
		Note	:	Each row in the drop down list box denotes one plane
	Generated loads	In X-direction	:	-1.269 kN
		In Y-direction	:	0.000 kN
		In Z-direction	:	0.000 kN
	Convert loads to members No.		:	23,24,29,33,176-181,183-186,188-191,349,351,373-375,379-390,400,403,410,411,413,415-425,436-441,464-468,473-475,477,481,503,504,507
8	From Area Loads via Plane			
	Area load direction	Global relative to the projected area:	:	x XP
	Area of load application	x Empty, on members only		
	Area load magnitude	x Constant	:	-0.60 kN/m²
	Boundary of the area load plane	Corner nodes	:	237,195,371,370
		Note	:	Each row in the drop down list box denotes one plane
	Generated loads	In X-direction	:	-1.198 kN
		In Y-direction	:	0.000 kN
		In Z-direction	:	0.000 kN
	Convert loads to members No.		:	230-232,245-256,288,331-342,345,348,349,370,371,379,

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.15 Generated Loads

No.	Load Description			
				451,476,484-488,504,510,511,513-519,522-528
9	From Area Loads via Plane			
	Area load direction	Global relative to the projected area:	:	x XP
	Area of load application	x Empty, on members only		
	Area load magnitude	x Constant	:	-0.43 kN/m²
	Boundary of the area load plane	Corner nodes	:	237,238,44,47; 24,370,387,386
		Note	:	Each row in the drop down list box denotes one plane
	Generated loads	In X-direction	:	-0.355 kN
		In Y-direction	:	0.000 kN
		In Z-direction	:	0.000 kN
	Convert loads to members No.		:	40,42,85,95,103-106,192,193,223,288,348,354-356,359-362,365,368,406,407,511,513,530,531,534,535,540,545,550,554,559,563

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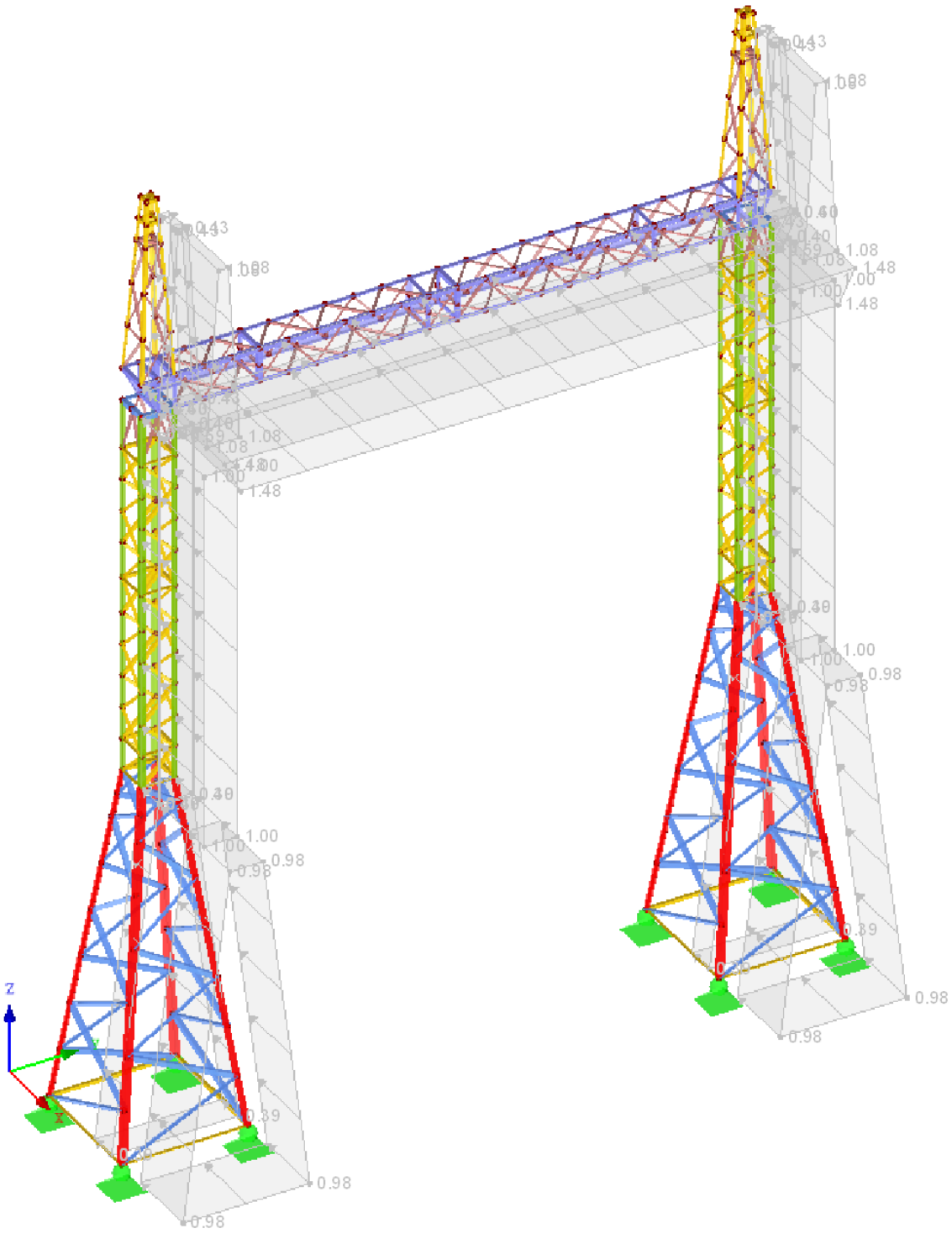
+: Vėjas X-X kryptimi

LC4 : Vėjas X-X kryptimi
Loads [kN/m^2]



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3.15 Generated Loads

No.	Load Description			
1	From Area Loads via Plane			
	Area load direction	Global relative to the projected area:	:	x YP
	Area of load application	x Empty, on members only		
	Area load magnitude	x Constant	:	0.98 kN/m²
	Boundary of the area load plane	Corner nodes	:	37,39,34,30; 74,72,73,8
		Note	:	Each row in the drop down list box denotes one plane
	Generated loads	In X-direction	:	0.000 kN
		In Y-direction	:	3.798 kN
		In Z-direction	:	0.000 kN
	Convert loads to members No.		:	1-7,27,30,60,61,96,100,194-203,352
2	From Area Loads via Plane			
	Area load direction	Global relative to the projected area:	:	x YP
	Area of load application	x Empty, on members only		
	Area load magnitude	x Constant	:	1.00 kN/m²
	Boundary of the area load plane	Corner nodes	:	30,34,35,31; 8,73,313,356
		Note	:	Each row in the drop down list box denotes one plane
	Generated loads	In X-direction	:	0.000 kN
		In Y-direction	:	3.161 kN
		In Z-direction	:	0.000 kN
	Convert loads to members No.		:	8-20,24,26-28,33,35,36,72,93,204-217,352,378,408,410,412,421-425,431-435,438-441,444-450,454-458,483
3	From Area Loads via Plane			
	Area load direction	Global relative to the projected area:	:	x YP
	Area of load application	x Empty, on members only		
	Area load magnitude	x Constant	:	1.08 kN/m²
	Boundary of the area load plane	Corner nodes	:	237,301,46,47; 24,105,385,386
		Note	:	Each row in the drop down list box denotes one plane
	Generated loads	In X-direction	:	0.000 kN
		In Y-direction	:	0.890 kN
		In Z-direction	:	0.000 kN
	Convert loads to members No.		:	21,22,32,40,85,86,98,99,104,105,107,218,219,224,283,358,359,361,364-366,372,404,406,529,531,533,534,537,542,547,551,556,560
4	From Area Loads via Plane			
	Area load direction	Global relative to the projected area:	:	x YP
	Area of load application	x Empty, on members only		
	Area load magnitude	x Constant	:	0.39 kN/m²
	Boundary of the area load plane	Corner nodes	:	36,38,32,28; 108,75,126,109
		Note	:	Each row in the drop down list box denotes one plane
	Generated loads	In X-direction	:	0.000 kN
		In Y-direction	:	1.518 kN
		In Z-direction	:	0.000 kN

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.15 Generated Loads

No.	Load Description			
	Convert loads to members No.		:	90,115,116,118-133,165,167,187,350,353
5	From Area Loads via Plane			
	Area load direction	Global relative to the projected area:	:	x YP
	Area of load application	x Empty, on members only		
	Area load magnitude	x Constant	:	0.40 kN/m^2
	Boundary of the area load plane	Corner nodes	:	28,32,33,29; 109,126,394,395
		Note	:	Each row in the drop down list box denotes one plane
	Generated loads	In X-direction	:	0.000 kN
		In Y-direction	:	1.262 kN
		In Z-direction	:	0.000 kN
	Convert loads to members No.		:	23,25,29,34,52,134-146,149-156,158,159,161-164,166,350,353,376,401,402,409,411,414-420,426-430,436,437,442,443,459-475,481,482,503,507,508
6	From Area Loads via Plane			
	Area load direction	Global relative to the projected area:	:	x YP
	Area of load application	x Empty, on members only		
	Area load magnitude	x Constant	:	0.43 kN/m^2
	Boundary of the area load plane	Corner nodes	:	238,296,45,44; 370,148,384,387
		Note	:	Each row in the drop down list box denotes one plane
	Generated loads	In X-direction	:	0.000 kN
		In Y-direction	:	0.355 kN
		In Z-direction	:	0.000 kN
	Convert loads to members No.		:	39,42,95,101-103,106,147,148,157,160,222,225,282,291,357,360,362,363,367-369,405,407,530,532,535,536,539,544,553,558,562,568

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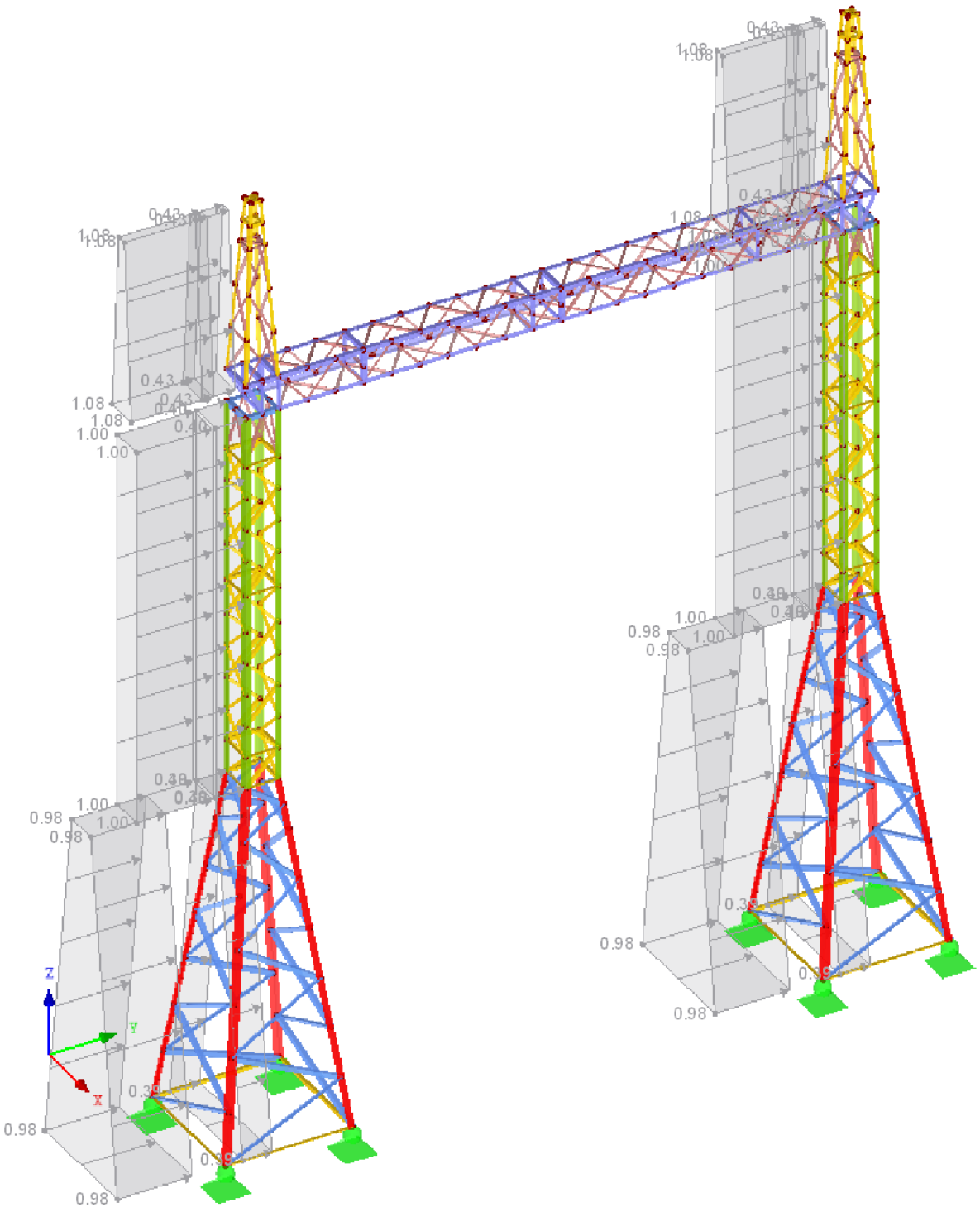
LC5 : Vėjas Y-Y kryptimi
Loads [kN/m^2]



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3.15 Generated Loads

No.	Load Description			
1	From Area Loads via Plane			
	Area load direction	Global relative to the projected area:	:	x YP
	Area of load application	x Empty, on members only		
	Area load magnitude	x Constant	:	1.17 kN/m²
	Boundary of the area load plane	Corner nodes	:	37,39,34,30; 74,72,73,8
		Note	:	Each row in the drop down list box denotes one plane
	Generated loads	In X-direction	:	0.000 kN
		In Y-direction	:	4.520 kN
		In Z-direction	:	0.000 kN
	Convert loads to members No.		:	1-7,27,30,60,61,96,100,194-203,352
2	From Area Loads via Plane			
	Area load direction	Global relative to the projected area:	:	x XP
	Area of load application	x Empty, on members only		
	Area load magnitude	x Constant	:	-1.17 kN/m²
	Boundary of the area load plane	Corner nodes	:	74,72,73,8; 39,38,32,34; 72,75,126,73
		Note	:	Each row in the drop down list box denotes one plane
	Generated loads	In X-direction	:	-5.602 kN
		In Y-direction	:	0.000 kN
		In Z-direction	:	0.000 kN
	Convert loads to members No.		:	1-7,27,30,31,37,38,41,43,47-50,60-67,69,71,78,96,100,108,109,125,167
3	From Area Loads via Plane			
	Area load direction	Global relative to the projected area:	:	x XP
	Area of load application	x Empty, on members only		
	Area load magnitude	x Constant	:	-1.21 kN/m²
	Boundary of the area load plane	Corner nodes	:	34,32,33,35; 73,126,394,313
		Note	:	Each row in the drop down list box denotes one plane
	Generated loads	In X-direction	:	-3.822 kN
		In Y-direction	:	0.000 kN
		In Z-direction	:	0.000 kN
	Convert loads to members No.		:	25,26,34-36,44-46,51,53-59,68,70,73-77,79-83,87,89,91,92,108-111,113,220,377,408,409,414,426-435,442-450,454-463,469-472,482,483,505,506,508
4	From Area Loads via Plane			
	Area load direction	Global relative to the projected area:	:	x YP
	Area of load application	x Empty, on members only		
	Area load magnitude	x Constant	:	1.21 kN/m²
	Boundary of the area load plane	Corner nodes	:	30,34,35,31; 8,73,313,356
		Note	:	Each row in the drop down list box denotes one plane
	Generated loads	In X-direction	:	0.000 kN
		In Y-direction	:	3.829 kN
		In Z-direction	:	0.000 kN

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No.	Load Description			
	Convert loads to members No.		:	8-20,24,26-28,33,35,36,72,93,204-217,352,378,408,410,412,421-425,431-435,438-441,444-450,454-458,483
5	From Area Loads via Plane			
	Area load direction	Global relative to the projected area:	:	x YP
	Area of load application	x Empty, on members only		
	Area load magnitude	x Constant	:	1.30 kN/m²
	Boundary of the area load plane	Corner nodes	:	237,301,46,47; 24,105,385,386
		Note	:	Each row in the drop down list box denotes one plane
	Generated loads	In X-direction	:	0.000 kN
		In Y-direction	:	1.072 kN
		In Z-direction	:	0.000 kN
	Convert loads to members No.		:	21,22,32,40,85,86,98,99,104,105,107,218,219,224,283,358,359,361,364-366,372,404,406,529,531,533,534,537,542,547,551,556,560
6	From Area Loads via Plane			
	Area load direction	Global relative to the projected area:	:	x XP
	Area of load application	x Empty, on members only		
	Area load magnitude	x Constant	:	-1.30 kN/m²
	Boundary of the area load plane	Corner nodes	:	301,296,45,46; 105,148,384,385
		Note	:	Each row in the drop down list box denotes one plane
	Generated loads	In X-direction	:	-1.074 kN
		In Y-direction	:	0.000 kN
		In Z-direction	:	0.000 kN
	Convert loads to members No.		:	32,39,84,86,88,94,98,99,101,102,112,114,117,221,289,291,346,357,358,363,364,366,367,404,405,478,529,532,533,536,538,552,557,561,566,567
7	From Area Loads via Plane			
	Area load direction	Global relative to the projected area:	:	x XP
	Area of load application	x Empty, on members only		
	Area load magnitude	x Constant	:	-1.76 kN/m²
	Boundary of the area load plane	Corner nodes	:	301,107,311,148
		Note	:	Each row in the drop down list box denotes one plane
	Generated loads	In X-direction	:	-3.515 kN
		In Y-direction	:	0.000 kN
		In Z-direction	:	0.000 kN
	Convert loads to members No.		:	94,269-281,284,287,289,290,292-294,307-318,346,347,377,452,453,478-480,489-502,505,509,512,520,521
8	From Area Loads via Plane			
	Area load direction	Global relative to the projected area:	:	x XP
	Area of load application	x Empty, on members only		
	Area load magnitude	x Constant	:	-0.70 kN/m²
	Boundary of the area load plane	Corner nodes	:	237,195,371,370
		Note	:	Each row in the drop down list box denotes one plane

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No.	Load Description			
	Generated loads	In X-direction	:	-1.417 kN
		In Y-direction	:	0.000 kN
		In Z-direction	:	0.000 kN
	Convert loads to members No.		:	230-232,245-256,288,331-342,345,348,349,370,371,379,451,476,484-488,504,510,511,513-519,522-528
9	From Area Loads via Plane			
	Area load direction	Global relative to the projected area:	:	x XP
	Area of load application	x Empty, on members only		
	Area load magnitude	x Constant	:	-0.52 kN/m^2
	Boundary of the area load plane	Corner nodes	:	237,238,44,47; 386,387,370,24
		Note	:	Each row in the drop down list box denotes one plane
	Generated loads	In X-direction	:	-0.428 kN
		In Y-direction	:	0.000 kN
		In Z-direction	:	0.000 kN
	Convert loads to members No.		:	40,42,85,95,103-106,192,193,223,288,348,354-356,359-362,365,368,406,407,511,513,530,531,534,535,540,545,550,554,559,563
10	From Area Loads via Plane			
	Area load direction	Global relative to the projected area:	:	x XP
	Area of load application	x Empty, on members only		
	Area load magnitude	x Constant	:	-0.48 kN/m^2
	Boundary of the area load plane	Corner nodes	:	30,28,29,31; 356,395,109,8
		Note	:	Each row in the drop down list box denotes one plane
	Generated loads	In X-direction	:	-1.536 kN
		In Y-direction	:	0.000 kN
		In Z-direction	:	0.000 kN
	Convert loads to members No.		:	23,24,29,33,176-181,183-186,188-191,349,351,373-375,379-390,400,403,410,411,413,415-425,436-441,464-468,473-475,477,481,503,504,507
11	From Area Loads via Plane			
	Area load direction	Global relative to the projected area:	:	x XP
	Area of load application	x Empty, on members only		
	Area load magnitude	x Constant	:	-0.47 kN/m^2
	Boundary of the area load plane	Corner nodes	:	37,36,28,30; 8,109,108,74
		Note	:	Each row in the drop down list box denotes one plane
	Generated loads	In X-direction	:	-1.812 kN
		In Y-direction	:	0.000 kN
		In Z-direction	:	0.000 kN
	Convert loads to members No.		:	61,90,165,168-175,182,194,351,391-400
12	From Area Loads via Plane			
	Area load direction	Global relative to the projected area:	:	x YP
	Area of load application	x Empty, on members only		

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.15 Generated Loads

No.	Load Description			
	Area load magnitude	x Constant	:	0.47 kN/m²
	Boundary of the area load plane	Corner nodes	:	36,38,32,28; 108,75,126,109
		Note	:	Each row in the drop down list box denotes one plane
	Generated loads	In X-direction	:	0.000 kN
		In Y-direction	:	1.816 kN
		In Z-direction	:	0.000 kN
	Convert loads to members No.		:	90,115,116,118-133,165,167,187,350,353
13	From Area Loads via Plane			
	Area load direction	Global relative to the projected area:	:	x YP
	Area of load application	x Empty, on members only		
	Area load magnitude	x Constant	:	0.48 kN/m²
	Boundary of the area load plane	Corner nodes	:	28,32,33,29; 395,394,126,109
		Note	:	Each row in the drop down list box denotes one plane
	Generated loads	In X-direction	:	0.000 kN
		In Y-direction	:	1.528 kN
		In Z-direction	:	0.000 kN
	Convert loads to members No.		:	23,25,29,34,52,134-146,149-156,158,159,161-164,166,350,353,376,401,402,409,411,414-420,426-430,436,437,442,443,459-475,481,482,503,507,508
14	From Area Loads via Plane			
	Area load direction	Global relative to the projected area:	:	x YP
	Area of load application	x Empty, on members only		
	Area load magnitude	x Constant	:	0.52 kN/m²
	Boundary of the area load plane	Corner nodes	:	44,45,296,238; 370,148,384,387
		Note	:	Each row in the drop down list box denotes one plane
	Generated loads	In X-direction	:	0.000 kN
		In Y-direction	:	0.428 kN
		In Z-direction	:	0.000 kN
	Convert loads to members No.		:	39,42,95,101-103,106,147,148,157,160,222,225,282,291,357,360,362,363,367-369,405,407,530,532,535,536,539,544,553,558,562,568

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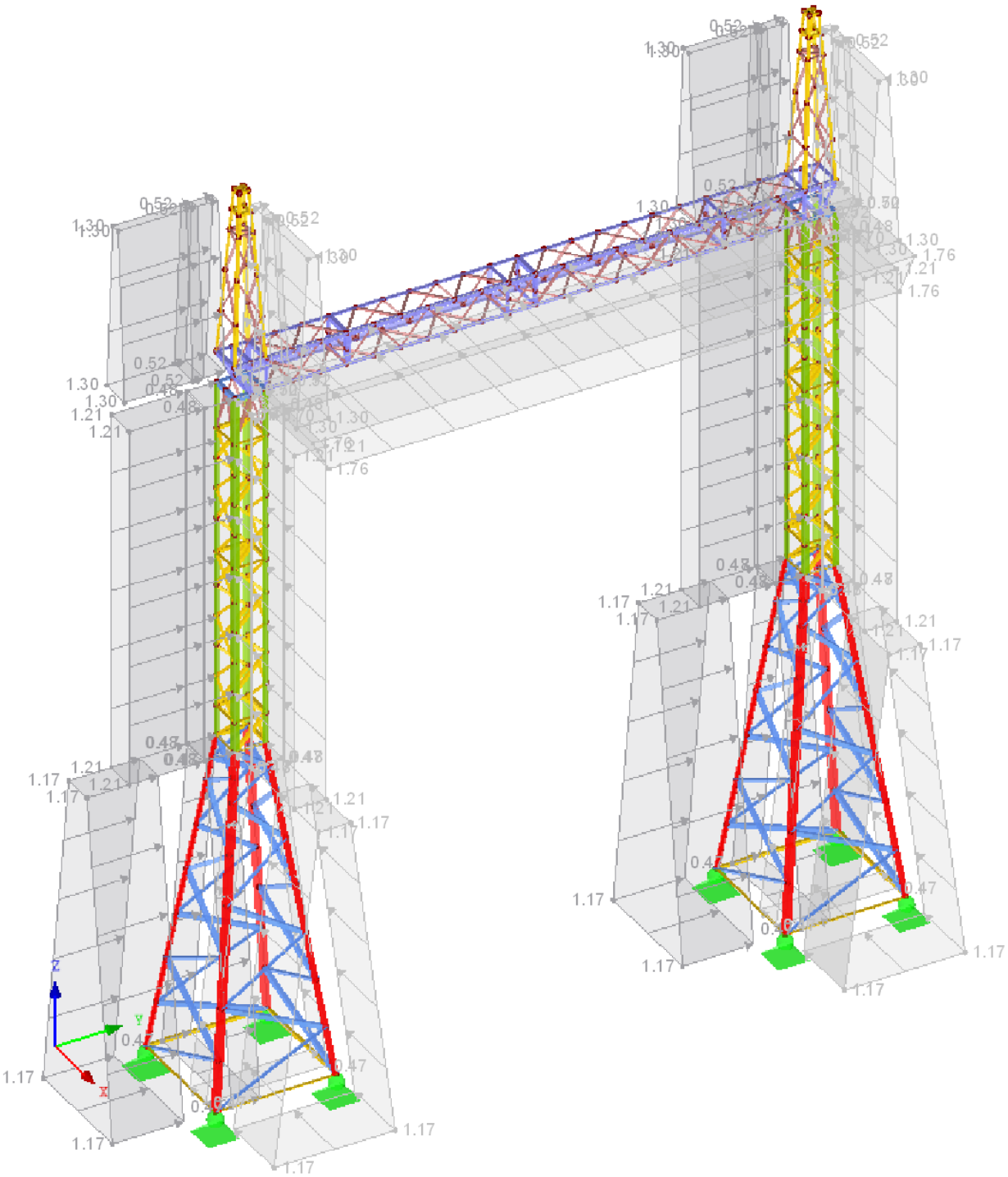
6: Vėjas X-Y kryptimi

LC6 : Vėjas X-Y kryptimi
Loads [kN/m^2]



LC8
Laidř tempimas

ED2201-XX-RDP-SK-T1.IS	LAPAS	LAPŲ	LAIDA
	337	643	0

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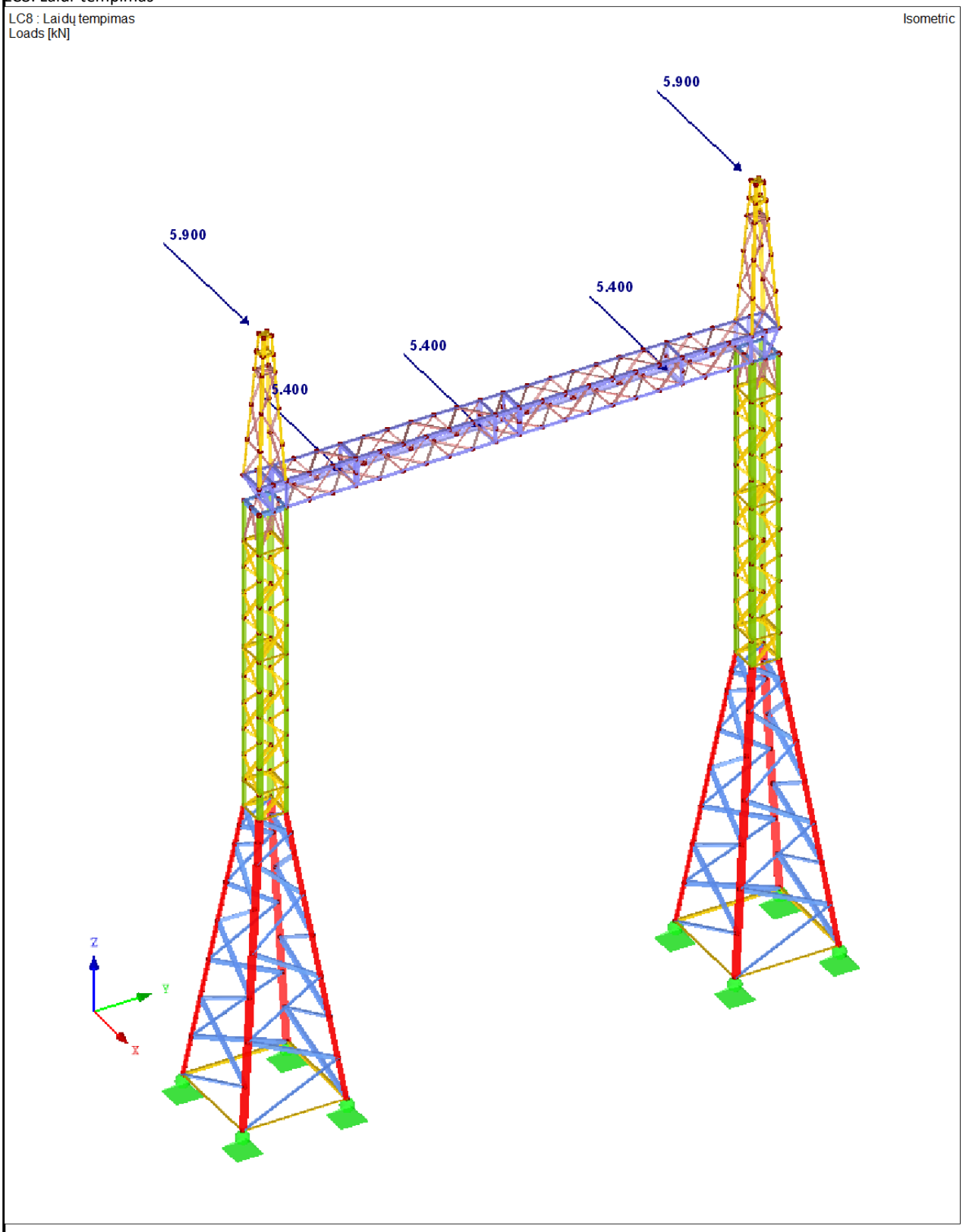
.1 Nodal Loads - By Components - Coordinate System

No.	On Nodes No.	Coordinate System	Force [kN] P_X / P_U	P_Y / P_V	P_Z / P_W	Moment [kNm] M_X / M_U	M_Y / M_V	M_Z / M_W
1	270,272,332	0 | Global XYZ	5.400	0.000	0.000	0.000	0.000	0.000
2	46,385	0 | Global XYZ	5.900	0.000	0.000	0.000	0.000	0.000

LC8: Laidř tempimas



Model

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4.1 Nodes - Support Forces

Node No.	LC/CO	Support Forces [kN] $P_{X'}$	$P_{Y'}$	$P_{Z'}$	Support Moments [kNm] $M_{X'}$	$M_{Y'}$	$M_{Z'}$	
36	LC1	-0.42	0.39	-2.85	0.00	0.00	0.00	Nuosavas svoris
	LC2	0.00	0.00	-0.02	0.00	0.00	0.00	Laidř ir trosř apkrova
	LC3	-0.03	0.01	-0.19	0.00	0.00	0.00	Technologiniř árenginiř apkrova
	LC4	-2.00	1.90	-14.63	0.00	0.00	-0.02	Vėjas X-X kryptimi
	LC5	-1.04	1.57	-7.68	0.00	0.00	0.01	Vėjas Y-Y kryptimi
	LC6	-3.64	4.16	-26.79	0.00	0.00	-0.01	Vėjas X-Y kryptimi
	LC8	6.12	-5.95	46.31	0.00	0.00	0.00	Laidř tempimas
	CO1	-0.56	0.53	-3.85	0.00	0.00	0.00	
	CO2	-0.57	0.53	-3.89	0.00	0.00	0.00	
	CO3	-0.60	0.55	-4.14	0.00	0.00	0.00	
	CO4	-0.60	0.55	-4.11	0.00	0.00	0.00	
	CO5	-3.56	3.38	-25.83	0.00	0.00	-0.04	
	CO6	-3.57	3.38	-25.87	0.00	0.00	-0.04	
	CO7	-3.60	3.40	-26.14	0.00	0.00	-0.04	
	CO8	-3.60	3.40	-26.10	0.00	0.00	-0.04	
	CO9	7.68	-7.51	58.53	0.00	0.00	0.00	
	CO10	7.70	-7.52	58.74	0.00	0.00	0.00	
	CO11	7.68	-7.51	58.55	0.00	0.00	0.00	
	CO12	7.71	-7.52	58.76	0.00	0.00	0.00	
	CO13	4.68	-4.66	36.54	0.00	0.00	-0.03	
	CO14	4.71	-4.67	36.76	0.00	0.00	-0.03	
	CO15	4.68	-4.66	36.57	0.00	0.00	-0.03	
	CO16	4.71	-4.67	36.79	0.00	0.00	-0.03	
	CO17	-2.12	2.89	-15.38	0.00	0.00	0.01	
	CO18	-2.12	2.89	-15.41	0.00	0.00	0.01	
	CO19	-2.16	2.90	-15.67	0.00	0.00	0.01	
	CO20	-2.15	2.90	-15.64	0.00	0.00	0.01	
	CO21	6.10	-5.12	46.90	0.00	0.00	0.02	
	CO22	6.13	-5.13	47.11	0.00	0.00	0.02	
	CO23	6.11	-5.12	46.92	0.00	0.00	0.02	
	CO24	6.14	-5.13	47.13	0.00	0.00	0.02	
	CO25	-6.03	6.75	-44.05	0.00	0.00	-0.02	
	CO26	-6.03	6.75	-44.08	0.00	0.00	-0.02	
	CO27	-6.07	6.77	-44.36	0.00	0.00	-0.02	
	CO28	-6.06	6.77	-44.32	0.00	0.00	-0.02	
	CO29	2.20	-1.24	18.20	0.00	0.00	-0.02	
	CO30	2.23	-1.26	18.42	0.00	0.00	-0.02	
	CO31	2.20	-1.24	18.22	0.00	0.00	-0.02	
	CO32	2.23	-1.25	18.45	0.00	0.00	-0.02	
	CO33	-0.42	0.39	-2.85	0.00	0.00	0.00	
	CO34	-0.42	0.39	-2.88	0.00	0.00	0.00	
	CO35	-0.45	0.41	-3.07	0.00	0.00	0.00	
	CO36	-0.44	0.41	-3.04	0.00	0.00	0.00	
	CO37	-2.41	2.29	-17.50	0.00	0.00	-0.02	
	CO38	-2.42	2.29	-17.53	0.00	0.00	-0.02	
	CO39	-2.44	2.31	-17.72	0.00	0.00	-0.02	
	CO40	-2.44	2.30	-17.70	0.00	0.00	-0.02	
	CO41	5.68	-5.56	43.33	0.00	0.00	0.00	
	CO42	5.71	-5.57	43.49	0.00	0.00	0.00	
	CO43	5.69	-5.56	43.34	0.00	0.00	0.00	
	CO44	5.71	-5.57	43.51	0.00	0.00	0.00	
	CO45	3.69	-3.66	28.67	0.00	0.00	-0.02	
	CO46	3.71	-3.67	28.84	0.00	0.00	-0.02	
	CO47	3.69	-3.66	28.69	0.00	0.00	-0.02	
	CO48	3.71	-3.67	28.86	0.00	0.00	-0.02	
	CO49	-1.45	1.97	-10.54	0.00	0.00	0.01	
	CO50	-1.46	1.97	-10.56	0.00	0.00	0.01	
	CO51	-1.48	1.98	-10.75	0.00	0.00	0.01	
	CO52	-1.48	1.98	-10.73	0.00	0.00	0.01	
	CO53	4.64	-3.97	35.59	0.00	0.00	0.01	
	CO54	4.66	-3.98	35.75	0.00	0.00	0.01	
	CO55	4.64	-3.97	35.61	0.00	0.00	0.01	
	CO56	4.66	-3.98	35.77	0.00	0.00	0.01	
	CO57	-4.06	4.54	-29.65	0.00	0.00	-0.02	

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.1 Nodes - Support Forces

Node No.	LC/CO	Support Forces [kN] $P_{X'}$	$P_{Y'}$	$P_{Z'}$	Support Moments [kNm] $M_{X'}$	$M_{Y'}$	$M_{Z'}$	
	CO58	-4.06	4.55	-29.68	0.00	0.00	-0.02	
	CO59	-4.09	4.56	-29.88	0.00	0.00	-0.02	
	CO60	-4.09	4.56	-29.85	0.00	0.00	-0.02	
	CO61	2.03	-1.39	16.46	0.00	0.00	-0.01	
	CO62	2.06	-1.40	16.63	0.00	0.00	-0.01	
	CO63	2.04	-1.39	16.48	0.00	0.00	-0.01	
	CO64	2.06	-1.40	16.65	0.00	0.00	-0.01	
	CO65	-0.42	0.39	-2.85	0.00	0.00	0.00	
	CO66	-0.42	0.39	-2.88	0.00	0.00	0.00	
	CO67	-0.45	0.41	-3.07	0.00	0.00	0.00	
	CO68	-0.44	0.41	-3.04	0.00	0.00	0.00	
	CO69	-0.82	0.77	-5.78	0.00	0.00	-0.01	
	CO70	-0.82	0.77	-5.81	0.00	0.00	-0.01	
	CO71	-0.85	0.79	-6.00	0.00	0.00	-0.01	
	CO72	-0.84	0.79	-5.98	0.00	0.00	-0.01	
	CO73	5.68	-5.56	43.33	0.00	0.00	0.00	
	CO74	5.71	-5.57	43.49	0.00	0.00	0.00	
	CO75	5.69	-5.56	43.34	0.00	0.00	0.00	
	CO76	5.71	-5.57	43.51	0.00	0.00	0.00	
	CO77	5.28	-5.18	40.40	0.00	0.00	0.00	
	CO78	5.31	-5.19	40.56	0.00	0.00	0.00	
	CO79	5.29	-5.18	40.41	0.00	0.00	0.00	
	CO80	5.31	-5.19	40.58	0.00	0.00	0.00	
	CO81	-0.62	0.71	-4.39	0.00	0.00	0.00	
	CO82	-0.63	0.71	-4.41	0.00	0.00	0.00	
	CO83	-0.65	0.72	-4.60	0.00	0.00	0.00	
	CO84	-0.65	0.72	-4.58	0.00	0.00	0.00	
	CO85	5.47	-5.24	41.78	0.00	0.00	0.00	
	CO86	5.50	-5.25	41.94	0.00	0.00	0.00	
	CO87	5.48	-5.24	41.80	0.00	0.00	0.00	
	CO88	5.50	-5.25	41.96	0.00	0.00	0.00	
	CO89	-1.15	1.23	-8.22	0.00	0.00	0.00	
	CO90	-1.15	1.23	-8.24	0.00	0.00	0.00	
	CO91	-1.17	1.24	-8.43	0.00	0.00	0.00	
	CO92	-1.17	1.24	-8.41	0.00	0.00	0.00	
	CO93	4.95	-4.72	37.95	0.00	0.00	0.00	
	CO94	4.98	-4.73	38.11	0.00	0.00	0.00	
	CO95	4.96	-4.72	37.97	0.00	0.00	0.00	
	CO96	4.98	-4.73	38.13	0.00	0.00	0.00	
	CO97	-0.42	0.39	-2.85	0.00	0.00	0.00	
	CO98	-0.42	0.39	-2.88	0.00	0.00	0.00	
	CO99	-0.45	0.41	-3.07	0.00	0.00	0.00	
	CO100	-0.44	0.41	-3.04	0.00	0.00	0.00	
	CO101	5.68	-5.56	43.33	0.00	0.00	0.00	
	CO102	5.71	-5.57	43.49	0.00	0.00	0.00	
	CO103	5.69	-5.56	43.34	0.00	0.00	0.00	
	CO104	5.71	-5.57	43.51	0.00	0.00	0.00	
37	LC1	-0.54	-0.54	-3.75	0.00	0.00	0.00	Nuosavas svoris
	LC2	-0.03	-0.02	-0.15	0.00	0.00	0.00	Laidř ir trosř apkrova
	LC3	-0.11	-0.11	-0.79	0.00	0.00	0.00	Technologiniř árenginiř apkrova
	LC4	-1.64	-1.98	-14.61	0.00	0.00	0.01	Vėjas X-X kryptimi
	LC5	1.08	1.18	7.96	0.00	0.00	0.05	Vėjas Y-Y kryptimi
	LC6	-0.67	-0.95	-7.92	0.00	0.00	0.07	Vėjas X-Y kryptimi
	LC8	0.64	6.29	46.18	0.00	0.00	0.01	Laidř tempimas
	CO1	-0.72	-0.73	-5.06	0.00	0.00	0.00	
	CO2	-0.76	-0.75	-5.26	0.00	0.00	0.00	
	CO3	-0.90	-0.90	-6.33	0.00	0.00	0.00	
	CO4	-0.87	-0.87	-6.13	0.00	0.00	0.00	
	CO5	-3.17	-3.70	-27.01	0.00	0.00	0.01	
	CO6	-3.21	-3.73	-27.21	0.00	0.00	0.01	
	CO7	-3.35	-3.88	-28.29	0.00	0.00	0.01	
	CO8	-3.32	-3.85	-28.09	0.00	0.00	0.01	
	CO9	-0.08	7.63	56.16	0.00	0.00	0.01	
	CO10	0.07	7.77	57.19	0.00	0.00	0.01	
	CO11	-0.04	7.65	56.35	0.00	0.00	0.01	

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.1 Nodes - Support Forces

Node No.	LC/CO	Support Forces [kN] $P_{X'}$	$P_{Y'}$	$P_{Z'}$	Support Moments [kNm] $M_{X'}$	$M_{Y'}$	$M_{Z'}$
	CO12	0.11	7.79	57.38	0.00	0.00	0.01
	CO13	-2.53	4.64	34.20	0.00	0.00	0.03
	CO14	-2.38	4.78	35.24	0.00	0.00	0.03
	CO15	-2.49	4.67	34.40	0.00	0.00	0.03
	CO16	-2.34	4.81	35.44	0.00	0.00	0.03
	CO17	0.89	1.05	6.89	0.00	0.00	0.07
	CO18	0.86	1.03	6.69	0.00	0.00	0.07
	CO19	0.71	0.88	5.63	0.00	0.00	0.07
	CO20	0.75	0.91	5.82	0.00	0.00	0.07
	CO21	1.59	9.43	68.29	0.00	0.00	0.09
	CO22	1.74	9.57	69.32	0.00	0.00	0.09
	CO23	1.62	9.45	68.48	0.00	0.00	0.09
	CO24	1.77	9.59	69.51	0.00	0.00	0.09
	CO25	-1.73	-2.16	-17.02	0.00	0.00	0.10
	CO26	-1.77	-2.19	-17.22	0.00	0.00	0.10
	CO27	-1.91	-2.34	-18.30	0.00	0.00	0.10
	CO28	-1.87	-2.31	-18.10	0.00	0.00	0.10
	CO29	-1.02	6.21	44.40	0.00	0.00	0.12
	CO30	-0.88	6.35	45.44	0.00	0.00	0.12
	CO31	-0.99	6.24	44.59	0.00	0.00	0.12
	CO32	-0.84	6.38	45.63	0.00	0.00	0.12
	CO33	-0.54	-0.54	-3.75	0.00	0.00	0.00
	CO34	-0.56	-0.56	-3.90	0.00	0.00	0.00
	CO35	-0.67	-0.66	-4.69	0.00	0.00	0.00
	CO36	-0.64	-0.64	-4.54	0.00	0.00	0.00
	CO37	-2.17	-2.52	-18.38	0.00	0.00	0.01
	CO38	-2.20	-2.54	-18.53	0.00	0.00	0.01
	CO39	-2.30	-2.65	-19.32	0.00	0.00	0.01
	CO40	-2.28	-2.63	-19.18	0.00	0.00	0.01
	CO41	-0.05	5.64	41.57	0.00	0.00	0.01
	CO42	0.06	5.75	42.34	0.00	0.00	0.01
	CO43	-0.02	5.66	41.72	0.00	0.00	0.01
	CO44	0.09	5.77	42.49	0.00	0.00	0.01
	CO45	-1.69	3.66	26.94	0.00	0.00	0.02
	CO46	-1.58	3.76	27.72	0.00	0.00	0.02
	CO47	-1.66	3.68	27.08	0.00	0.00	0.02
	CO48	-1.55	3.78	27.86	0.00	0.00	0.02
	CO49	0.54	0.65	4.22	0.00	0.00	0.05
	CO50	0.51	0.63	4.07	0.00	0.00	0.05
	CO51	0.41	0.52	3.28	0.00	0.00	0.05
	CO52	0.43	0.54	3.43	0.00	0.00	0.05
	CO53	1.05	6.84	49.63	0.00	0.00	0.06
	CO54	1.16	6.95	50.40	0.00	0.00	0.06
	CO55	1.08	6.86	49.77	0.00	0.00	0.06
	CO56	1.19	6.96	50.54	0.00	0.00	0.06
	CO57	-1.21	-1.49	-11.70	0.00	0.00	0.07
	CO58	-1.23	-1.51	-11.85	0.00	0.00	0.07
	CO59	-1.34	-1.62	-12.65	0.00	0.00	0.07
	CO60	-1.31	-1.60	-12.50	0.00	0.00	0.07
	CO61	-0.69	4.70	33.71	0.00	0.00	0.08
	CO62	-0.58	4.80	34.49	0.00	0.00	0.08
	CO63	-0.66	4.72	33.86	0.00	0.00	0.08
	CO64	-0.55	4.82	34.63	0.00	0.00	0.08
	CO65	-0.54	-0.54	-3.75	0.00	0.00	0.00
	CO66	-0.56	-0.56	-3.90	0.00	0.00	0.00
	CO67	-0.67	-0.66	-4.69	0.00	0.00	0.00
	CO68	-0.64	-0.64	-4.54	0.00	0.00	0.00
	CO69	-0.86	-0.93	-6.68	0.00	0.00	0.00
	CO70	-0.89	-0.95	-6.82	0.00	0.00	0.00
	CO71	-0.99	-1.06	-7.62	0.00	0.00	0.00
	CO72	-0.97	-1.04	-7.47	0.00	0.00	0.00
	CO73	-0.05	5.64	41.57	0.00	0.00	0.01
	CO74	0.06	5.75	42.34	0.00	0.00	0.01
	CO75	-0.02	5.66	41.72	0.00	0.00	0.01
	CO76	0.09	5.77	42.49	0.00	0.00	0.01

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.1 Nodes - Support Forces

Node No.	LC/CO	Support Forces [kN] $P_{X'}$	$P_{Y'}$	$P_{Z'}$	Support Moments [kNm] $M_{X'}$	$M_{Y'}$	$M_{Z'}$	
	CO77	-0.38	5.25	38.65	0.00	0.00	0.01	
	CO78	-0.27	5.35	39.42	0.00	0.00	0.01	
	CO79	-0.35	5.27	38.79	0.00	0.00	0.01	
	CO80	-0.24	5.37	39.56	0.00	0.00	0.01	
	CO81	-0.32	-0.30	-2.16	0.00	0.00	0.01	
	CO82	-0.35	-0.32	-2.30	0.00	0.00	0.01	
	CO83	-0.45	-0.43	-3.10	0.00	0.00	0.01	
	CO84	-0.43	-0.41	-2.95	0.00	0.00	0.01	
	CO85	0.17	5.88	43.18	0.00	0.00	0.02	
	CO86	0.28	5.99	43.95	0.00	0.00	0.02	
	CO87	0.20	5.90	43.33	0.00	0.00	0.02	
	CO88	0.31	6.01	44.10	0.00	0.00	0.02	
	CO89	-0.67	-0.73	-5.34	0.00	0.00	0.01	
	CO90	-0.69	-0.75	-5.48	0.00	0.00	0.01	
	CO91	-0.80	-0.85	-6.28	0.00	0.00	0.01	
	CO92	-0.77	-0.83	-6.13	0.00	0.00	0.01	
	CO93	-0.18	5.46	40.01	0.00	0.00	0.02	
	CO94	-0.07	5.56	40.78	0.00	0.00	0.02	
	CO95	-0.15	5.48	40.15	0.00	0.00	0.02	
	CO96	-0.04	5.58	40.92	0.00	0.00	0.02	
	CO97	-0.54	-0.54	-3.75	0.00	0.00	0.00	
	CO98	-0.56	-0.56	-3.90	0.00	0.00	0.00	
	CO99	-0.67	-0.66	-4.69	0.00	0.00	0.00	
	CO100	-0.64	-0.64	-4.54	0.00	0.00	0.00	
	CO101	-0.05	5.64	41.57	0.00	0.00	0.01	
	CO102	0.06	5.75	42.34	0.00	0.00	0.01	
	CO103	-0.02	5.66	41.72	0.00	0.00	0.01	
	CO104	0.09	5.77	42.49	0.00	0.00	0.01	
38	LC1	0.41	0.42	-2.84	0.00	0.00	0.00	Nuosavas svoris
	LC2	0.00	0.01	-0.07	0.00	0.00	0.00	Laidř ir trosř apkrova
	LC3	0.02	0.03	-0.18	0.00	0.00	0.00	Technologiniř árenginiř apkrova
	LC4	-1.87	-1.98	14.62	0.00	0.00	-0.02	Vėjas X-X kryptimi
	LC5	1.03	1.08	-7.69	0.00	0.00	-0.02	Vėjas Y-Y kryptimi
	LC6	-0.99	-1.07	8.26	0.00	0.00	-0.05	Vėjas X-Y kryptimi
	LC8	1.47	6.30	-46.25	0.00	0.00	-0.01	Laidř tempimas
	CO1	0.56	0.56	-3.84	0.00	0.00	0.00	
	CO2	0.56	0.58	-3.93	0.00	0.00	0.00	
	CO3	0.60	0.61	-4.18	0.00	0.00	0.00	
	CO4	0.59	0.60	-4.09	0.00	0.00	0.00	
	CO5	-2.24	-2.41	18.13	0.00	0.00	-0.03	
	CO6	-2.24	-2.40	18.04	0.00	0.00	-0.03	
	CO7	-2.20	-2.36	17.80	0.00	0.00	-0.03	
	CO8	-2.21	-2.38	17.89	0.00	0.00	-0.03	
	CO9	2.58	9.13	-66.77	0.00	0.00	-0.02	
	CO10	2.55	9.09	-66.47	0.00	0.00	-0.02	
	CO11	2.57	9.11	-66.67	0.00	0.00	-0.02	
	CO12	2.54	9.07	-66.37	0.00	0.00	-0.02	
	CO13	-0.22	6.16	-44.80	0.00	0.00	-0.05	
	CO14	-0.26	6.12	-44.52	0.00	0.00	-0.05	
	CO15	-0.23	6.15	-44.70	0.00	0.00	-0.05	
	CO16	-0.26	6.11	-44.41	0.00	0.00	-0.05	
	CO17	2.11	2.18	-15.38	0.00	0.00	-0.03	
	CO18	2.11	2.19	-15.47	0.00	0.00	-0.03	
	CO19	2.15	2.23	-15.73	0.00	0.00	-0.03	
	CO20	2.14	2.21	-15.63	0.00	0.00	-0.03	
	CO21	4.09	10.73	-78.21	0.00	0.00	-0.05	
	CO22	4.06	10.69	-77.91	0.00	0.00	-0.05	
	CO23	4.08	10.72	-78.10	0.00	0.00	-0.05	
	CO24	4.05	10.67	-77.80	0.00	0.00	-0.05	
	CO25	-0.91	-1.04	8.53	0.00	0.00	-0.08	
	CO26	-0.90	-1.03	8.44	0.00	0.00	-0.08	
	CO27	-0.87	-1.00	8.21	0.00	0.00	-0.08	
	CO28	-0.87	-1.01	8.30	0.00	0.00	-0.08	
	CO29	1.06	7.51	-54.27	0.00	0.00	-0.09	
	CO30	1.03	7.47	-53.98	0.00	0.00	-0.09	

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.1 Nodes - Support Forces

Node No.	LC/CO	Support Forces [kN] $P_{X'}$	$P_{Y'}$	$P_{Z'}$	Support Moments [kNm] $M_{X'}$	$M_{Y'}$	$M_{Z'}$
	CO31	1.06	7.49	-54.16	0.00	0.00	-0.09
	CO32	1.02	7.45	-53.88	0.00	0.00	-0.09
	CO33	0.41	0.42	-2.84	0.00	0.00	0.00
	CO34	0.42	0.43	-2.91	0.00	0.00	0.00
	CO35	0.44	0.45	-3.10	0.00	0.00	0.00
	CO36	0.44	0.44	-3.03	0.00	0.00	0.00
	CO37	-1.45	-1.56	11.79	0.00	0.00	-0.02
	CO38	-1.45	-1.55	11.73	0.00	0.00	-0.02
	CO39	-1.42	-1.53	11.55	0.00	0.00	-0.02
	CO40	-1.43	-1.54	11.62	0.00	0.00	-0.02
	CO41	1.91	6.76	-49.43	0.00	0.00	-0.01
	CO42	1.89	6.73	-49.22	0.00	0.00	-0.01
	CO43	1.91	6.75	-49.36	0.00	0.00	-0.01
	CO44	1.88	6.72	-49.15	0.00	0.00	-0.01
	CO45	0.04	4.78	-34.79	0.00	0.00	-0.03
	CO46	0.02	4.75	-34.59	0.00	0.00	-0.03
	CO47	0.04	4.77	-34.72	0.00	0.00	-0.03
	CO48	0.02	4.74	-34.51	0.00	0.00	-0.03
	CO49	1.45	1.49	-10.54	0.00	0.00	-0.02
	CO50	1.45	1.50	-10.61	0.00	0.00	-0.02
	CO51	1.48	1.53	-10.79	0.00	0.00	-0.02
	CO52	1.47	1.52	-10.72	0.00	0.00	-0.02
	CO53	2.92	7.83	-57.07	0.00	0.00	-0.03
	CO54	2.90	7.80	-56.86	0.00	0.00	-0.03
	CO55	2.92	7.82	-57.00	0.00	0.00	-0.03
	CO56	2.90	7.79	-56.79	0.00	0.00	-0.03
	CO57	-0.57	-0.66	5.41	0.00	0.00	-0.05
	CO58	-0.56	-0.65	5.34	0.00	0.00	-0.05
	CO59	-0.54	-0.62	5.16	0.00	0.00	-0.05
	CO60	-0.54	-0.63	5.23	0.00	0.00	-0.05
	CO61	0.90	5.68	-41.11	0.00	0.00	-0.06
	CO62	0.88	5.65	-40.91	0.00	0.00	-0.06
	CO63	0.90	5.67	-41.04	0.00	0.00	-0.06
	CO64	0.88	5.64	-40.83	0.00	0.00	-0.06
	CO65	0.41	0.42	-2.84	0.00	0.00	0.00
	CO66	0.42	0.43	-2.91	0.00	0.00	0.00
	CO67	0.44	0.45	-3.10	0.00	0.00	0.00
	CO68	0.44	0.44	-3.03	0.00	0.00	0.00
	CO69	0.04	0.02	0.08	0.00	0.00	-0.01
	CO70	0.04	0.03	0.01	0.00	0.00	-0.01
	CO71	0.07	0.06	-0.17	0.00	0.00	-0.01
	CO72	0.07	0.05	-0.10	0.00	0.00	-0.01
	CO73	1.91	6.76	-49.43	0.00	0.00	-0.01
	CO74	1.89	6.73	-49.22	0.00	0.00	-0.01
	CO75	1.91	6.75	-49.36	0.00	0.00	-0.01
	CO76	1.88	6.72	-49.15	0.00	0.00	-0.01
	CO77	1.54	6.36	-46.50	0.00	0.00	-0.02
	CO78	1.51	6.33	-46.29	0.00	0.00	-0.02
	CO79	1.53	6.35	-46.43	0.00	0.00	-0.02
	CO80	1.51	6.32	-46.22	0.00	0.00	-0.02
	CO81	0.62	0.63	-4.38	0.00	0.00	-0.01
	CO82	0.62	0.64	-4.45	0.00	0.00	-0.01
	CO83	0.65	0.67	-4.64	0.00	0.00	-0.01
	CO84	0.65	0.66	-4.57	0.00	0.00	-0.01
	CO85	2.11	6.97	-50.96	0.00	0.00	-0.02
	CO86	2.09	6.94	-50.75	0.00	0.00	-0.02
	CO87	2.11	6.96	-50.88	0.00	0.00	-0.02
	CO88	2.09	6.93	-50.67	0.00	0.00	-0.02
	CO89	0.22	0.20	-1.19	0.00	0.00	-0.01
	CO90	0.22	0.21	-1.26	0.00	0.00	-0.01
	CO91	0.24	0.24	-1.44	0.00	0.00	-0.01
	CO92	0.24	0.23	-1.37	0.00	0.00	-0.01
	CO93	1.71	6.54	-47.76	0.00	0.00	-0.02
	CO94	1.68	6.51	-47.56	0.00	0.00	-0.02
	CO95	1.70	6.53	-47.69	0.00	0.00	-0.02

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.1 Nodes - Support Forces

Node No.	LC/CO	Support Forces [kN] $P_{X'}$	$P_{Y'}$	$P_{Z'}$	Support Moments [kNm] $M_{X'}$	$M_{Y'}$	$M_{Z'}$	
	CO96	1.68	6.50	-47.48	0.00	0.00	-0.02	
	CO97	0.41	0.42	-2.84	0.00	0.00	0.00	
	CO98	0.42	0.43	-2.91	0.00	0.00	0.00	
	CO99	0.44	0.45	-3.10	0.00	0.00	0.00	
	CO100	0.44	0.44	-3.03	0.00	0.00	0.00	
	CO101	1.91	6.76	-49.43	0.00	0.00	-0.01	
	CO102	1.89	6.73	-49.22	0.00	0.00	-0.01	
	CO103	1.91	6.75	-49.36	0.00	0.00	-0.01	
	CO104	1.88	6.72	-49.15	0.00	0.00	-0.01	
39	LC1	0.54	-0.55	-3.74	0.00	0.00	0.00	Nuosavas svoris
	LC2	0.03	-0.03	-0.19	0.00	0.00	0.00	Laidř ir trosř apkrova
	LC3	0.11	-0.12	-0.79	0.00	0.00	0.00	Technologiniř árenginiř apkrova
	LC4	-2.06	2.06	14.62	0.00	0.00	0.05	Vėjas X-X kryptimi
	LC5	-1.07	1.66	7.98	0.00	0.00	-0.02	Vėjas Y-Y kryptimi
	LC6	-3.76	4.47	27.13	0.00	0.00	0.03	Vėjas X-Y kryptimi
	LC8	6.10	-6.62	-46.20	0.00	0.00	0.00	Laidř tempimas
	CO1	0.73	-0.75	-5.05	0.00	0.00	0.00	
	CO2	0.76	-0.79	-5.31	0.00	0.00	0.00	
	CO3	0.90	-0.95	-6.37	0.00	0.00	0.00	
	CO4	0.87	-0.91	-6.12	0.00	0.00	0.00	
	CO5	-2.37	2.35	16.90	0.00	0.00	0.07	
	CO6	-2.34	2.31	16.65	0.00	0.00	0.07	
	CO7	-2.19	2.15	15.59	0.00	0.00	0.07	
	CO8	-2.23	2.19	15.85	0.00	0.00	0.07	
	CO9	9.17	-9.91	-68.91	0.00	0.00	-0.01	
	CO10	9.02	-9.74	-67.80	0.00	0.00	-0.01	
	CO11	9.13	-9.87	-68.64	0.00	0.00	-0.01	
	CO12	8.98	-9.70	-67.53	0.00	0.00	-0.01	
	CO13	6.07	-6.81	-46.94	0.00	0.00	0.07	
	CO14	5.92	-6.64	-45.84	0.00	0.00	0.07	
	CO15	6.03	-6.77	-46.68	0.00	0.00	0.07	
	CO16	5.89	-6.61	-45.58	0.00	0.00	0.07	
	CO17	-0.88	1.75	6.92	0.00	0.00	-0.04	
	CO18	-0.85	1.71	6.67	0.00	0.00	-0.04	
	CO19	-0.71	1.55	5.60	0.00	0.00	-0.04	
	CO20	-0.74	1.58	5.86	0.00	0.00	-0.04	
	CO21	7.58	-7.46	-57.10	0.00	0.00	-0.04	
	CO22	7.43	-7.29	-55.99	0.00	0.00	-0.04	
	CO23	7.55	-7.42	-56.83	0.00	0.00	-0.04	
	CO24	7.40	-7.25	-55.73	0.00	0.00	-0.04	
	CO25	-4.93	5.97	35.76	0.00	0.00	0.05	
	CO26	-4.90	5.94	35.50	0.00	0.00	0.05	
	CO27	-4.76	5.78	34.45	0.00	0.00	0.05	
	CO28	-4.79	5.81	34.71	0.00	0.00	0.05	
	CO29	3.53	-3.24	-28.28	0.00	0.00	0.04	
	CO30	3.38	-3.08	-27.19	0.00	0.00	0.04	
	CO31	3.50	-3.20	-28.02	0.00	0.00	0.04	
	CO32	3.35	-3.04	-26.93	0.00	0.00	0.04	
	CO33	0.54	-0.55	-3.74	0.00	0.00	0.00	
	CO34	0.56	-0.58	-3.93	0.00	0.00	0.00	
	CO35	0.67	-0.70	-4.72	0.00	0.00	0.00	
	CO36	0.64	-0.67	-4.53	0.00	0.00	0.00	
	CO37	-1.53	1.51	10.89	0.00	0.00	0.05	
	CO38	-1.50	1.48	10.70	0.00	0.00	0.05	
	CO39	-1.39	1.36	9.91	0.00	0.00	0.05	
	CO40	-1.42	1.39	10.10	0.00	0.00	0.05	
	CO41	6.79	-7.33	-51.01	0.00	0.00	-0.01	
	CO42	6.68	-7.21	-50.20	0.00	0.00	-0.01	
	CO43	6.76	-7.30	-50.82	0.00	0.00	-0.01	
	CO44	6.65	-7.18	-50.00	0.00	0.00	-0.01	
	CO45	4.72	-5.27	-36.38	0.00	0.00	0.04	
	CO46	4.61	-5.15	-35.57	0.00	0.00	0.04	
	CO47	4.70	-5.24	-36.18	0.00	0.00	0.04	
	CO48	4.59	-5.12	-35.37	0.00	0.00	0.04	
	CO49	-0.54	1.11	4.24	0.00	0.00	-0.02	

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.1 Nodes - Support Forces

Node No.	LC/CO	Support Forces [kN] $P_{X'}$	$P_{Y'}$	$P_{Z'}$	Support Moments [kNm] $M_{X'}$	$M_{Y'}$	$M_{Z'}$	
	CO50	-0.51	1.08	4.05	0.00	0.00	-0.02	
	CO51	-0.40	0.96	3.26	0.00	0.00	-0.02	
	CO52	-0.43	0.99	3.45	0.00	0.00	-0.02	
	CO53	5.72	-5.69	-43.11	0.00	0.00	-0.03	
	CO54	5.61	-5.57	-42.30	0.00	0.00	-0.03	
	CO55	5.70	-5.66	-42.92	0.00	0.00	-0.03	
	CO56	5.59	-5.54	-42.11	0.00	0.00	-0.03	
	CO57	-3.23	3.92	23.44	0.00	0.00	0.03	
	CO58	-3.21	3.89	23.25	0.00	0.00	0.03	
	CO59	-3.10	3.77	22.47	0.00	0.00	0.03	
	CO60	-3.13	3.80	22.66	0.00	0.00	0.03	
	CO61	3.03	-2.89	-23.92	0.00	0.00	0.03	
	CO62	2.92	-2.76	-23.11	0.00	0.00	0.03	
	CO63	3.00	-2.86	-23.72	0.00	0.00	0.03	
	CO64	2.89	-2.74	-22.92	0.00	0.00	0.03	
	CO65	0.54	-0.55	-3.74	0.00	0.00	0.00	
	CO66	0.56	-0.58	-3.93	0.00	0.00	0.00	
	CO67	0.67	-0.70	-4.72	0.00	0.00	0.00	
	CO68	0.64	-0.67	-4.53	0.00	0.00	0.00	
	CO69	0.12	-0.14	-0.82	0.00	0.00	0.01	
	CO70	0.15	-0.17	-1.01	0.00	0.00	0.01	
	CO71	0.26	-0.29	-1.79	0.00	0.00	0.01	
	CO72	0.23	-0.26	-1.60	0.00	0.00	0.01	
	CO73	6.79	-7.33	-51.01	0.00	0.00	-0.01	
	CO74	6.68	-7.21	-50.20	0.00	0.00	-0.01	
	CO75	6.76	-7.30	-50.82	0.00	0.00	-0.01	
	CO76	6.65	-7.18	-50.00	0.00	0.00	-0.01	
	CO77	6.37	-6.92	-48.08	0.00	0.00	0.00	
	CO78	6.26	-6.80	-47.27	0.00	0.00	0.00	
	CO79	6.35	-6.89	-47.89	0.00	0.00	0.00	
	CO80	6.24	-6.77	-47.08	0.00	0.00	0.00	
	CO81	0.32	-0.22	-2.15	0.00	0.00	-0.01	
	CO82	0.35	-0.25	-2.34	0.00	0.00	-0.01	
	CO83	0.46	-0.37	-3.13	0.00	0.00	-0.01	
	CO84	0.43	-0.34	-2.93	0.00	0.00	-0.01	
	CO85	6.57	-7.01	-49.43	0.00	0.00	-0.01	
	CO86	6.46	-6.88	-48.62	0.00	0.00	-0.01	
	CO87	6.55	-6.98	-49.24	0.00	0.00	-0.01	
	CO88	6.44	-6.85	-48.42	0.00	0.00	-0.01	
	CO89	-0.22	0.34	1.69	0.00	0.00	0.00	
	CO90	-0.19	0.31	1.50	0.00	0.00	0.00	
	CO91	-0.08	0.19	0.71	0.00	0.00	0.00	
	CO92	-0.11	0.22	0.90	0.00	0.00	0.00	
	CO93	6.04	-6.45	-45.60	0.00	0.00	0.00	
	CO94	5.93	-6.32	-44.79	0.00	0.00	0.00	
	CO95	6.01	-6.42	-45.40	0.00	0.00	0.00	
	CO96	5.90	-6.29	-44.59	0.00	0.00	0.00	
	CO97	0.54	-0.55	-3.74	0.00	0.00	0.00	
	CO98	0.56	-0.58	-3.93	0.00	0.00	0.00	
	CO99	0.67	-0.70	-4.72	0.00	0.00	0.00	
	CO100	0.64	-0.67	-4.53	0.00	0.00	0.00	
	CO101	6.79	-7.33	-51.01	0.00	0.00	-0.01	
	CO102	6.68	-7.21	-50.20	0.00	0.00	-0.01	
	CO103	6.76	-7.30	-50.82	0.00	0.00	-0.01	
	CO104	6.65	-7.18	-50.00	0.00	0.00	-0.01	
72	LC1	0.42	-0.39	-2.85	0.00	0.00	0.00	Nuosavas svoris
	LC2	0.01	-0.01	-0.06	0.00	0.00	0.00	Laidř ir trosř apkrova
	LC3	0.02	-0.01	-0.15	0.00	0.00	0.00	Technologiniř árenginiř apkrova
	LC4	-2.07	1.90	14.65	0.00	0.00	0.05	Vėjas X-X kryptimi
	LC5	-1.03	1.62	7.67	0.00	0.00	-0.02	Vėjas Y-Y kryptimi
	LC6	-3.87	4.34	27.84	0.00	0.00	0.03	Vėjas X-Y kryptimi
	LC8	5.88	-5.66	-44.51	0.00	0.00	0.00	Laidř tempimas
	CO1	0.56	-0.53	-3.85	0.00	0.00	0.00	
	CO2	0.57	-0.54	-3.93	0.00	0.00	0.00	
	CO3	0.60	-0.55	-4.14	0.00	0.00	0.00	

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.1 Nodes - Support Forces

Node No.	LC/CO	Support Forces [kN] $P_{X'}$	$P_{Y'}$	$P_{Z'}$	Support Moments [kNm] $M_{X'}$	$M_{Y'}$	$M_{Z'}$
	CO4	0.59	-0.54	-4.05	0.00	0.00	0.00
	CO5	-2.54	2.32	18.16	0.00	0.00	0.07
	CO6	-2.53	2.31	18.07	0.00	0.00	0.07
	CO7	-2.51	2.30	17.88	0.00	0.00	0.07
	CO8	-2.52	2.31	17.96	0.00	0.00	0.07
	CO9	8.57	-8.21	-64.39	0.00	0.00	-0.01
	CO10	8.54	-8.19	-64.14	0.00	0.00	-0.01
	CO11	8.56	-8.20	-64.30	0.00	0.00	-0.01
	CO12	8.53	-8.18	-64.04	0.00	0.00	-0.01
	CO13	5.47	-5.36	-42.38	0.00	0.00	0.07
	CO14	5.43	-5.34	-42.14	0.00	0.00	0.07
	CO15	5.45	-5.35	-42.29	0.00	0.00	0.07
	CO16	5.42	-5.33	-42.04	0.00	0.00	0.07
	CO17	-0.99	1.90	7.67	0.00	0.00	-0.04
	CO18	-0.98	1.89	7.59	0.00	0.00	-0.04
	CO19	-0.95	1.88	7.38	0.00	0.00	-0.04
	CO20	-0.96	1.89	7.47	0.00	0.00	-0.04
	CO21	7.04	-5.82	-52.97	0.00	0.00	-0.04
	CO22	7.00	-5.80	-52.72	0.00	0.00	-0.04
	CO23	7.03	-5.81	-52.88	0.00	0.00	-0.04
	CO24	6.99	-5.79	-52.62	0.00	0.00	-0.04
	CO25	-5.25	6.00	38.01	0.00	0.00	0.05
	CO26	-5.24	5.99	37.93	0.00	0.00	0.05
	CO27	-5.22	5.98	37.74	0.00	0.00	0.05
	CO28	-5.23	5.99	37.82	0.00	0.00	0.05
	CO29	2.77	-1.73	-22.64	0.00	0.00	0.04
	CO30	2.74	-1.71	-22.41	0.00	0.00	0.04
	CO31	2.76	-1.72	-22.55	0.00	0.00	0.04
	CO32	2.73	-1.70	-22.31	0.00	0.00	0.04
	CO33	0.42	-0.39	-2.85	0.00	0.00	0.00
	CO34	0.42	-0.40	-2.91	0.00	0.00	0.00
	CO35	0.44	-0.41	-3.07	0.00	0.00	0.00
	CO36	0.44	-0.40	-3.00	0.00	0.00	0.00
	CO37	-1.65	1.51	11.81	0.00	0.00	0.05
	CO38	-1.64	1.50	11.75	0.00	0.00	0.05
	CO39	-1.62	1.49	11.60	0.00	0.00	0.05
	CO40	-1.63	1.50	11.67	0.00	0.00	0.05
	CO41	6.34	-6.08	-47.67	0.00	0.00	-0.01
	CO42	6.32	-6.07	-47.49	0.00	0.00	-0.01
	CO43	6.34	-6.07	-47.60	0.00	0.00	-0.01
	CO44	6.31	-6.06	-47.42	0.00	0.00	-0.01
	CO45	4.27	-4.18	-33.00	0.00	0.00	0.04
	CO46	4.25	-4.16	-32.83	0.00	0.00	0.04
	CO47	4.27	-4.17	-32.93	0.00	0.00	0.04
	CO48	4.24	-4.16	-32.76	0.00	0.00	0.04
	CO49	-0.62	1.23	4.83	0.00	0.00	-0.03
	CO50	-0.61	1.22	4.77	0.00	0.00	-0.03
	CO51	-0.59	1.21	4.61	0.00	0.00	-0.03
	CO52	-0.60	1.22	4.68	0.00	0.00	-0.03
	CO53	5.32	-4.48	-40.04	0.00	0.00	-0.03
	CO54	5.30	-4.46	-39.86	0.00	0.00	-0.03
	CO55	5.31	-4.47	-39.97	0.00	0.00	-0.03
	CO56	5.29	-4.46	-39.79	0.00	0.00	-0.03
	CO57	-3.46	3.95	25.04	0.00	0.00	0.03
	CO58	-3.45	3.95	24.98	0.00	0.00	0.03
	CO59	-3.43	3.94	24.83	0.00	0.00	0.03
	CO60	-3.44	3.95	24.89	0.00	0.00	0.03
	CO61	2.48	-1.75	-19.83	0.00	0.00	0.03
	CO62	2.46	-1.74	-19.66	0.00	0.00	0.03
	CO63	2.47	-1.74	-19.77	0.00	0.00	0.03
	CO64	2.45	-1.73	-19.60	0.00	0.00	0.03
	CO65	0.42	-0.39	-2.85	0.00	0.00	0.00
	CO66	0.42	-0.40	-2.91	0.00	0.00	0.00
	CO67	0.44	-0.41	-3.07	0.00	0.00	0.00
	CO68	0.44	-0.40	-3.00	0.00	0.00	0.00

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.1 Nodes - Support Forces

Node No.	LC/CO	Support Forces [kN] $P_{X'}$	$P_{Y'}$	$P_{Z'}$	Support Moments [kNm] $M_{X'}$	$M_{Y'}$	$M_{Z'}$	
	CO69	0.00	-0.01	0.08	0.00	0.00	0.01	
	CO70	0.01	-0.02	0.02	0.00	0.00	0.01	
	CO71	0.03	-0.03	-0.13	0.00	0.00	0.01	
	CO72	0.02	-0.02	-0.07	0.00	0.00	0.01	
	CO73	6.34	-6.08	-47.67	0.00	0.00	-0.01	
	CO74	6.32	-6.07	-47.49	0.00	0.00	-0.01	
	CO75	6.34	-6.07	-47.60	0.00	0.00	-0.01	
	CO76	6.31	-6.06	-47.42	0.00	0.00	-0.01	
	CO77	5.93	-5.70	-44.73	0.00	0.00	0.00	
	CO78	5.91	-5.68	-44.55	0.00	0.00	0.00	
	CO79	5.92	-5.69	-44.66	0.00	0.00	0.00	
	CO80	5.90	-5.68	-44.49	0.00	0.00	0.00	
	CO81	0.21	-0.07	-1.31	0.00	0.00	-0.01	
	CO82	0.22	-0.08	-1.38	0.00	0.00	-0.01	
	CO83	0.24	-0.08	-1.53	0.00	0.00	-0.01	
	CO84	0.23	-0.08	-1.47	0.00	0.00	-0.01	
	CO85	6.14	-5.76	-46.14	0.00	0.00	-0.01	
	CO86	6.12	-5.74	-45.96	0.00	0.00	-0.01	
	CO87	6.13	-5.75	-46.07	0.00	0.00	-0.01	
	CO88	6.11	-5.74	-45.89	0.00	0.00	-0.01	
	CO89	-0.36	0.47	2.73	0.00	0.00	0.00	
	CO90	-0.35	0.47	2.66	0.00	0.00	0.00	
	CO91	-0.33	0.46	2.51	0.00	0.00	0.00	
	CO92	-0.34	0.47	2.57	0.00	0.00	0.00	
	CO93	5.57	-5.21	-42.10	0.00	0.00	0.00	
	CO94	5.55	-5.20	-41.93	0.00	0.00	0.00	
	CO95	5.56	-5.21	-42.03	0.00	0.00	0.00	
	CO96	5.54	-5.19	-41.86	0.00	0.00	0.00	
	CO97	0.42	-0.39	-2.85	0.00	0.00	0.00	
	CO98	0.42	-0.40	-2.91	0.00	0.00	0.00	
	CO99	0.44	-0.41	-3.07	0.00	0.00	0.00	
	CO100	0.44	-0.40	-3.00	0.00	0.00	0.00	
	CO101	6.34	-6.08	-47.67	0.00	0.00	-0.01	
	CO102	6.32	-6.07	-47.49	0.00	0.00	-0.01	
	CO103	6.34	-6.07	-47.60	0.00	0.00	-0.01	
	CO104	6.31	-6.06	-47.42	0.00	0.00	-0.01	
74	LC1	-0.41	-0.42	-2.84	0.00	0.00	0.00	Nuosavas svoris
	LC2	-0.01	0.00	-0.02	0.00	0.00	0.00	Laidř ir trosř apkrova
	LC3	-0.02	-0.02	-0.15	0.00	0.00	0.00	Technologiniř árenginiř apkrova
	LC4	-1.82	-1.98	-14.62	0.00	0.00	0.01	Vėjas X-X kryptimi
	LC5	1.03	1.14	7.66	0.00	0.00	0.05	Vėjas Y-Y kryptimi
	LC6	-1.72	-1.13	-9.32	0.00	0.00	0.07	Vėjas X-Y kryptimi
	LC8	1.45	6.04	44.38	0.00	0.00	0.01	Laidř tempimas
	CO1	-0.56	-0.56	-3.84	0.00	0.00	0.00	
	CO2	-0.57	-0.57	-3.86	0.00	0.00	0.00	
	CO3	-0.59	-0.59	-4.06	0.00	0.00	0.00	
	CO4	-0.58	-0.59	-4.04	0.00	0.00	0.00	
	CO5	-3.28	-3.54	-25.79	0.00	0.00	0.01	
	CO6	-3.29	-3.54	-25.82	0.00	0.00	0.01	
	CO7	-3.32	-3.57	-26.03	0.00	0.00	0.01	
	CO8	-3.31	-3.57	-26.00	0.00	0.00	0.01	
	CO9	1.35	7.59	56.03	0.00	0.00	0.01	
	CO10	1.38	7.61	56.19	0.00	0.00	0.01	
	CO11	1.36	7.59	56.05	0.00	0.00	0.01	
	CO12	1.39	7.62	56.20	0.00	0.00	0.01	
	CO13	-1.38	4.61	34.06	0.00	0.00	0.02	
	CO14	-1.35	4.63	34.23	0.00	0.00	0.02	
	CO15	-1.37	4.61	34.08	0.00	0.00	0.02	
	CO16	-1.34	4.64	34.25	0.00	0.00	0.02	
	CO17	0.99	1.15	7.67	0.00	0.00	0.07	
	CO18	0.98	1.15	7.65	0.00	0.00	0.07	
	CO19	0.96	1.12	7.45	0.00	0.00	0.07	
	CO20	0.97	1.13	7.47	0.00	0.00	0.07	
	CO21	2.94	9.32	67.64	0.00	0.00	0.09	
	CO22	2.97	9.34	67.79	0.00	0.00	0.09	

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.1 Nodes - Support Forces

Node No.	LC/CO	Support Forces [kN] $P_{X'}$	$P_{Y'}$	$P_{Z'}$	Support Moments [kNm] $M_{X'}$	$M_{Y'}$	$M_{Z'}$
	CO23	2.95	9.33	67.65	0.00	0.00	0.09
	CO24	2.98	9.35	67.80	0.00	0.00	0.09
	CO25	-3.15	-2.26	-17.88	0.00	0.00	0.11
	CO26	-3.16	-2.27	-17.91	0.00	0.00	0.11
	CO27	-3.19	-2.29	-18.12	0.00	0.00	0.11
	CO28	-3.18	-2.29	-18.09	0.00	0.00	0.11
	CO29	-1.20	5.91	42.10	0.00	0.00	0.12
	CO30	-1.17	5.93	42.26	0.00	0.00	0.12
	CO31	-1.19	5.91	42.11	0.00	0.00	0.12
	CO32	-1.16	5.93	42.28	0.00	0.00	0.12
	CO33	-0.41	-0.42	-2.84	0.00	0.00	0.00
	CO34	-0.42	-0.42	-2.86	0.00	0.00	0.00
	CO35	-0.44	-0.44	-3.01	0.00	0.00	0.00
	CO36	-0.43	-0.44	-2.99	0.00	0.00	0.00
	CO37	-2.23	-2.40	-17.47	0.00	0.00	0.01
	CO38	-2.24	-2.40	-17.49	0.00	0.00	0.01
	CO39	-2.26	-2.42	-17.65	0.00	0.00	0.01
	CO40	-2.25	-2.42	-17.63	0.00	0.00	0.01
	CO41	1.00	5.62	41.47	0.00	0.00	0.01
	CO42	1.02	5.64	41.60	0.00	0.00	0.01
	CO43	1.01	5.62	41.48	0.00	0.00	0.01
	CO44	1.03	5.64	41.61	0.00	0.00	0.01
	CO45	-0.82	3.63	26.83	0.00	0.00	0.02
	CO46	-0.79	3.65	26.96	0.00	0.00	0.02
	CO47	-0.81	3.63	26.85	0.00	0.00	0.02
	CO48	-0.79	3.65	26.98	0.00	0.00	0.02
	CO49	0.62	0.73	4.83	0.00	0.00	0.05
	CO50	0.61	0.73	4.81	0.00	0.00	0.05
	CO51	0.59	0.70	4.66	0.00	0.00	0.05
	CO52	0.60	0.71	4.68	0.00	0.00	0.05
	CO53	2.05	6.77	49.19	0.00	0.00	0.06
	CO54	2.07	6.79	49.31	0.00	0.00	0.06
	CO55	2.06	6.77	49.20	0.00	0.00	0.06
	CO56	2.08	6.79	49.32	0.00	0.00	0.06
	CO57	-2.14	-1.55	-12.19	0.00	0.00	0.07
	CO58	-2.15	-1.55	-12.21	0.00	0.00	0.07
	CO59	-2.17	-1.57	-12.36	0.00	0.00	0.07
	CO60	-2.16	-1.57	-12.35	0.00	0.00	0.07
	CO61	-0.70	4.49	32.18	0.00	0.00	0.08
	CO62	-0.68	4.51	32.31	0.00	0.00	0.08
	CO63	-0.69	4.50	32.19	0.00	0.00	0.08
	CO64	-0.67	4.51	32.32	0.00	0.00	0.08
	CO65	-0.41	-0.42	-2.84	0.00	0.00	0.00
	CO66	-0.42	-0.42	-2.86	0.00	0.00	0.00
	CO67	-0.44	-0.44	-3.01	0.00	0.00	0.00
	CO68	-0.43	-0.44	-2.99	0.00	0.00	0.00
	CO69	-0.78	-0.81	-5.77	0.00	0.00	0.00
	CO70	-0.78	-0.82	-5.79	0.00	0.00	0.00
	CO71	-0.80	-0.84	-5.93	0.00	0.00	0.00
	CO72	-0.80	-0.83	-5.92	0.00	0.00	0.00
	CO73	1.00	5.62	41.47	0.00	0.00	0.01
	CO74	1.02	5.64	41.60	0.00	0.00	0.01
	CO75	1.01	5.62	41.48	0.00	0.00	0.01
	CO76	1.03	5.64	41.61	0.00	0.00	0.01
	CO77	0.64	5.22	38.54	0.00	0.00	0.01
	CO78	0.66	5.24	38.67	0.00	0.00	0.01
	CO79	0.65	5.22	38.56	0.00	0.00	0.01
	CO80	0.67	5.24	38.68	0.00	0.00	0.01
	CO81	-0.21	-0.19	-1.31	0.00	0.00	0.01
	CO82	-0.21	-0.19	-1.32	0.00	0.00	0.01
	CO83	-0.23	-0.21	-1.47	0.00	0.00	0.01
	CO84	-0.23	-0.21	-1.46	0.00	0.00	0.01
	CO85	1.21	5.85	43.02	0.00	0.00	0.02
	CO86	1.23	5.87	43.14	0.00	0.00	0.02
	CO87	1.22	5.85	43.03	0.00	0.00	0.02

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.1 Nodes - Support Forces

Node No.	LC/CO	Support Forces [kN] $P_{X'}$	$P_{Y'}$	$P_{Z'}$	Support Moments [kNm] $M_{X'}$	$M_{Y'}$	$M_{Z'}$	
	CO88	1.24	5.87	43.15	0.00	0.00	0.02	
	CO89	-0.76	-0.64	-4.71	0.00	0.00	0.01	
	CO90	-0.76	-0.64	-4.73	0.00	0.00	0.01	
	CO91	-0.78	-0.67	-4.88	0.00	0.00	0.01	
	CO92	-0.78	-0.66	-4.86	0.00	0.00	0.01	
	CO93	0.66	5.39	39.62	0.00	0.00	0.02	
	CO94	0.68	5.41	39.74	0.00	0.00	0.02	
	CO95	0.67	5.40	39.63	0.00	0.00	0.02	
	CO96	0.69	5.41	39.75	0.00	0.00	0.02	
	CO97	-0.41	-0.42	-2.84	0.00	0.00	0.00	
	CO98	-0.42	-0.42	-2.86	0.00	0.00	0.00	
	CO99	-0.44	-0.44	-3.01	0.00	0.00	0.00	
	CO100	-0.43	-0.44	-2.99	0.00	0.00	0.00	
	CO101	1.00	5.62	41.47	0.00	0.00	0.01	
	CO102	1.02	5.64	41.60	0.00	0.00	0.01	
	CO103	1.01	5.62	41.48	0.00	0.00	0.01	
	CO104	1.03	5.64	41.61	0.00	0.00	0.01	
75	LC1	0.53	0.54	-3.75	0.00	0.00	0.00	Nuosavas svoris
	LC2	0.02	0.02	-0.19	0.00	0.00	0.00	Laidř ir trosř apkrova
	LC3	0.10	0.10	-0.77	0.00	0.00	0.00	Technologiniř árenginiř apkrova
	LC4	-1.69	-1.98	14.63	0.00	0.00	-0.02	Vėjas X-X kryptimi
	LC5	1.07	1.11	-7.96	0.00	0.00	-0.02	Vėjas Y-Y kryptimi
	LC6	-0.81	-1.09	8.35	0.00	0.00	-0.05	Vėjas X-Y kryptimi
	LC8	0.48	6.04	-44.29	0.00	0.00	-0.01	Laidř tempimas
	CO1	0.72	0.73	-5.07	0.00	0.00	0.00	
	CO2	0.75	0.76	-5.32	0.00	0.00	0.00	
	CO3	0.89	0.90	-6.36	0.00	0.00	0.00	
	CO4	0.86	0.87	-6.11	0.00	0.00	0.00	
	CO5	-1.80	-2.25	16.90	0.00	0.00	-0.03	
	CO6	-1.78	-2.21	16.65	0.00	0.00	-0.03	
	CO7	-1.64	-2.08	15.62	0.00	0.00	-0.03	
	CO8	-1.66	-2.11	15.87	0.00	0.00	-0.03	
	CO9	1.51	9.07	-66.29	0.00	0.00	-0.02	
	CO10	1.38	8.92	-65.21	0.00	0.00	-0.02	
	CO11	1.49	9.03	-66.03	0.00	0.00	-0.02	
	CO12	1.36	8.88	-64.95	0.00	0.00	-0.02	
	CO13	-1.01	6.10	-44.32	0.00	0.00	-0.05	
	CO14	-1.15	5.95	-43.25	0.00	0.00	-0.05	
	CO15	-1.04	6.06	-44.06	0.00	0.00	-0.05	
	CO16	-1.17	5.92	-42.99	0.00	0.00	-0.05	
	CO17	2.33	2.40	-17.02	0.00	0.00	-0.03	
	CO18	2.36	2.43	-17.27	0.00	0.00	-0.03	
	CO19	2.50	2.57	-18.32	0.00	0.00	-0.03	
	CO20	2.48	2.54	-18.06	0.00	0.00	-0.03	
	CO21	3.08	10.71	-78.08	0.00	0.00	-0.05	
	CO22	2.94	10.57	-76.99	0.00	0.00	-0.05	
	CO23	3.05	10.68	-77.82	0.00	0.00	-0.05	
	CO24	2.92	10.53	-76.73	0.00	0.00	-0.05	
	CO25	-0.47	-0.90	7.42	0.00	0.00	-0.08	
	CO26	-0.44	-0.87	7.17	0.00	0.00	-0.08	
	CO27	-0.30	-0.73	6.14	0.00	0.00	-0.08	
	CO28	-0.33	-0.76	6.38	0.00	0.00	-0.08	
	CO29	0.26	7.42	-53.61	0.00	0.00	-0.10	
	CO30	0.13	7.27	-52.53	0.00	0.00	-0.10	
	CO31	0.24	7.38	-53.35	0.00	0.00	-0.10	
	CO32	0.10	7.24	-52.28	0.00	0.00	-0.10	
	CO33	0.53	0.54	-3.75	0.00	0.00	0.00	
	CO34	0.55	0.56	-3.94	0.00	0.00	0.00	
	CO35	0.66	0.67	-4.71	0.00	0.00	0.00	
	CO36	0.64	0.64	-4.53	0.00	0.00	0.00	
	CO37	-1.15	-1.44	10.89	0.00	0.00	-0.02	
	CO38	-1.13	-1.42	10.70	0.00	0.00	-0.02	
	CO39	-1.03	-1.32	9.94	0.00	0.00	-0.02	
	CO40	-1.05	-1.34	10.12	0.00	0.00	-0.02	
	CO41	1.12	6.71	-49.08	0.00	0.00	-0.01	

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.1 Nodes - Support Forces

Node No.	LC/CO	Support Forces [kN] $P_{X'}$	$P_{Y'}$	$P_{Z'}$	Support Moments [kNm] $M_{X'}$	$M_{Y'}$	$M_{Z'}$	
	CO42	1.02	6.61	-48.28	0.00	0.00	-0.01	
	CO43	1.11	6.69	-48.88	0.00	0.00	-0.01	
	CO44	1.01	6.58	-48.09	0.00	0.00	-0.01	
	CO45	-0.56	4.73	-34.43	0.00	0.00	-0.04	
	CO46	-0.66	4.63	-33.65	0.00	0.00	-0.04	
	CO47	-0.58	4.71	-34.24	0.00	0.00	-0.04	
	CO48	-0.68	4.60	-33.46	0.00	0.00	-0.03	
	CO49	1.61	1.65	-11.72	0.00	0.00	-0.02	
	CO50	1.63	1.68	-11.90	0.00	0.00	-0.02	
	CO51	1.73	1.78	-12.68	0.00	0.00	-0.02	
	CO52	1.71	1.76	-12.49	0.00	0.00	-0.02	
	CO53	2.18	7.82	-56.96	0.00	0.00	-0.03	
	CO54	2.08	7.71	-56.17	0.00	0.00	-0.03	
	CO55	2.16	7.79	-56.77	0.00	0.00	-0.03	
	CO56	2.06	7.68	-55.98	0.00	0.00	-0.03	
	CO57	-0.27	-0.55	4.58	0.00	0.00	-0.05	
	CO58	-0.25	-0.52	4.40	0.00	0.00	-0.05	
	CO59	-0.14	-0.42	3.63	0.00	0.00	-0.05	
	CO60	-0.16	-0.44	3.81	0.00	0.00	-0.05	
	CO61	0.29	5.62	-40.65	0.00	0.00	-0.07	
	CO62	0.19	5.51	-39.86	0.00	0.00	-0.06	
	CO63	0.28	5.59	-40.46	0.00	0.00	-0.07	
	CO64	0.18	5.48	-39.67	0.00	0.00	-0.06	
	CO65	0.53	0.54	-3.75	0.00	0.00	0.00	
	CO66	0.55	0.56	-3.94	0.00	0.00	0.00	
	CO67	0.66	0.67	-4.71	0.00	0.00	0.00	
	CO68	0.64	0.64	-4.53	0.00	0.00	0.00	
	CO69	0.20	0.14	-0.82	0.00	0.00	-0.01	
	CO70	0.22	0.17	-1.01	0.00	0.00	-0.01	
	CO71	0.32	0.27	-1.78	0.00	0.00	-0.01	
	CO72	0.30	0.24	-1.60	0.00	0.00	-0.01	
	CO73	1.12	6.71	-49.08	0.00	0.00	-0.01	
	CO74	1.02	6.61	-48.28	0.00	0.00	-0.01	
	CO75	1.11	6.69	-48.88	0.00	0.00	-0.01	
	CO76	1.01	6.58	-48.09	0.00	0.00	-0.01	
	CO77	0.79	6.32	-46.15	0.00	0.00	-0.02	
	CO78	0.69	6.21	-45.35	0.00	0.00	-0.02	
	CO79	0.77	6.29	-45.96	0.00	0.00	-0.02	
	CO80	0.67	6.18	-45.16	0.00	0.00	-0.02	
	CO81	0.75	0.76	-5.35	0.00	0.00	-0.01	
	CO82	0.77	0.79	-5.53	0.00	0.00	-0.01	
	CO83	0.87	0.89	-6.30	0.00	0.00	-0.01	
	CO84	0.85	0.86	-6.12	0.00	0.00	-0.01	
	CO85	1.33	6.93	-50.65	0.00	0.00	-0.02	
	CO86	1.24	6.83	-49.86	0.00	0.00	-0.02	
	CO87	1.32	6.91	-50.46	0.00	0.00	-0.02	
	CO88	1.22	6.80	-49.67	0.00	0.00	-0.02	
	CO89	0.37	0.32	-2.08	0.00	0.00	-0.01	
	CO90	0.39	0.34	-2.27	0.00	0.00	-0.01	
	CO91	0.50	0.45	-3.04	0.00	0.00	-0.01	
	CO92	0.48	0.42	-2.85	0.00	0.00	-0.01	
	CO93	0.96	6.49	-47.39	0.00	0.00	-0.02	
	CO94	0.86	6.39	-46.59	0.00	0.00	-0.02	
	CO95	0.94	6.47	-47.19	0.00	0.00	-0.02	
	CO96	0.84	6.36	-46.40	0.00	0.00	-0.02	
	CO97	0.53	0.54	-3.75	0.00	0.00	0.00	
	CO98	0.55	0.56	-3.94	0.00	0.00	0.00	
	CO99	0.66	0.67	-4.71	0.00	0.00	0.00	
	CO100	0.64	0.64	-4.53	0.00	0.00	0.00	
	CO101	1.12	6.71	-49.08	0.00	0.00	-0.01	
	CO102	1.02	6.61	-48.28	0.00	0.00	-0.01	
	CO103	1.11	6.69	-48.88	0.00	0.00	-0.01	
	CO104	1.01	6.58	-48.09	0.00	0.00	-0.01	
108	LC1	-0.54	0.55	-3.75	0.00	0.00	0.00	Nuosavas svoris
	LC2	-0.02	0.02	-0.14	0.00	0.00	0.00	Laidř ir trosř apkrova

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.1 Nodes - Support Forces

Node No.	LC/CO	Support Forces [kN] $P_{X'}$	$P_{Y'}$	$P_{Z'}$	Support Moments [kNm] $M_{X'}$	$M_{Y'}$	$M_{Z'}$	
	LC3	-0.10	0.12	-0.77	0.00	0.00	0.00	Technologiniř árenginiř apkrova
	LC4	-2.00	2.07	-14.65	0.00	0.00	-0.02	Vėjas X-X kryptimi
	LC5	-1.07	1.61	-7.95	0.00	0.00	0.01	Vėjas Y-Y kryptimi
	LC6	-3.74	4.47	-27.56	0.00	0.00	-0.02	Vėjas X-Y kryptimi
	LC8	5.86	-6.44	44.38	0.00	0.00	0.00	Laidř tempimas
	CO1	-0.73	0.75	-5.06	0.00	0.00	0.00	
	CO2	-0.75	0.78	-5.25	0.00	0.00	0.00	
	CO3	-0.89	0.93	-6.29	0.00	0.00	0.00	
	CO4	-0.87	0.90	-6.09	0.00	0.00	0.00	
	CO5	-3.72	3.85	-27.06	0.00	0.00	-0.04	
	CO6	-3.75	3.88	-27.25	0.00	0.00	-0.04	
	CO7	-3.89	4.03	-28.30	0.00	0.00	-0.04	
	CO8	-3.87	4.00	-28.11	0.00	0.00	-0.04	
	CO9	7.03	-7.79	53.76	0.00	0.00	0.00	
	CO10	7.16	-7.94	54.75	0.00	0.00	0.00	
	CO11	7.05	-7.81	53.94	0.00	0.00	0.00	
	CO12	7.19	-7.96	54.94	0.00	0.00	0.00	
	CO13	4.03	-4.68	31.76	0.00	0.00	-0.03	
	CO14	4.17	-4.83	32.76	0.00	0.00	-0.03	
	CO15	4.06	-4.71	31.94	0.00	0.00	-0.03	
	CO16	4.19	-4.86	32.95	0.00	0.00	-0.03	
	CO17	-2.34	3.16	-16.99	0.00	0.00	0.01	
	CO18	-2.37	3.19	-17.19	0.00	0.00	0.01	
	CO19	-2.51	3.34	-18.22	0.00	0.00	0.01	
	CO20	-2.48	3.31	-18.03	0.00	0.00	0.01	
	CO21	5.39	-5.33	41.66	0.00	0.00	0.02	
	CO22	5.53	-5.48	42.66	0.00	0.00	0.02	
	CO23	5.42	-5.36	41.84	0.00	0.00	0.02	
	CO24	5.55	-5.51	42.84	0.00	0.00	0.02	
	CO25	-6.34	7.44	-46.38	0.00	0.00	-0.03	
	CO26	-6.36	7.47	-46.58	0.00	0.00	-0.03	
	CO27	-6.51	7.62	-47.63	0.00	0.00	-0.03	
	CO28	-6.48	7.59	-47.43	0.00	0.00	-0.03	
	CO29	1.39	-1.04	12.23	0.00	0.00	-0.02	
	CO30	1.53	-1.19	13.25	0.00	0.00	-0.02	
	CO31	1.42	-1.07	12.42	0.00	0.00	-0.02	
	CO32	1.55	-1.22	13.43	0.00	0.00	-0.02	
	CO33	-0.54	0.55	-3.75	0.00	0.00	0.00	
	CO34	-0.56	0.57	-3.89	0.00	0.00	0.00	
	CO35	-0.66	0.69	-4.66	0.00	0.00	0.00	
	CO36	-0.64	0.67	-4.51	0.00	0.00	0.00	
	CO37	-2.54	2.62	-18.41	0.00	0.00	-0.02	
	CO38	-2.56	2.64	-18.55	0.00	0.00	-0.02	
	CO39	-2.66	2.76	-19.32	0.00	0.00	-0.02	
	CO40	-2.64	2.74	-19.18	0.00	0.00	-0.02	
	CO41	5.20	-5.76	39.80	0.00	0.00	0.00	
	CO42	5.30	-5.88	40.54	0.00	0.00	0.00	
	CO43	5.22	-5.78	39.93	0.00	0.00	0.00	
	CO44	5.32	-5.90	40.68	0.00	0.00	0.00	
	CO45	3.21	-3.69	25.13	0.00	0.00	-0.02	
	CO46	3.31	-3.81	25.89	0.00	0.00	-0.02	
	CO47	3.23	-3.72	25.27	0.00	0.00	-0.02	
	CO48	3.33	-3.83	26.02	0.00	0.00	-0.02	
	CO49	-1.61	2.16	-11.70	0.00	0.00	0.01	
	CO50	-1.63	2.18	-11.84	0.00	0.00	0.01	
	CO51	-1.74	2.30	-12.61	0.00	0.00	0.01	
	CO52	-1.72	2.28	-12.47	0.00	0.00	0.01	
	CO53	4.12	-4.13	31.76	0.00	0.00	0.01	
	CO54	4.22	-4.24	32.51	0.00	0.00	0.01	
	CO55	4.14	-4.15	31.90	0.00	0.00	0.01	
	CO56	4.24	-4.26	32.64	0.00	0.00	0.01	
	CO57	-4.28	5.02	-31.30	0.00	0.00	-0.02	
	CO58	-4.30	5.04	-31.45	0.00	0.00	-0.02	
	CO59	-4.40	5.15	-32.22	0.00	0.00	-0.02	
	CO60	-4.38	5.13	-32.08	0.00	0.00	-0.02	

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.1 Nodes - Support Forces

Node No.	LC/CO	Support Forces [kN] $P_{X'}$	$P_{Y'}$	$P_{Z'}$	Support Moments [kNm] $M_{X'}$	$M_{Y'}$	$M_{Z'}$
	CO61	1.45	-1.27	12.14	0.00	0.00	-0.01
	CO62	1.55	-1.38	12.90	0.00	0.00	-0.01
	CO63	1.47	-1.29	12.28	0.00	0.00	-0.01
	CO64	1.57	-1.40	13.03	0.00	0.00	-0.01
	CO65	-0.54	0.55	-3.75	0.00	0.00	0.00
	CO66	-0.56	0.57	-3.89	0.00	0.00	0.00
	CO67	-0.66	0.69	-4.66	0.00	0.00	0.00
	CO68	-0.64	0.67	-4.51	0.00	0.00	0.00
	CO69	-0.94	0.97	-6.68	0.00	0.00	-0.01
	CO70	-0.96	0.99	-6.82	0.00	0.00	-0.01
	CO71	-1.06	1.10	-7.59	0.00	0.00	-0.01
	CO72	-1.04	1.08	-7.45	0.00	0.00	-0.01
	CO73	5.20	-5.76	39.80	0.00	0.00	0.00
	CO74	5.30	-5.88	40.54	0.00	0.00	0.00
	CO75	5.22	-5.78	39.93	0.00	0.00	0.00
	CO76	5.32	-5.90	40.68	0.00	0.00	0.00
	CO77	4.80	-5.35	36.86	0.00	0.00	0.00
	CO78	4.91	-5.46	37.61	0.00	0.00	0.00
	CO79	4.82	-5.37	37.00	0.00	0.00	0.00
	CO80	4.92	-5.48	37.75	0.00	0.00	0.00
	CO81	-0.75	0.87	-5.34	0.00	0.00	0.00
	CO82	-0.77	0.90	-5.48	0.00	0.00	0.00
	CO83	-0.88	1.01	-6.25	0.00	0.00	0.00
	CO84	-0.86	0.99	-6.10	0.00	0.00	0.00
	CO85	4.99	-5.44	38.19	0.00	0.00	0.00
	CO86	5.09	-5.55	38.94	0.00	0.00	0.00
	CO87	5.00	-5.46	38.33	0.00	0.00	0.00
	CO88	5.11	-5.57	39.07	0.00	0.00	0.00
	CO89	-1.29	1.45	-9.26	0.00	0.00	0.00
	CO90	-1.31	1.47	-9.40	0.00	0.00	0.00
	CO91	-1.41	1.58	-10.17	0.00	0.00	0.00
	CO92	-1.39	1.56	-10.03	0.00	0.00	0.00
	CO93	4.45	-4.86	34.26	0.00	0.00	0.00
	CO94	4.55	-4.98	35.01	0.00	0.00	0.00
	CO95	4.47	-4.88	34.40	0.00	0.00	0.00
	CO96	4.57	-5.00	35.15	0.00	0.00	0.00
	CO97	-0.54	0.55	-3.75	0.00	0.00	0.00
	CO98	-0.56	0.57	-3.89	0.00	0.00	0.00
	CO99	-0.66	0.69	-4.66	0.00	0.00	0.00
	CO100	-0.64	0.67	-4.51	0.00	0.00	0.00
	CO101	5.20	-5.76	39.80	0.00	0.00	0.00
	CO102	5.30	-5.88	40.54	0.00	0.00	0.00
	CO103	5.22	-5.78	39.93	0.00	0.00	0.00
	CO104	5.32	-5.90	40.68	0.00	0.00	0.00
Σ Supp.	LC1	0.00	0.00	-26.38			
Σ Loads	LC1	0.00	0.00	-26.38			
Σ Supp.	LC2	0.00	0.00	-0.84			
Σ Loads	LC2	0.00	0.00	-0.84			
Σ Supp.	LC3	0.00	0.00	-3.80			
Σ Loads	LC3	0.00	0.00	-3.80			
Σ Supp.	LC4	-15.13	0.00	0.00			
Σ Loads	LC4	-15.13	0.00	0.00			
Σ Supp.	LC5	0.00	10.98	0.00			
Σ Loads	LC5	0.00	10.98	0.00			
Σ Supp.	LC6	-19.21	13.19	0.00			
Σ Loads	LC6	-19.21	13.19	0.00			
Σ Supp.	LC8	28.00	0.00	0.00			
Σ Loads	LC8	28.00	0.00	0.00			
Σ Supp.	CO1	0.00	0.00	-35.61			
Σ Supp.	CO1	0.00	0.00	-35.61			
Σ Supp.	CO2	0.00	0.00	-36.75			
Σ Supp.	CO2	0.00	0.00	-36.75			
Σ Supp.	CO3	0.00	0.00	-41.88			
Σ Supp.	CO3	0.00	0.00	-41.88			

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.1 Nodes - Support Forces

Node No.	LC/CO	Support Forces [kN] $P_{X'}$	$P_{Y'}$	$P_{Z'}$	Support Moments [kNm] $M_{X'}$	$M_{Y'}$	$M_{Z'}$
Σ Supp.	CO4	0.00	0.00	-40.74			
Σ Supp.	CO4	0.00	0.00	-40.74			
Σ Supp.	CO5	-22.70	0.00	-35.61			
Σ Supp.	CO5	-22.70	0.00	-35.61			
Σ Supp.	CO6	-22.70	0.00	-36.75			
Σ Supp.	CO6	-22.70	0.00	-36.75			
Σ Supp.	CO7	-22.70	0.00	-41.88			
Σ Supp.	CO7	-22.70	0.00	-41.88			
Σ Supp.	CO8	-22.70	0.00	-40.74			
Σ Supp.	CO8	-22.70	0.00	-40.74			
Σ Supp.	CO9	37.80	0.00	-41.88			
Σ Supp.	CO9	37.80	0.00	-41.88			
Σ Supp.	CO10	37.80	0.00	-36.75			
Σ Supp.	CO10	37.80	0.00	-36.75			
Σ Supp.	CO11	37.80	0.00	-40.74			
Σ Supp.	CO11	37.80	0.00	-40.74			
Σ Supp.	CO12	37.80	0.00	-35.61			
Σ Supp.	CO12	37.80	0.00	-35.61			
Σ Supp.	CO13	15.10	0.00	-41.88			
Σ Supp.	CO13	15.10	0.00	-41.88			
Σ Supp.	CO14	15.10	0.00	-36.75			
Σ Supp.	CO14	15.10	0.00	-36.75			
Σ Supp.	CO15	15.10	0.00	-40.74			
Σ Supp.	CO15	15.10	0.00	-40.74			
Σ Supp.	CO16	15.10	0.00	-35.61			
Σ Supp.	CO16	15.10	0.00	-35.61			
Σ Supp.	CO17	0.00	16.48	-35.61			
Σ Supp.	CO17	0.00	16.48	-35.61			
Σ Supp.	CO18	0.00	16.48	-36.75			
Σ Supp.	CO18	0.00	16.48	-36.75			
Σ Supp.	CO19	0.00	16.48	-41.88			
Σ Supp.	CO19	0.00	16.48	-41.88			
Σ Supp.	CO20	0.00	16.48	-40.74			
Σ Supp.	CO20	0.00	16.48	-40.74			
Σ Supp.	CO21	37.80	16.48	-41.88			
Σ Supp.	CO21	37.80	16.48	-41.88			
Σ Supp.	CO22	37.80	16.48	-36.75			
Σ Supp.	CO22	37.80	16.48	-36.75			
Σ Supp.	CO23	37.80	16.48	-40.74			
Σ Supp.	CO23	37.80	16.48	-40.74			
Σ Supp.	CO24	37.80	16.48	-35.61			
Σ Supp.	CO24	37.80	16.48	-35.61			
Σ Supp.	CO25	-28.81	19.79	-35.61			
Σ Supp.	CO25	-28.81	19.79	-35.61			
Σ Supp.	CO26	-28.81	19.79	-36.75			
Σ Supp.	CO26	-28.81	19.79	-36.75			
Σ Supp.	CO27	-28.81	19.79	-41.88			
Σ Supp.	CO27	-28.81	19.79	-41.88			
Σ Supp.	CO28	-28.81	19.79	-40.74			
Σ Supp.	CO28	-28.81	19.79	-40.74			
Σ Supp.	CO29	8.99	19.79	-41.88			
Σ Supp.	CO29	8.99	19.79	-41.88			
Σ Supp.	CO30	8.99	19.79	-36.75			
Σ Supp.	CO30	8.99	19.79	-36.75			
Σ Supp.	CO31	8.99	19.79	-40.74			
Σ Supp.	CO31	8.99	19.79	-40.74			
Σ Supp.	CO32	8.99	19.79	-35.61			
Σ Supp.	CO32	8.99	19.79	-35.61			
Σ Supp.	CO33	0.00	0.00	-26.38			
Σ Supp.	CO33	0.00	0.00	-26.38			
Σ Supp.	CO34	0.00	0.00	-27.22			
Σ Supp.	CO34	0.00	0.00	-27.22			
Σ Supp.	CO35	0.00	0.00	-31.02			

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.1 Nodes - Support Forces

Node No.	LC/CO	Support Forces [kN] $P_{X'}$	$P_{Y'}$	$P_{Z'}$	Support Moments [kNm] $M_{X'}$	$M_{Y'}$	$M_{Z'}$
Σ Supp.	CO35	0.00	0.00	-31.02			
Σ Supp.	CO36	0.00	0.00	-30.18			
Σ Supp.	CO36	0.00	0.00	-30.18			
Σ Supp.	CO37	-15.13	0.00	-26.38			
Σ Supp.	CO37	-15.13	0.00	-26.38			
Σ Supp.	CO38	-15.13	0.00	-27.22			
Σ Supp.	CO38	-15.13	0.00	-27.22			
Σ Supp.	CO39	-15.13	0.00	-31.02			
Σ Supp.	CO39	-15.13	0.00	-31.02			
Σ Supp.	CO40	-15.13	0.00	-30.18			
Σ Supp.	CO40	-15.13	0.00	-30.18			
Σ Supp.	CO41	28.00	0.00	-31.02			
Σ Supp.	CO41	28.00	0.00	-31.02			
Σ Supp.	CO42	28.00	0.00	-27.22			
Σ Supp.	CO42	28.00	0.00	-27.22			
Σ Supp.	CO43	28.00	0.00	-30.18			
Σ Supp.	CO43	28.00	0.00	-30.18			
Σ Supp.	CO44	28.00	0.00	-26.38			
Σ Supp.	CO44	28.00	0.00	-26.38			
Σ Supp.	CO45	12.87	0.00	-31.02			
Σ Supp.	CO45	12.87	0.00	-31.02			
Σ Supp.	CO46	12.87	0.00	-27.22			
Σ Supp.	CO46	12.87	0.00	-27.22			
Σ Supp.	CO47	12.87	0.00	-30.18			
Σ Supp.	CO47	12.87	0.00	-30.18			
Σ Supp.	CO48	12.87	0.00	-26.38			
Σ Supp.	CO48	12.87	0.00	-26.38			
Σ Supp.	CO49	0.00	10.98	-26.38			
Σ Supp.	CO49	0.00	10.98	-26.38			
Σ Supp.	CO50	0.00	10.98	-27.22			
Σ Supp.	CO50	0.00	10.98	-27.22			
Σ Supp.	CO51	0.00	10.98	-31.02			
Σ Supp.	CO51	0.00	10.98	-31.02			
Σ Supp.	CO52	0.00	10.98	-30.18			
Σ Supp.	CO52	0.00	10.98	-30.18			
Σ Supp.	CO53	28.00	10.98	-31.02			
Σ Supp.	CO53	28.00	10.98	-31.02			
Σ Supp.	CO54	28.00	10.98	-27.22			
Σ Supp.	CO54	28.00	10.98	-27.22			
Σ Supp.	CO55	28.00	10.98	-30.18			
Σ Supp.	CO55	28.00	10.98	-30.18			
Σ Supp.	CO56	28.00	10.98	-26.38			
Σ Supp.	CO56	28.00	10.98	-26.38			
Σ Supp.	CO57	-19.21	13.19	-26.38			
Σ Supp.	CO57	-19.21	13.19	-26.38			
Σ Supp.	CO58	-19.21	13.19	-27.22			
Σ Supp.	CO58	-19.21	13.19	-27.22			
Σ Supp.	CO59	-19.21	13.19	-31.02			
Σ Supp.	CO59	-19.21	13.19	-31.02			
Σ Supp.	CO60	-19.21	13.19	-30.18			
Σ Supp.	CO60	-19.21	13.19	-30.18			
Σ Supp.	CO61	8.79	13.19	-31.02			
Σ Supp.	CO61	8.79	13.19	-31.02			
Σ Supp.	CO62	8.79	13.19	-27.22			
Σ Supp.	CO62	8.79	13.19	-27.22			
Σ Supp.	CO63	8.79	13.19	-30.18			
Σ Supp.	CO63	8.79	13.19	-30.18			
Σ Supp.	CO64	8.79	13.19	-26.38			
Σ Supp.	CO64	8.79	13.19	-26.38			
Σ Supp.	CO65	0.00	0.00	-26.38			
Σ Supp.	CO65	0.00	0.00	-26.38			
Σ Supp.	CO66	0.00	0.00	-27.22			
Σ Supp.	CO66	0.00	0.00	-27.22			

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.1 Nodes - Support Forces

Node No.	LC/CO	Support Forces [kN] $P_{X'}$	$P_{Y'}$	$P_{Z'}$	Support Moments [kNm] $M_{X'}$	$M_{Y'}$	$M_{Z'}$
Σ Supp.	CO67	0.00	0.00	-31.02			
Σ Supp.	CO67	0.00	0.00	-31.02			
Σ Supp.	CO68	0.00	0.00	-30.18			
Σ Supp.	CO68	0.00	0.00	-30.18			
Σ Supp.	CO69	-3.03	0.00	-26.38			
Σ Supp.	CO69	-3.03	0.00	-26.38			
Σ Supp.	CO70	-3.03	0.00	-27.22			
Σ Supp.	CO70	-3.03	0.00	-27.22			
Σ Supp.	CO71	-3.03	0.00	-31.02			
Σ Supp.	CO71	-3.03	0.00	-31.02			
Σ Supp.	CO72	-3.03	0.00	-30.18			
Σ Supp.	CO72	-3.03	0.00	-30.18			
Σ Supp.	CO73	28.00	0.00	-31.02			
Σ Supp.	CO73	28.00	0.00	-31.02			
Σ Supp.	CO74	28.00	0.00	-27.22			
Σ Supp.	CO74	28.00	0.00	-27.22			
Σ Supp.	CO75	28.00	0.00	-30.18			
Σ Supp.	CO75	28.00	0.00	-30.18			
Σ Supp.	CO76	28.00	0.00	-26.38			
Σ Supp.	CO76	28.00	0.00	-26.38			
Σ Supp.	CO77	24.97	0.00	-31.02			
Σ Supp.	CO77	24.97	0.00	-31.02			
Σ Supp.	CO78	24.97	0.00	-27.22			
Σ Supp.	CO78	24.97	0.00	-27.22			
Σ Supp.	CO79	24.97	0.00	-30.18			
Σ Supp.	CO79	24.97	0.00	-30.18			
Σ Supp.	CO80	24.97	0.00	-26.38			
Σ Supp.	CO80	24.97	0.00	-26.38			
Σ Supp.	CO81	0.00	2.20	-26.38			
Σ Supp.	CO81	0.00	2.20	-26.38			
Σ Supp.	CO82	0.00	2.20	-27.22			
Σ Supp.	CO82	0.00	2.20	-27.22			
Σ Supp.	CO83	0.00	2.20	-31.02			
Σ Supp.	CO83	0.00	2.20	-31.02			
Σ Supp.	CO84	0.00	2.20	-30.18			
Σ Supp.	CO84	0.00	2.20	-30.18			
Σ Supp.	CO85	28.00	2.20	-31.02			
Σ Supp.	CO85	28.00	2.20	-31.02			
Σ Supp.	CO86	28.00	2.20	-27.22			
Σ Supp.	CO86	28.00	2.20	-27.22			
Σ Supp.	CO87	28.00	2.20	-30.18			
Σ Supp.	CO87	28.00	2.20	-30.18			
Σ Supp.	CO88	28.00	2.20	-26.38			
Σ Supp.	CO88	28.00	2.20	-26.38			
Σ Supp.	CO89	-3.84	2.64	-26.38			
Σ Supp.	CO89	-3.84	2.64	-26.38			
Σ Supp.	CO90	-3.84	2.64	-27.22			
Σ Supp.	CO90	-3.84	2.64	-27.22			
Σ Supp.	CO91	-3.84	2.64	-31.02			
Σ Supp.	CO91	-3.84	2.64	-31.02			
Σ Supp.	CO92	-3.84	2.64	-30.18			
Σ Supp.	CO92	-3.84	2.64	-30.18			
Σ Supp.	CO93	24.16	2.64	-31.02			
Σ Supp.	CO93	24.16	2.64	-31.02			
Σ Supp.	CO94	24.16	2.64	-27.22			
Σ Supp.	CO94	24.16	2.64	-27.22			
Σ Supp.	CO95	24.16	2.64	-30.18			
Σ Supp.	CO95	24.16	2.64	-30.18			
Σ Supp.	CO96	24.16	2.64	-26.38			
Σ Supp.	CO96	24.16	2.64	-26.38			
Σ Supp.	CO97	0.00	0.00	-26.38			
Σ Supp.	CO97	0.00	0.00	-26.38			
Σ Supp.	CO98	0.00	0.00	-27.22			

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4.1 Nodes - Support Forces

Node No.	LC/CO	Support Forces [kN] $P_{X'}$	$P_{Y'}$	$P_{Z'}$	Support Moments [kNm] $M_{X'}$	$M_{Y'}$	$M_{Z'}$	
Σ Supp.	CO98	0.00	0.00	-27.22				
Σ Supp.	CO99	0.00	0.00	-31.02				
Σ Supp.	CO99	0.00	0.00	-31.02				
Σ Supp.	CO100	0.00	0.00	-30.18				
Σ Supp.	CO100	0.00	0.00	-30.18				
Σ Supp.	CO101	28.00	0.00	-31.02				
Σ Supp.	CO101	28.00	0.00	-31.02				
Σ Supp.	CO102	28.00	0.00	-27.22				
Σ Supp.	CO102	28.00	0.00	-27.22				
Σ Supp.	CO103	28.00	0.00	-30.18				
Σ Supp.	CO103	28.00	0.00	-30.18				
Σ Supp.	CO104	28.00	0.00	-26.38				
Σ Supp.	CO104	28.00	0.00	-26.38				

4.1 Nodes - Support Forces

Result Combinations

Node No.	RC		Support Forces [kN] $P_{X'}$	$P_{Y'}$	$P_{Z'}$	Support Moments [kNm] $M_{X'}$	$M_{Y'}$	$M_{Z'}$	
36	RC1	Max	7.71	6.77	58.76	0.00	0.00	0.02	
									ULS (STR/GEO) - Permanent / transient - Eq. 6.10
		Min	-6.07	-7.52	-44.36	0.00	0.00	-0.04	
									ULS (STR/GEO) - Permanent / transient - Eq. 6.10
	RC2	Max	5.71	4.56	43.51	0.00	0.00	0.01	SLS - Characteristic
		Min	-4.09	-5.57	-29.88	0.00	0.00	-0.02	SLS - Characteristic
	RC3	Max	5.71	1.24	43.51	0.00	0.00	0.00	SLS - Frequent
		Min	-1.17	-5.57	-8.43	0.00	0.00	-0.01	SLS - Frequent
	RC4	Max	5.71	0.41	43.51	0.00	0.00	0.00	SLS - Quasi-permanent
		Min	-0.45	-5.57	-3.07	0.00	0.00	0.00	SLS - Quasi-permanent
37	RC1	Max	1.77	9.59	69.51	0.00	0.00	0.12	
									ULS (STR/GEO) - Permanent / transient - Eq. 6.10
		Min	-3.35	-3.88	-28.29	0.00	0.00	0.00	
									ULS (STR/GEO) - Permanent / transient - Eq. 6.10
	RC2	Max	1.19	6.96	50.54	0.00	0.00	0.08	SLS - Characteristic
		Min	-2.30	-2.65	-19.32	0.00	0.00	0.00	SLS - Characteristic
	RC3	Max	0.31	6.01	44.10	0.00	0.00	0.02	SLS - Frequent
		Min	-0.99	-1.06	-7.62	0.00	0.00	0.00	SLS - Frequent
	RC4	Max	0.09	5.77	42.49	0.00	0.00	0.01	SLS - Quasi-permanent
		Min	-0.67	-0.66	-4.69	0.00	0.00	0.00	SLS - Quasi-permanent
38	RC1	Max	4.09	10.73	18.13	0.00	0.00	0.00	
									ULS (STR/GEO) - Permanent / transient - Eq. 6.10
		Min	-2.24	-2.41	-78.21	0.00	0.00	-0.09	
									ULS (STR/GEO) - Permanent / transient - Eq. 6.10
	RC2	Max	2.92	7.83	11.79	0.00	0.00	0.00	SLS - Characteristic
		Min	-1.45	-1.56	-57.07	0.00	0.00	-0.06	SLS - Characteristic
	RC3	Max	2.11	6.97	0.08	0.00	0.00	0.00	SLS - Frequent
		Min	0.04	0.02	-50.96	0.00	0.00	-0.02	SLS - Frequent
	RC4	Max	1.91	6.76	-2.84	0.00	0.00	0.00	SLS - Quasi-permanent
		Min	0.41	0.42	-49.43	0.00	0.00	-0.01	SLS - Quasi-permanent
39	RC1	Max	9.17	5.97	35.76	0.00	0.00	0.07	
									ULS (STR/GEO) - Permanent / transient - Eq. 6.10
		Min	-4.93	-9.91	-68.91	0.00	0.00	-0.04	
									ULS (STR/GEO) - Permanent / transient - Eq. 6.10
	RC2	Max	6.79	3.92	23.44	0.00	0.00	0.05	SLS - Characteristic
		Min	-3.23	-7.33	-51.01	0.00	0.00	-0.03	SLS - Characteristic
	RC3	Max	6.79	0.34	1.69	0.00	0.00	0.01	SLS - Frequent
		Min	-0.22	-7.33	-51.01	0.00	0.00	-0.01	SLS - Frequent
	RC4	Max	6.79	-0.55	-3.74	0.00	0.00	0.00	SLS - Quasi-permanent
		Min	0.54	-7.33	-51.01	0.00	0.00	-0.01	SLS - Quasi-permanent
72	RC1	Max	8.57	6.00	38.01	0.00	0.00	0.07	
									ULS (STR/GEO) - Permanent / transient - Eq. 6.10
		Min	-5.25	-8.21	-64.39	0.00	0.00	-0.04	
									ULS (STR/GEO) - Permanent / transient - Eq. 6.10
	RC2	Max	6.34	3.95	25.04	0.00	0.00	0.05	SLS - Characteristic
		Min	-3.46	-6.08	-47.67	0.00	0.00	-0.03	SLS - Characteristic
	RC3	Max	6.34	0.47	2.73	0.00	0.00	0.01	SLS - Frequent

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Result Comb

.1 Nodes - Support Forces

Node No.	RC		Support Forces [kN] $P_{X'}$	$P_{Y'}$	$P_{Z'}$	Support Moments [kNm] $M_{X'}$	$M_{Y'}$	$M_{Z'}$	
		Min	-0.36	-6.08	-47.67	0.00	0.00	-0.01	SLS - Frequent
	RC4	Max	6.34	-0.39	-2.85	0.00	0.00	0.00	SLS - Quasi-permanent
		Min	0.42	-6.08	-47.67	0.00	0.00	-0.01	SLS - Quasi-permanent
74	RC1	Max	2.98	9.35	67.80	0.00	0.00	0.12	
									ULS (STR/GEO) - Permanent / transient - Eq. 6.10
		Min	-3.32	-3.57	-26.03	0.00	0.00	0.00	
									ULS (STR/GEO) - Permanent / transient - Eq. 6.10
	RC2	Max	2.08	6.79	49.32	0.00	0.00	0.08	SLS - Characteristic
		Min	-2.26	-2.42	-17.65	0.00	0.00	0.00	SLS - Characteristic
	RC3	Max	1.24	5.87	43.15	0.00	0.00	0.02	SLS - Frequent
		Min	-0.80	-0.84	-5.93	0.00	0.00	0.00	SLS - Frequent
	RC4	Max	1.03	5.64	41.61	0.00	0.00	0.01	SLS - Quasi-permanent
		Min	-0.44	-0.44	-3.01	0.00	0.00	0.00	SLS - Quasi-permanent
75	RC1	Max	3.08	10.71	16.90	0.00	0.00	0.00	
									ULS (STR/GEO) - Permanent / transient - Eq. 6.10
		Min	-1.80	-2.25	-78.08	0.00	0.00	-0.10	
									ULS (STR/GEO) - Permanent / transient - Eq. 6.10
	RC2	Max	2.18	7.82	10.89	0.00	0.00	0.00	SLS - Characteristic
		Min	-1.15	-1.44	-56.96	0.00	0.00	-0.07	SLS - Characteristic
	RC3	Max	1.33	6.93	-0.82	0.00	0.00	0.00	SLS - Frequent
		Min	0.20	0.14	-50.65	0.00	0.00	-0.02	SLS - Frequent
	RC4	Max	1.12	6.71	-3.75	0.00	0.00	0.00	SLS - Quasi-permanent
		Min	0.53	0.54	-49.08	0.00	0.00	-0.01	SLS - Quasi-permanent
108	RC1	Max	7.19	7.62	54.94	0.00	0.00	0.02	
									ULS (STR/GEO) - Permanent / transient - Eq. 6.10
		Min	-6.51	-7.96	-47.63	0.00	0.00	-0.04	
									ULS (STR/GEO) - Permanent / transient - Eq. 6.10
	RC2	Max	5.32	5.15	40.68	0.00	0.00	0.01	SLS - Characteristic
		Min	-4.40	-5.90	-32.22	0.00	0.00	-0.02	SLS - Characteristic
	RC3	Max	5.32	1.58	40.68	0.00	0.00	0.00	SLS - Frequent
		Min	-1.41	-5.90	-10.17	0.00	0.00	-0.01	SLS - Frequent
	RC4	Max	5.32	0.69	40.68	0.00	0.00	0.00	SLS - Quasi-permanent
		Min	-0.66	-5.90	-4.66	0.00	0.00	0.00	SLS - Quasi-permanent

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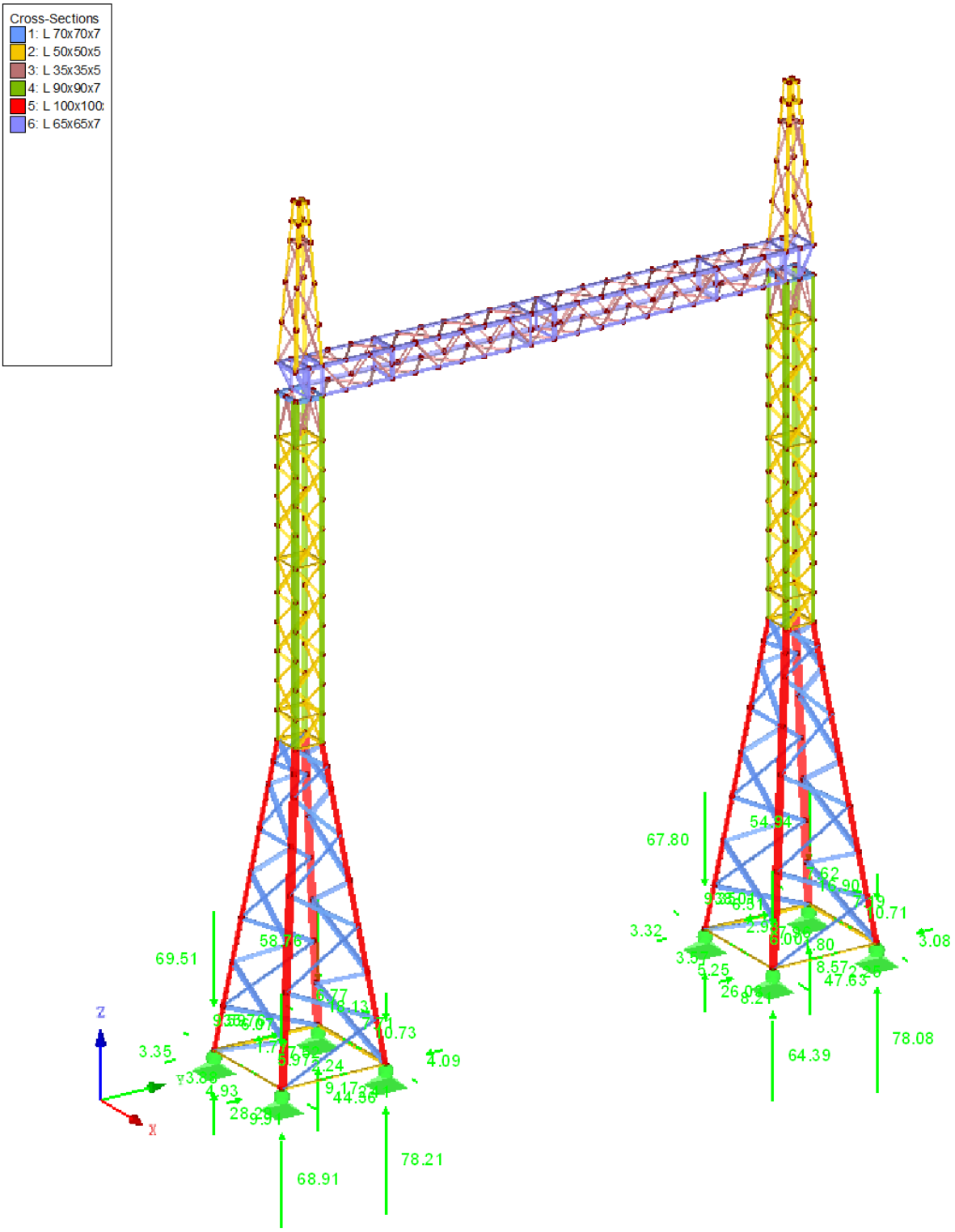
pport Reactions

RC1 : ULS (STR/GEO) - Permanent / transient - Eq. 6.10
Support Reactions[kN]
Result Combinations: Max and Min Values



Max P-X': 9.17, Min P-X': -6.51 kN
Max P-Y': 10.73, Min P-Y': -9.91 kN
Max P-Z': 69.51, Min P-Z': -78.21 kN

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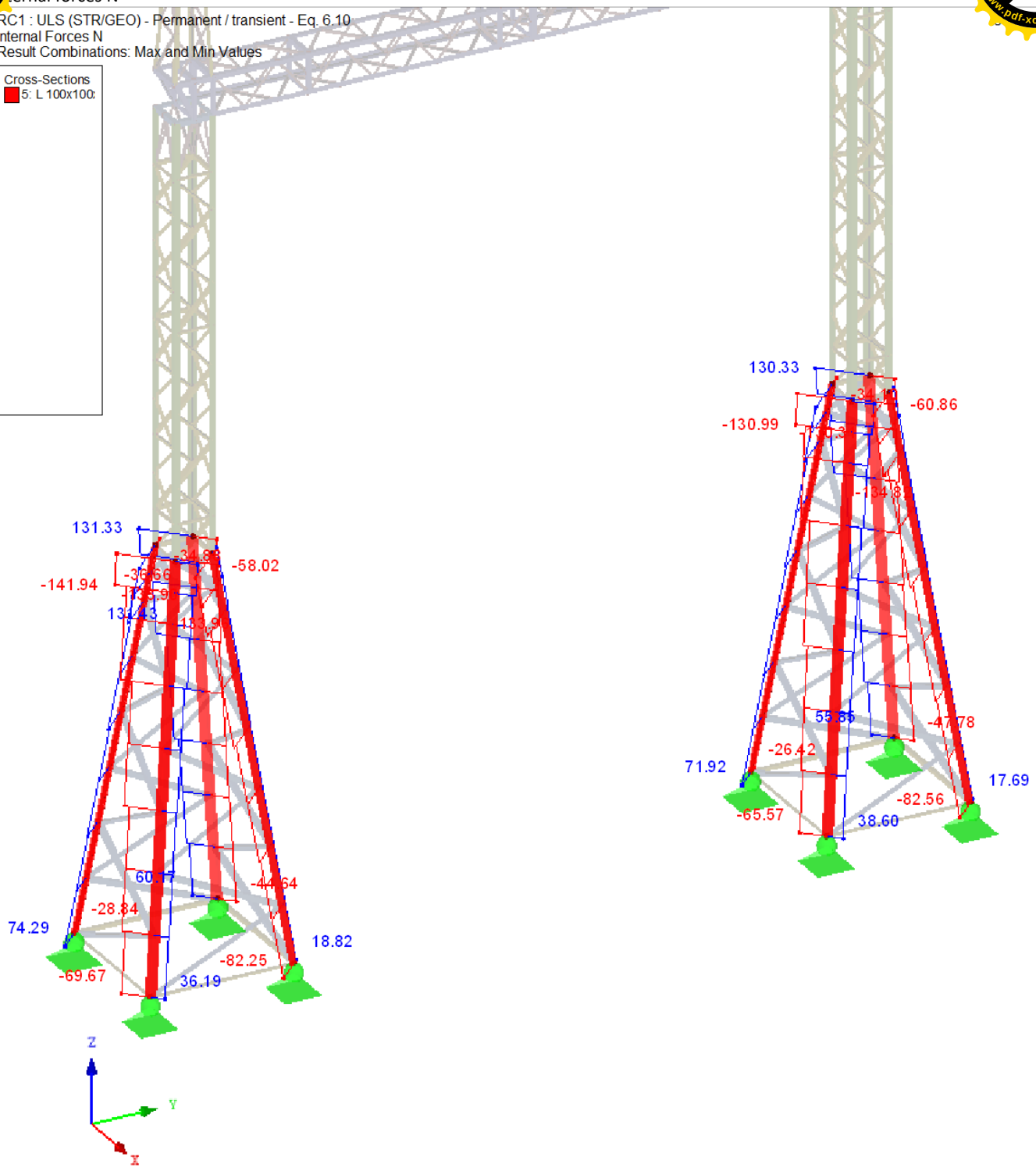
ternal forces N

RC1 : ULS (STR/GEO) - Permanent / transient - Eq. 6.10
Internal Forces N
Result Combinations: Max and Min Values

Cross-Sections
5: L 100x100;



Max N: 131.43, Min N: -141.94 [kN]

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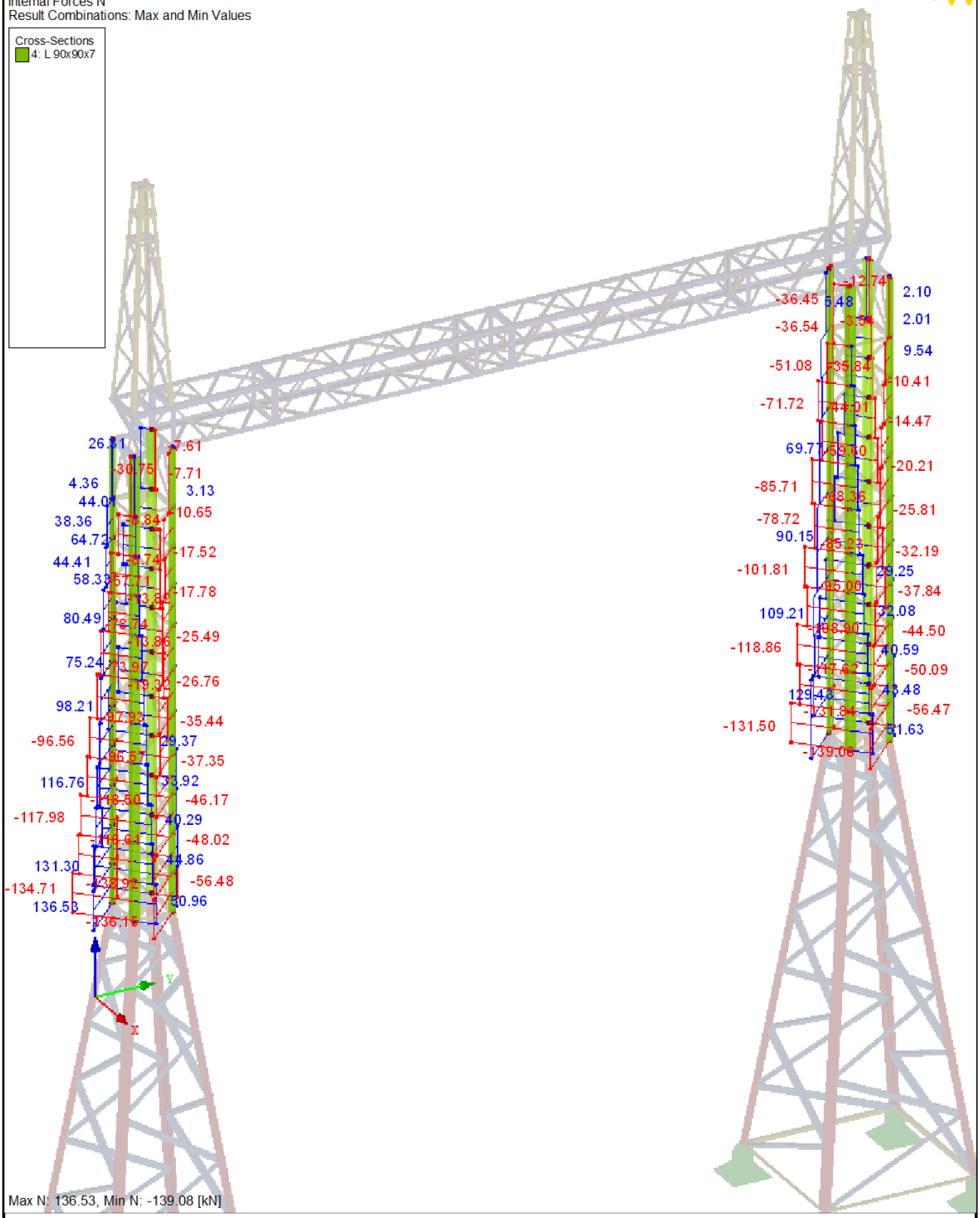
ternal forces N

RC1 : ULS (STR/GEO) - Permanent / transient - Eq. 6.10
Internal Forces N
Result Combinations: Max and Min Values

Cross-Sections
4: L 90x90x7



Max N: 136.53, Min N: -139.08 [kN]

	LAPAS	LAPŲ	LAIDA
ED2201-XX-RDP-SK-T1.IS	360	643	0

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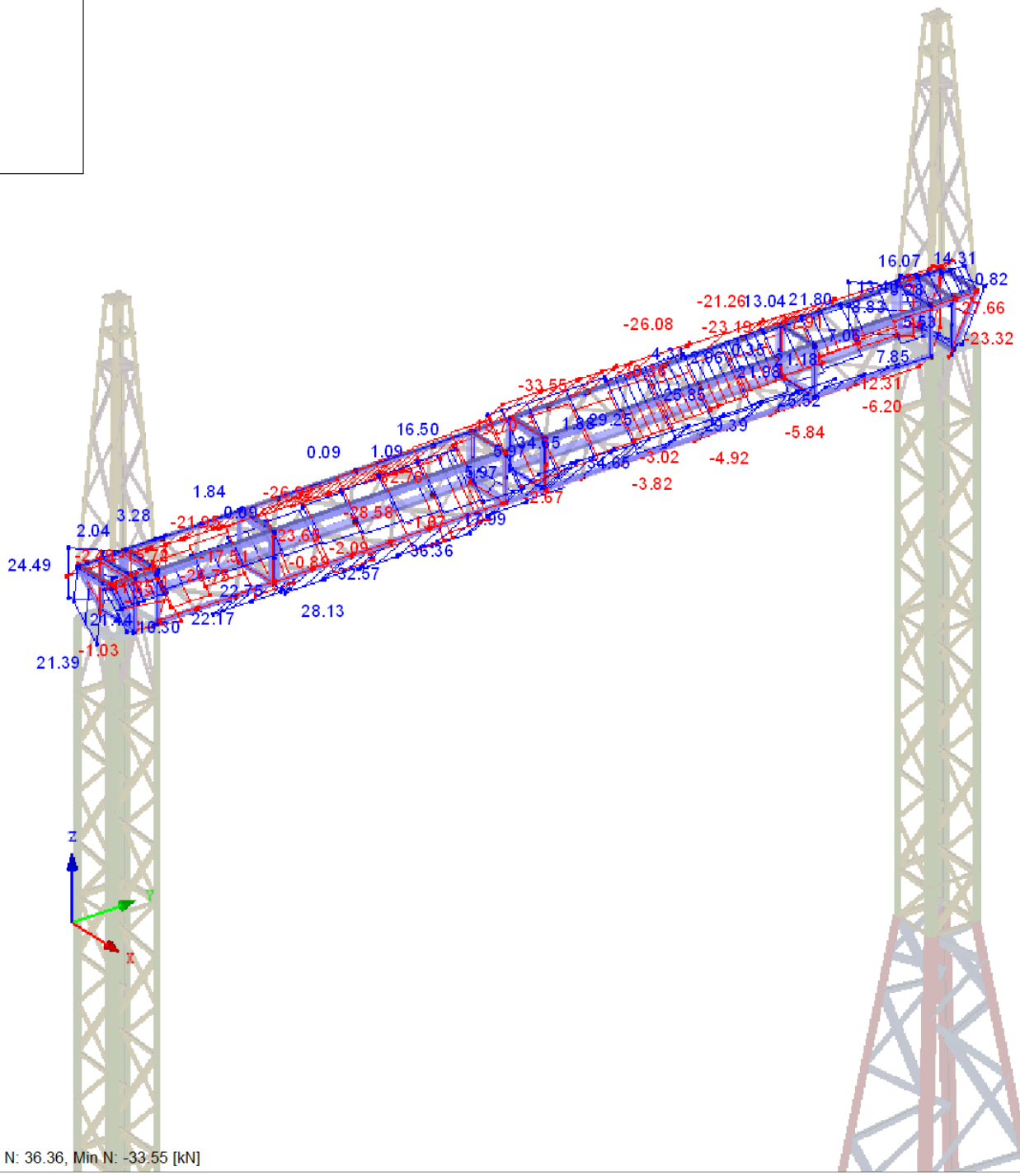
ternal forces N

RC1 : ULS (STR/GEO) - Permanent / transient - Eq. 6.10
Internal Forces N
Result Combinations: Max and Min Values

Cross-Sections
6: L 65x65x7



Max N: 36.36, Min N: -33.55 [kN]

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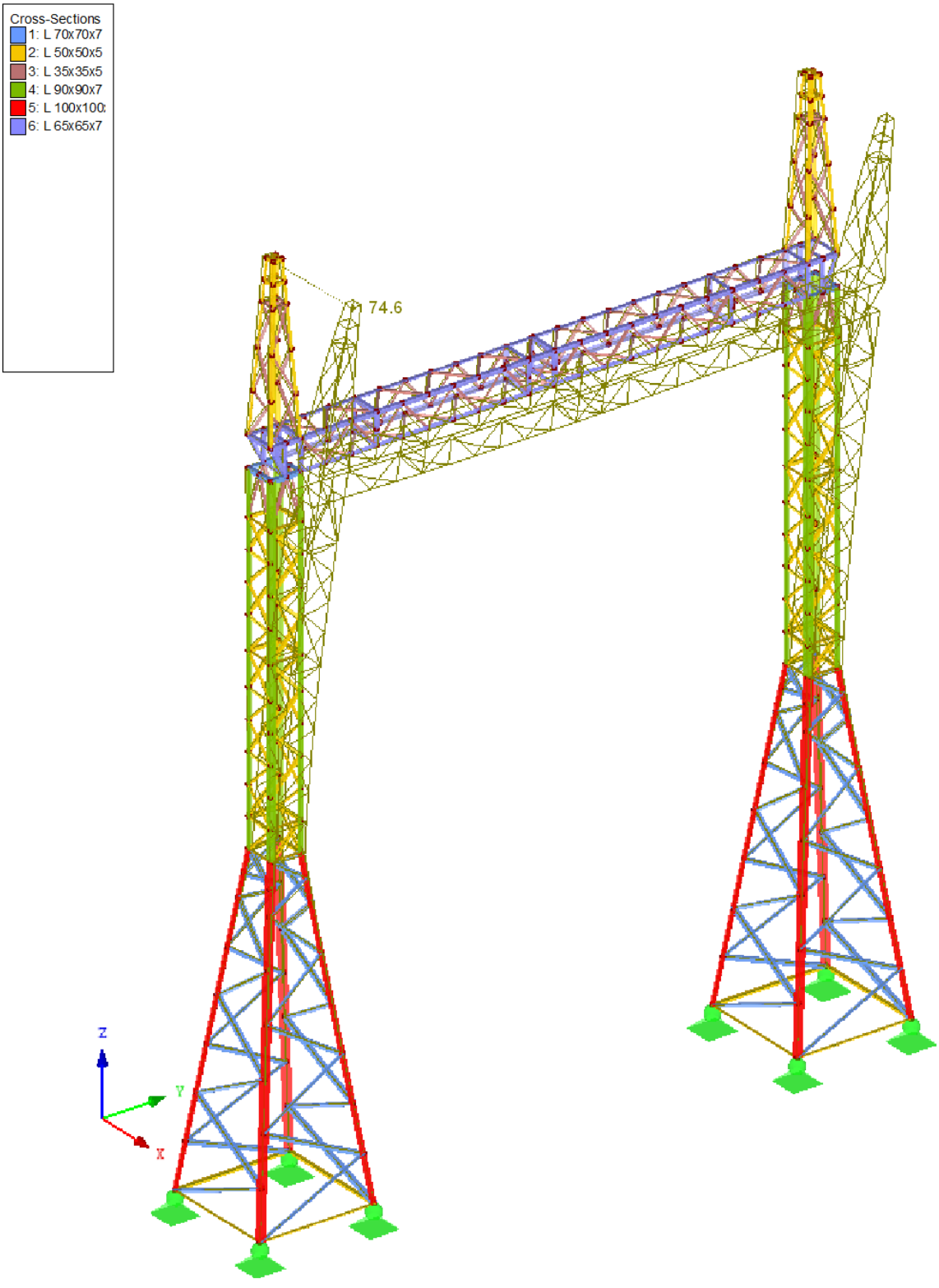
Global Deformations u

RC3 : SLS - Frequent
Global Deformations u [mm]
Result Combinations: Max and Min Values



Factor of deformations: 23.00
Max u: 74.6, Min u: 0.0 mm

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-STEEL EC3
.A1
Design of steel members
according to Eurocode 3

1.1 General Data

Members to design:	All	
Sets of members to design:		
National Annex:	LST	
Ultimate Limit State Design		
Result combinations to design:	RC1	ULS (STR/GEO) - Permanent / transient - Eq. 6.10
Serviceability Limit State Design		
Result combinations to design:	RC2	SLS - Characteristic
	RC3	SLS - Frequent
	RC4	SLS - Quasi-permanent

1.2 Materials

Matl. No.	Material Description	E- Modulus E [kN/cm²]	Shear Modulus G [kN/cm²]	Poisson's Ratio ν [-]	Yield Stress f_{yk} [kN/cm²]	Max. Thickness t [mm]
1	Steel S 355 J2 | DIN EN 10025-2:2005-04	21000.00	8076.92	0.300	35.50	3.0
					35.50	16.0
					34.50	40.0
					33.50	63.0
					32.50	80.0
					31.50	100.0
					29.50	150.0
					28.50	200.0
	S355J2					

1.3 Cross-Sections

Sect. No.	Matl. No.	Cross-Section Description	Cross-Section Type	Max Design Ratio	Comment
1	1	L 70x70x7 | EN 10056-1:1998	Angle	0.26	L70*7
2	1	L 50x50x5 | EN 10056-1:1998	Angle	0.76	L50*5
3	1	L 35x35x5 | ArcelorMittal (EN 10056-1:2017)	Angle	0.47	L35*5
4	1	L 90x90x7 | EN 10056-1:1998	Angle	0.47	L90*90*7
5	1	L 100x100x8 | EN 10056-1:1998	Angle	0.36	L100*8
6	1	L 65x65x7 | EN 10056-1:1998	Angle	0.35	L65*7

1.5 Effective Lengths - Members

Member No.	Buckling Possible	Buckling About Axis u			Buckling About Axis v			Lateral-Torsional Buckling				
		Possible	$k_{cr,u}$	$L_{cr,u}$ [m]	Possible	$k_{cr,v}$	$L_{cr,v}$ [m]	Possible	k_z	k_w	L_w [m]	L_T [m]
1	x	x	1.00	1.423	x	1.00	1.423	x	1.0	1.0	1.423	1.423
2	x	x	1.00	1.777	x	1.00	1.777	x	1.0	1.0	1.777	1.777
3	x	x	1.00	1.597	x	1.00	1.597	x	1.0	1.0	1.597	1.597
4	x	x	1.00	1.257	x	1.00	1.257	x	1.0	1.0	1.257	1.257
5	x	x	1.00	1.103	x	1.00	1.103	x	1.0	1.0	1.103	1.103
6	x	x	1.00	0.753	x	1.00	0.753	x	1.0	1.0	0.753	0.753
7	x	x	1.00	0.668	x	1.00	0.668	x	1.0	1.0	0.668	0.668
8	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
9	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
10	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
11	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
12	x	x	1.00	0.743	x	1.00	0.743	x	1.0	1.0	0.743	0.743
13	x	x	1.00	0.743	x	1.00	0.743	x	1.0	1.0	0.743	0.743
14	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
15	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
16	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
17	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
18	x	x	1.00	0.786	x	1.00	0.786	x	1.0	1.0	0.786	0.786
19	x	x	1.00	0.786	x	1.00	0.786	x	1.0	1.0	0.786	0.786
20	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500

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.5 Effective Lengths - Members

Member	Buckling	Buckling About Axis u			Buckling About Axis v			Lateral-Torsional Buckling				
No.	Possible	Possible	$k_{cr,u}$	$L_{cr,u}$ [m]	Possible	$k_{cr,v}$	$L_{cr,v}$ [m]	Possible	k_z	k_w	L_w [m]	L_T [m]
21	x	x	1.00	0.816	x	1.00	0.816	x	1.0	1.0	0.816	0.816
22	x	x	1.00	0.733	x	1.00	0.733	x	1.0	1.0	0.733	0.733
23	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
24	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
25	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
26	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
27	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
28	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
29	x	x	1.00	0.550	x	1.00	0.550	x	1.0	1.0	0.550	0.550
30	x	x	1.00	5.344	x	1.00	5.344	x	1.0	1.0	5.344	5.344
31	x	x	1.00	1.777	x	1.00	1.777	x	1.0	1.0	1.777	1.777
32	x	x	1.00	0.678	x	1.00	0.678	x	1.0	1.0	0.678	0.678
33	x	x	1.00	0.550	x	1.00	0.550	x	1.0	1.0	0.550	0.550
34	x	x	1.00	0.550	x	1.00	0.550	x	1.0	1.0	0.550	0.550
35	x	x	1.00	0.550	x	1.00	0.550	x	1.0	1.0	0.550	0.550
36	x	x	1.00	0.550	x	1.00	0.550	x	1.0	1.0	0.550	0.550
37	x	x	1.00	1.961	x	1.00	1.961	x	1.0	1.0	1.961	1.961
38	x	x	1.00	1.910	x	1.00	1.910	x	1.0	1.0	1.910	1.910
39	x	x	1.00	0.678	x	1.00	0.678	x	1.0	1.0	0.678	0.678
40	x	x	1.00	0.678	x	1.00	0.678	x	1.0	1.0	0.678	0.678
41	x	x	1.00	1.597	x	1.00	1.597	x	1.0	1.0	1.597	1.597
42	x	x	1.00	0.678	x	1.00	0.678	x	1.0	1.0	0.678	0.678
43	x	x	1.00	1.423	x	1.00	1.423	x	1.0	1.0	1.423	1.423
44	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
45	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
46	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
47	x	x	1.00	0.668	x	1.00	0.668	x	1.0	1.0	0.668	0.668
48	x	x	1.00	0.753	x	1.00	0.753	x	1.0	1.0	0.753	0.753
49	x	x	1.00	1.103	x	1.00	1.103	x	1.0	1.0	1.103	1.103
50	x	x	1.00	1.257	x	1.00	1.257	x	1.0	1.0	1.257	1.257
51	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
52	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
53	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
54	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
55	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
56	x	x	1.00	0.743	x	1.00	0.743	x	1.0	1.0	0.743	0.743
57	x	x	1.00	0.743	x	1.00	0.743	x	1.0	1.0	0.743	0.743
58	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
59	x	x	1.00	0.250	x	1.00	0.250	x	1.0	1.0	0.250	0.250
60	x	x	1.00	5.344	x	1.00	5.344	x	1.0	1.0	5.344	5.344
61	x	x	1.00	5.344	x	1.00	5.344	x	1.0	1.0	5.344	5.344
62	x	x	1.00	1.910	x	1.00	1.910	x	1.0	1.0	1.910	1.910
63	x	x	1.00	1.961	x	1.00	1.961	x	1.0	1.0	1.961	1.961
64	x	x	1.00	1.777	x	1.00	1.777	x	1.0	1.0	1.777	1.777
65	x	x	1.00	1.423	x	1.00	1.423	x	1.0	1.0	1.423	1.423
66	x	x	1.00	1.257	x	1.00	1.257	x	1.0	1.0	1.257	1.257
67	x	x	1.00	1.103	x	1.00	1.103	x	1.0	1.0	1.103	1.103
68	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
69	x	x	1.00	0.668	x	1.00	0.668	x	1.0	1.0	0.668	0.668
70	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
71	x	x	1.00	0.753	x	1.00	0.753	x	1.0	1.0	0.753	0.753
72	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
73	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
74	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
75	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
76	x	x	1.00	0.743	x	1.00	0.743	x	1.0	1.0	0.743	0.743
77	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
78	x	x	1.00	1.597	x	1.00	1.597	x	1.0	1.0	1.597	1.597
79	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
80	x	x	1.00	0.785	x	1.00	0.785	x	1.0	1.0	0.785	0.785
81	x	x	1.00	0.787	x	1.00	0.787	x	1.0	1.0	0.787	0.787
82	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
83	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
84	x	x	1.00	0.733	x	1.00	0.733	x	1.0	1.0	0.733	0.733
85	x	x	1.00	0.678	x	1.00	0.678	x	1.0	1.0	0.678	0.678

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1.5 Effective Lengths - Members

Member	Buckling	Buckling About Axis u			Buckling About Axis v			Lateral-Torsional Buckling				
No.	Possible	Possible	$k_{cr,u}$	$L_{cr,u}$ [m]	Possible	$k_{cr,v}$	$L_{cr,v}$ [m]	Possible	k_z	k_w	L_w [m]	L_T [m]
86	x	x	1.00	0.678	x	1.00	0.678	x	1.0	1.0	0.678	0.678
87	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
88	x	x	1.00	0.816	x	1.00	0.816	x	1.0	1.0	0.816	0.816
89	x	x	1.00	0.786	x	1.00	0.786	x	1.0	1.0	0.786	0.786
90	x	x	1.00	5.344	x	1.00	5.344	x	1.0	1.0	5.344	5.344
91	x	x	1.00	0.786	x	1.00	0.786	x	1.0	1.0	0.786	0.786
92	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
93	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
94	x	x	1.00	0.250	x	1.00	0.250	x	1.0	1.0	0.250	0.250
95	x	x	1.00	0.678	x	1.00	0.678	x	1.0	1.0	0.678	0.678
96	x	x	1.00	1.910	x	1.00	1.910	x	1.0	1.0	1.910	1.910
98	x	x	1.00	0.678	x	1.00	0.678	x	1.0	1.0	0.678	0.678
99	x	x	1.00	0.339	x	1.00	0.339	x	1.0	1.0	0.339	0.339
100	x	x	1.00	1.961	x	1.00	1.961	x	1.0	1.0	1.961	1.961
101	x	x	1.00	0.678	x	1.00	0.678	x	1.0	1.0	0.678	0.678
102	x	x	1.00	0.678	x	1.00	0.678	x	1.0	1.0	0.678	0.678
103	x	x	1.00	0.339	x	1.00	0.339	x	1.0	1.0	0.339	0.339
104	x	x	1.00	0.339	x	1.00	0.339	x	1.0	1.0	0.339	0.339
105	x	x	1.00	0.678	x	1.00	0.678	x	1.0	1.0	0.678	0.678
106	x	x	1.00	0.678	x	1.00	0.678	x	1.0	1.0	0.678	0.678
107	x	x	1.00	0.770	x	1.00	0.770	x	1.0	1.0	0.770	0.770
108	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
109	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
110	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
111	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
112	x	x	1.00	0.733	x	1.00	0.733	x	1.0	1.0	0.733	0.733
113	x	x	1.00	0.743	x	1.00	0.743	x	1.0	1.0	0.743	0.743
114	x	x	1.00	0.817	x	1.00	0.817	x	1.0	1.0	0.817	0.817
115	x	x	1.00	1.910	x	1.00	1.910	x	1.0	1.0	1.910	1.910
116	x	x	1.00	0.668	x	1.00	0.668	x	1.0	1.0	0.668	0.668
117	x	x	1.00	0.770	x	1.00	0.770	x	1.0	1.0	0.770	0.770
118	x	x	1.00	1.103	x	1.00	1.103	x	1.0	1.0	1.103	1.103
119	x	x	1.00	1.257	x	1.00	1.257	x	1.0	1.0	1.257	1.257
120	x	x	1.00	1.423	x	1.00	1.423	x	1.0	1.0	1.423	1.423
121	x	x	1.00	1.597	x	1.00	1.597	x	1.0	1.0	1.597	1.597
122	x	x	1.00	1.777	x	1.00	1.777	x	1.0	1.0	1.777	1.777
123	x	x	1.00	1.961	x	1.00	1.961	x	1.0	1.0	1.961	1.961
124	x	x	1.00	0.753	x	1.00	0.753	x	1.0	1.0	0.753	0.753
125	x	x	1.00	5.344	x	1.00	5.344	x	1.0	1.0	5.344	5.344
126	x	x	1.00	1.910	x	1.00	1.910	x	1.0	1.0	1.910	1.910
127	x	x	1.00	1.961	x	1.00	1.961	x	1.0	1.0	1.961	1.961
128	x	x	1.00	1.777	x	1.00	1.777	x	1.0	1.0	1.777	1.777
129	x	x	1.00	1.597	x	1.00	1.597	x	1.0	1.0	1.597	1.597
130	x	x	1.00	1.423	x	1.00	1.423	x	1.0	1.0	1.423	1.423
131	x	x	1.00	1.103	x	1.00	1.103	x	1.0	1.0	1.103	1.103
132	x	x	1.00	0.753	x	1.00	0.753	x	1.0	1.0	0.753	0.753
133	x	x	1.00	0.668	x	1.00	0.668	x	1.0	1.0	0.668	0.668
134	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
135	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
136	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
137	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
138	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
139	x	x	1.00	0.743	x	1.00	0.743	x	1.0	1.0	0.743	0.743
140	x	x	1.00	0.743	x	1.00	0.743	x	1.0	1.0	0.743	0.743
141	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
142	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
143	x	x	1.00	0.786	x	1.00	0.786	x	1.0	1.0	0.786	0.786
144	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
145	x	x	1.00	0.786	x	1.00	0.786	x	1.0	1.0	0.786	0.786
146	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
147	x	x	1.00	0.816	x	1.00	0.816	x	1.0	1.0	0.816	0.816
148	x	x	1.00	0.733	x	1.00	0.733	x	1.0	1.0	0.733	0.733
149	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
150	x	x	1.00	0.743	x	1.00	0.743	x	1.0	1.0	0.743	0.743
151	x	x	1.00	0.743	x	1.00	0.743	x	1.0	1.0	0.743	0.743

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1.5 Effective Lengths - Members

Member	Buckling	Buckling About Axis u			Buckling About Axis v			Lateral-Torsional Buckling				
No.	Possible	Possible	$k_{cr,u}$	$L_{cr,u}$ [m]	Possible	$k_{cr,v}$	$L_{cr,v}$ [m]	Possible	k_z	k_w	L_w [m]	L_T [m]
152	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
153	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
154	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
155	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
156	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
157	x	x	1.00	0.733	x	1.00	0.733	x	1.0	1.0	0.733	0.733
158	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
159	x	x	1.00	0.786	x	1.00	0.786	x	1.0	1.0	0.786	0.786
160	x	x	1.00	0.816	x	1.00	0.816	x	1.0	1.0	0.816	0.816
161	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
162	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
163	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
164	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
165	x	x	1.00	5.344	x	1.00	5.344	x	1.0	1.0	5.344	5.344
166	x	x	1.00	0.786	x	1.00	0.786	x	1.0	1.0	0.786	0.786
167	x	x	1.00	5.344	x	1.00	5.344	x	1.0	1.0	5.344	5.344
168	x	x	1.00	1.103	x	1.00	1.103	x	1.0	1.0	1.103	1.103
169	x	x	1.00	1.257	x	1.00	1.257	x	1.0	1.0	1.257	1.257
170	x	x	1.00	1.423	x	1.00	1.423	x	1.0	1.0	1.423	1.423
171	x	x	1.00	1.597	x	1.00	1.597	x	1.0	1.0	1.597	1.597
172	x	x	1.00	1.777	x	1.00	1.777	x	1.0	1.0	1.777	1.777
173	x	x	1.00	1.961	x	1.00	1.961	x	1.0	1.0	1.961	1.961
174	x	x	1.00	1.910	x	1.00	1.910	x	1.0	1.0	1.910	1.910
175	x	x	1.00	0.753	x	1.00	0.753	x	1.0	1.0	0.753	0.753
176	x	x	1.00	0.743	x	1.00	0.743	x	1.0	1.0	0.743	0.743
177	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
178	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
179	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
180	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
181	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
182	x	x	1.00	0.668	x	1.00	0.668	x	1.0	1.0	0.668	0.668
183	x	x	1.00	0.743	x	1.00	0.743	x	1.0	1.0	0.743	0.743
184	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
185	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
186	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
187	x	x	1.00	1.257	x	1.00	1.257	x	1.0	1.0	1.257	1.257
188	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
189	x	x	1.00	0.786	x	1.00	0.786	x	1.0	1.0	0.786	0.786
190	x	x	1.00	0.786	x	1.00	0.786	x	1.0	1.0	0.786	0.786
191	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
192	x	x	1.00	0.814	x	1.00	0.814	x	1.0	1.0	0.814	0.814
193	x	x	1.00	0.733	x	1.00	0.733	x	1.0	1.0	0.733	0.733
194	x	x	1.00	5.344	x	1.00	5.344	x	1.0	1.0	5.344	5.344
195	x	x	1.00	1.910	x	1.00	1.910	x	1.0	1.0	1.910	1.910
196	x	x	1.00	1.961	x	1.00	1.961	x	1.0	1.0	1.961	1.961
197	x	x	1.00	1.777	x	1.00	1.777	x	1.0	1.0	1.777	1.777
198	x	x	1.00	1.597	x	1.00	1.597	x	1.0	1.0	1.597	1.597
199	x	x	1.00	1.423	x	1.00	1.423	x	1.0	1.0	1.423	1.423
200	x	x	1.00	1.257	x	1.00	1.257	x	1.0	1.0	1.257	1.257
201	x	x	1.00	1.103	x	1.00	1.103	x	1.0	1.0	1.103	1.103
202	x	x	1.00	0.753	x	1.00	0.753	x	1.0	1.0	0.753	0.753
203	x	x	1.00	0.668	x	1.00	0.668	x	1.0	1.0	0.668	0.668
204	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
205	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
206	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
207	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
208	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
209	x	x	1.00	0.743	x	1.00	0.743	x	1.0	1.0	0.743	0.743
210	x	x	1.00	0.743	x	1.00	0.743	x	1.0	1.0	0.743	0.743
211	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
212	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
213	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
214	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
215	x	x	1.00	0.786	x	1.00	0.786	x	1.0	1.0	0.786	0.786
216	x	x	1.00	0.786	x	1.00	0.786	x	1.0	1.0	0.786	0.786

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2.5 Effective Lengths - Members

Member	Buckling	Buckling About Axis u			Buckling About Axis v			Lateral-Torsional Buckling				
No.	Possible	Possible	$k_{cr,u}$	$L_{cr,u}$ [m]	Possible	$k_{cr,v}$	$L_{cr,v}$ [m]	Possible	k_z	k_w	L_w [m]	L_T [m]
217	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
218	x	x	1.00	0.816	x	1.00	0.816	x	1.0	1.0	0.816	0.816
219	x	x	1.00	0.733	x	1.00	0.733	x	1.0	1.0	0.733	0.733
220	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
221	x	x	1.00	0.770	x	1.00	0.770	x	1.0	1.0	0.770	0.770
222	x	x	1.00	0.770	x	1.00	0.770	x	1.0	1.0	0.770	0.770
223	x	x	1.00	0.770	x	1.00	0.770	x	1.0	1.0	0.770	0.770
224	x	x	1.00	0.770	x	1.00	0.770	x	1.0	1.0	0.770	0.770
225	x	x	1.00	0.770	x	1.00	0.770	x	1.0	1.0	0.770	0.770
226	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
227	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
228	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
229	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
230	x	x	1.00	0.560	x	1.00	0.560	x	1.0	1.0	0.560	0.560
231	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
232	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
233	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
234	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
235	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
236	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
237	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
238	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
239	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
240	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
241	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
242	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
243	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
244	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
245	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
246	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
247	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
248	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
249	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
250	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
251	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
252	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
253	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
254	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
255	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
256	x	x	1.00	0.655	x	1.00	0.655	x	1.0	1.0	0.655	0.655
257	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
258	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
259	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
260	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
261	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
262	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
263	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
264	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
265	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
266	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
267	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
268	x	x	1.00	0.655	x	1.00	0.655	x	1.0	1.0	0.655	0.655
269	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
270	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
271	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
272	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
273	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
274	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
275	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
276	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
277	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
278	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
279	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
280	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
281	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500

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2.5 Effective Lengths - Members

Member	Buckling	Buckling About Axis u			Buckling About Axis v			Lateral-Torsional Buckling				
No.	Possible	Possible	$k_{cr,u}$	$L_{cr,u}$ [m]	Possible	$k_{cr,v}$	$L_{cr,v}$ [m]	Possible	k_z	k_w	L_w [m]	L_T [m]
282	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
283	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
284	x	x	1.00	0.560	x	1.00	0.560	x	1.0	1.0	0.560	0.560
285	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
286	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
287	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
288	x	x	1.00	0.250	x	1.00	0.250	x	1.0	1.0	0.250	0.250
289	x	x	1.00	0.250	x	1.00	0.250	x	1.0	1.0	0.250	0.250
290	x	x	1.00	0.850	x	1.00	0.850	x	1.0	1.0	0.850	0.850
291	x	x	1.00	0.339	x	1.00	0.339	x	1.0	1.0	0.339	0.339
292	x	x	1.00	0.560	x	1.00	0.560	x	1.0	1.0	0.560	0.560
293	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
294	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
295	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
296	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
297	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
298	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
299	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
300	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
301	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
302	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
303	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
304	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
305	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
306	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
307	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
308	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
309	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
310	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
311	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
312	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
313	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
314	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
315	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
316	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
317	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
318	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
319	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
320	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
321	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
322	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
323	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
324	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
325	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
326	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
327	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
328	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
329	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
330	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
331	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
332	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
333	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
334	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
335	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
336	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
337	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
338	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
339	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
340	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
341	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
342	x	x	1.00	0.559	x	1.00	0.559	x	1.0	1.0	0.559	0.559
343	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
344	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
345	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
346	x	x	1.00	0.250	x	1.00	0.250	x	1.0	1.0	0.250	0.250

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No.	Possible	Possible	$k_{cr,u}$	$L_{cr,u}$ [m]	Possible	$k_{cr,v}$	$L_{cr,v}$ [m]	Possible	k_z	k_w	L_w [m]	L_T [m]
347	x	x	1.00	3.825	x	1.00	3.825	x	1.0	1.0	3.825	3.825
348	x	x	1.00	0.250	x	1.00	0.250	x	1.0	1.0	0.250	0.250
349	x	x	1.00	4.925	x	1.00	4.925	x	1.0	1.0	4.925	4.925
350	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
351	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
352	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
353	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
354	x	x	1.00	0.733	x	1.00	0.733	x	1.0	1.0	0.733	0.733
355	x	x	1.00	0.770	x	1.00	0.770	x	1.0	1.0	0.770	0.770
356	x	x	1.00	0.816	x	1.00	0.816	x	1.0	1.0	0.816	0.816
357	x	x	1.00	0.339	x	1.00	0.339	x	1.0	1.0	0.339	0.339
358	x	x	1.00	0.339	x	1.00	0.339	x	1.0	1.0	0.339	0.339
359	x	x	1.00	0.339	x	1.00	0.339	x	1.0	1.0	0.339	0.339
360	x	x	1.00	0.339	x	1.00	0.339	x	1.0	1.0	0.339	0.339
361	x	x	1.00	0.678	x	1.00	0.678	x	1.0	1.0	0.678	0.678
362	x	x	1.00	0.678	x	1.00	0.678	x	1.0	1.0	0.678	0.678
363	x	x	1.00	0.678	x	1.00	0.678	x	1.0	1.0	0.678	0.678
364	x	x	1.00	0.678	x	1.00	0.678	x	1.0	1.0	0.678	0.678
365	x	x	1.00	0.678	x	1.00	0.678	x	1.0	1.0	0.678	0.678
366	x	x	1.00	0.678	x	1.00	0.678	x	1.0	1.0	0.678	0.678
367	x	x	1.00	0.678	x	1.00	0.678	x	1.0	1.0	0.678	0.678
368	x	x	1.00	0.678	x	1.00	0.678	x	1.0	1.0	0.678	0.678
369	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
370	x	x	1.00	0.656	x	1.00	0.656	x	1.0	1.0	0.656	0.656
371	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
372	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
373	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
374	x	x	1.00	0.786	x	1.00	0.786	x	1.0	1.0	0.786	0.786
375	x	x	1.00	0.786	x	1.00	0.786	x	1.0	1.0	0.786	0.786
376	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
377	x	x	1.00	0.247	x	1.00	0.247	x	1.0	1.0	0.247	0.247
378	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
379	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
380	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
381	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
382	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
383	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
384	x	x	1.00	0.743	x	1.00	0.743	x	1.0	1.0	0.743	0.743
385	x	x	1.00	0.743	x	1.00	0.743	x	1.0	1.0	0.743	0.743
386	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
387	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
388	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
389	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
390	x	x	1.00	0.700	x	1.00	0.700	x	1.0	1.0	0.700	0.700
391	x	x	1.00	0.668	x	1.00	0.668	x	1.0	1.0	0.668	0.668
392	x	x	1.00	0.753	x	1.00	0.753	x	1.0	1.0	0.753	0.753
393	x	x	1.00	1.103	x	1.00	1.103	x	1.0	1.0	1.103	1.103
394	x	x	1.00	1.257	x	1.00	1.257	x	1.0	1.0	1.257	1.257
395	x	x	1.00	1.423	x	1.00	1.423	x	1.0	1.0	1.423	1.423
396	x	x	1.00	1.597	x	1.00	1.597	x	1.0	1.0	1.597	1.597
397	x	x	1.00	1.777	x	1.00	1.777	x	1.0	1.0	1.777	1.777
398	x	x	1.00	1.961	x	1.00	1.961	x	1.0	1.0	1.961	1.961
399	x	x	1.00	1.910	x	1.00	1.910	x	1.0	1.0	1.910	1.910
400	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
401	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
402	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
403	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
404	x	x	1.00	0.678	x	1.00	0.678	x	1.0	1.0	0.678	0.678
405	x	x	1.00	0.678	x	1.00	0.678	x	1.0	1.0	0.678	0.678
406	x	x	1.00	0.678	x	1.00	0.678	x	1.0	1.0	0.678	0.678
407	x	x	1.00	0.678	x	1.00	0.678	x	1.0	1.0	0.678	0.678
408	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
409	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
410	x	x	1.00	5.765	x	1.00	5.765	x	1.0	1.0	5.765	5.765
411	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490

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2.5 Effective Lengths - Members

Member	Buckling	Buckling About Axis u			Buckling About Axis v			Lateral-Torsional Buckling				
No.	Possible	Possible	$k_{cr,u}$	$L_{cr,u}$ [m]	Possible	$k_{cr,v}$	$L_{cr,v}$ [m]	Possible	k_z	k_w	L_w [m]	L_T [m]
412	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
413	x	x	1.00	0.500	x	1.00	0.500	x	1.0	1.0	0.500	0.500
414	x	x	1.00	0.550	x	1.00	0.550	x	1.0	1.0	0.550	0.550
415	x	x	1.00	0.550	x	1.00	0.550	x	1.0	1.0	0.550	0.550
416	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
417	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
418	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
419	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
420	x	x	1.00	0.550	x	1.00	0.550	x	1.0	1.0	0.550	0.550
421	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
422	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
423	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
424	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
425	x	x	1.00	0.550	x	1.00	0.550	x	1.0	1.0	0.550	0.550
426	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
427	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
428	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
429	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
430	x	x	1.00	0.550	x	1.00	0.550	x	1.0	1.0	0.550	0.550
431	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
432	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
433	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
434	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
435	x	x	1.00	0.550	x	1.00	0.550	x	1.0	1.0	0.550	0.550
436	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
437	x	x	1.00	0.745	x	1.00	0.745	x	1.0	1.0	0.745	0.745
438	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
439	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
440	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
441	x	x	1.00	0.745	x	1.00	0.745	x	1.0	1.0	0.745	0.745
442	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
443	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
444	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
445	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
446	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
447	x	x	1.00	0.745	x	1.00	0.745	x	1.0	1.0	0.745	0.745
448	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
449	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
450	x	x	1.00	0.745	x	1.00	0.745	x	1.0	1.0	0.745	0.745
451	x	x	1.00	0.422	x	1.00	0.422	x	1.0	1.0	0.422	0.422
452	x	x	1.00	0.422	x	1.00	0.422	x	1.0	1.0	0.422	0.422
453	x	x	1.00	0.850	x	1.00	0.850	x	1.0	1.0	0.850	0.850
454	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
455	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
456	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
457	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
458	x	x	1.00	0.550	x	1.00	0.550	x	1.0	1.0	0.550	0.550
459	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
460	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
461	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
462	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
463	x	x	1.00	0.550	x	1.00	0.550	x	1.0	1.0	0.550	0.550
464	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
465	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
466	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
467	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
468	x	x	1.00	0.550	x	1.00	0.550	x	1.0	1.0	0.550	0.550
469	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
470	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
471	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
472	x	x	1.00	0.745	x	1.00	0.745	x	1.0	1.0	0.745	0.745
473	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
474	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
475	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
476	x	x	1.00	0.425	x	1.00	0.425	x	1.0	1.0	0.425	0.425

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2.5 Effective Lengths - Members

Member	Buckling	Buckling About Axis u			Buckling About Axis v			Lateral-Torsional Buckling				
No.	Possible	Possible	$k_{cr,u}$	$L_{cr,u}$ [m]	Possible	$k_{cr,v}$	$L_{cr,v}$ [m]	Possible	k_z	k_w	L_w [m]	L_T [m]
477	x	x	1.00	0.250	x	1.00	0.250	x	1.0	1.0	0.250	0.250
478	x	x	1.00	0.250	x	1.00	0.250	x	1.0	1.0	0.250	0.250
479	x	x	1.00	0.425	x	1.00	0.425	x	1.0	1.0	0.425	0.425
480	x	x	1.00	0.425	x	1.00	0.425	x	1.0	1.0	0.425	0.425
481	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
482	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
483	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
484	x	x	1.00	0.425	x	1.00	0.425	x	1.0	1.0	0.425	0.425
485	x	x	1.00	0.425	x	1.00	0.425	x	1.0	1.0	0.425	0.425
486	x	x	1.00	0.850	x	1.00	0.850	x	1.0	1.0	0.850	0.850
487	x	x	1.00	0.850	x	1.00	0.850	x	1.0	1.0	0.850	0.850
488	x	x	1.00	0.425	x	1.00	0.425	x	1.0	1.0	0.425	0.425
489	x	x	1.00	0.425	x	1.00	0.425	x	1.0	1.0	0.425	0.425
490	x	x	1.00	0.425	x	1.00	0.425	x	1.0	1.0	0.425	0.425
491	x	x	1.00	0.425	x	1.00	0.425	x	1.0	1.0	0.425	0.425
492	x	x	1.00	0.425	x	1.00	0.425	x	1.0	1.0	0.425	0.425
493	x	x	1.00	0.425	x	1.00	0.425	x	1.0	1.0	0.425	0.425
494	x	x	1.00	0.425	x	1.00	0.425	x	1.0	1.0	0.425	0.425
495	x	x	1.00	0.425	x	1.00	0.425	x	1.0	1.0	0.425	0.425
496	x	x	1.00	0.425	x	1.00	0.425	x	1.0	1.0	0.425	0.425
497	x	x	1.00	0.425	x	1.00	0.425	x	1.0	1.0	0.425	0.425
498	x	x	1.00	0.425	x	1.00	0.425	x	1.0	1.0	0.425	0.425
499	x	x	1.00	0.850	x	1.00	0.850	x	1.0	1.0	0.850	0.850
500	x	x	1.00	0.850	x	1.00	0.850	x	1.0	1.0	0.850	0.850
501	x	x	1.00	0.425	x	1.00	0.425	x	1.0	1.0	0.425	0.425
502	x	x	1.00	0.425	x	1.00	0.425	x	1.0	1.0	0.425	0.425
503	x	x	1.00	0.745	x	1.00	0.745	x	1.0	1.0	0.745	0.745
504	x	x	1.00	0.250	x	1.00	0.250	x	1.0	1.0	0.250	0.250
505	x	x	1.00	0.250	x	1.00	0.250	x	1.0	1.0	0.250	0.250
506	x	x	1.00	0.253	x	1.00	0.253	x	1.0	1.0	0.253	0.253
507	x	x	1.00	0.490	x	1.00	0.490	x	1.0	1.0	0.490	0.490
508	x	x	1.00	0.745	x	1.00	0.745	x	1.0	1.0	0.745	0.745
509	x	x	1.00	0.425	x	1.00	0.425	x	1.0	1.0	0.425	0.425
510	x	x	1.00	0.425	x	1.00	0.425	x	1.0	1.0	0.425	0.425
511	x	x	1.00	0.250	x	1.00	0.250	x	1.0	1.0	0.250	0.250
512	x	x	1.00	0.850	x	1.00	0.850	x	1.0	1.0	0.850	0.850
513	x	x	1.00	0.250	x	1.00	0.250	x	1.0	1.0	0.250	0.250
514	x	x	1.00	0.425	x	1.00	0.425	x	1.0	1.0	0.425	0.425
515	x	x	1.00	0.425	x	1.00	0.425	x	1.0	1.0	0.425	0.425
516	x	x	1.00	0.425	x	1.00	0.425	x	1.0	1.0	0.425	0.425
517	x	x	1.00	0.850	x	1.00	0.850	x	1.0	1.0	0.850	0.850
518	x	x	1.00	0.850	x	1.00	0.850	x	1.0	1.0	0.850	0.850
519	x	x	1.00	0.425	x	1.00	0.425	x	1.0	1.0	0.425	0.425
520	x	x	1.00	0.850	x	1.00	0.850	x	1.0	1.0	0.850	0.850
521	x	x	1.00	1.275	x	1.00	1.275	x	1.0	1.0	1.275	1.275
522	x	x	1.00	0.850	x	1.00	0.850	x	1.0	1.0	0.850	0.850
523	x	x	1.00	0.425	x	1.00	0.425	x	1.0	1.0	0.425	0.425
524	x	x	1.00	0.425	x	1.00	0.425	x	1.0	1.0	0.425	0.425
525	x	x	1.00	0.850	x	1.00	0.850	x	1.0	1.0	0.850	0.850
526	x	x	1.00	0.850	x	1.00	0.850	x	1.0	1.0	0.850	0.850
527	x	x	1.00	0.850	x	1.00	0.850	x	1.0	1.0	0.850	0.850
528	x	x	1.00	0.425	x	1.00	0.425	x	1.0	1.0	0.425	0.425
529	x	x	1.00	0.339	x	1.00	0.339	x	1.0	1.0	0.339	0.339
530	x	x	1.00	0.339	x	1.00	0.339	x	1.0	1.0	0.339	0.339
531	x	x	1.00	0.339	x	1.00	0.339	x	1.0	1.0	0.339	0.339
532	x	x	1.00	0.339	x	1.00	0.339	x	1.0	1.0	0.339	0.339
533	x	x	1.00	0.339	x	1.00	0.339	x	1.0	1.0	0.339	0.339
534	x	x	1.00	0.339	x	1.00	0.339	x	1.0	1.0	0.339	0.339
535	x	x	1.00	0.339	x	1.00	0.339	x	1.0	1.0	0.339	0.339
536	x	x	1.00	0.339	x	1.00	0.339	x	1.0	1.0	0.339	0.339
537	x	x	1.00	0.237	x	1.00	0.237	x	1.0	1.0	0.237	0.237
538	x	x	1.00	0.237	x	1.00	0.237	x	1.0	1.0	0.237	0.237
539	x	x	1.00	0.237	x	1.00	0.237	x	1.0	1.0	0.237	0.237
540	x	x	1.00	0.237	x	1.00	0.237	x	1.0	1.0	0.237	0.237
541	x	x	1.00	0.336	x	1.00	0.336	x	1.0	1.0	0.336	0.336

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2.5 Effective Lengths - Members

Member No.	Buckling Possible	Buckling About Axis u: Possible	$k_{cr,u}$	$L_{cr,u}$ [m]	Buckling About Axis v: Possible	$k_{cr,v}$	$L_{cr,v}$ [m]	Lateral-Torsional Buckling: Possible	k_z	k_w	L_w [m]	L_T [m]
542	x	x	1.00	0.237	x	1.00	0.237	x	1.0	1.0	0.237	0.237
544	x	x	1.00	0.237	x	1.00	0.237	x	1.0	1.0	0.237	0.237
545	x	x	1.00	0.237	x	1.00	0.237	x	1.0	1.0	0.237	0.237
546	x	x	1.00	0.336	x	1.00	0.336	x	1.0	1.0	0.336	0.336
547	x	x	1.00	0.194	x	1.00	0.194	x	1.0	1.0	0.194	0.194
550	x	x	1.00	0.194	x	1.00	0.194	x	1.0	1.0	0.194	0.194
551	x	x	1.00	0.150	x	1.00	0.150	x	1.0	1.0	0.150	0.150
552	x	x	1.00	0.150	x	1.00	0.150	x	1.0	1.0	0.150	0.150
553	x	x	1.00	0.150	x	1.00	0.150	x	1.0	1.0	0.150	0.150
554	x	x	1.00	0.150	x	1.00	0.150	x	1.0	1.0	0.150	0.150
556	x	x	1.00	0.194	x	1.00	0.194	x	1.0	1.0	0.194	0.194
557	x	x	1.00	0.194	x	1.00	0.194	x	1.0	1.0	0.194	0.194
558	x	x	1.00	0.194	x	1.00	0.194	x	1.0	1.0	0.194	0.194
559	x	x	1.00	0.194	x	1.00	0.194	x	1.0	1.0	0.194	0.194
560	x	x	1.00	0.150	x	1.00	0.150	x	1.0	1.0	0.150	0.150
561	x	x	1.00	0.150	x	1.00	0.150	x	1.0	1.0	0.150	0.150
562	x	x	1.00	0.150	x	1.00	0.150	x	1.0	1.0	0.150	0.150
563	x	x	1.00	0.150	x	1.00	0.150	x	1.0	1.0	0.150	0.150
564	x	x	1.00	0.212	x	1.00	0.212	x	1.0	1.0	0.212	0.212
565	x	x	1.00	0.212	x	1.00	0.212	x	1.0	1.0	0.212	0.212
566	x	x	1.00	0.237	x	1.00	0.237	x	1.0	1.0	0.237	0.237
567	x	x	1.00	0.194	x	1.00	0.194	x	1.0	1.0	0.194	0.194
568	x	x	1.00	0.194	x	1.00	0.194	x	1.0	1.0	0.194	0.194

2.2 Design by Cross-Section

Sect. No.	Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
1	L 70x70x7 | EN 10056-1:1998 - L70*7						
	49	1.103	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	203	0.668	RC1	0.08	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	133	0.000	RC1	0.08	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	93	0.250	RC1	0.03	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	379	0.250	RC1	0.08	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	52	0.250	RC1	0.02	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	505	0.250	RC1	0.03	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	203	0.668	RC1	0.10	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	133	0.668	RC1	0.09	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	201	1.103	RC1	0.08	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	52	0.000	RC1	0.16	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	203	0.000	RC1	0.16	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	379	0.250	RC1	0.26	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	477	0.000	RC1	0.04	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	59	0.250	RC1	0.06	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	378	0.500	RC1	0.21	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	1	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	379	0.250	RC2	0.05	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	379	0.250	RC3	0.03	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	379	0.250	RC4	0.03	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	379	0.250	RC2	0.03	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	504	0.125	RC3	0.02	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	504	0.125	RC4	0.02	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
2	L 50x50x5 | EN 10056-1:1998 - L50*5						
	82	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	42	0.678	RC1	0.14	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	404	0.000	RC1	0.15	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4

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..2 Design by Cross-Section

Sect. No.	Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	560	0.075	RC1	0.13	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	556	0.000	RC1	0.13	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	551	0.075	RC1	0.10	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	556	0.194	RC1	0.10	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	361	0.678	RC1	0.17	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	39	0.000	RC1	0.17	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	361	0.000	RC1	0.15	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	357	0.339	RC1	0.23	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	42	0.000	RC1	0.18	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	560	0.150	RC1	0.57	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	412	0.500	RC1	0.06	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	399	0.000	RC1	0.02	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	556	0.194	RC1	0.76	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	8	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	108	0.250	RC2	0.02	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	108	0.250	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	108	0.250	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	115	0.637	RC2	0.03	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	174	1.273	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	195	1.273	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
3	L 35x35x5 | ArcelorMittal (EN 10056-1:2017) - L35*5						
	545	0.237	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	166	0.786	RC1	0.14	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	159	0.786	RC1	0.14	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	272	0.656	RC1	0.02	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	314	0.000	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	189	0.786	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	537	0.000	RC1	0.04	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	537	0.237	RC1	0.03	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	189	0.000	RC1	0.14	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	538	0.237	RC1	0.17	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	542	0.000	RC1	0.47	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	272	0.656	RC1	0.02	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	314	0.000	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	227	0.500	RC1	0.07	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	18	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	227	0.250	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	227	0.250	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	227	0.250	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	227	0.250	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	227	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	227	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
4	L 90x90x7 | EN 10056-1:1998 - L90*90*7						
	447	0.745	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	24	0.490	RC1	0.32	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	409	0.000	RC1	0.32	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	23	0.000	RC1	0.03	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	408	0.490	RC1	0.03	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	24	0.000	RC1	0.01	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	409	0.490	RC1	0.01	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4

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..2 Design by Cross-Section

Sect. No.	Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	424	0.490	RC1	0.26	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	426	0.490	RC1	0.37	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	410	0.000	RC1	0.44	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	454	0.000	RC1	0.31	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	24	0.000	RC1	0.46	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	409	0.000	RC1	0.47	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	447	0.745	RC1	0.00	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	472	0.745	RC1	0.02	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	508	0.745	RC1	0.03	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	23	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	410	2.450	RC2	0.16	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	410	2.450	RC3	0.11	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	410	2.450	RC4	0.11	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	410	3.000	RC2	0.16	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	410	3.000	RC3	0.11	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	410	3.000	RC4	0.11	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
5	L 100x100x8 | EN 10056-1:1998 - L100*8						
	194	4.962	RC1	0.24	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	30	4.962	RC1	0.26	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	165	5.344	RC1	0.02	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	30	4.962	RC1	0.02	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	194	5.344	RC1	0.02	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	167	4.962	RC1	0.01	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	194	4.580	RC1	0.27	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	125	4.580	RC1	0.28	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	194	5.344	RC1	0.35	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	167	5.344	RC1	0.36	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	194	5.344	RC1	0.32	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	125	5.344	RC1	0.36	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	30	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	167	3.054	RC2	0.06	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	167	3.054	RC3	0.04	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	167	3.054	RC4	0.04	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	30	3.054	RC2	0.06	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	30	3.054	RC3	0.04	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	30	3.054	RC4	0.04	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
6	L 65x65x7 | EN 10056-1:1998 - L65*7						
	331	0.500	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	496	0.000	RC1	0.12	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	524	0.425	RC1	0.11	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	294	0.000	RC1	0.13	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	230	0.000	RC1	0.07	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	94	0.125	RC1	0.04	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	288	0.250	RC1	0.06	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	288	0.125	RC1	0.03	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	286	0.000	RC1	0.03	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	293	0.500	RC1	0.26	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	343	0.000	RC1	0.22	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3

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2.2 Design by Cross-Section

Sect. No.	Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	286	0.000	RC1	0.35	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	294	0.000	RC1	0.13	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	230	0.000	RC1	0.07	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	286	0.000	RC1	0.35	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	94	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	349	2.800	RC2	0.06	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	349	2.800	RC3	0.04	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	349	2.800	RC4	0.04	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	349	1.950	RC2	0.05	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	349	1.950	RC3	0.03	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	349	2.375	RC4	0.03	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction

2.4 Design by Member

Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
1	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	0.711	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	1.423	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.04	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.711	RC1	0.04	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	1.423	RC1	0.01	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.711	RC1	0.04	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	1.423	RC1	0.02	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.423	RC1	0.01	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.711	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.711	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.711	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.711	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.711	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.711	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
2	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	1.185	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	1.777	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.00	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.03	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.592	RC1	0.03	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	1.777	RC1	0.01	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.185	RC1	0.04	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	1.777	RC1	0.04	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.02	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.777	RC1	0.02	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	1.185	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.592	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.592	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction

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..4 Design by Member

Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.592	RC2	0.03	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.592	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.592	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
3	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	0.532	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	1.597	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.03	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	1.597	RC1	0.03	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.597	RC1	0.03	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.05	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.532	RC1	0.01	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.532	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.532	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.532	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.532	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.532	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.532	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
4	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	1.257	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	1.257	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.04	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.628	RC1	0.01	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	1.257	RC1	0.05	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.628	RC1	0.05	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.02	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.07	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.628	RC1	0.01	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.00	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.628	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.628	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.628	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.628	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.628	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.628	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
5	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	1.103	RC1	0.06	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	1.103	RC1	0.01	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.551	RC1	0.02	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.103	RC1	0.07	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	1.103	RC1	0.03	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.08	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.03	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.103	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 -

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
						Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.551	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.551	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.551	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.551	RC2	0.03	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.551	RC3	0.02	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.551	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
6	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.753	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.06	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.753	RC1	0.02	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.753	RC1	0.05	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.04	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.11	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.00	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.753	RC1	0.01	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
7	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.668	RC1	0.07	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.668	RC1	0.02	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.668	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.668	RC1	0.00	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.668	RC1	0.06	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.668	RC1	0.03	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.13	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.04	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.668	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
8	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.07	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.03	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.01	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.700	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.00	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.700	RC1	0.14	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.04	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.12	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.700	RC1	0.14	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
9	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.04	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.09	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.000	RC1	0.06	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.05	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.700	RC1	0.05	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.700	RC1	0.12	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
10	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.09	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.11	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.700	RC1	0.04	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.700	RC1	0.11	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
11	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.700	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.09	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.03	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.700	RC1	0.00	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.000	RC1	0.11	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.700	RC1	0.13	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.04	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.700	RC1	0.00	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
12	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.743	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.743	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.10	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.743	RC1	0.04	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.743	RC1	0.03	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.743	RC1	0.12	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
13	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.743	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.743	RC1	0.09	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.03	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.743	RC1	0.04	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.11	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
14	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.000	RC1	0.09	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.700	RC1	0.04	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.09	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.06	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.700	RC1	0.10	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.00	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
15	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.09	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.03	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.700	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.03	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.700	RC1	0.03	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.700	RC1	0.10	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.04	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.00	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
16	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.09	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.700	RC1	0.03	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.700	RC1	0.03	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.700	RC1	0.11	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.700	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
17	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.500	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.250	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.250	RC1	0.01	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.500	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.00	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.500	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.03	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.250	RC1	0.02	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.11	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.250	RC1	0.01	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
18	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.786	RC1	0.04	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.14	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.00	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.05	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.786	RC1	0.19	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.00	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.786	RC1	0.01	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
19	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.14	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.786	RC1	0.04	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.786	RC1	0.00	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.786	RC1	0.05	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.19	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.786	RC1	0.00	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.01	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
20	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.500	RC1	0.00	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.500	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.500	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.01	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.500	RC1	0.09	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.500	RC1	0.01	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.500	RC1	0.10	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
21	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.816	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.00	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.02	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.05	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.816	RC1	0.05	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.05	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.000	RC1	0.02	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.816	RC1	0.01	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
22	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.733	RC1	0.09	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.00	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.00	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.733	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.09	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.09	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.733	RC1	0.16	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.00	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.733	RC1	0.02	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
23	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.490	RC1	0.30	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.13	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.03	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.245	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.00	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.245	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.490	RC1	0.04	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.05	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.42	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.17	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.03	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.02	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.02	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.04	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.03	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.03	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
24	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.490	RC1	0.32	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.08	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.490	RC1	0.02	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.490	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.01	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.490	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.01	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.490	RC1	0.03	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.12	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.46	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.490	RC1	0.11	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.02	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.245	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.04	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.03	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.03	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
25	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.490	RC1	0.07	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.31	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.490	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.02	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.00	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.490	RC1	0.01	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.490	RC1	0.04	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.10	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.46	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.02	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.05	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.03	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.03	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
26	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.490	RC1	0.12	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.31	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.01	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.490	RC1	0.03	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.00	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.490	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.490	RC1	0.03	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.490	RC1	0.08	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.16	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.42	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.03	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.02	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.02	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.04	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.03	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.03	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
27	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.500	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.500	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.500	RC1	0.07	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.500	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.500	RC1	0.01	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.500	RC1	0.04	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.04	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.10	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.250	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
28	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.250	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.500	RC1	0.01	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.01	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.500	RC1	0.10	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.250	RC1	0.01	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.500	RC1	0.02	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.500	RC1	0.09	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
29	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.550	RC1	0.19	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.06	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.550	RC1	0.06	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.02	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.21	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.07	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.275	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.275	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.275	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.275	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.275	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.275	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
30	Cross-section No. 5 - L 100x100x8 | EN 10056-1:1998					
	5.344	RC1	0.10	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	4.962	RC1	0.26	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	5.344	RC1	0.01	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	4.962	RC1	0.02	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	5.344	RC1	0.01	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	4.962	RC1	0.01	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	4.962	RC1	0.10	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	4.962	RC1	0.25	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	4.962	RC1	0.11	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.763	RC1	0.15	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	5.344	RC1	0.13	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	5.344	RC1	0.33	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	3.054	RC2	0.06	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	3.054	RC3	0.04	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	3.054	RC4	0.04	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	3.054	RC2	0.06	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	3.054	RC3	0.04	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	3.054	RC4	0.04	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
31	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	1.185	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.00	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.02	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.777	RC1	0.02	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.02	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.592	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.592	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	1.185	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	1.185	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	1.185	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	1.185	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
32	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.678	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.678	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.12	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.678	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.678	RC1	0.01	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.678	RC1	0.11	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.678	RC1	0.14	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.16	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.678	RC1	0.01	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.03	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
33	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.550	RC1	0.16	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.03	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.01	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.01	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.000	RC1	0.23	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.05	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.550	RC1	0.21	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.550	RC1	0.05	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.275	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.275	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.275	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.275	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.275	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.275	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
34	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.550	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.17	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.550	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.23	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.04	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.22	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.275	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.275	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.275	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.275	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.275	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.275	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
35	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.550	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.550	RC1	0.04	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.17	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.550	RC1	0.05	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.550	RC1	0.20	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.06	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.20	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.00	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.275	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.275	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.275	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.275	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.275	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.275	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
36	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.550	RC1	0.04	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.20	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.550	RC1	0.05	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.05	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.23	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.275	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.275	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.275	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.275	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.275	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.275	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
37	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	1.307	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	1.961	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.00	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.654	RC1	0.01	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.02	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.02	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	1.307	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	1.307	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.654	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	1.307	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	1.307	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	1.307	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
38	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	1.910	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.637	RC1	0.01	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.910	RC1	0.03	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.637	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.637	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.637	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.637	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.637	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.637	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
39	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.678	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.678	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.15	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.17	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.678	RC1	0.16	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.00	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
40	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.678	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.678	RC1	0.10	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.12	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.10	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.678	RC1	0.01	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.12	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.000	RC1	0.02	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.678	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.02	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
41	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	1.597	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.00	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	1.065	RC1	0.01	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.02	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.065	RC1	0.01	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.02	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	1.065	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	1.065	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	1.065	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.532	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	1.065	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	1.065	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
42	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.678	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.678	RC1	0.14	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.16	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.02	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.678	RC1	0.01	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.18	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.04	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.00	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.678	RC1	0.00	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
43	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	1.423	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	1.423	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	1.423	RC1	0.01	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.711	RC1	0.01	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.02	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.423	RC1	0.00	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.00	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.02	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.711	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.711	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.711	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.711	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.711	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.711	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
44	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.05	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.13	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.08	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
45	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.700	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.700	RC1	0.02	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.10	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.700	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.02	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
46	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.700	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.05	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.700	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.700	RC1	0.02	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.700	RC1	0.05	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.02	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.700	RC1	0.03	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.700	RC1	0.04	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.11	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
47	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.668	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.668	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.668	RC1	0.08	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.05	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.668	RC1	0.05	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.03	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
48	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.01	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.01	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.753	RC1	0.09	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.753	RC1	0.02	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
49	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	1.103	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	1.103	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.551	RC1	0.01	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.551	RC1	0.01	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.103	RC1	0.04	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.551	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.103	RC1	0.02	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.551	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.551	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.551	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.551	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.551	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.551	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
50	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	1.257	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.00	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.628	RC1	0.01	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.02	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.03	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.628	RC1	0.01	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.257	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.628	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.628	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.628	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.628	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.628	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.628	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
51	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.700	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.700	RC1	0.03	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.700	RC1	0.07	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.700	RC1	0.04	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
52	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.250	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.250	RC1	0.01	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.250	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.02	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.250	RC1	0.02	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.03	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.16	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.250	RC1	0.04	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.21	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.250	RC1	0.01	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.500	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.500	RC1	0.18	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
53	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.03	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.700	RC1	0.03	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.700	RC1	0.02	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.700	RC1	0.02	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
54	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.03	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.02	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.700	RC1	0.02	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.07	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
55	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.700	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.700	RC1	0.02	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
						6.2.9.3 - Class 4
	0.700	RC1	0.07	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.700	RC1	0.00	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
56	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.743	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.743	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.03	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.03	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.743	RC1	0.06	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.743	RC1	0.03	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.07	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
57	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.743	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.743	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.743	RC1	0.02	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.04	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.743	RC1	0.05	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.743	RC1	0.01	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.00	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.743	RC1	0.04	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
58	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.03	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.09	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.700	RC1	0.05	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
59	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	0.125	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.07	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.02	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.125	RC1	0.03	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.22	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.125	RC1	0.01	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.250	RC1	0.06	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.250	RC1	0.07	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 -

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
						Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.125	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.125	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.125	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.125	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.125	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.125	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
60	Cross-section No. 5 - L 100x100x8 | EN 10056-1:1998					
	5.344	RC1	0.10	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	4.962	RC1	0.24	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	5.344	RC1	0.01	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	4.962	RC1	0.02	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	5.344	RC1	0.01	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	4.962	RC1	0.01	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	4.962	RC1	0.10	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	3.817	RC1	0.20	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	4.580	RC1	0.10	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.763	RC1	0.14	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	5.344	RC1	0.13	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	5.344	RC1	0.31	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	3.054	RC2	0.06	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	3.054	RC3	0.04	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	3.054	RC4	0.03	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	3.054	RC2	0.05	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	3.054	RC3	0.03	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	3.054	RC4	0.03	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
61	Cross-section No. 5 - L 100x100x8 | EN 10056-1:1998					
	5.344	RC1	0.23	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	4.580	RC1	0.06	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	4.962	RC1	0.01	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	4.962	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	5.344	RC1	0.02	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	4.962	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	4.580	RC1	0.26	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	4.962	RC1	0.07	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	5.344	RC1	0.34	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	5.344	RC1	0.09	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	5.344	RC1	0.31	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	4.962	RC1	0.08	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	3.054	RC2	0.06	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	3.054	RC3	0.04	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	3.054	RC4	0.04	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	3.054	RC2	0.05	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	3.054	RC3	0.03	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	3.054	RC4	0.03	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
62	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	1.910	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.637	RC1	0.01	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.910	RC1	0.03	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.637	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.637	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.637	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.637	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.637	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.637	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
63	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	0.654	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	1.961	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.654	RC1	0.01	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.02	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.02	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	1.307	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	1.307	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.654	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	1.307	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	1.307	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	1.307	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
64	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	1.185	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.00	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.01	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.03	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.777	RC1	0.02	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.592	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.592	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	1.185	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	1.185	RC2	0.03	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	1.185	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	1.185	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
65	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	0.711	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.00	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	1.423	RC1	0.01	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.711	RC1	0.01	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.03	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.00	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.423	RC1	0.02	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.711	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.711	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.711	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.711	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.711	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.711	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
66	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	1.257	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	1.257	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.00	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.628	RC1	0.01	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.628	RC1	0.01	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	1.257	RC1	0.02	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.03	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.628	RC1	0.01	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.257	RC1	0.02	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.628	RC1	0.01	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.628	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.628	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.628	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.628	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.628	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.628	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
67	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	0.551	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	1.103	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.551	RC1	0.01	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.04	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.103	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.103	RC1	0.02	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.551	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.551	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.551	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.551	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.551	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.551	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
68	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.700	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.700	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.700	RC1	0.04	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.700	RC1	0.01	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.02	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.700	RC1	0.02	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.08	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.09	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
69	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	0.668	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.668	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.668	RC1	0.07	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.668	RC1	0.10	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
70	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.700	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.05	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.02	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.15	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
71	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.753	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.01	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.753	RC1	0.10	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.753	RC1	0.06	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
72	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.09	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.04	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.700	RC1	0.12	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.700	RC1	0.04	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.700	RC1	0.12	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.700	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
73	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.700	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.04	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.00	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.700	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.700	RC1	0.08	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
						- Class 3
	0.700	RC1	0.11	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.700	RC1	0.02	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
74	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.04	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.10	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.700	RC1	0.01	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
75	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.700	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.00	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.700	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.01	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.700	RC1	0.07	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.700	RC1	0.10	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.700	RC1	0.02	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
76	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.743	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.743	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.00	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.02	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.743	RC1	0.04	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.04	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.05	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.743	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
77	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.04	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.02	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.11	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
78	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	1.597	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	1.597	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	1.065	RC1	0.01	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.02	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.532	RC1	0.01	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.065	RC1	0.01	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.532	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.532	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	1.065	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.532	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	1.065	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	1.065	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
79	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.04	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.00	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.07	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.05	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.700	RC1	0.08	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.700	RC1	0.01	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.700	RC1	0.01	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
80	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.785	RC1	0.06	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.03	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.03	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.10	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
81	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.787	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.12	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.787	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.02	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.787	RC1	0.03	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.787	RC1	0.21	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.787	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
82	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.250	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.250	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.500	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.00	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.500	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.02	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.08	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.250	RC1	0.05	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.08	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.500	RC1	0.00	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.02	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
83	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.500	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.250	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.500	RC1	0.01	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.250	RC1	0.01	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.500	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.00	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.500	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.01	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.250	RC1	0.03	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.09	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.500	RC1	0.02	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
84	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.733	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.01	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.733	RC1	0.05	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.733	RC1	0.06	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.733	RC1	0.02	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
85	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.678	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.678	RC1	0.04	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.00	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.678	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.07	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.08	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.678	RC1	0.11	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.678	RC1	0.02	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
86	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.678	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.11	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.16	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.17	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.678	RC1	0.02	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
87	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.250	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.500	RC1	0.01	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.250	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.500	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.00	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.500	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.01	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.03	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.04	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.500	RC1	0.06	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.500	RC1	0.01	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
88	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.816	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.816	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.816	RC1	0.03	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.000	RC1	0.04	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.816	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.02	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
89	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.786	RC1	0.13	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.786	RC1	0.00	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.786	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.786	RC1	0.02	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.19	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.786	RC1	0.00	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.01	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
90	Cross-section No. 5 - L 100x100x8 | EN 10056-1:1998					
	5.344	RC1	0.24	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	4.962	RC1	0.11	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	5.344	RC1	0.02	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	4.962	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	5.344	RC1	0.01	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	5.344	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	4.962	RC1	0.23	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	4.962	RC1	0.11	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.11	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	4.962	RC1	0.12	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	5.344	RC1	0.31	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	5.344	RC1	0.15	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	3.054	RC2	0.06	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	3.054	RC3	0.04	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	3.054	RC4	0.03	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	3.054	RC2	0.05	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	3.054	RC3	0.04	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	3.054	RC4	0.04	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
91	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.786	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.08	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.786	RC1	0.03	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.11	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
92	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.250	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.500	RC1	0.00	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.250	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.00	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.000	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.03	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.250	RC1	0.01	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.500	RC1	0.06	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.250	RC1	0.04	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.500	RC1	0.06	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.250	RC1	0.01	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.500	RC1	0.01	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
93	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	0.500	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.250	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.250	RC1	0.03	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.500	RC1	0.03	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.01	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.000	RC1	0.01	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.02	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.250	RC1	0.01	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.250	RC1	0.02	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.23	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.04	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
94	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.125	RC1	0.05	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.125	RC1	0.00	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.125	RC1	0.04	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.05	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.125	RC1	0.03	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.250	RC1	0.03	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.125	RC1	0.01	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.250	RC1	0.11	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.22	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
						- Class 3
	0.125	RC1	0.00	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.07	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.125	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.125	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.125	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.125	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.125	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.125	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
95	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.678	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.678	RC1	0.08	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.00	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.12	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.678	RC1	0.12	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.00	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
96	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	1.273	RC1	0.01	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.910	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.03	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	1.273	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	1.273	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	1.273	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	1.273	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	1.273	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	1.273	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
98	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.678	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.08	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.678	RC1	0.13	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.678	RC1	0.13	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.02	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
99	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.169	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.06	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.05	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.169	RC1	0.02	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.339	RC1	0.39	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.00	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.169	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.169	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.169	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.169	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.169	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.169	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
100	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	0.654	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.02	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	1.961	RC1	0.03	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.961	RC1	0.03	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.04	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.307	RC1	0.01	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.961	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.02	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	1.307	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	1.307	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	1.307	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	1.307	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.654	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.654	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
101	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.678	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.678	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.12	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.678	RC1	0.13	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.678	RC1	0.14	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.678	RC1	0.02	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
102	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.678	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.08	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.10	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.678	RC1	0.11	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
103	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.339	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.339	RC1	0.05	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.169	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.169	RC1	0.02	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.000	RC1	0.02	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.169	RC1	0.06	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.20	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.169	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.169	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.169	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.169	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.169	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.169	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
104	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.339	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.339	RC1	0.06	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.00	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.169	RC1	0.05	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.339	RC1	0.05	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.169	RC1	0.02	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.000	RC1	0.02	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.169	RC1	0.06	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.339	RC1	0.41	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.339	RC1	0.01	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.339	RC1	0.00	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.02	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.169	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.169	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.169	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.169	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.169	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.169	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
105	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.678	RC1	0.11	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.678	RC1	0.13	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.13	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.02	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.678	RC1	0.14	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.678	RC1	0.02	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.678	RC1	0.01	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
106	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.678	RC1	0.11	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.12	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.678	RC1	0.02	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.678	RC1	0.01	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.678	RC1	0.14	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.02	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
107	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.770	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.05	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.770	RC1	0.05	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.770	RC1	0.01	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.07	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
108	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.250	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.08	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.500	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.03	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.250	RC1	0.12	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.500	RC1	0.07	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.15	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.02	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
109	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.500	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.500	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.08	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.500	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.03	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.15	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.500	RC1	0.03	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.500	RC1	0.10	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.02	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
110	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.500	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.250	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.250	RC1	0.01	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.500	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.02	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.500	RC1	0.09	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.250	RC1	0.00	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.500	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.500	RC1	0.01	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
111	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.250	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.250	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.500	RC1	0.00	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.250	RC1	0.01	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.00	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.500	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.02	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.250	RC1	0.02	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.09	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.500	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.500	RC1	0.02	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
112	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.733	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.01	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.733	RC1	0.07	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.733	RC1	0.08	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.733	RC1	0.02	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
113	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.743	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.05	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.743	RC1	0.02	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.02	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.743	RC1	0.08	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
114	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.817	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.817	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.817	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.04	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.817	RC1	0.03	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.05	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.817	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.02	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
115	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.02	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.910	RC1	0.03	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.637	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.637	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.637	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.637	RC2	0.03	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.637	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.637	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
116	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.668	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.07	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.668	RC1	0.08	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.668	RC1	0.03	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.03	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.14	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.668	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
117	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.770	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.03	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.770	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.770	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.01	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.08	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
						- Class 3
	0.770	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
118	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	1.103	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	1.103	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.06	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.551	RC1	0.02	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	1.103	RC1	0.02	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	1.103	RC1	0.07	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.551	RC1	0.02	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.09	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.00	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.551	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.551	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.551	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.551	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.551	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.551	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
119	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	0.628	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	1.257	RC1	0.05	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	1.257	RC1	0.05	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.628	RC1	0.05	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.06	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.02	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.628	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.628	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.628	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.628	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.628	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.628	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
120	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	0.711	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	1.423	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.04	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.711	RC1	0.01	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	1.423	RC1	0.04	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.711	RC1	0.01	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.06	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.00	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.711	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.711	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.711	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.711	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.711	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.711	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
121	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	0.532	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	1.597	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.00	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.04	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.532	RC1	0.04	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	1.597	RC1	0.01	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.532	RC1	0.04	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.02	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.532	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.532	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.532	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.532	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.532	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.532	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
122	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	1.185	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	1.777	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.03	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	1.185	RC1	0.03	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.777	RC1	0.03	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.05	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.00	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.777	RC1	0.01	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	1.185	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.592	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.592	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.592	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.592	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	1.185	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
123	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	1.307	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	1.961	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.03	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.03	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	1.961	RC1	0.03	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.961	RC1	0.02	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.654	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.654	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.654	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.654	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.654	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.654	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
124	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.753	RC1	0.06	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.753	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.753	RC1	0.00	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.753	RC1	0.06	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.753	RC1	0.02	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.11	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.04	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
125	Cross-section No. 5 - L 100x100x8 | EN 10056-1:1998					
	4.962	RC1	0.05	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	4.580	RC1	0.25	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	4.962	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	5.344	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	5.344	RC1	0.00	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	4.962	RC1	0.01	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	4.962	RC1	0.07	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	4.580	RC1	0.28	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	2.290	RC1	0.04	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	5.344	RC1	0.24	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	5.344	RC1	0.08	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	5.344	RC1	0.36	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	3.054	RC2	0.06	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	3.054	RC3	0.04	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	3.054	RC4	0.04	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	3.054	RC2	0.05	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	3.054	RC3	0.03	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	3.054	RC4	0.03	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
126	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.02	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.910	RC1	0.03	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.637	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.637	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.637	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.637	RC2	0.03	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.637	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.637	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
127	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	1.307	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	1.961	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.00	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.03	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.654	RC1	0.03	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	1.307	RC1	0.01	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.961	RC1	0.04	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	1.961	RC1	0.04	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.961	RC1	0.01	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.654	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.654	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.654	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.654	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.654	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.654	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
128	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	1.185	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	1.777	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.03	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	1.185	RC1	0.01	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	1.777	RC1	0.03	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.777	RC1	0.03	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.05	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.185	RC1	0.00	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.777	RC1	0.00	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	1.185	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.592	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.592	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.592	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	1.185	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	1.185	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
129	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	0.532	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	1.597	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.04	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.532	RC1	0.04	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	1.597	RC1	0.01	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.532	RC1	0.04	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.02	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.532	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.532	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.532	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.532	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.532	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.532	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
130	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	0.711	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	1.423	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.04	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.711	RC1	0.01	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	1.423	RC1	0.05	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.423	RC1	0.01	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.07	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.00	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.711	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.711	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.711	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.711	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.711	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.711	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
131	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	1.103	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	1.103	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.07	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.551	RC1	0.02	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	1.103	RC1	0.02	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	1.103	RC1	0.08	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.551	RC1	0.02	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.11	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.551	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.551	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.551	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.551	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.551	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.551	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
132	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.753	RC1	0.07	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.753	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.753	RC1	0.00	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.000	RC1	0.12	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.05	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
133	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.668	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.08	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.668	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.668	RC1	0.09	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.668	RC1	0.03	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.04	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.16	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.668	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
134	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.04	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.700	RC1	0.04	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.03	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.08	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.03	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.700	RC1	0.12	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
135	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.700	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.06	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.03	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.06	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.700	RC1	0.09	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.700	RC1	0.03	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.700	RC1	0.09	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.05	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
136	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.06	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.03	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.08	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.700	RC1	0.03	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.700	RC1	0.05	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.04	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.700	RC1	0.08	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.700	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
137	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.06	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.03	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.03	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.700	RC1	0.08	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.700	RC1	0.04	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.00	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
138	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.700	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.06	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.07	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.700	RC1	0.03	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.700	RC1	0.08	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.00	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
139	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.743	RC1	0.06	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.03	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.743	RC1	0.03	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.07	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.743	RC1	0.08	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
140	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.743	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.07	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.743	RC1	0.03	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.08	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.743	RC1	0.09	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
141	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.06	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.700	RC1	0.02	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.700	RC1	0.08	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
142	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.07	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.08	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.700	RC1	0.03	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.700	RC1	0.09	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
143	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.786	RC1	0.09	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.11	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.786	RC1	0.12	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
144	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.03	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.02	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.10	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
145	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.786	RC1	0.09	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.03	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.12	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
146	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.500	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.250	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.04	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.250	RC1	0.01	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.500	RC1	0.07	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.04	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.250	RC1	0.00	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.500	RC1	0.08	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
147	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.816	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.00	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.03	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.05	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.00	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.02	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
148	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.733	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.733	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.03	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.02	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.733	RC1	0.05	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
149	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.09	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.03	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.700	RC1	0.04	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.07	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.700	RC1	0.10	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.04	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
150	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.743	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.09	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.743	RC1	0.04	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.04	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.743	RC1	0.03	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.743	RC1	0.11	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
151	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.743	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.743	RC1	0.10	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.04	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.11	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.743	RC1	0.03	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.04	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.743	RC1	0.12	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.743	RC1	0.04	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.00	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
152	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.04	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.10	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.700	RC1	0.04	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.700	RC1	0.12	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.05	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.700	RC1	0.12	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.700	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
153	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.09	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.04	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.10	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.04	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.700	RC1	0.12	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.700	RC1	0.04	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
154	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.700	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.09	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.04	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.06	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.04	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.700	RC1	0.13	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.06	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
155	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.08	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.700	RC1	0.05	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.700	RC1	0.15	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.04	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.04	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.12	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
156	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.09	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.700	RC1	0.03	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.10	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.03	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.03	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.700	RC1	0.10	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
157	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.733	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.04	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.733	RC1	0.00	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.04	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.733	RC1	0.07	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.733	RC1	0.06	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.733	RC1	0.00	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
158	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.700	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.09	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.04	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.700	RC1	0.04	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.700	RC1	0.13	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.00	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
159	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.786	RC1	0.00	≤ 1	CS100)	Negligible internal forces

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.000	RC1	0.04	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.786	RC1	0.14	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.20	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
160	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.816	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.816	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.01	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.03	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.04	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
161	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.07	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.700	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.03	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.08	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
162	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.500	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.250	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.250	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.00	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.000	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.500	RC1	0.09	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.250	RC1	0.00	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.500	RC1	0.10	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
163	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.09	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.03	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.700	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.07	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.700	RC1	0.11	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.04	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
164	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.500	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.03	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.250	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.03	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.12	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
165	Cross-section No. 5 - L 100x100x8 | EN 10056-1:1998					
	5.344	RC1	0.24	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	4.962	RC1	0.11	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	5.344	RC1	0.02	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	4.962	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	5.344	RC1	0.01	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	5.344	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	4.962	RC1	0.24	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	4.962	RC1	0.11	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.12	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	4.580	RC1	0.11	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	5.344	RC1	0.31	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	5.344	RC1	0.14	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	3.054	RC2	0.06	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	3.054	RC3	0.04	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	3.054	RC4	0.04	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	3.054	RC2	0.06	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	3.054	RC3	0.04	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	3.054	RC4	0.04	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
166	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.786	RC1	0.14	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.04	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.786	RC1	0.20	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
167	Cross-section No. 5 - L 100x100x8 | EN 10056-1:1998					
	4.962	RC1	0.05	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	4.962	RC1	0.24	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	4.962	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	5.344	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	5.344	RC1	0.00	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	4.962	RC1	0.01	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	4.962	RC1	0.07	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	4.580	RC1	0.28	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	2.290	RC1	0.04	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	5.344	RC1	0.36	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	5.344	RC1	0.08	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	5.344	RC1	0.33	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	3.054	RC2	0.06	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	3.054	RC3	0.04	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	3.054	RC4	0.04	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	3.054	RC2	0.05	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	3.054	RC3	0.03	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	3.054	RC4	0.03	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
168	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	0.551	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	1.103	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.00	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	1.103	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.551	RC1	0.01	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.103	RC1	0.04	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.103	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.03	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.551	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.551	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.551	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.551	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.551	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.551	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
169	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	1.257	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.00	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.02	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.257	RC1	0.03	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.257	RC1	0.02	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.628	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.628	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.628	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.628	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.628	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.628	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
170	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	0.711	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	1.423	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	1.423	RC1	0.02	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.00	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.423	RC1	0.02	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.711	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.711	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.711	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.711	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.711	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.711	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
171	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.00	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	1.597	RC1	0.02	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.597	RC1	0.02	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.597	RC1	0.02	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.532	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.532	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.532	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	1.065	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.532	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.532	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
172	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	1.185	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	1.777	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.592	RC1	0.01	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.777	RC1	0.02	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.592	RC1	0.00	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.777	RC1	0.02	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.592	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.592	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.592	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.592	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.592	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.592	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
173	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	1.307	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.00	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.02	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.961	RC1	0.02	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.961	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.961	RC1	0.02	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.654	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.654	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.654	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	1.307	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.654	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.654	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
174	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.000	RC1	0.02	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.03	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	1.273	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	1.273	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	1.273	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	1.273	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	1.273	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	1.273	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
175	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.753	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.753	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.753	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.753	RC1	0.10	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.753	RC1	0.07	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
176	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.743	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.743	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.01	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.743	RC1	0.04	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.04	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
177	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.700	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.03	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.700	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.700	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.700	RC1	0.09	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
178	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.700	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.700	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.700	RC1	0.02	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.08	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
179	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.700	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.03	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.700	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.700	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.700	RC1	0.10	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
180	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.05	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.700	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.700	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.700	RC1	0.02	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.700	RC1	0.01	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.14	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
181	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.700	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.700	RC1	0.01	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.700	RC1	0.04	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.700	RC1	0.05	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.09	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.06	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
182	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.668	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.668	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.668	RC1	0.10	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.06	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
183	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.743	RC1	0.04	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.743	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.743	RC1	0.02	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.02	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.06	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.743	RC1	0.08	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
184	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.700	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.700	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.10	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.000	RC1	0.02	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
185	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.03	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.01	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.06	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.700	RC1	0.02	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.700	RC1	0.07	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.700	RC1	0.01	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
186	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.700	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.700	RC1	0.01	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.02	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.06	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.700	RC1	0.05	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.700	RC1	0.00	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
187	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	0.628	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	1.257	RC1	0.05	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	1.257	RC1	0.06	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.628	RC1	0.06	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.07	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.03	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.628	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.628	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.628	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.628	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.628	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.628	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
188	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.500	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.500	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.03	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.01	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.250	RC1	0.04	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.500	RC1	0.01	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.09	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
189	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.786	RC1	0.13	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.786	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.786	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.14	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.786	RC1	0.19	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.786	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
190	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.786	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.07	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.786	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.02	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.11	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
191	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.500	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.500	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.500	RC1	0.02	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.250	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.01	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.09	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.250	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
192	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.814	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.814	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.00	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.01	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.03	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.04	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
193	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.733	RC1	0.04	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.733	RC1	0.00	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.733	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.733	RC1	0.01	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.733	RC1	0.01	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.733	RC1	0.11	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.733	RC1	0.00	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
194	Cross-section No. 5 - L 100x100x8 | EN 10056-1:1998					
	4.962	RC1	0.24	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	4.580	RC1	0.07	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	4.962	RC1	0.02	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	4.962	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	5.344	RC1	0.02	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	4.962	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	4.580	RC1	0.27	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	4.962	RC1	0.08	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	5.344	RC1	0.35	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	5.344	RC1	0.09	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	5.344	RC1	0.32	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	4.962	RC1	0.08	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	3.054	RC2	0.06	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	3.054	RC3	0.04	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	3.054	RC4	0.04	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	3.054	RC2	0.05	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	3.054	RC3	0.03	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	3.054	RC4	0.03	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
195	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	1.273	RC1	0.01	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.910	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.000	RC1	0.03	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	1.273	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	1.273	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	1.273	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	1.273	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	1.273	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	1.273	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
196	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	1.307	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	1.961	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.03	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	1.307	RC1	0.03	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.961	RC1	0.03	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.04	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.307	RC1	0.01	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.961	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.02	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	1.307	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	1.307	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	1.307	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	1.307	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.654	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.654	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
197	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	1.185	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	1.777	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.00	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.04	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.592	RC1	0.04	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.02	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.777	RC1	0.04	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	1.777	RC1	0.04	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.777	RC1	0.02	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	1.185	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.592	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.592	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.592	RC2	0.03	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.592	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.592	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
198	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	1.065	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	1.597	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.04	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.01	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	1.597	RC1	0.04	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.597	RC1	0.01	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.06	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.532	RC1	0.01	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.532	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.532	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	1.065	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.532	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.532	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.532	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
199	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	0.711	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	1.423	RC1	0.04	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.05	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.711	RC1	0.05	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	1.423	RC1	0.02	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.423	RC1	0.05	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.02	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.423	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.423	RC1	0.01	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.711	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.711	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.711	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.711	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.711	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.711	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
200	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	1.257	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	1.257	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.05	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.628	RC1	0.02	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	1.257	RC1	0.06	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.628	RC1	0.06	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.02	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.08	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.628	RC1	0.01	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.00	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.628	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.628	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.628	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.628	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.628	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.628	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
201	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	1.103	RC1	0.07	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.07	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.551	RC1	0.02	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.103	RC1	0.08	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	1.103	RC1	0.03	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.10	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.03	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.103	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.551	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.551	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.551	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.551	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.551	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.551	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
202	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.753	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.08	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.753	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.753	RC1	0.02	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.04	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.13	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.00	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.753	RC1	0.01	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
203	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.668	RC1	0.08	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.668	RC1	0.01	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.668	RC1	0.00	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.668	RC1	0.10	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.668	RC1	0.03	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.16	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.04	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.668	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
204	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.05	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.000	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.700	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.700	RC1	0.12	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.09	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.06	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.08	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.05	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
205	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.700	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.07	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.07	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.04	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.700	RC1	0.07	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.700	RC1	0.05	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.700	RC1	0.10	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
206	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.07	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.03	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.04	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.700	RC1	0.05	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.700	RC1	0.03	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.700	RC1	0.09	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.700	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
207	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.07	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.700	RC1	0.03	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.700	RC1	0.09	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
208	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.06	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.700	RC1	0.03	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.07	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.03	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.700	RC1	0.09	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.700	RC1	0.06	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.700	RC1	0.00	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
209	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.743	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.07	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.743	RC1	0.03	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.05	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.743	RC1	0.02	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.743	RC1	0.09	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.743	RC1	0.00	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
210	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.743	RC1	0.07	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.743	RC1	0.03	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.03	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.743	RC1	0.09	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.00	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
211	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.700	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.07	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.700	RC1	0.02	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.09	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.700	RC1	0.02	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.700	RC1	0.10	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
212	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.700	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.07	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.700	RC1	0.09	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.700	RC1	0.09	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
213	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.250	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.250	RC1	0.01	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.500	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.01	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.500	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.03	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.02	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.11	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
214	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.07	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.03	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.08	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
215	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.786	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.786	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.10	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.786	RC1	0.00	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.12	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.03	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.786	RC1	0.13	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.786	RC1	0.00	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.01	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
216	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.10	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.786	RC1	0.02	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.786	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.09	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.13	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.786	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
217	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.500	RC1	0.00	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.500	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.04	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.250	RC1	0.01	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.500	RC1	0.08	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
						6.2.9.3 - Class 4
	0.500	RC1	0.00	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.250	RC1	0.00	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.500	RC1	0.09	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
218	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.816	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.07	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.816	RC1	0.04	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.07	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.02	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
219	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.733	RC1	0.07	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.00	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.00	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.733	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.733	RC1	0.01	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.08	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.733	RC1	0.15	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.00	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.733	RC1	0.02	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
220	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.04	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.700	RC1	0.01	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.07	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.700	RC1	0.07	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
221	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.02	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.770	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.02	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.08	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
222	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.770	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.770	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.00	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.00	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.770	RC1	0.02	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.770	RC1	0.01	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.04	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.00	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
223	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.770	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.770	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.00	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.770	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.01	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.770	RC1	0.07	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.00	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
224	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.770	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.04	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.770	RC1	0.01	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.06	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
225	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.770	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.770	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.00	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.05	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.770	RC1	0.03	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.05	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
226	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.00	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.000	RC1	0.00	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.02	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
227	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.500	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.500	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.500	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.500	RC1	0.07	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
228	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.250	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.05	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
229	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.500	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.500	RC1	0.00	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.500	RC1	0.00	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.03	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
230	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.560	RC1	0.07	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.07	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.280	RC1	0.02	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.02	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.280	RC1	0.01	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.000	RC1	0.01	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.05	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.280	RC1	0.09	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.560	RC1	0.24	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.07	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.000	RC1	0.06	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.280	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.280	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.280	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.280	RC2	0.03	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.280	RC3	0.02	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.280	RC4	0.02	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
231	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.000	RC1	0.08	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.500	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.250	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.250	RC1	0.03	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.500	RC1	0.03	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.01	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.500	RC1	0.01	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.500	RC1	0.08	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.500	RC1	0.16	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.500	RC1	0.26	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.250	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.500	RC1	0.07	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
232	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.000	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.500	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.500	RC1	0.03	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.250	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.02	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.500	RC1	0.01	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.06	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.250	RC1	0.01	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.23	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.500	RC1	0.03	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.250	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.500	RC1	0.05	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.02	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
233	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.500	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.500	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.500	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.500	RC1	0.06	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
234	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.500	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.500	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.500	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.500	RC1	0.02	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
235	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.656	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.01	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.02	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.656	RC1	0.02	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
236	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.656	RC1	0.00	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.01	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.01	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.02	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.00	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.656	RC1	0.01	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
237	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.656	RC1	0.00	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.656	RC1	0.02	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.000	RC1	0.01	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.03	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.00	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.01	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
238	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.656	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.656	RC1	0.01	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.02	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
239	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.01	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.03	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
240	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.656	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.656	RC1	0.00	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.656	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.656	RC1	0.01	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.02	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.02	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.00	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.656	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.656	RC1	0.01	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
241	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.00	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.02	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.000	RC1	0.02	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.00	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.01	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
242	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.656	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.656	RC1	0.00	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.02	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.02	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.656	RC1	0.00	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
243	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.656	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.656	RC1	0.00	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.656	RC1	0.02	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.02	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.03	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.00	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.01	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
244	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.656	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.00	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.656	RC1	0.02	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.02	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.03	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.00	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.01	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
245	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.000	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.500	RC1	0.00	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.250	RC1	0.01	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.00	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.000	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.01	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.500	RC1	0.06	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.500	RC1	0.00	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
246	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.250	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.500	RC1	0.02	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.500	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.500	RC1	0.03	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.500	RC1	0.03	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.500	RC1	0.02	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.02	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
247	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.656	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.656	RC1	0.01	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.02	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.02	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.656	RC1	0.02	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
248	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.656	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.656	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.656	RC1	0.00	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.656	RC1	0.02	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.03	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.656	RC1	0.03	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.00	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
249	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.656	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.656	RC1	0.01	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.03	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.03	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
250	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.02	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.656	RC1	0.00	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.04	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.04	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.00	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
251	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.03	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
252	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.03	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.04	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.05	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
253	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.03	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
254	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.04	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.656	RC1	0.06	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.05	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.05	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
255	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.04	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.06	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.656	RC1	0.06	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.07	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
256	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.04	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.655	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.655	RC1	0.07	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.04	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.655	RC1	0.08	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
257	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.00	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.250	RC1	0.01	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.00	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.000	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.07	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.00	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
258	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.250	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.250	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.00	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.500	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.03	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.500	RC1	0.06	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.500	RC1	0.02	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
259	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.656	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.656	RC1	0.03	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.656	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.656	RC1	0.06	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
260	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.03	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.656	RC1	0.00	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.656	RC1	0.04	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.04	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.00	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
261	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.04	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.00	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.656	RC1	0.00	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.656	RC1	0.04	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.06	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.00	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
262	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.656	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.04	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.656	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.04	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.01	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.04	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
263	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.04	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.656	RC1	0.04	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.05	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
264	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.656	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.04	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.656	RC1	0.00	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.656	RC1	0.04	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
						3
	0.000	RC1	0.04	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.02	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.00	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
265	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.04	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.00	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.03	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.05	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.00	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
266	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.11	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.656	RC1	0.00	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.656	RC1	0.11	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.12	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.00	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
267	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.12	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.00	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.656	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.02	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.16	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.00	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.01	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
268	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.655	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.12	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.655	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.03	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.16	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.17	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.655	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 -

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
						Angle section
	0.000	RC1	0.02	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
269	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.500	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.500	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.500	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.500	RC1	0.06	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
270	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.250	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.500	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.500	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.02	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
271	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.656	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.656	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.656	RC1	0.03	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.04	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
272	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.656	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.656	RC1	0.02	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.656	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.656	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.656	RC1	0.03	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.02	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.656	RC1	0.04	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.02	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.656	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.656	RC1	0.03	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
273	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.656	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.656	RC1	0.00	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.656	RC1	0.01	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.04	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.00	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.01	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
274	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.656	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.656	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.02	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.02	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.02	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
275	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.656	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.656	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.02	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.02	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.02	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.656	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
276	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.656	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.656	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.656	RC1	0.02	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.02	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.656	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.02	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
277	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.656	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.02	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.656	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.03	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.02	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.03	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.02	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.656	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.03	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
278	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.656	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.656	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.03	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.03	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.02	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
279	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.656	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.03	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.03	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.02	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.05	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.656	RC1	0.02	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
280	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.656	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.03	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.02	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.04	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.02	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
281	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.500	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.09	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.250	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.500	RC1	0.06	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.250	RC1	0.03	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.01	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.18	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.250	RC1	0.08	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.24	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.250	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.500	RC1	0.06	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.06	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
282	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.250	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.500	RC1	0.00	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.250	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.250	RC1	0.02	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.02	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.01	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.000	RC1	0.01	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.01	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.500	RC1	0.15	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.250	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.15	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
283	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.500	RC1	0.00	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.250	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.500	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.500	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.500	RC1	0.02	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.01	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.18	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.250	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.500	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.000	RC1	0.19	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
284	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.000	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.560	RC1	0.07	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.280	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.280	RC1	0.01	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.280	RC1	0.02	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.280	RC1	0.01	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.01	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.23	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.280	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.560	RC1	0.04	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.280	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.280	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.280	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.280	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.280	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.280	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
285	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.250	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.250	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.00	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.250	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.500	RC1	0.00	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.250	RC1	0.01	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.02	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.00	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.000	RC1	0.01	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.01	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.500	RC1	0.01	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.21	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.250	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.500	RC1	0.00	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.23	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
286	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.250	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.00	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.250	RC1	0.02	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.03	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.01	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.35	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.250	RC1	0.02	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.35	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
287	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.500	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.250	RC1	0.03	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.01	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.05	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.05	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.500	RC1	0.19	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.03	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.02	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.02	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
288	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.125	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.04	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.125	RC1	0.04	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.250	RC1	0.06	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.125	RC1	0.03	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.000	RC1	0.03	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.125	RC1	0.02	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.27	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.125	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.125	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.125	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.125	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.125	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.125	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
289	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.250	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.250	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.250	RC1	0.02	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.04	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.125	RC1	0.01	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.000	RC1	0.02	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.04	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.250	RC1	0.05	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.21	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.09	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.125	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.125	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.125	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.125	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.125	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.125	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
290	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.425	RC1	0.05	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.850	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.425	RC1	0.01	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.425	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.425	RC1	0.00	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.000	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.425	RC1	0.07	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.850	RC1	0.04	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.09	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.04	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.425	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.425	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.425	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.425	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.425	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.425	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
291	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.339	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.03	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.339	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.169	RC1	0.02	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.169	RC1	0.04	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.339	RC1	0.23	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.339	RC1	0.00	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.339	RC1	0.00	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
292	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.560	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.08	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.06	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.280	RC1	0.02	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.280	RC1	0.01	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.280	RC1	0.09	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.280	RC1	0.08	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.560	RC1	0.22	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.000	RC1	0.06	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.03	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.280	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.280	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.280	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.280	RC2	0.03	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.280	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.280	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
293	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.500	RC1	0.09	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.250	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.250	RC1	0.03	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.00	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.500	RC1	0.01	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.500	RC1	0.26	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.500	RC1	0.06	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.500	RC1	0.27	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.500	RC1	0.05	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
294	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.000	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.500	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.13	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.250	RC1	0.03	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.500	RC1	0.01	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.13	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.500	RC1	0.05	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.21	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.13	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.13	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.02	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
295	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.500	RC1	0.00	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.00	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.500	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.500	RC1	0.04	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
						- Class 3
	0.000	RC1	0.00	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.500	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.500	RC1	0.04	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
296	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.500	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.500	RC1	0.03	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
297	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.656	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.00	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.656	RC1	0.00	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.656	RC1	0.02	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.02	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.00	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
298	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.656	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.01	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.02	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.02	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.656	RC1	0.01	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
299	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.00	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.656	RC1	0.02	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
300	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.656	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.656	RC1	0.00	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.02	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.01	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.02	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.00	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
301	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.00	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.02	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.02	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.00	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
302	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.656	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.656	RC1	0.00	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.656	RC1	0.02	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.02	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.00	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
303	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.656	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.02	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
304	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.656	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.00	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.656	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.01	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.01	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.02	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.00	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.656	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.01	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
305	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.656	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.656	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.656	RC1	0.02	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.02	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.656	RC1	0.01	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
306	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.656	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.656	RC1	0.01	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.05	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.03	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
307	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.250	RC1	0.00	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.500	RC1	0.00	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.250	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.500	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.01	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.500	RC1	0.04	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.500	RC1	0.00	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.500	RC1	0.03	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
308	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.250	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.500	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.250	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.500	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.500	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.500	RC1	0.01	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.500	RC1	0.03	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.500	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.02	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
309	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.656	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.656	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.656	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.01	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.02	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.656	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.656	RC1	0.02	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
310	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.656	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.656	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.656	RC1	0.02	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.02	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.03	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.656	RC1	0.02	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
311	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.656	RC1	0.00	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.02	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.02	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.01	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
312	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.656	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.656	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.02	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.03	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.656	RC1	0.01	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
313	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.02	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.02	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.656	RC1	0.01	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
314	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.656	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.02	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.656	RC1	0.00	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.02	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.02	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.03	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.00	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.656	RC1	0.01	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
315	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.656	RC1	0.02	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.03	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.03	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
316	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.03	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.04	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.03	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.05	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
317	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.656	RC1	0.04	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.02	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.05	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
318	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.03	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.656	RC1	0.05	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.04	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.10	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
319	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.500	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.500	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.500	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.00	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.500	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.05	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.500	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
320	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.250	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.04	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.500	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.04	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.500	RC1	0.04	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
321	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.656	RC1	0.00	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.03	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.03	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.00	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
322	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.00	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.656	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.656	RC1	0.03	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.03	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
323	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.00	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.03	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.00	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
324	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.656	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.656	RC1	0.00	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.656	RC1	0.03	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.01	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.03	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.00	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
325	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.00	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.03	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.02	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.00	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
326	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.656	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.656	RC1	0.00	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.03	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.03	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.00	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
327	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.656	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.00	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.04	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.02	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.00	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
328	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.11	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.11	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.12	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.01	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
329	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.656	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.11	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.656	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.656	RC1	0.03	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.02	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.14	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
330	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.656	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.11	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.656	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.656	RC1	0.02	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
						6.2.9 - Class 3
	0.656	RC1	0.16	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.04	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
331	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.500	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.500	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.00	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.500	RC1	0.00	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.250	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.500	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.00	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.500	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.500	RC1	0.01	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.250	RC1	0.01	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.500	RC1	0.04	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.00	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.500	RC1	0.00	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.04	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
332	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.250	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.500	RC1	0.02	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.250	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.250	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.500	RC1	0.02	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.500	RC1	0.02	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
333	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.02	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.02	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.02	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
334	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.656	RC1	0.02	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.02	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.03	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
335	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.02	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.03	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.02	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.04	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
336	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.656	RC1	0.03	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.03	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
337	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.03	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.03	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.02	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.04	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
338	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.656	RC1	0.03	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.03	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.03	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
339	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.03	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.04	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.04	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
340	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.04	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.656	RC1	0.04	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.05	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.05	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
341	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.03	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.03	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.656	RC1	0.05	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.07	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
342	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.000	RC1	0.07	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.559	RC1	0.02	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.280	RC1	0.01	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.559	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.280	RC1	0.01	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.559	RC1	0.01	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.559	RC1	0.05	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.559	RC1	0.26	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.559	RC1	0.03	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.280	RC2	0.02	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.280	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.280	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.280	RC2	0.04	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.280	RC3	0.02	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.280	RC4	0.02	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
343	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.250	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.250	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.500	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.500	RC1	0.03	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.22	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.500	RC1	0.34	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.250	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.500	RC1	0.31	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.02	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
344	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.500	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.00	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.500	RC1	0.02	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.500	RC1	0.01	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.01	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.500	RC1	0.23	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.00	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.500	RC1	0.21	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
345	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.500	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.500	RC1	0.04	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.250	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.02	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.02	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.05	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.250	RC1	0.01	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.500	RC1	0.26	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.500	RC1	0.04	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.250	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.06	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.02	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
346	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.125	RC1	0.04	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.125	RC1	0.02	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.02	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.125	RC1	0.02	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.250	RC1	0.02	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.125	RC1	0.02	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.250	RC1	0.01	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.125	RC1	0.06	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.250	RC1	0.08	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.13	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.125	RC1	0.02	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.02	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.250	RC1	0.05	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.125	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.125	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.125	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.125	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.125	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.125	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
347	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.850	RC1	0.00	≤ 1	CS100)	Negligible internal forces

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	3.400	RC1	0.06	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	3.825	RC1	0.05	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.850	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.425	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	3.825	RC1	0.00	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	3.825	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	3.400	RC1	0.07	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	3.825	RC1	0.09	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	3.400	RC1	0.08	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.850	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.03	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	2.125	RC2	0.05	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	2.125	RC3	0.03	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	2.125	RC4	0.03	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	2.125	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	2.125	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	2.125	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
348	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.250	RC1	0.03	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.250	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.03	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.02	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.06	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.09	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.250	RC1	0.19	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.250	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.250	RC1	0.02	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.125	RC2	0.02	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.125	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.125	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.125	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.125	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.125	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
349	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	1.950	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	4.500	RC1	0.05	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	4.075	RC1	0.06	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	1.100	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.250	RC1	0.02	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	4.500	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.03	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.01	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	4.075	RC1	0.08	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	1.100	RC1	0.06	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.250	RC1	0.15	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	1.100	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 -

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
						Angle section
	0.250	RC1	0.02	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.250	RC1	0.05	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	2.800	RC2	0.06	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	2.800	RC3	0.04	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	2.800	RC4	0.04	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	1.950	RC2	0.05	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	1.950	RC3	0.03	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	2.375	RC4	0.03	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
350	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.250	RC1	0.07	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.500	RC1	0.03	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.500	RC1	0.00	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.250	RC1	0.03	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.500	RC1	0.03	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.10	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.04	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
351	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.500	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.500	RC1	0.08	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.01	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.14	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.04	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.16	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.02	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
352	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.500	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.500	RC1	0.08	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.500	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.500	RC1	0.01	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.04	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.500	RC1	0.04	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
						- Class 3
	0.000	RC1	0.12	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
353	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.250	RC1	0.07	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.500	RC1	0.03	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.500	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.500	RC1	0.00	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.500	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.04	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.04	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.11	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.500	RC1	0.10	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
354	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.733	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.733	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.733	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.01	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.733	RC1	0.10	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.733	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
355	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.770	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.770	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.770	RC1	0.01	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.770	RC1	0.06	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
356	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.816	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.00	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.000	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.816	RC1	0.00	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.816	RC1	0.01	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.07	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.816	RC1	0.00	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.816	RC1	0.01	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
357	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.339	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.06	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.339	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.169	RC1	0.02	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.169	RC1	0.07	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.339	RC1	0.23	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.24	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.339	RC1	0.00	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.169	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.169	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.169	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.169	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.169	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.169	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
358	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.339	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.06	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.05	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.169	RC1	0.02	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.339	RC1	0.38	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.169	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.169	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.169	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.169	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.169	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.169	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
359	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.339	RC1	0.05	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.00	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.169	RC1	0.05	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.339	RC1	0.05	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.169	RC1	0.02	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.000	RC1	0.02	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.169	RC1	0.06	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.339	RC1	0.39	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.339	RC1	0.01	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.339	RC1	0.00	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.02	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.169	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.169	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.169	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.169	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.169	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.169	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
360	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.339	RC1	0.06	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.169	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.169	RC1	0.02	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.000	RC1	0.02	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.169	RC1	0.06	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.22	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.169	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.169	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.169	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.169	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.169	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.169	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
361	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.678	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.678	RC1	0.13	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.678	RC1	0.17	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.15	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.02	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.678	RC1	0.17	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.678	RC1	0.02	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.678	RC1	0.02	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
362	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.678	RC1	0.09	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.678	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.02	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.678	RC1	0.13	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.678	RC1	0.00	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
363	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.678	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.10	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.678	RC1	0.11	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.11	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.678	RC1	0.12	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.678	RC1	0.02	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.02	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
364	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.678	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.10	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.11	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.11	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.678	RC1	0.13	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.02	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
365	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.678	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.678	RC1	0.05	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.00	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.678	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.08	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.07	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.678	RC1	0.12	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.00	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.678	RC1	0.02	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
366	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.678	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.678	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.12	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.17	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.15	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.02	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
367	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.678	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.08	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.01	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.678	RC1	0.11	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
368	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.678	RC1	0.08	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.00	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.11	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.678	RC1	0.11	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.678	RC1	0.01	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.678	RC1	0.12	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.678	RC1	0.01	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
369	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.500	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.250	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.250	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.250	RC1	0.01	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.01	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.000	RC1	0.01	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.01	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.500	RC1	0.16	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.250	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.16	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
370	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.656	RC1	0.03	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.04	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.08	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
371	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.500	RC1	0.07	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.000	RC1	0.02	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.250	RC1	0.01	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.02	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.02	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.000	RC1	0.02	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.08	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.250	RC1	0.07	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.26	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
372	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.500	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.500	RC1	0.00	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.500	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.500	RC1	0.02	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.500	RC1	0.01	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.01	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.500	RC1	0.15	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.500	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.500	RC1	0.16	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
373	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.500	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.500	RC1	0.02	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.500	RC1	0.01	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.03	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.05	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.02	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
374	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.786	RC1	0.00	≤ 1	CS100)	Negligible internal forces

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.000	RC1	0.13	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.786	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.04	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.786	RC1	0.13	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.17	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
375	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.786	RC1	0.07	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.786	RC1	0.04	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.786	RC1	0.09	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.786	RC1	0.01	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
376	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.250	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.500	RC1	0.01	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.250	RC1	0.03	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.03	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.01	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.500	RC1	0.01	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.01	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.250	RC1	0.01	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.250	RC1	0.01	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.500	RC1	0.21	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.250	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.500	RC1	0.05	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
377	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	0.000	RC1	0.04	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.247	RC1	0.05	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.247	RC1	0.02	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.124	RC1	0.02	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.247	RC1	0.21	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.124	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.247	RC1	0.03	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.124	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.124	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.124	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.124	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.124	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.124	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
378	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	0.250	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.03	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.250	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.500	RC1	0.02	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.02	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.500	RC1	0.03	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.21	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.250	RC1	0.01	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.500	RC1	0.21	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
379	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	0.500	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.500	RC1	0.01	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.250	RC1	0.08	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.02	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.500	RC1	0.07	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.250	RC1	0.26	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.250	RC1	0.12	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.05	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.03	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.03	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.03	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
380	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.250	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.02	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.500	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.500	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.03	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.500	RC1	0.05	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.500	RC1	0.06	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.500	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
381	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.700	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.03	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.02	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.700	RC1	0.03	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.03	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.04	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
382	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.700	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.700	RC1	0.03	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.06	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.700	RC1	0.06	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
383	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.700	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.700	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.700	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.700	RC1	0.02	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.03	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.700	RC1	0.06	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
384	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.743	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.743	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.03	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.743	RC1	0.06	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.743	RC1	0.05	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.07	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.743	RC1	0.04	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
385	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.743	RC1	0.00	≤ 1	CS100)	Negligible internal forces

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.743	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.743	RC1	0.03	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.03	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.03	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.743	RC1	0.05	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.02	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.743	RC1	0.04	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
386	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.700	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.700	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.02	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.08	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.700	RC1	0.05	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
387	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.700	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.700	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.700	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.700	RC1	0.02	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.700	RC1	0.03	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.700	RC1	0.02	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.04	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.700	RC1	0.07	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.700	RC1	0.04	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
388	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.03	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.700	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.700	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.11	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
389	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.700	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.00	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.700	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.700	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.700	RC1	0.03	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
						6.2.9 - Class 3
	0.700	RC1	0.01	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.700	RC1	0.02	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.09	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.700	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.02	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
390	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.700	RC1	0.05	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.04	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.700	RC1	0.01	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.700	RC1	0.07	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.700	RC1	0.05	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.10	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
391	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.668	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.668	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.668	RC1	0.07	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.05	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.668	RC1	0.05	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.03	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
392	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.753	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.753	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.753	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.753	RC1	0.09	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.753	RC1	0.03	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
393	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	0.551	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.01	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	1.103	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.551	RC1	0.01	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.103	RC1	0.04	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.103	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.02	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.551	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.551	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.551	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.551	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.551	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.551	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
394	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	0.628	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	1.257	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.257	RC1	0.03	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.628	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.628	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.628	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.628	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.628	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.628	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
395	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	0.711	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.00	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.01	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.423	RC1	0.02	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.00	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.423	RC1	0.01	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.711	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.711	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.711	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.711	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.711	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.711	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
396	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	1.597	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.00	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.01	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.597	RC1	0.02	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.597	RC1	0.02	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.532	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.532	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.532	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	1.065	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.532	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.532	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
397	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	1.185	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	1.777	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.00	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	1.185	RC1	0.01	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 -

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
						Class 4
	0.592	RC1	0.01	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.592	RC1	0.01	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.777	RC1	0.02	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.592	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.592	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.592	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.592	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.592	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.592	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
398	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	1.307	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.00	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.02	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.02	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	1.961	RC1	0.02	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.654	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.654	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.654	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	1.307	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.654	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.654	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
399	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.02	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.03	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	1.273	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	1.273	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	1.273	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	1.273	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	1.273	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	1.273	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
400	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.500	RC1	0.08	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.01	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.10	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.250	RC1	0.03	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.500	RC1	0.08	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.14	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.04	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.250	RC2	0.02	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
401	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.05	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.500	RC1	0.06	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
402	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.250	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.00	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.500	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.01	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.500	RC1	0.09	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.500	RC1	0.02	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.500	RC1	0.10	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
403	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.500	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.500	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.500	RC1	0.01	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.500	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.500	RC1	0.01	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.500	RC1	0.08	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.500	RC1	0.01	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
404	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.678	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.000	RC1	0.15	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.678	RC1	0.14	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.18	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.17	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.03	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
405	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.678	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.11	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.14	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.678	RC1	0.02	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.15	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.678	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.02	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
406	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.678	RC1	0.13	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.14	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.678	RC1	0.14	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.678	RC1	0.01	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.678	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
407	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.678	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.678	RC1	0.11	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.678	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.00	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.000	RC1	0.02	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.14	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.678	RC1	0.02	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.15	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.04	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.678	RC1	0.00	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
408	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.490	RC1	0.12	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.000	RC1	0.30	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.01	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.490	RC1	0.03	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.00	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.490	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.490	RC1	0.02	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.16	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.43	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.03	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.02	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.02	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.04	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.03	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.03	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
409	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.490	RC1	0.07	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.32	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.490	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.02	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.00	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.490	RC1	0.01	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.490	RC1	0.04	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.10	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.47	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.02	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.05	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.03	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.03	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
410	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	3.550	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.980	RC1	0.30	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.490	RC1	0.08	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.490	RC1	0.01	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	5.020	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.01	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	5.020	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	2.450	RC1	0.25	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.490	RC1	0.10	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.44	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	3.000	RC1	0.07	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.40	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.11	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	2.450	RC1	0.00	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	2.450	RC2	0.16	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	2.450	RC3	0.11	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	2.450	RC4	0.11	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	3.000	RC2	0.16	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	3.000	RC3	0.11	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	3.000	RC4	0.11	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
411	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.490	RC1	0.29	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.13	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.03	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.245	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.00	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.245	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.490	RC1	0.20	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.05	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.38	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.17	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.03	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.02	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.02	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.04	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.03	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.03	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
412	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.500	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.500	RC1	0.06	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.500	RC1	0.06	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
413	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.250	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.500	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.01	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.10	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.250	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.250	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.250	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.250	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.250	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.250	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
414	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.550	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.16	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.550	RC1	0.01	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.550	RC1	0.03	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.04	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.22	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.04	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.23	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.275	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.275	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.275	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.275	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.275	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.275	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
415	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.550	RC1	0.16	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.05	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.550	RC1	0.05	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.19	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.06	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.275	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.275	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.275	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.275	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.275	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.275	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
416	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.490	RC1	0.26	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.11	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.490	RC1	0.01	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.245	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.01	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.000	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.04	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.31	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.245	RC1	0.12	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.34	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.14	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.02	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.245	RC4	0.02	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
417	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.490	RC1	0.27	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.11	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.490	RC1	0.00	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.000	RC1	0.11	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.34	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.490	RC1	0.12	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.02	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.02	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.02	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
418	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.490	RC1	0.22	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.09	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.25	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.10	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.02	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
419	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.490	RC1	0.23	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.08	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.490	RC1	0.09	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.25	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.09	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.02	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
420	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.550	RC1	0.17	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.06	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.550	RC1	0.02	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.19	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.550	RC1	0.07	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.275	RC2	0.02	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.275	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.275	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.275	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.275	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.275	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
421	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.490	RC1	0.30	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.08	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.01	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.245	RC1	0.10	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.02	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.37	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.10	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.03	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.02	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.02	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
422	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.490	RC1	0.27	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.06	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.490	RC1	0.00	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.245	RC1	0.02	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.08	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.490	RC1	0.31	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.07	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.02	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
423	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.490	RC1	0.25	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.06	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.000	RC1	0.07	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.29	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.07	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.02	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
424	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.490	RC1	0.22	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.05	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.000	RC1	0.00	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.490	RC1	0.26	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.245	RC1	0.06	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.490	RC1	0.01	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.245	RC1	0.25	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.490	RC1	0.06	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.02	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
425	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.550	RC1	0.20	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.04	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.01	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.550	RC1	0.00	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.000	RC1	0.18	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.05	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.550	RC1	0.06	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.25	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.07	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.275	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.275	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.275	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.275	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.275	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.275	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
426	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.490	RC1	0.07	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.32	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.490	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.09	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.490	RC1	0.37	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.04	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.09	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.39	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.03	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.02	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.02	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
427	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.490	RC1	0.05	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.000	RC1	0.27	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.490	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.24	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.06	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.32	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.02	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
428	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.490	RC1	0.05	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.27	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.490	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.07	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.245	RC1	0.02	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.245	RC1	0.06	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.32	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.02	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
429	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.490	RC1	0.04	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.22	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.490	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.245	RC1	0.05	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.490	RC1	0.27	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.05	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.245	RC1	0.26	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.02	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
430	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.550	RC1	0.04	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.23	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.550	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.05	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.550	RC1	0.06	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
						6.2.9 - Class 3
	0.000	RC1	0.06	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.550	RC1	0.29	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.275	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.275	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.275	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.275	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.275	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.275	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
431	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.490	RC1	0.10	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.28	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.490	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.00	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.490	RC1	0.01	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.03	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.245	RC1	0.11	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.23	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.13	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.36	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.02	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.02	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
432	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.490	RC1	0.09	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.27	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.10	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.490	RC1	0.11	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.34	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.02	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.02	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.02	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
433	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.490	RC1	0.08	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.24	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.490	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.09	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.27	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.02	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.245	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
434	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.490	RC1	0.07	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.22	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.490	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.490	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.08	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.26	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.02	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
435	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.550	RC1	0.05	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.19	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.275	RC1	0.04	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.550	RC1	0.21	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.550	RC1	0.01	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.550	RC1	0.01	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.550	RC1	0.06	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.550	RC1	0.22	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.275	RC2	0.02	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.275	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.275	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.275	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.275	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.275	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
436	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.490	RC1	0.13	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.04	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.245	RC1	0.04	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.490	RC1	0.05	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.16	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.05	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
437	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.745	RC1	0.06	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.745	RC1	0.00	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.000	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.03	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.745	RC1	0.12	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.08	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.745	RC1	0.02	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
438	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.490	RC1	0.14	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.03	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.18	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.245	RC1	0.04	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.18	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.05	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.00	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
439	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.490	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.490	RC1	0.10	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.11	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.490	RC1	0.03	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.13	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.03	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
440	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.490	RC1	0.09	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.490	RC1	0.00	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.000	RC1	0.12	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.000	RC1	0.03	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.490	RC1	0.10	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.490	RC1	0.03	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.490	RC1	0.13	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
441	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.745	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.745	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.00	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.01	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.745	RC1	0.10	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.745	RC1	0.12	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.745	RC1	0.02	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
442	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.490	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.18	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.245	RC1	0.04	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.22	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.04	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.245	RC1	0.21	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
443	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.490	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.13	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.490	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.490	RC1	0.02	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.02	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.16	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
444	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.245	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.490	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.13	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.245	RC1	0.04	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.490	RC1	0.04	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.490	RC1	0.01	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.04	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.490	RC1	0.15	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
445	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.245	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.490	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.12	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.490	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.490	RC1	0.03	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.14	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.03	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.490	RC1	0.02	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.13	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.00	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
446	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.490	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.490	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.08	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.02	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.490	RC1	0.02	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.245	RC1	0.02	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.490	RC1	0.10	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
447	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.745	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.745	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.745	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.745	RC1	0.01	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.745	RC1	0.10	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.745	RC1	0.12	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.745	RC1	0.00	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.745	RC1	0.02	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
448	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.490	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.15	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.245	RC1	0.03	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.03	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.490	RC1	0.17	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
449	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.490	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.12	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.490	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.490	RC1	0.01	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.490	RC1	0.15	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.490	RC1	0.02	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.490	RC1	0.14	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
450	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.000	RC1	0.08	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.13	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.745	RC1	0.11	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.745	RC1	0.14	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
451	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.422	RC1	0.04	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.422	RC1	0.00	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.422	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.06	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.04	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.06	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.422	RC1	0.00	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.05	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.211	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.211	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.211	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.211	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.211	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.211	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
452	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.000	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.422	RC1	0.03	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.211	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.03	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.422	RC1	0.03	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.09	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.422	RC1	0.03	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.10	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.211	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.211	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.211	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.211	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.211	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.211	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
453	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.425	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.425	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.04	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.425	RC1	0.00	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.850	RC1	0.00	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.425	RC1	0.00	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.425	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.06	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.425	RC1	0.04	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.09	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.425	RC1	0.00	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.850	RC1	0.00	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.04	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.425	RC2	0.02	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.425	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.425	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.425	RC2	0.03	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.425	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.425	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
454	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.490	RC1	0.10	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.26	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.490	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.00	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.490	RC1	0.01	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.03	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.245	RC1	0.11	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.31	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.13	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.33	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
455	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.490	RC1	0.09	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.27	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.10	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.490	RC1	0.11	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.34	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.02	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
456	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.490	RC1	0.07	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.22	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.490	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.490	RC1	0.01	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.09	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.26	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.02	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.245	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
457	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.490	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.490	RC1	0.07	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.24	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.490	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.08	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.27	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
458	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.550	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.550	RC1	0.05	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.18	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.275	RC1	0.04	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.05	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.550	RC1	0.20	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.275	RC2	0.02	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.275	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.275	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.275	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.275	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.275	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
459	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.490	RC1	0.07	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.30	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.490	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.09	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.490	RC1	0.36	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.04	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.09	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.37	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.03	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.02	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.02	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
460	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.490	RC1	0.05	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.27	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.490	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.000	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.24	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.06	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.490	RC1	0.32	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.02	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
461	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.490	RC1	0.05	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.25	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.490	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.06	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.490	RC1	0.06	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.29	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.02	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
462	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.490	RC1	0.04	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.22	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.245	RC1	0.05	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.490	RC1	0.26	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.05	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.245	RC1	0.26	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.02	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
463	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.550	RC1	0.04	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.20	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.550	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.05	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.550	RC1	0.05	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.06	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.25	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.275	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.275	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.275	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.275	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.275	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.275	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
464	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.490	RC1	0.26	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.12	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.490	RC1	0.01	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.245	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.01	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.000	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.04	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.32	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.245	RC1	0.13	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.34	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.14	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.02	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.02	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
465	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.490	RC1	0.25	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.10	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.490	RC1	0.00	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.245	RC1	0.08	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.32	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.490	RC1	0.12	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.02	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
466	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.490	RC1	0.22	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.09	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.25	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.10	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.02	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
467	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.490	RC1	0.21	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.07	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.490	RC1	0.08	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.24	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.09	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
468	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.550	RC1	0.17	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.06	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.550	RC1	0.14	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.275	RC1	0.05	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.550	RC1	0.20	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.550	RC1	0.07	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.275	RC2	0.02	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.275	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.275	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.275	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.275	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.275	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
469	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.490	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.490	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.14	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.245	RC1	0.04	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.245	RC1	0.17	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.04	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.18	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
470	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.490	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.10	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.245	RC1	0.02	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.11	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.02	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.000	RC1	0.13	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
471	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.490	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.490	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.08	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.490	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.03	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.11	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.490	RC1	0.03	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.490	RC1	0.09	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.490	RC1	0.11	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
472	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.745	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.745	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.01	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.745	RC1	0.09	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.745	RC1	0.10	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.745	RC1	0.02	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
473	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.490	RC1	0.12	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.03	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.245	RC1	0.04	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.14	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.04	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
474	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.490	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.490	RC1	0.11	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.11	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.490	RC1	0.03	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.13	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
475	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.490	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.490	RC1	0.08	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.02	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.490	RC1	0.10	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
476	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.425	RC1	0.03	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.425	RC1	0.00	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.425	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.425	RC1	0.05	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.04	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.05	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.425	RC1	0.00	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.01	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.212	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.212	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.212	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.212	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.212	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.212	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
477	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	0.250	RC1	0.01	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.06	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.01	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.125	RC1	0.05	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.250	RC1	0.22	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.04	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.04	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.06	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.125	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.125	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.125	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.125	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.125	RC3	0.02	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.125	RC4	0.02	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
478	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.250	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.250	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.250	RC1	0.02	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.02	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.250	RC1	0.02	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.01	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.250	RC1	0.01	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.250	RC1	0.06	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.125	RC1	0.06	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.11	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.250	RC1	0.02	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.250	RC1	0.02	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.125	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.125	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.125	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.125	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.125	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.125	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
479	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.000	RC1	0.05	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.425	RC1	0.02	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.425	RC1	0.05	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.425	RC1	0.03	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.425	RC1	0.05	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.213	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.213	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.213	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.213	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.213	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.213	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
480	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.000	RC1	0.04	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.425	RC1	0.03	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.425	RC1	0.05	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.000	RC1	0.03	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.04	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.212	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.212	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.212	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.212	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.212	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.212	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
481	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.490	RC1	0.15	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.04	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.490	RC1	0.04	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.04	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.490	RC1	0.17	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
482	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.490	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.15	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.490	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.490	RC1	0.04	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.490	RC1	0.01	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.490	RC1	0.02	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.490	RC1	0.03	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.16	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
483	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.490	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.17	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.245	RC1	0.03	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.490	RC1	0.03	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.18	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.245	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
484	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.000	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.425	RC1	0.02	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.03	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.213	RC1	0.04	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.425	RC1	0.05	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.425	RC1	0.04	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.213	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.213	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.213	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.213	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.213	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.213	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
485	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.000	RC1	0.04	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.425	RC1	0.05	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.425	RC1	0.07	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.06	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.212	RC1	0.06	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.212	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.212	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.212	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.212	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.212	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.212	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
486	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.425	RC1	0.05	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.850	RC1	0.06	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.425	RC1	0.07	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.850	RC1	0.05	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.850	RC1	0.07	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.425	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.425	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.425	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.425	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.425	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.425	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
487	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.425	RC1	0.05	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.850	RC1	0.07	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.425	RC1	0.08	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.425	RC1	0.06	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.850	RC1	0.08	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.425	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.425	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.425	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.425	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.425	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.425	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
488	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.000	RC1	0.05	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.425	RC1	0.06	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.08	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.212	RC1	0.05	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.212	RC1	0.07	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.212	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.212	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.212	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.212	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.212	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.212	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
489	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.000	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.212	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.425	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.212	RC1	0.02	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.03	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.425	RC1	0.03	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.212	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.02	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.212	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.212	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.212	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.212	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.212	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.212	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
490	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.213	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.213	RC1	0.07	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.425	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.213	RC1	0.01	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.425	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.00	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.425	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.02	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.425	RC1	0.02	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.425	RC1	0.12	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.213	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.213	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.213	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.213	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.213	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.213	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
491	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.425	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.212	RC1	0.07	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.425	RC1	0.00	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.00	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.425	RC1	0.07	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.09	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.00	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.212	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.212	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.212	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.212	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.212	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.212	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
492	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.000	RC1	0.09	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.425	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.213	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.00	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.425	RC1	0.09	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.08	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.425	RC1	0.10	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.213	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.00	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.425	RC1	0.01	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.213	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.213	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.213	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.213	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.213	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.213	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
493	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.000	RC1	0.09	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.425	RC1	0.00	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.212	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.425	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.09	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.212	RC1	0.10	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.425	RC1	0.10	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.212	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.425	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.01	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.212	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.212	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.212	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.212	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.212	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.212	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
494	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.000	RC1	0.11	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.425	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.213	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.213	RC1	0.03	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.12	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.425	RC1	0.11	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.213	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.425	RC1	0.01	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.213	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.213	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.213	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.213	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.213	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.213	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
495	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.000	RC1	0.10	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.425	RC1	0.00	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.212	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.425	RC1	0.11	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.11	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.212	RC1	0.11	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.212	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.01	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.212	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.212	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.212	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.212	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.212	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.212	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
496	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.000	RC1	0.12	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.425	RC1	0.00	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.425	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.10	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.425	RC1	0.04	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.425	RC1	0.14	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.212	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.212	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.212	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.212	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.212	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.212	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
497	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.425	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.04	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.425	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.425	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.04	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.03	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.425	RC1	0.06	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.01	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.213	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.213	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.213	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.213	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.213	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.213	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
498	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.212	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.07	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.425	RC1	0.02	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.425	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.00	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.425	RC1	0.08	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.08	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.212	RC1	0.08	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.425	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.00	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.212	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.212	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.212	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.212	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.212	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.212	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
499	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.425	RC1	0.08	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.850	RC1	0.02	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.08	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.425	RC1	0.02	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.425	RC1	0.09	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.850	RC1	0.01	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 -

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
						Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.425	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.425	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.425	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.425	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.425	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.425	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
500	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.425	RC1	0.10	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.850	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.425	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.850	RC1	0.10	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.05	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.425	RC1	0.10	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.425	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.01	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.425	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.425	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.425	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.425	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.425	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.425	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
501	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.000	RC1	0.09	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.425	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.213	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.10	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.425	RC1	0.10	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.213	RC1	0.10	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.213	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.01	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.213	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.213	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.213	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.213	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.213	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.213	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
502	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.000	RC1	0.11	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.425	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.213	RC1	0.00	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.00	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.425	RC1	0.01	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.425	RC1	0.00	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.000	RC1	0.13	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.425	RC1	0.04	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.425	RC1	0.15	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.213	RC1	0.00	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.00	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.425	RC1	0.01	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.213	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.213	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.213	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.213	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.213	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.213	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
503	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.745	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.745	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.745	RC1	0.01	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.745	RC1	0.12	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.745	RC1	0.02	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
504	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	0.125	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.125	RC1	0.01	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.250	RC1	0.04	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.125	RC1	0.01	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.000	RC1	0.01	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.125	RC1	0.07	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.13	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.125	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.250	RC1	0.04	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.125	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.125	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.125	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.125	RC2	0.03	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.125	RC3	0.02	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.125	RC4	0.02	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
505	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	0.125	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.250	RC1	0.03	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.125	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.250	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.125	RC1	0.01	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.250	RC1	0.03	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.125	RC1	0.02	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.250	RC1	0.18	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.125	RC1	0.01	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.02	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.250	RC1	0.05	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.125	RC2	0.02	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.125	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.125	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.125	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.125	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.125	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
506	Cross-section No. 1 - L 70x70x7 | EN 10056-1:1998					
	0.126	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.253	RC1	0.05	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.02	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.253	RC1	0.21	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.03	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.253	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.13	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.126	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.126	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.126	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.126	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.126	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.126	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
507	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.490	RC1	0.10	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.490	RC1	0.03	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.490	RC1	0.03	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.12	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.03	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.245	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.245	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.245	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.245	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.245	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.245	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
508	Cross-section No. 4 - L 90x90x7 | EN 10056-1:1998					
	0.745	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.07	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.745	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.745	RC1	0.01	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.745	RC1	0.07	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.745	RC1	0.10	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.745	RC1	0.03	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
509	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.425	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.11	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.425	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.425	RC1	0.10	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.11	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
						6.2.9 - Class 3
	0.000	RC1	0.10	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.213	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.213	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.213	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.213	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.213	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.213	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
510	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.212	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.425	RC1	0.05	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.425	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.05	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.425	RC1	0.06	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.425	RC1	0.06	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.425	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.212	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.212	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.212	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.212	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.212	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.212	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
511	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.125	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.250	RC1	0.04	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.125	RC1	0.02	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.02	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.03	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.01	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.125	RC1	0.06	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.02	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.250	RC1	0.14	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.125	RC1	0.02	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.02	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.250	RC1	0.07	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.125	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.125	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.125	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.125	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.125	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.125	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
512	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.000	RC1	0.05	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.756	RC1	0.04	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.06	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.567	RC1	0.04	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
						6.2.9 - Class 3
	0.425	RC1	0.05	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.425	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.425	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.425	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.425	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.425	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.425	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
513	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.125	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.04	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.125	RC1	0.02	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.250	RC1	0.04	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.125	RC1	0.01	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.125	RC1	0.02	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.125	RC1	0.01	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.250	RC1	0.18	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.250	RC1	0.10	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.125	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.125	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.125	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.125	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.125	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.125	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
514	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.425	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.425	RC1	0.04	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.213	RC1	0.00	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.425	RC1	0.00	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.425	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.213	RC1	0.05	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.05	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.09	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.213	RC1	0.00	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.425	RC1	0.00	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.01	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.213	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.213	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.213	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.213	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.213	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.213	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
515	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.000	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.425	RC1	0.06	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.05	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.213	RC1	0.07	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
						6.2.9 - Class 3
	0.425	RC1	0.07	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.213	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.213	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.213	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.213	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.213	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.213	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
516	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.212	RC1	0.07	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.425	RC1	0.00	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.08	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.02	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.07	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.425	RC1	0.00	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.212	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.212	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.212	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.212	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.212	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.212	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
517	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.850	RC1	0.09	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.661	RC1	0.00	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.425	RC1	0.09	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.850	RC1	0.08	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.850	RC1	0.10	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.661	RC1	0.00	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.850	RC1	0.01	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.425	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.425	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.425	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.425	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.425	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.472	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
518	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.756	RC1	0.10	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.756	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.425	RC1	0.11	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.850	RC1	0.11	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.567	RC1	0.11	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.756	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.01	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.425	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.425	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.425	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.378	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.378	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.378	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
519	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.425	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.425	RC1	0.11	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.425	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.10	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.425	RC1	0.04	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.425	RC1	0.13	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.212	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.212	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.212	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.212	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.212	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.212	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
520	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.000	RC1	0.05	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.850	RC1	0.04	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.850	RC1	0.07	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.472	RC1	0.05	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.425	RC1	0.06	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.425	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.425	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.425	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.425	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.425	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.425	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
521	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	1.275	RC1	0.06	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	1.275	RC1	0.05	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	1.275	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.425	RC1	0.08	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	1.275	RC1	0.07	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.850	RC1	0.08	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.425	RC2	0.02	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.425	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.425	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.850	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.850	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.850	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
522	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.850	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.425	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.850	RC1	0.04	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.850	RC1	0.00	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.425	RC1	0.00	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.425	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.425	RC1	0.05	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.850	RC1	0.05	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.11	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.850	RC1	0.00	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.03	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.425	RC2	0.02	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.425	RC3	0.01	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.425	RC4	0.01	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.425	RC2	0.02	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.425	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.425	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
523	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.425	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.425	RC1	0.10	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.04	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.213	RC1	0.12	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.425	RC1	0.13	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.213	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.213	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.213	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.213	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.213	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.213	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
524	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.000	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.425	RC1	0.11	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.213	RC1	0.00	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.00	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.425	RC1	0.00	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.425	RC1	0.13	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.11	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.425	RC1	0.13	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.213	RC1	0.00	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.00	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.01	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.213	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.213	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.213	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.213	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.213	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.213	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
525	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.283	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.425	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.850	RC1	0.06	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.850	RC1	0.00	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.00	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.850	RC1	0.06	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.189	RC1	0.07	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.425	RC1	0.07	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.850	RC1	0.00	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.00	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.283	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.378	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.378	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.283	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.283	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.283	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
526	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.425	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.850	RC1	0.08	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.425	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.00	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.850	RC1	0.08	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.425	RC1	0.07	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.425	RC1	0.08	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.425	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.00	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.425	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.425	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.425	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.425	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.425	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.425	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
527	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.425	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.850	RC1	0.09	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.850	RC1	0.10	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.425	RC1	0.08	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.425	RC1	0.10	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.850	RC1	0.01	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.425	RC2	0.01	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.425	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.425	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.425	RC2	0.01	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.425	RC3	0.01	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.425	RC4	0.01	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
528	Cross-section No. 6 - L 65x65x7 | EN 10056-1:1998					
	0.000	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.213	RC1	0.10	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.425	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.11	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.425	RC1	0.11	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.213	RC1	0.10	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.425	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.01	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
	0.000	RC2	0.00	≤ 1	SE400)	Serviceability - Negligible deformations
	0.213	RC2	0.00	≤ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - v-direction
	0.213	RC3	0.00	≤ 1	SE402)	Serviceability - Combination of actions 'Frequent' - v-direction
	0.213	RC4	0.00	≤ 1	SE403)	Serviceability - Combination of actions 'Quasi-permanent' - v-direction
	0.213	RC2	0.00	≤ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - u-direction
	0.213	RC3	0.00	≤ 1	SE407)	Serviceability - Combination of actions 'Frequent' - u-direction
	0.213	RC4	0.00	≤ 1	SE408)	Serviceability - Combination of actions 'Quasi-permanent' - u-direction
529	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.339	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.03	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.06	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.169	RC1	0.03	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.339	RC1	0.01	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.339	RC1	0.55	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
530	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.339	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.339	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.169	RC1	0.01	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.169	RC1	0.02	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.339	RC1	0.02	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.169	RC1	0.04	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.339	RC1	0.25	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.339	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
531	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.339	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.339	RC1	0.06	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.02	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.339	RC1	0.51	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.339	RC1	0.00	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
532	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.339	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.03	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.339	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.169	RC1	0.02	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.169	RC1	0.04	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.339	RC1	0.25	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.339	RC1	0.00	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
533	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.169	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.03	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.06	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.169	RC1	0.02	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.339	RC1	0.01	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.339	RC1	0.52	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
534	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.339	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.339	RC1	0.06	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.02	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.339	RC1	0.49	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.339	RC1	0.00	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
535	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.339	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.339	RC1	0.03	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.169	RC1	0.01	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.000	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.169	RC1	0.03	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.339	RC1	0.02	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.169	RC1	0.05	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.169	RC1	0.05	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.339	RC1	0.27	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.339	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
536	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.05	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.339	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.169	RC1	0.02	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.169	RC1	0.07	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.339	RC1	0.21	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.23	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.00	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
537	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.02	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.04	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.237	RC1	0.03	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.47	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
538	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.237	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.237	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.00	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.237	RC1	0.01	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.237	RC1	0.17	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.237	RC1	0.17	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.237	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.000	RC1	0.00	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.237	RC1	0.01	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
539	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.119	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.237	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.237	RC1	0.01	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.119	RC1	0.03	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.18	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
540	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.237	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.00	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.01	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.119	RC1	0.03	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.16	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
541	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.336	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.336	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.336	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.336	RC1	0.12	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
542	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.02	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.01	≤ 1	CS117)	Cross-section check - Bending about v-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.03	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.119	RC1	0.03	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.119	RC1	0.04	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.47	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS252)	Cross-section check - Bending about v-axis and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
544	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.119	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.237	RC1	0.02	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.237	RC1	0.01	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.119	RC1	0.02	≤ 1	CS185)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.18	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
545	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.237	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.00	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.01	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.119	RC1	0.03	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.17	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.000	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
546	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.168	RC1	0.00	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.336	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.336	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.13	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
547	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.194	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.12	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.194	RC1	0.10	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.194	RC1	0.73	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
550	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.194	RC1	0.04	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.194	RC1	0.03	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.194	RC1	0.31	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
551	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.150	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.075	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.075	RC1	0.12	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.150	RC1	0.11	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.075	RC1	0.10	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.000	RC1	0.10	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.075	RC1	0.02	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.150	RC1	0.57	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.150	RC1	0.00	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
552	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.150	RC1	0.00	≤ 1	CS100)	Negligible internal forces

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.150	RC1	0.00	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.150	RC1	0.05	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.03	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.150	RC1	0.31	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
553	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.150	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.150	RC1	0.00	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.150	RC1	0.04	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.150	RC1	0.03	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.150	RC1	0.17	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
554	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.01	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.03	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.03	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.29	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.00	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
556	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.194	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.13	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.194	RC1	0.10	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.194	RC1	0.76	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
557	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.194	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.04	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.194	RC1	0.03	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.194	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.31	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
558	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.097	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.05	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.03	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.194	RC1	0.25	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
559	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.194	RC1	0.00	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.194	RC1	0.03	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.194	RC1	0.03	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.194	RC1	0.29	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.194	RC1	0.29	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
560	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.150	RC1	0.00	≤ 1	CS100)	Negligible internal forces

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.075	RC1	0.02	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.075	RC1	0.13	≤ 1	CS121)	Cross-section check - Shear force in v-axis acc. to 6.2.6
	0.150	RC1	0.11	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.075	RC1	0.10	≤ 1	CS123)	Cross-section check - Shear force in u-axis acc. to 6.2.6
	0.000	RC1	0.10	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.075	RC1	0.03	≤ 1	CS205)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.150	RC1	0.57	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.150	RC1	0.00	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
561	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.150	RC1	0.00	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.150	RC1	0.05	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.03	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.150	RC1	0.31	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
562	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.150	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.150	RC1	0.00	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.150	RC1	0.03	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.150	RC1	0.03	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.075	RC1	0.02	≤ 1	CS192)	Cross-section check - Bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.150	RC1	0.16	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.075	RC1	0.01	≤ 1	CS245)	Cross-section check - Bending and shear force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.150	RC1	0.16	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
563	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.01	≤ 1	CS103)	Cross-section check - Compression acc. to 6.2.4 - Class 4
	0.000	RC1	0.03	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.03	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.28	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.00	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
564	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.212	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.106	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.02	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.00	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.08	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
565	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.212	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.106	RC1	0.01	≤ 1	CS101)	Cross-section check - Tension acc. to 6.2.3
	0.000	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.01	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.09	≤ 1	CS212)	Cross-section check - Bending about v-axis, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.212	RC1	0.08	≤ 1	CS232)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9.3 - Class 4
566	Cross-section No. 3 - L 35x35x5 | ArcelorMittal (EN 10056-1:2017)					
	0.000	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.237	RC1	0.01	≤ 1	CS102)	Cross-section check - Compression acc. to 6.2.4

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Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.237	RC1	0.01	≤ 1	CS112)	Cross-section check - Bending about u-axis acc. to 6.2.5 - Class 3
	0.000	RC1	0.01	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.237	RC1	0.01	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.237	RC1	0.17	≤ 1	CS225)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9 - Class 3
	0.237	RC1	0.01	≤ 1	CS242)	Cross-section check - Bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3 - Angle section
	0.237	RC1	0.01	≤ 1	CS262)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.2 and 6.2.10 - Class 3
567	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.194	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.04	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.194	RC1	0.04	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.194	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.000	RC1	0.33	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4
568	Cross-section No. 2 - L 50x50x5 | EN 10056-1:1998					
	0.097	RC1	0.00	≤ 1	CS100)	Negligible internal forces
	0.000	RC1	0.05	≤ 1	CS122)	Cross-section check - Shear force in v-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.03	≤ 1	CS124)	Cross-section check - Shear force in u-axis acc. to 6.2.6(4) - Class 3 or 4
	0.000	RC1	0.01	≤ 1	CS255)	Cross-section check - Bending about v-axis and shear acc. to 6.2.10 and 6.2.9.3 - Class 4
	0.194	RC1	0.27	≤ 1	CS265)	Cross-section check - Biaxial bending and shear force acc. to 6.2.9.3 and 6.2.10 - Class 4

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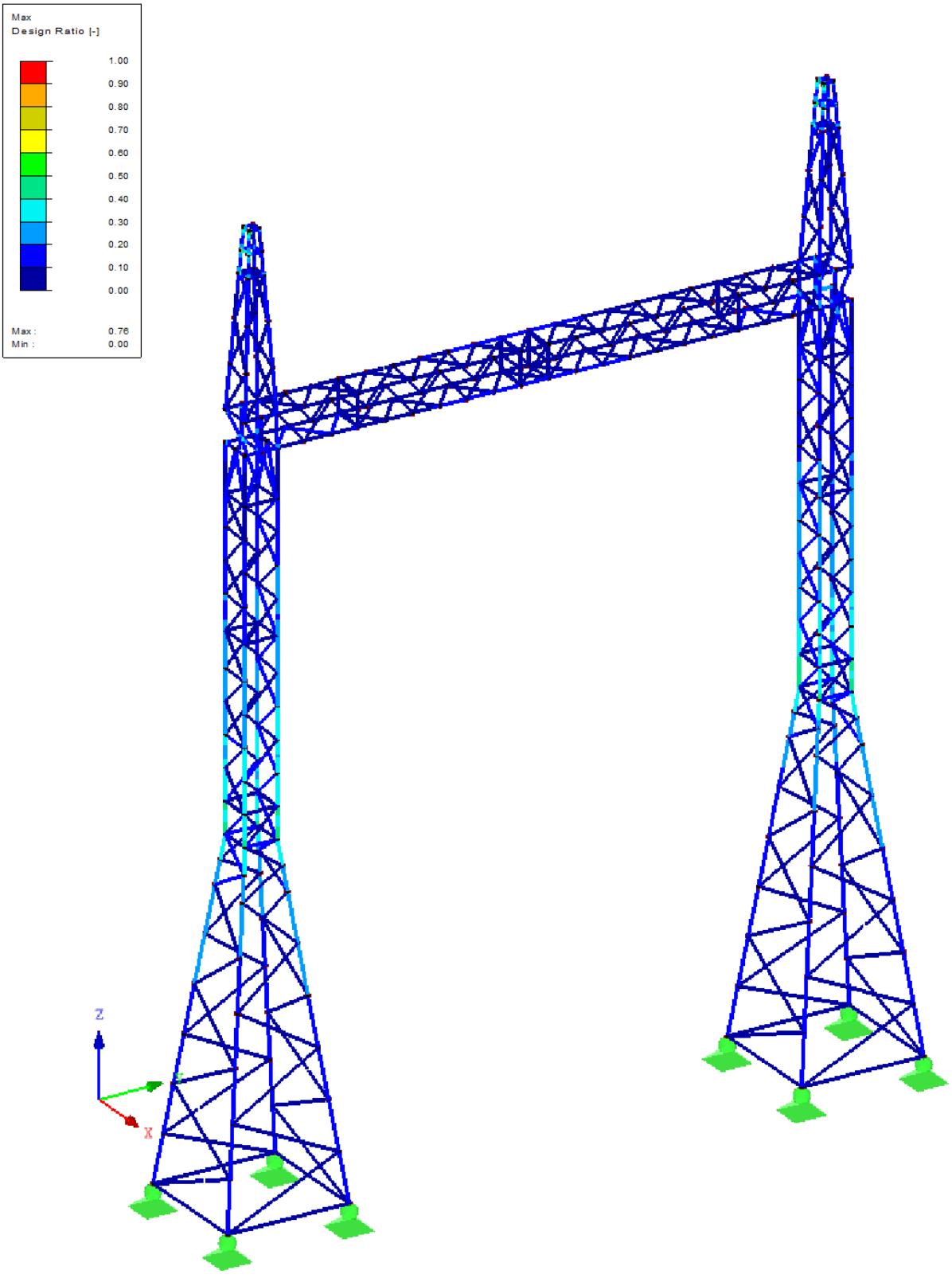
sign Ratio

RF-STEEL EC3 CA1
Ultimate Limit State: Cross-Section Design, Stability Design, Weld Design, Pressure Design, Plastic Design



Max Design Ratio: 0.76

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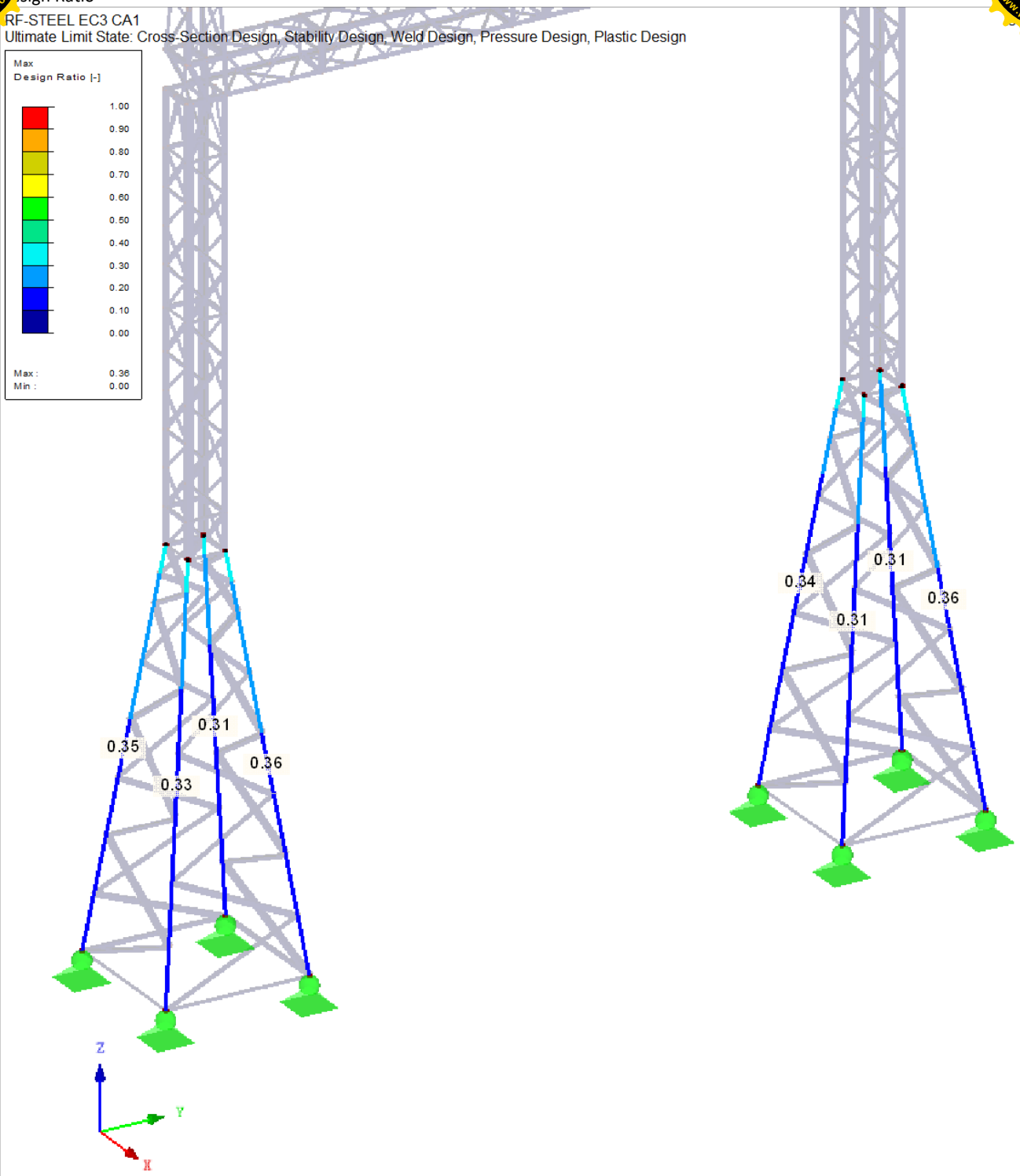
sign Ratio

RF-STEEL EC3 CA1
Ultimate Limit State: Cross-Section Design, Stability Design, Weld Design, Pressure Design, Plastic Design



Max Design Ratio: 0.36

ED2201-XX-RDP-SK-T1.IS	LAPAS	LAPŲ	LAIDA
	528	643	0

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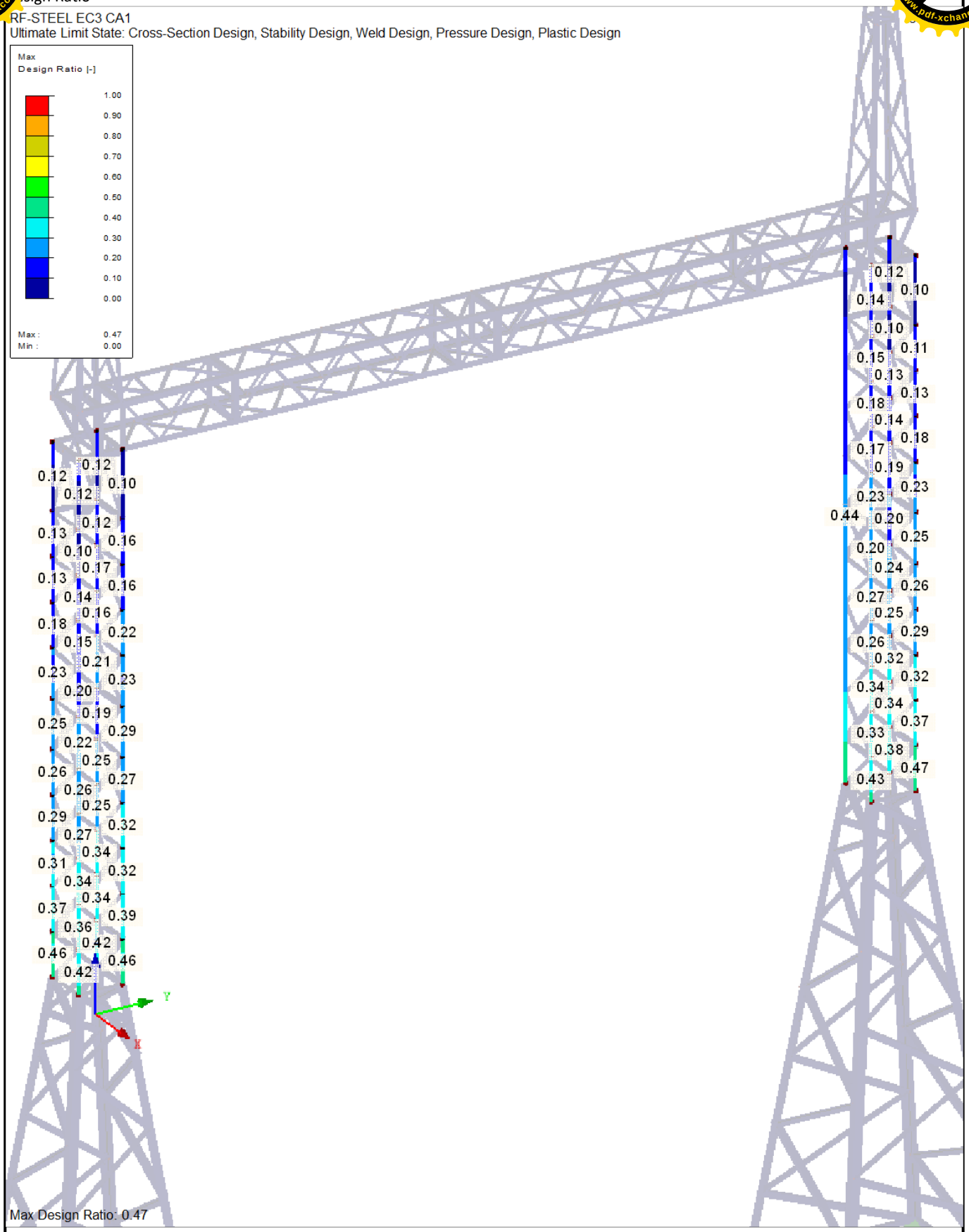
sign Ratio

RF-STEEL EC3 CA1
Ultimate Limit State: Cross-Section Design, Stability Design, Weld Design, Pressure Design, Plastic Design



Max Design Ratio: 0.47

	LAPAS	LAPŲ	LAIDA
ED2201-XX-RDP-SK-T1.IS	529	643	0

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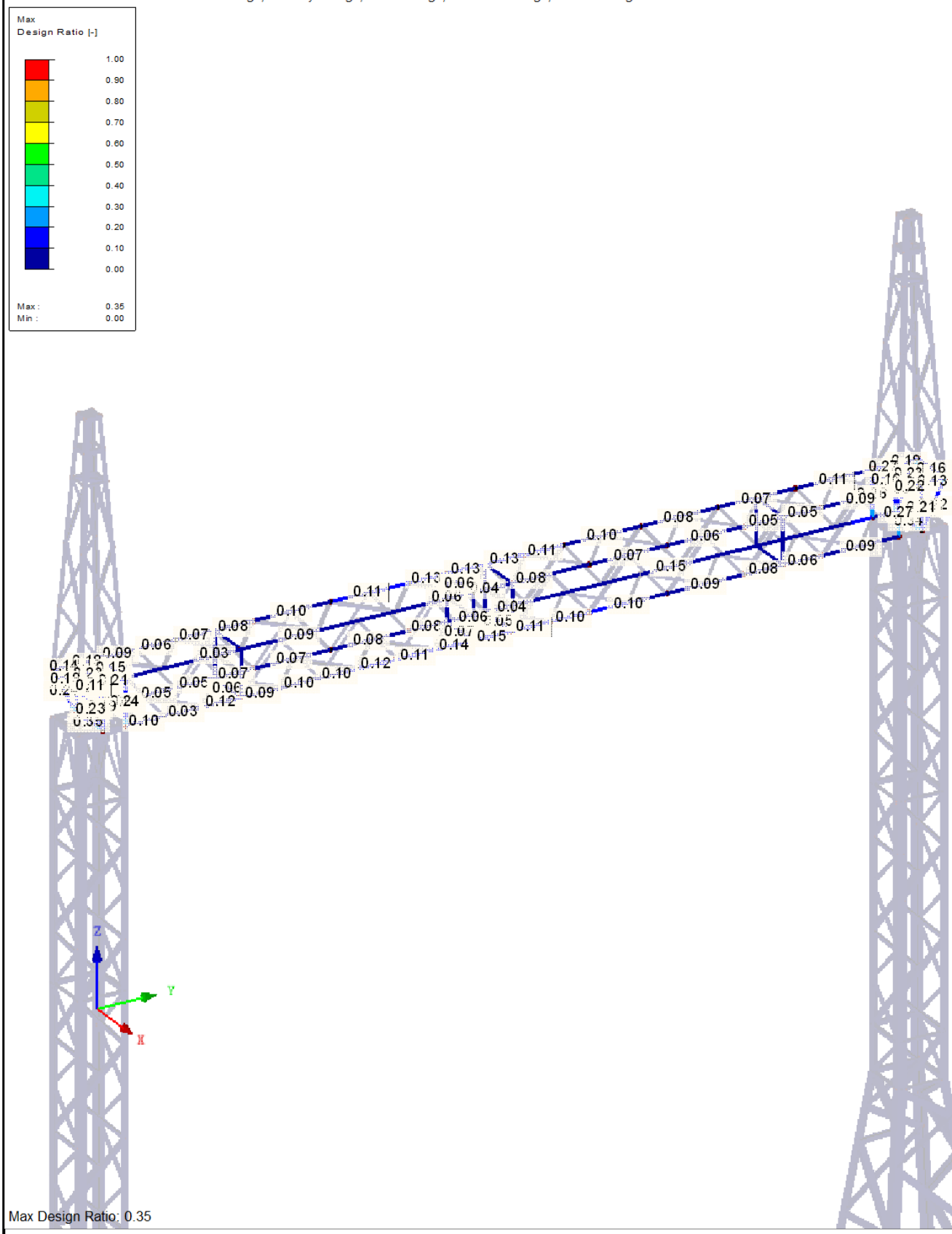
sign Ratio

RF-STEEL EC3 CA1
Ultimate Limit State: Cross-Section Design, Stability Design, Weld Design, Pressure Design, Plastic Design



Max Design Ratio: 0.35

1.1 Global Data

	Activities	x	Modal analysis (eigenvectors)
		-	Mass combinations
		-	Forced vibrations

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1.1 Global Data

- Response spectra
- Accelerograms
- Time diagrams
- Equivalent static force analysis

Setting — Gravity acceleration : 10.00 m/s²

1.2.1 Mass Cases - General

No.	Mass Case Description	Parameters		
MC1		Mass Case Type	:	Permanent
		Masses	x :	From self-weight of structure
			x :	From force components of Load Case LC1-Nuosavas svoris

1.4.1 Natural Vibration Case - General

NVC Case	Natural Vibration Case Description	Parameters		
NVC1	MC1	Number of Smallest Eigenvalues	:	10
		Acting Masses	:	MC1
		Masses considered in	: x	X-direction
			x	Y-direction
			x	Z-direction

1.4.2 Natural Vibration Case - Calculation Parameters

NVC Case	Natural Vibration Case Description	Calculation Parameters		
NVC1	MC1	Type of Mass Matrix	:	Diagonal matrix (translational DOFs)
		Scaling Vibration Mode Shapes	:	Max $u_j = 1$
		Method for Solving Eigenvalues	:	Lanczos

NVC1

5.1 Natural Frequencies

NVC1

Mode No.	Eigenvalue λ [1/s²]	Angular frequency ω [rad/s]	Natural Frequency f [Hz]	Natural Period T [s]	
1	417.034	20.421	3.250	0.308	
2	615.380	24.807	3.948	0.253	
3	736.317	27.135	4.319	0.232	
4	7453.846	86.336	13.741	0.073	
5	9362.436	96.760	15.400	0.065	
6	12869.522	113.444	18.055	0.055	
7	13717.422	117.121	18.640	0.054	
8	17886.252	133.739	21.285	0.047	
9	19008.721	137.872	21.943	0.046	
10	32368.432	179.912	28.634	0.035	

NVC1

5.7 Effective Modal Mass Factors

NVC1

Mode No.	Modal Mass M_i [kg]	Effective Modal Mass m_{eX} [kg]	m_{eY} [kg]	m_{eZ} [kg]	$m_{\varphi X}$ [kg.m²]	$m_{\varphi Y}$ [kg.m²]	$m_{\varphi Z}$ [kg.m²]	Effective Modal Mass Factor f_{meX} [-]	f_{meY} [-]	f_{meZ} [-]
1	858.84	2395.97	0.05	0.00	0.80	37283.91	0.02	0.482	0.000	0.000
2	1246.70	0.05	2564.49	0.00	35069.10	0.79	0.35	0.000	0.516	0.000
3	579.99	0.00	0.03	0.00	0.38	0.02	37573.42	0.000	0.000	0.000
4	556.91	0.01	0.02	631.21	0.57	0.02	0.63	0.000	0.000	0.127
5	616.30	36.53	0.00	0.00	0.14	15.39	0.07	0.007	0.000	0.000
6	345.99	951.51	0.02	0.00	0.02	3629.54	3.65	0.191	0.000	0.000
7	327.09	0.24	0.03	0.01	0.06	1.00	19324.17	0.000	0.000	0.000
8	430.08	0.00	984.90	0.00	6483.88	0.23	0.80	0.000	0.198	0.000
9	1286.33	0.04	0.05	54.60	1.28	0.24	3.04	0.000	0.000	0.011
10	105.50	0.10	0.02	173.18	0.04	1.06	1.17	0.000	0.000	0.035
Sum	6353.72	3384.46	3549.60	859.00	41556.26	40932.21	56907.32	0.681	0.714	0.173

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Išvados:

- Portalo deformacijos nustatomos pagal LST EN 1993-3-1:2007/NA:2011 standarto nuostatas. Portalo deformacijos yra d=74,6 mm lyginant su ribiniai poslinkiai dlim=14265/100=143 mm, todėl sąlyga yra tenkinama.
- Portalo konstrukcijos labiausiai išnaudojamo elemento skerspjūvio stiprumo sąlyga tenkinama ir neviršija ribinių reikšmių 0,76 < 1,0.
- Portalo savųjų svyravimų dažnis yra daugiau už ribinį (3,25 Hz > flim=2,9 Hz), todėl leidžiama nevertinti inercijos jėgų.
- Parinkti portalo elementų skerspjūviai tenkina stiprumo ir pastovumo sąlygas.

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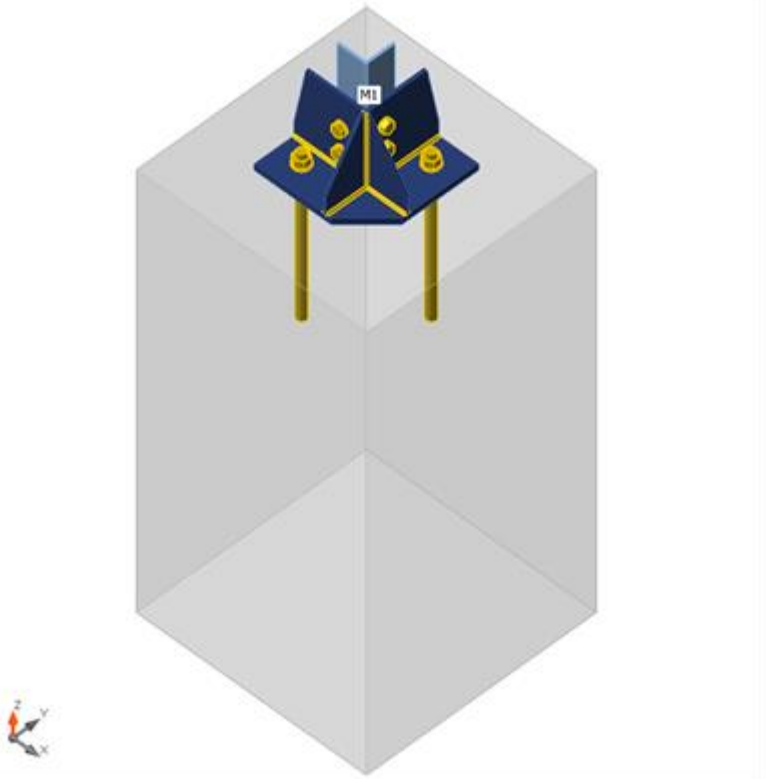
4.2. Detalūs portalo jungimo mazgų skaičiavimai

Atraminio mazgo tikrinimas

Geometry

M1 1 - L100X8 0,0 90,0 0,0 20 13 -46 Node

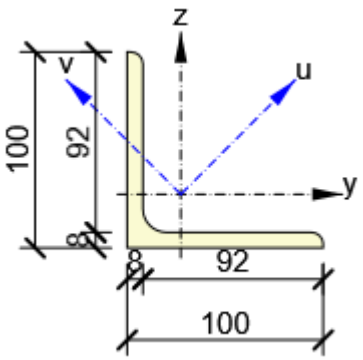


Cross-sections

1 - L100X8 S 355

Cross-sections

1 - L100X8 S 355



Anchors / Bolts

M30 8.8	M30 8.8	30	800,0	707
M24 8.8	M24 8.8	24	800,0	452

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oad effects (Equilibrium not required)

LE1	M1	-155,0	6,0	-10,0	1,0	2,0	1,0

Foundation block

CB 1

Dimensions	780 x 780	mm
Depth	1500	mm
Anchor	M30 8.8	
Anchoring length	500	mm
Shear force transfer	Friction	

Check

Summary

Analysis	100,0%	OK
Plates	0,0 < 5,0%	OK
Bolts	97,1 < 100%	OK
Anchors	0,0 < 100%	OK
Welds	51,7 < 100%	OK
Concrete block	7,6 < 100%	OK
Shear	29,9 < 100%	OK
Buckling	Not calculated	

Plates

M1-bfl 1	8,0	LE1	335,9	0,0	22,8	OK
M1-w 1	8,0	LE1	350,3	0,0	29,1	OK
SP1	20,0	LE1	52,5	0,0	0,0	OK
SP2	8,0	LE1	176,4	0,0	5,8	OK
SP3	8,0	LE1	87,4	0,0	0,0	OK
SP4	10,0	LE1	217,2	0,0	22,8	OK

Design data

S 355	355,0	5,0

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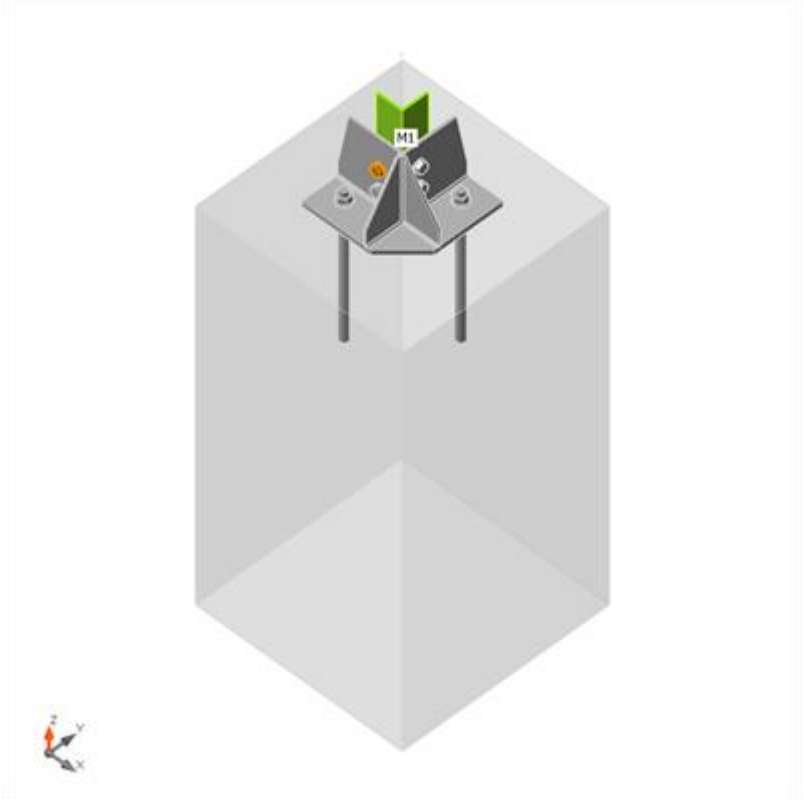
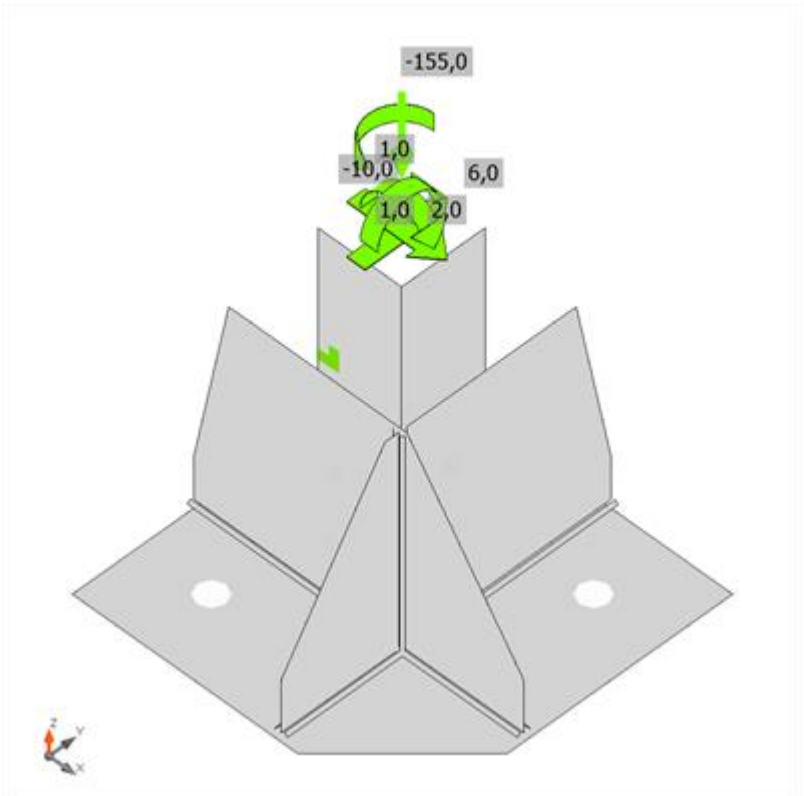


Overall check, LE1



Strain check, LE1

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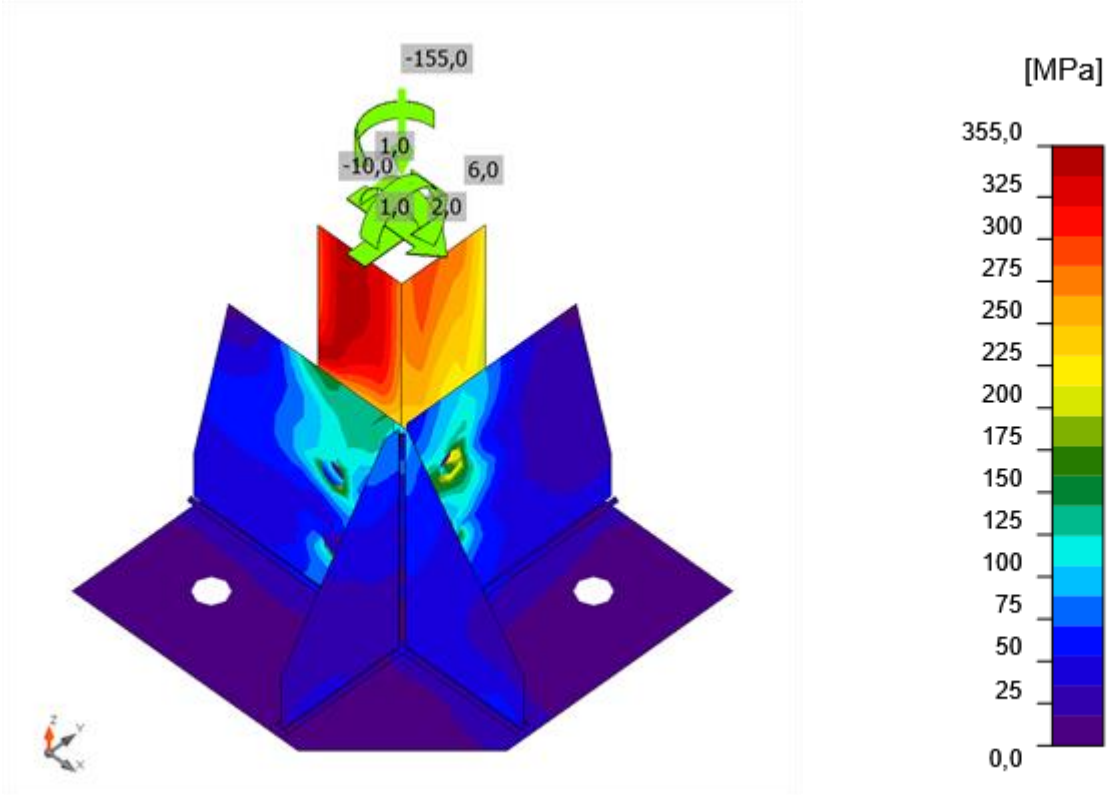
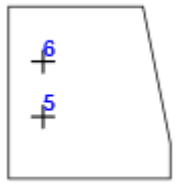
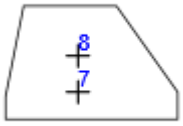


Equivalent stress, LE1

Bolts



B5	M24 8.8 - 1	LE1	8,9	47,0	145,9	4,4	34,6	37,8	OK
B6	M24 8.8 - 1	LE1	15,0	47,8	164,3	7,4	35,3	40,6	OK
B7	M24 8.8 - 1	LE1	1,8	30,1	69,6	0,9	43,3	22,9	OK
B8	M24 8.8 - 1	LE1	4,0	35,4	36,4	2,0	97,1	27,5	OK



Design data

M24 8.8 - 1	203,3	224,6	135,6

Detailed result for B5

Tension resistance check (EN 1993-1-8 – Tab. 3.4)

$F_{t,Rd} = \frac{k_2 f_{ub} A_s}{\gamma_{M2}} =$ 203,3 kN ≥ $F_{t,Ed} =$ 8,9 kN

Where:

$k_2 =$ 0,90 – Factor

$f_{ub} =$ 800,0 MPa – Ultimate tensile strength of the bolt

$A_s =$ 353 mm^2 – Tensile stress area of the bolt

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γ_{M2} = 1,25 – Safety factor

Punching resistance check (EN 1993-1-8 – Tab. 3.4)

$B_{p,Rd} = \frac{0,6\,\pi\,d_m\,t_p\,f_u}{\gamma_{M2}}$ = 224,6 kN ≥ $F_{t,Ed}$ = 8,9 kN

Where:

d_m = 38 mm – The mean of the across points and across flats dimensions of the bolt head or the nut, whichever is smaller

t_p = 8 mm – Plate thickness

f_u = 490,0 MPa – Ultimate strength

γ_{M2} = 1,25 – Safety factor

Shear resistance check (EN 1993-1-8 – Tab. 3.4)

$F_{v,Rd} = \frac{\beta_p\,\alpha_v f_{ub} A}{\gamma_{M2}}$ = 135,6 kN ≥ $F_{v,Ed}$ = 47,0 kN

Where:

β_p = 1,00 – Reduction factor for packing

α_v = 0,60 – Reduction factor for shear stress

f_{ub} = 800,0 MPa – Ultimate tensile strength of the bolt

A = 353 mm^2 – Gross cross-section area of the bolt

γ_{M2} = 1,25 – Safety factor

Bearing resistance check (EN 1993-1-8 – Tab. 3.4)

$F_{b,Rd} = \frac{k_1\,\alpha_b f_u\,dt}{\gamma_{M2}}$ = 145,9 kN ≥ $F_{b,Ed}$ = 47,0 kN

Where:

$k_1 = \min(2.8\frac{e_2}{d_0} - 1.7, 1.4\frac{p_2}{d_0} - 1.7, 2.5)$ = 2,50 – Factor for edge distance and bolt spacing perpendicular to the direction of load transfer

$\alpha_b = \min(\frac{e_1}{3d_0}, \frac{p_1}{3d_0} - \frac{1}{4}, \frac{f_{ub}}{f_u}, 1)$ = 0,78 – Factor for end distance and bolt spacing in direction of load transfer

e_2 = 45 mm – Distance to the plate edge perpendicular to the shear force

p_2 = ∞ mm – Distance between bolts perpendicular to the shear force

d_0 = 26 mm – Bolt hole diameter

e_1 = 310 mm – Distance to the plate edge in the direction of the shear force

p_1 = 80 mm – Distance between bolts in the direction of the shear force

f_{ub} = 800,0 MPa – Ultimate tensile strength of the bolt

f_u = 490,0 MPa – Ultimate strength of the plate

d = 24 mm – Nominal diameter of the fastener

t = 8 mm – Thickness of the plate

γ_{M2} = 1,25 – Safety factor

Utilization in tension

$\frac{F_{t,Ed}}{\min(F_{t,Rd}\,;\,B_{p,Rd})}$ = 0,04 ≤ 1,0

Where:

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$F_{t,Ed}$ = 8,9 kN – Tensile force

$F_{t,Rd}$ = 203,3 kN – Tension resistance

$B_{p,Rd}$ = 224,6 kN – Punching resistance

Utilization in shear

$\max(\frac{F_{v,Ed}}{F_{v,Rd}}; \frac{F_{b,Ed}}{F_{b,Rd}})$ = 0,35 ≤ 1,0

Where:

$F_{v,Ed}$ = 47,0 kN – Shear force (in decisive shear plane)

$F_{v,Rd}$ = 135,6 kN – Shear resistance

$F_{b,Ed}$ = 47,0 kN – Bearing force (for decisive plate)

$F_{b,Rd}$ = 145,9 kN – Bearing resistance

Interaction of tension and shear (EN 1993-1-8 – Tab. 3.4)

$\frac{F_{v,Ed}}{F_{v,Rd}} + \frac{F_{t,Ed}}{1,4\,F_{t,Rd}}$ = 0,38 ≤ 1,0

Where:

$F_{v,Ed}$ = 47,0 kN – Shear force (in decisive shear plane)

$F_{v,Rd}$ = 135,6 kN – Shear resistance

$F_{t,Ed}$ = 8,9 kN – Tensile force

$F_{t,Rd}$ = 203,3 kN – Tension resistance

Detailed result for B6

Tension resistance check (EN 1993-1-8 – Tab. 3.4)

$F_{t,Rd} = \frac{k_2 f_{ub} A_s}{\gamma_{M2}}$ = 203,3 kN ≥ $F_{t,Ed}$ = 15,0 kN

Where:

k_2 = 0,90 – Factor

f_{ub} = 800,0 MPa – Ultimate tensile strength of the bolt

A_s = 353 mm^2 – Tensile stress area of the bolt

γ_{M2} = 1,25 – Safety factor

Punching resistance check (EN 1993-1-8 – Tab. 3.4)

$B_{p,Rd} = \frac{0,6\,\pi\,d_m\,t_p f_u}{\gamma_{M2}}$ = 224,6 kN ≥ $F_{t,Ed}$ = 15,0 kN

Where:

d_m = 38 mm – The mean of the across points and across flats dimensions of the bolt head or the nut, whichever is smaller

t_p = 8 mm – Plate thickness

f_u = 490,0 MPa – Ultimate strength

γ_{M2} = 1,25 – Safety factor

Shear resistance check (EN 1993-1-8 – Tab. 3.4)

$F_{v,Rd} = \frac{\beta_p\,\alpha_v f_{ub} A}{\gamma_{M2}}$ = 135,6 kN ≥ $F_{v,Ed}$ = 47,8 kN

Where:

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β_p = 1,00 – Reduction factor for packing

α_v = 0,60 – Reduction factor for shear stress

f_{ub} = 800,0 MPa – Ultimate tensile strength of the bolt

A = 353 mm^2 – Gross cross-section area of the bolt

γ_{M2} = 1,25 – Safety factor

Bearing resistance check (EN 1993-1-8 – Tab. 3.4)

$F_{b,Rd} = \frac{k_1 \alpha_b f_u dt}{\gamma_{M2}}$ = 164,3 kN ≥ $F_{b,Ed}$ = 47,8 kN

Where:

$k_1 = \min(2.8\frac{e_2}{d_0} - 1.7, 1.4\frac{p_2}{d_0} - 1.7, 2.5)$ = 2,50 – Factor for edge distance and bolt spacing perpendicular to the direction of load transfer

$\alpha_b = \min(\frac{e_1}{3d_0}, \frac{p_1}{3d_0} - \frac{1}{4}, \frac{f_{ub}}{f_u}, 1)$ = 0,87 – Factor for end distance and bolt spacing in direction of load transfer

e_2 = 45 mm – Distance to the plate edge perpendicular to the shear force

p_2 = ∞ mm – Distance between bolts perpendicular to the shear force

d_0 = 26 mm – Bolt hole diameter

e_1 = 68 mm – Distance to the plate edge in the direction of the shear force

p_1 = ∞ mm – Distance between bolts in the direction of the shear force

f_{ub} = 800,0 MPa – Ultimate tensile strength of the bolt

f_u = 490,0 MPa – Ultimate strength of the plate

d = 24 mm – Nominal diameter of the fastener

t = 8 mm – Thickness of the plate

γ_{M2} = 1,25 – Safety factor

Utilization in tension

$\frac{F_{t,Ed}}{\min(F_{t,Rd}; B_{p,Rd})}$ = 0,07 ≤ 1,0

Where:

$F_{t,Ed}$ = 15,0 kN – Tensile force

$F_{t,Rd}$ = 203,3 kN – Tension resistance

$B_{p,Rd}$ = 224,6 kN – Punching resistance

Utilization in shear

$\max(\frac{F_{v,Ed}}{F_{v,Rd}}; \frac{F_{b,Ed}}{F_{b,Rd}})$ = 0,35 ≤ 1,0

Where:

$F_{v,Ed}$ = 47,8 kN – Shear force (in decisive shear plane)

$F_{v,Rd}$ = 135,6 kN – Shear resistance

$F_{b,Ed}$ = 47,8 kN – Bearing force (for decisive plate)

$F_{b,Rd}$ = 164,3 kN – Bearing resistance

Interaction of tension and shear (EN 1993-1-8 – Tab. 3.4)

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$\frac{F_{v,Ed}}{F_{v,Rd}} + \frac{F_{t,Ed}}{1,4\,F_{t,Rd}} =$ 0,41 ≤ 1,0

Where:

$F_{v,Ed}$ = 47,8 kN – Shear force (in decisive shear plane)

$F_{v,Rd}$ = 135,6 kN – Shear resistance

$F_{t,Ed}$ = 15,0 kN – Tensile force

$F_{t,Rd}$ = 203,3 kN – Tension resistance

Detailed result for B7

Tension resistance check (EN 1993-1-8 – Tab. 3.4)

$F_{t,Rd} = \frac{k_2 f_{ub} A_s}{\gamma_{M2}} =$ 203,3 kN ≥ $F_{t,Ed} =$ 1,8 kN

Where:

k_2 = 0,90 – Factor

f_{ub} = 800,0 MPa – Ultimate tensile strength of the bolt

A_s = 353 mm^2 – Tensile stress area of the bolt

γ_{M2} = 1,25 – Safety factor

Punching resistance check (EN 1993-1-8 – Tab. 3.4)

$B_{p,Rd} = \frac{0,6\,\pi\,d_m\,t_p f_u}{\gamma_{M2}} =$ 224,6 kN ≥ $F_{t,Ed} =$ 1,8 kN

Where:

d_m = 38 mm – The mean of the across points and across flats dimensions of the bolt head or the nut, whichever is smaller

t_p = 8 mm – Plate thickness

f_u = 490,0 MPa – Ultimate strength

γ_{M2} = 1,25 – Safety factor

Shear resistance check (EN 1993-1-8 – Tab. 3.4)

$F_{v,Rd} = \frac{\beta_p\,\alpha_v f_{ub} A}{\gamma_{M2}} =$ 135,6 kN ≥ $F_{v,Ed} =$ 30,1 kN

Where:

β_p = 1,00 – Reduction factor for packing

α_v = 0,60 – Reduction factor for shear stress

f_{ub} = 800,0 MPa – Ultimate tensile strength of the bolt

A = 353 mm^2 – Gross cross-section area of the bolt

γ_{M2} = 1,25 – Safety factor

Bearing resistance check (EN 1993-1-8 – Tab. 3.4)

$F_{b,Rd} = \frac{k_1\,\alpha_b f_u\,dt}{\gamma_{M2}} =$ 69,6 kN ≥ $F_{b,Ed} =$ 30,1 kN

Where:

$k_1 = \min(2.8\frac{e_2}{d_0} - 1.7, 1.4\frac{p_2}{d_0} - 1.7, 2.5) =$ 1,19 – Factor for edge distance and bolt spacing perpendicular to the direction of load transfer

$\alpha_b = \min(\frac{e_1}{3d_0}, \frac{p_1}{3d_0} - \frac{1}{4}, \frac{f_{ub}}{f_u}, 1) =$ 0,78 – Factor for end distance and bolt spacing in direction of load transfer

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e_2 = 27 mm – Distance to the plate edge perpendicular to the shear force

p_2 = ∞ mm – Distance between bolts perpendicular to the shear force

d_0 = 26 mm – Bolt hole diameter

e_1 = 103 mm – Distance to the plate edge in the direction of the shear force

p_1 = 80 mm – Distance between bolts in the direction of the shear force

f_{ub} = 800,0 MPa – Ultimate tensile strength of the bolt

f_u = 490,0 MPa – Ultimate strength of the plate

d = 24 mm – Nominal diameter of the fastener

t = 8 mm – Thickness of the plate

γ_{M2} = 1,25 – Safety factor

Utilization in tension

$\frac{F_{t,Ed}}{\min(F_{t,Rd}\,;\,B_{p,Rd})}$ = 0,01 ≤ 1,0

Where:

$F_{t,Ed}$ = 1,8 kN – Tensile force

$F_{t,Rd}$ = 203,3 kN – Tension resistance

$B_{p,Rd}$ = 224,6 kN – Punching resistance

Utilization in shear

$\max(\frac{F_{v,Ed}}{F_{v,Rd}}\,;\,\frac{F_{b,Ed}}{F_{b,Rd}})$ = 0,43 ≤ 1,0

Where:

$F_{v,Ed}$ = 30,1 kN – Shear force (in decisive shear plane)

$F_{v,Rd}$ = 135,6 kN – Shear resistance

$F_{b,Ed}$ = 30,1 kN – Bearing force (for decisive plate)

$F_{b,Rd}$ = 69,6 kN – Bearing resistance

Interaction of tension and shear (EN 1993-1-8 – Tab. 3.4)

$\frac{F_{v,Ed}}{F_{v,Rd}} + \frac{F_{t,Ed}}{1{,}4\,F_{t,Rd}}$ = 0,23 ≤ 1,0

Where:

$F_{v,Ed}$ = 30,1 kN – Shear force (in decisive shear plane)

$F_{v,Rd}$ = 135,6 kN – Shear resistance

$F_{t,Ed}$ = 1,8 kN – Tensile force

$F_{t,Rd}$ = 203,3 kN – Tension resistance

Detailed result for B8

Tension resistance check (EN 1993-1-8 – Tab. 3.4)

$F_{t,Rd} = \frac{k_2 f_{ub} A_s}{\gamma_{M2}}$ = 203,3 kN ≥ $F_{t,Ed}$ = 4,0 kN

Where:

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k_2 = 0,90 – Factor

f_{ub} = 800,0 MPa – Ultimate tensile strength of the bolt

A_s = 353 mm^2 – Tensile stress area of the bolt

γ_{M2} = 1,25 – Safety factor

Punching resistance check (EN 1993-1-8 – Tab. 3.4)

$B_{p,Rd} = \frac{0,6\,\pi\,d_m\,t_p\,f_u}{\gamma_{M2}}$ = 224,6 kN ≥ $F_{t,Ed}$ = 4,0 kN

Where:

d_m = 38 mm – The mean of the across points and across flats dimensions of the bolt head or the nut, whichever is smaller

t_p = 8 mm – Plate thickness

f_u = 490,0 MPa – Ultimate strength

γ_{M2} = 1,25 – Safety factor

Shear resistance check (EN 1993-1-8 – Tab. 3.4)

$F_{v,Rd} = \frac{\beta_p\,\alpha_v f_{ub} A}{\gamma_{M2}}$ = 135,6 kN ≥ $F_{v,Ed}$ = 35,4 kN

Where:

β_p = 1,00 – Reduction factor for packing

α_v = 0,60 – Reduction factor for shear stress

f_{ub} = 800,0 MPa – Ultimate tensile strength of the bolt

A = 353 mm^2 – Gross cross-section area of the bolt

γ_{M2} = 1,25 – Safety factor

Bearing resistance check (EN 1993-1-8 – Tab. 3.4)

$F_{b,Rd} = \frac{k_1\,\alpha_b\,f_u\,dt}{\gamma_{M2}}$ = 36,4 kN ≥ $F_{b,Ed}$ = 35,4 kN

Where:

$k_1 = \min(2.8\frac{e_2}{d_0} - 1.7, 1.4\frac{p_2}{d_0} - 1.7, 2.5)$ = 1,17 – Factor for edge distance and bolt spacing perpendicular to the direction of load transfer

$\alpha_b = \min(\frac{e_1}{3d_0}, \frac{p_1}{3d_0} - \frac{1}{4}, \frac{f_{ub}}{f_u}, 1)$ = 0,41 – Factor for end distance and bolt spacing in direction of load transfer

e_2 = 27 mm – Distance to the plate edge perpendicular to the shear force

p_2 = ∞ mm – Distance between bolts perpendicular to the shear force

d_0 = 26 mm – Bolt hole diameter

e_1 = 32 mm – Distance to the plate edge in the direction of the shear force

p_1 = ∞ mm – Distance between bolts in the direction of the shear force

f_{ub} = 800,0 MPa – Ultimate tensile strength of the bolt

f_u = 490,0 MPa – Ultimate strength of the plate

d = 24 mm – Nominal diameter of the fastener

t = 8 mm – Thickness of the plate

γ_{M2} = 1,25 – Safety factor

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Utilization in tension

$$\frac{F_{t,Ed}}{\min(F_{t,Rd}\,;\,B_{p,Rd})} = \quad 0,02 \quad \leq \quad 1,0$$

Where:

$F_{t,Ed}$ = 4,0 kN – Tensile force

$F_{t,Rd}$ = 203,3 kN – Tension resistance

$B_{p,Rd}$ = 224,6 kN – Punching resistance

Utilization in shear

$$\max\left(\frac{F_{v,Ed}}{F_{v,Rd}}\,;\,\frac{F_{b,Ed}}{F_{b,Rd}}\right) = \quad 0,97 \quad \leq \quad 1,0$$

Where:

$F_{v,Ed}$ = 35,4 kN – Shear force (in decisive shear plane)

$F_{v,Rd}$ = 135,6 kN – Shear resistance

$F_{b,Ed}$ = 35,4 kN – Bearing force (for decisive plate)

$F_{b,Rd}$ = 36,4 kN – Bearing resistance

Interaction of tension and shear (EN 1993-1-8 – Tab. 3.4)

$$\frac{F_{v,Ed}}{F_{v,Rd}} + \frac{F_{t,Ed}}{1,4\,F_{t,Rd}} = \quad 0,27 \quad \leq \quad 1,0$$

Where:

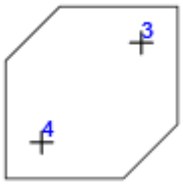
$F_{v,Ed}$ = 35,4 kN – Shear force (in decisive shear plane)

$F_{v,Rd}$ = 135,6 kN – Shear resistance

$F_{t,Ed}$ = 4,0 kN – Tensile force

$F_{t,Rd}$ = 203,3 kN – Tension resistance

Anchors



A3	LE1	0,0	0,0	234,2	0,0	0,0	0,0	OK
A4	LE1	0,0	0,0	234,2	0,0	0,0	0,0	OK

Design data

M30 8.8 - 2 254,3 179,5

Detailed result for A3

Anchor tensile resistance (EN 1992-4 – Cl. 7.2.1.3)

$$N_{Rd,s} = \frac{N_{Rk,s}}{\gamma_{Ms}} = \quad 254,3 \quad \text{kN} \quad \geq \quad N_{Ed} = \quad 0,0 \quad \text{kN}$$

$$N_{Rk,s} = c \cdot A_s \cdot f_{uk} = \quad 381,5 \quad \text{kN}$$

Where:

c = 0,85 – reduction factor for cut thread

A_s = 561 mm² – tensile stress area

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f_{uk} = 800,0 MPa – minimum tensile strength of the bolt

γ_{Ms} = 1,50 – safety factor for steel

-

$\gamma_{Ms} = 1,2 \cdot \frac{f_{uk}}{f_{yk}} \geq 1,4$

, where:

-
  -

f_{yk} =

640,0 MPa – minimum yield strength of the bolt

Shear resistance (EN 1992-4 – Cl. 7.2.2.3.1)

$V_{Rd,s}$ = 179,5 kN ≥ V_{Ed} = 0,0 kN

$V_{Rk,s} = k_7 \cdot V^0_{Rk,s}$ = 224,4 kN

Where:

k_7 = 1,00 – coefficient for anchor steel ductility

-

$k_7 = \begin{cases} 0,8, & A < 0,08 \\ 1.0, & A \geq 0,08 \end{cases}$

, where:

-
  -

A =

0,12 – bolt grade elongation at rupture

$V^0_{Rk,s}$ = 224,4 kN – the characteristic shear strength

-

$V^0_{Rk,s} = k_6 \cdot A_s \cdot f_{uk}$

, where:

-
  -

k_6 =

0,50 – coefficient for anchor resistance in shear

-

A_s =

561 mm² – tensile stress area

-

f_{uk} =

800,0 MPa – specified ultimate strength of anchor steel

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γ_{Ms} = 1,25 – safety factor for steel

Concrete pryout resistance (EN 1992-4 – Cl. 7.2.2.4)
The check is performed for group of anchors on common base plate

$V_{Rd,cp} = \frac{V_{Rk,cp}}{\gamma_{Mc}}$ = 234,2 kN ≥ $V_{Ed,g}$ = 0,0 kN

$V_{Rk,cp} = k_8 \cdot$ 351,2 kN

Where:

k_8 = 2,00 – factor taking into account fastener embedment depth

$N_{Rk,c}$ = 175,6 kN – characteristic concrete cone failure of a fastener or a group of fasteners; all anchors are assumed to be in tension

γ_{Mc} = 1,50 – safety factor for concrete

Interaction of tensile and shear forces in steel (EN 1992-4 – Tab. 7.3)

$(\frac{N_{Ed}}{N_{Rd,s}})^2 +$ 0,00 ≤ 1,0

Where:

N_{Ed} = 0,0 kN – design tension force

$N_{Rd,s}$ = 254,3 kN – fastener tensile strength

V_{Ed} = 0,0 kN – design shear force

$V_{Rd,s}$ = 179,5 kN – fastener shear strength

Interaction of tensile and shear forces in concrete (EN 1992-4 – Tab. 7.3)

$(\frac{N_{Ed}}{N_{Rd,i}})^{1,5} +$ 0,00 ≤ 1,0

Where:

$\frac{N_{Ed}}{N_{Rd,i}}$ – the largest utilization value for tension failure modes

$\frac{V_{Ed}}{V_{Rd,i}}$ – the largest utilization value for shear failure modes

$\frac{N_{Ed,g}}{N_{Rd,c}}$ = 0% – concrete breakout failure of anchor in tension

$\frac{N_{Ed}}{N_{Rd,p}}$ = 0% – concrete pullout failure

$\frac{N_{Ed}}{N_{Rd,cb}}$ = 0% – concrete blowout failure

$\frac{V_{Ed}}{V_{Rd,c}}$ = 0% – concrete edge failure

$\frac{V_{Ed}}{V_{Rd,cb}}$ = 0% – concrete pryout failure

Detailed result for A4

Anchor tensile resistance (EN 1992-4 – Cl. 7.2.1.3)

$N_{Rd,s} = \frac{N_{Rk,s}}{\gamma_{Ms}}$ = 254,3 kN ≥ N_{Ed} = 0,0 kN

$N_{Rk,s} = c \cdot A_s \cdot f_{uk}$ = 381,5 kN

Where:

c = 0,85 – reduction factor for cut thread

A_s = 561 mm^2 – tensile stress area

f_{uk} = 800,0 MPa – minimum tensile strength of the bolt

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$\gamma_{Ms} = 1,50$ – safety factor for steel

-

$\gamma_{Ms} = 1,2 \cdot \frac{f_{uk}}{f_{yk}} \geq 1,4$

, where:

-
  -

$f_{yk} =$

640,0 MPa – minimum yield strength of the bolt

Shear resistance (EN 1992-4 – Cl. 7.2.2.3.1)

$V_{Rd,s} =$ 179,5 kN ≥ $V_{Ed} =$ 0,0 kN

$V_{Rk,s} = k_7 \cdot V^0_{Rk,s} =$ 224,4 kN

Where:

$k_7 = 1,00$ – coefficient for anchor steel ductility

-

$k_7 = \begin{cases} 0,8, & A < 0,08 \\ 1.0, & A \geq 0,08 \end{cases}$

, where:

-
  -

$A =$

0,12 – bolt grade elongation at rupture

$V^0_{Rk,s} = 224,4$ kN – the characteristic shear strength

-

$V^0_{Rk,s} = k_6 \cdot A_s \cdot f_{uk}$

, where:

-
  -

$k_6 =$

0,50 – coefficient for anchor resistance in shear

-

$A_s =$

561 mm^2 – tensile stress area

-

$f_{uk} =$

800,0 MPa – specified ultimate strength of anchor steel

$\gamma_{Ms} = 1,25$ – safety factor for steel

Concrete pryout resistance (EN 1992-4 – Cl. 7.2.2.4)
The check is performed for group of anchors on common base plate

$V_{Rd,cp} = \frac{V_{Rk,cp}}{\gamma_{Mc}} =$ 234,2 kN ≥ $V_{Ed,g} =$ 0,0 kN

$V_{Rk,cp} = k_8 \cdot$ 351,2 kN

Where:

$k_8 =$ 2,00 – factor taking into account fastener embedment depth

$N_{Rk,c} =$ 175,6 kN – characteristic concrete cone failure of a fastener or a group of fasteners; all anchors are assumed to be in tension

$\gamma_{Mc} =$ 1,50 – safety factor for concrete

Interaction of tensile and shear forces in steel (EN 1992-4 – Tab. 7.3)

$(\frac{N_{Ed}}{N_{Rd,s}})^2 +$ 0,00 ≤ 1,0

Where:

$N_{Ed} =$ 0,0 kN – design tension force

$N_{Rd,s} =$ 254,3 kN – fastener tensile strength

$V_{Ed} =$ 0,0 kN – design shear force

$V_{Rd,s} =$ 179,5 kN – fastener shear strength

Interaction of tensile and shear forces in concrete (EN 1992-4 – Tab. 7.3)

$(\frac{N_{Ed}}{N_{Rd,i}})^{1,5} +$ 0,00 ≤ 1,0

Where:

$\frac{N_{Ed}}{N_{Rd,i}}$ – the largest utilization value for tension failure modes

$\frac{V_{Ed}}{V_{Rd,i}}$ – the largest utilization value for shear failure modes

$\frac{N_{Ed,g}}{N_{Rd,c}} =$ 0% – concrete breakout failure of anchor in tension

$\frac{N_{Ed}}{N_{Rd,p}} =$ 0% – concrete pullout failure

$\frac{N_{Ed}}{N_{Rd,cb}} =$ 0% – concrete blowout failure

$\frac{V_{Ed}}{V_{Rd,c}} =$ 0% – concrete edge failure

$\frac{V_{Ed}}{V_{Rd,cb}} =$ 0% – concrete pryout failure

Welds

SP1	SP2	◢ 5,0 ◣	378	LE1	64,9	0,0	-34,9	1,2	-31,6	14,9	8,0	OK
		◢ 5,0 ◣	379	LE1	48,3	0,0	-19,0	-18,8	17,4	11,1	6,9	OK
SP1	SP3	◢ 5,0 ◣	136	LE1	36,0	0,0	-0,9	-20,6	2,7	8,3	5,4	OK
		◢ 5,0 ◣	136	LE1	35,7	0,0	6,7	20,0	-3,2	8,2	2,8	OK
SP1	SP4	◢ 5,0 ◣	234	LE1	225,1	0,0	-105,7	-55,4	-100,5	51,7	15,1	OK
		◢ 5,0 ◣	234	LE1	192,8	0,0	-81,9	50,7	87,1	44,3	14,8	OK
SP2	SP3	◢ 4,0 ◣	248	LE1	85,3	0,0	5,0	-48,8	5,8	19,6	8,9	OK
		◢ 4,0 ◣	248	LE1	100,9	0,0	8,6	-58,0	-1,9	23,2	12,5	OK

Design data

S 355	0,90	435,6	352,8

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Detailed result for SP1 / SP2 - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 435,6 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 64,9 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 352,8 MPa ≥ $|\sigma_\perp| =$ 34,9 MPa

where:

$f_u =$ 490,0 MPa – Ultimate strength

$\beta_w =$ 0,90 – Correlation factor EN 1993-1-8 – Tab. 4.1

$\gamma_{M2} =$ 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,15 ≤ 1,0

Where:

$\sigma_{w,Ed} =$ 64,9 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd} =$ 435,6 MPa – Equivalent stress resistance

$|\sigma_\perp| =$ -34,9 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd} =$ 352,8 MPa – Perpendicular stress resistance

Detailed result for SP1 / SP2 - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 435,6 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 48,3 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 352,8 MPa ≥ $|\sigma_\perp| =$ 19,0 MPa

where:

$f_u =$ 490,0 MPa – Ultimate strength

$\beta_w =$ 0,90 – Correlation factor EN 1993-1-8 – Tab. 4.1

$\gamma_{M2} =$ 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,11 ≤ 1,0

Where:

$\sigma_{w,Ed} =$ 48,3 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd} =$ 435,6 MPa – Equivalent stress resistance

$|\sigma_\perp| =$ -19,0 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd} =$ 352,8 MPa – Perpendicular stress resistance

Detailed result for SP1 / SP3 - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 435,6 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 36,0 MPa

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$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 352,8 MPa ≥ $|\sigma_\perp| =$ 0,9 MPa

where:

$f_u =$ 490,0 MPa – Ultimate strength

$\beta_w =$ 0,90 – Correlation factor EN 1993-1-8 – Tab. 4.1

$\gamma_{M2} =$ 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,08 ≤ 1,0

Where:

$\sigma_{w,Ed} =$ 36,0 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd} =$ 435,6 MPa – Equivalent stress resistance

$|\sigma_\perp| =$ -0,9 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd} =$ 352,8 MPa – Perpendicular stress resistance

Detailed result for SP1 / SP3 - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 435,6 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 35,7 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 352,8 MPa ≥ $|\sigma_\perp| =$ 6,7 MPa

where:

$f_u =$ 490,0 MPa – Ultimate strength

$\beta_w =$ 0,90 – Correlation factor EN 1993-1-8 – Tab. 4.1

$\gamma_{M2} =$ 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,08 ≤ 1,0

Where:

$\sigma_{w,Ed} =$ 35,7 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd} =$ 435,6 MPa – Equivalent stress resistance

$|\sigma_\perp| =$ 6,7 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd} =$ 352,8 MPa – Perpendicular stress resistance

Detailed result for SP1 / SP4 - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 435,6 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 225,1 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 352,8 MPa ≥ $|\sigma_\perp| =$ 105,7 MPa

where:

$f_u =$ 490,0 MPa – Ultimate strength

$\beta_w =$ 0,90 – Correlation factor EN 1993-1-8 – Tab. 4.1

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γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,52 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 225,1 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 435,6 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = -105,7 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 352,8 MPa – Perpendicular stress resistance

Detailed result for SP1 / SP4 - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 435,6 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 192,8 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 352,8 MPa ≥ $|\sigma_\perp| =$ 81,9 MPa

where:

f_u = 490,0 MPa – Ultimate strength

β_w = 0,90 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,44 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 192,8 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 435,6 MPa – Equivalent stress resistance

$|\sigma_\perp|$ = -81,9 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 352,8 MPa – Perpendicular stress resistance

Detailed result for SP2 / SP3 - 1

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 435,6 MPa ≥ $\sigma_{w,Ed} = [\sigma_\perp^2 + 3(\tau_\perp^2 + \tau_\parallel^2)]^{0.5} =$ 85,3 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 352,8 MPa ≥ $|\sigma_\perp| =$ 5,0 MPa

where:

f_u = 490,0 MPa – Ultimate strength

β_w = 0,90 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_\perp|}{\sigma_{\perp,Rd}}) =$ 0,20 ≤ 1,0

Where:

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$\sigma_{w,Ed}$ = 85,3 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 435,6 MPa – Equivalent stress resistance

$|\sigma_{\perp}|$ = 5,0 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 352,8 MPa – Perpendicular stress resistance

Detailed result for SP2 / SP3 - 2

Weld resistance check (EN 1993-1-8 – Cl. 4.5.3.2)

$\sigma_{w,Rd} = f_u/(\beta_w \gamma_{M2}) =$ 435,6 MPa ≥ $\sigma_{w,Ed} = [\sigma_{\perp}^2 + 3(\tau_{\perp}^2 + \tau_{\parallel}^2)]^{0.5} =$ 100,9 MPa

$\sigma_{\perp,Rd} = 0,9 f_u / \gamma_{M2} =$ 352,8 MPa ≥ $|\sigma_{\perp}| =$ 8,6 MPa

where:

f_u = 490,0 MPa – Ultimate strength

β_w = 0,90 – Correlation factor EN 1993-1-8 – Tab. 4.1

γ_{M2} = 1,25 – Safety factor

Stress utilization

$U_t = \max(\frac{\sigma_{w,Ed}}{\sigma_{w,Rd}} ; \frac{|\sigma_{\perp}|}{\sigma_{\perp,Rd}}) =$ 0,23 ≤ 1,0

Where:

$\sigma_{w,Ed}$ = 100,9 MPa – Maximum normal stress transverse to the axis of the weld

$\sigma_{w,Rd}$ = 435,6 MPa – Equivalent stress resistance

$|\sigma_{\perp}|$ = 8,6 MPa – Normal stress perpendicular to the throat

$\sigma_{\perp,Rd}$ = 352,8 MPa – Perpendicular stress resistance

Concrete block

CB 1 LE1 35 52175 3,0 2,93 39,3 7,6 OK

Detailed result for CB 1

Concrete block compressive resistance check (EN 1993-1-8 – Cl. 6.2.5)

$f_{jd} =$ 39,3 MPa ≥ $\sigma =$ 3,0 MPa

Where:

f_{jd} – concrete block design bearing strength:

-

$f_{jd} = \alpha_{cc} \beta_j k_j \frac{f_{ck}}{\gamma_c}$

, where:

-
  -

$\alpha_{cc} =$

1,00 – long term effects on compressive strength factor

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-

β_j =
0,67 – grout quality factor

-

k_j =
2,93 – concentration factor

-

f_{ck} =
30,0 MPa – characteristic resistance of concrete in compression

-

γ_c =
1,50 – safety factor for concrete

σ – average compressive stress in concrete under base plate

-

$\sigma = \frac{N}{A_{eff}}$
, where:

-
-

N =
155,8 kN – compressive normal force acting on concrete block

-

A_{eff} =
52175 mm² – effective area on which normal force is distributed

Shear in contact plane

SP1	LE1	10,0	6,0	39,0	39,0	29,9	OK

Detailed result for SP1

Base plate shear resistance check (EN 1993-1-8 – Cl. 6.2.2)

$V_{Rd,y}$ = 39,0 kN

$V_{Rd,z} = NC_f$ = 39,0 kN

Where:

N = 155,8 kN – design normal force

C_f = 0,25 – friction coefficient

Utilization in shear

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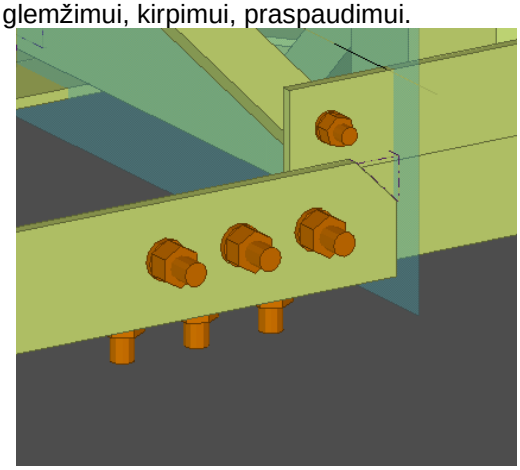
$$U_t = \frac{}{\left(\sqrt[3]{Vy^3+Vz^3} \quad \sqrt[3]{Vy^3+Vz^3}\right)} \qquad 0{,}30 \quad \leq \quad 1$$

Išvados:

- Jungimo mazgas tenkina stiprumo sąlygas. Didžiausias išnaudojimas varžtų, kuris lygus 97% < 100%.

Traversos jungimo mazgo tikrinimas

Tikrinamas varžtų stiprumas glemžimui, kirpimui, praspaudimui.



BOLTS RESISTANCE (SUMMARY)			
VALUES			COMMENTS
Tension resistance check (EN 1993-1-8, table 3.4):			
$k_2 \cdot f_{ub} \cdot A_s / \gamma_{M2}$:	$F_{t,Rd}$:	90,43 kN	- tension resistance, EN 1993-1-8, table 3.4;
Punching resistance check (EN 1993-1-8, table 3.4):			
$0.6 \cdot \pi \cdot d_m \cdot t_p \cdot f_u / \gamma_{M2}$:	$B_{p,Rd}$:	202,67 kN	- punching resistance, EN 1993-1-8, table 3.4;
Shear resistance check (EN 1993-1-8, table 3.4):			
$\alpha_V \cdot f_{ub} \cdot A_s / \gamma_{M2}$:	$F_{V,Rd}$:	180,86 kN	- shear resistance, EN 1993-1-8, table 3.4;
Bearing resistance check (EN 1993-1-8, table 3.4):			
$k_1 \cdot \alpha_b \cdot f_u \cdot d \cdot t_p / \gamma_{M2}$:	$F_{b,Rd}$:	112,66 kN	- bearing resistance, EN 1993-1-8, table 3.4;
Interaction of tension and shear (EN 1993-1-8, table 3.4):			
$F_{V,Ed}/F_{V,Rd} + F_{t,Ed}/(1.4 \cdot F_{t,Rd})$:	Utilization:	0,470	
Utilization in tension:			
$F_{t,Ed}/min(F_{t,Rd}; B_{p,Rd})$:	Utilization:	0,387	
Utilization in shear:			
$F_{V,Ed}/min(F_{t,Rd}; F_{b,Rd})$:	Utilization:	0,311	

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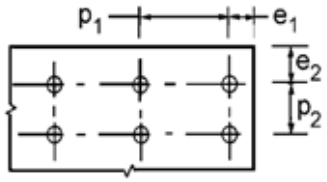
BOLTS RESISTANCE (CALCULATION)

VALUES			COMMENTS
	$F_{V,Ed}$:	35,00 kN	- the design shear force per bolt for ultimate limite state;
	$F_{t,Ed}$:	35,00 kN	- the design tensile force per bolt for the ultimate limite state;
		M16	- diameter of bolt;
		Class: 8.8	- class of bolt;
	f_{ub}:	800 N/mm²	- ultimate tensile strength of the bolt, EN 1993-1-8, table 3.1;
	f_u:	800 N/mm²	- ultimate strength, EN 1993-1-1, table 3.1;
	A_s:	157 mm²	- tensile stress area of the bolt;
Tension resistance check (EN 1993-1-8, table 3.4):			
	k_2:	0,90	- factor, EN 1993-1-8, table 3.4;
	γ_{M2}:	1,25	- safety factor;
$k_2 f_{ub} A_s/\gamma_{M2}$:	$F_{t,Rd}$:	90,43 kN	- tension resistance, EN 1993-1-8, table 3.4;
$F_{t,Ed}/F_{t,Rd}$:	Utilization:	0,387	
Punching resistance check (EN 1993-1-8, table 3.4):			
	d_m:	24 mm	- the mean of the across points and across flats dimenstions of the bolts is smaller;
	t_p:	7 mm	- thickness;
$0.6\pi d_m t_p f_u/\gamma_{M2}$:	$B_{p,Rd}$:	202,67 kN	- punching resistance, EN 1993-1-8, table 3.4;
$F_{t,Ed}/B_{p,Rd}$:	Utilization:	0,173	
Shear resistance check (EN 1993-1-8, table 3.4):			
	n:	3	- number of shear
$A_s \cdot n$:	A:	471 mm²	- tensile stress area of the bolt;
	α_V:	0,60	- reducting factor, EN 1991-1-8, table 3.4;
$\alpha_V f_{ub} A_s/\gamma_{M2}$:	$F_{V,Rd}$:	180,86 kN	- shear resistance, EN 1993-1-8, table 3.4;
$F_{V,Ed}/F_{V,Rd}$:	Utilization:	0,194	
Bearing resistance check (EN 1993-1-8, table 3.4):			
	e_2:	25 mm	- the edge distance from the centre of a fastener hole to the adjacent edge of any part, measured at right angles to the direction ofload transfer;
	p_2:	0 mm	- the spacing measured perpendicular to the load transfer direction between adjacent lines of fasteners;
	e_1:	44 mm	- the end distance from the centre of a fastener hole to the adjacent end of any part, measured in the direction of load transfer;
	p_1:	55 mm	- the spacing between centres of fasteners in a line in the direction of load transfer;
	d_0:	18 mm	- the hole diameter for a bolt;
		For edge bolts	- factor for edge distance and bolt spacing perpendicular to the direction of load transfer, EN 1993-1-8, table 3.4;
min(2.8·e2/d0-1.7;2.5):	k_1:	2,19	
		For end bolts	
e1/(3·d0):	α_d:	0,81	
min(α_d;f_{ub}/f_u;1.0):	α_b:	0,81	- factor, EN 1991-1-8, table 3.4;
	t_p:	7 mm	- thickness;
	d:	14,1 mm	- nominal diameter of the fastener;
$k_1 \cdot \alpha_b f_u \cdot d t_p/\gamma_{M2}$:	$F_{b,Rd}$:	112,66 kN	- bearing resistance, EN 1993-1-8, table 3.4;
$F_{V,Ed}/F_{b,Rd}$:	Utilization:	0,311	
Interaction of tension and shear (EN 1993-1-8, table 3.4):			
$F_{V,Ed}/F_{V,Rd} + F_{t,Ed}/(1.4 \cdot F_{t,Rd})$:	Utilization:	0,470	

Išvados:

- Jungimo mazgas tenkina stiprumo sąlygas. Didžiausias parinktų varžtų M16 išnaudojimas lygus 0,47 < 1,0

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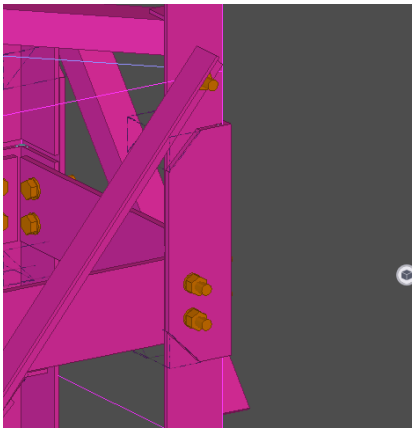
Kojų jungimo mazgo tikrinimas

Tikrinamas varžtų stiprumas glemžimui, kirpimui, praspaudimui.



BOLTS RESISTANCE (CALCULATION)			
VALUES			COMMENTS
	$F_{V,Ed}$:	40,10 kN	- the design shear force per bolt for ultimate limite state;
	$F_{t,Ed}$:	12,00 kN	- the design tensile force per bolt for the ultimate limite state;
		M16	- diameter of bolt;
		Class: 8.8	- class of bolt;
	f_{ub}:	800 N/mm²	- ultimate tensile strength of the bolt, EN 1993-1-8, table 3.1;
	f_u:	800 N/mm²	- ultimate strength, EN 1993-1-1, table 3.1;
	A_s:	157 mm²	- tensile stress area of the bolt;
Tension resistance check (EN 1993-1-8, table 3.4):			
	k_2:	0,90	- factor, EN 1993-1-8, table 3.4;
	γ_{M2}:	1,25	- safety factor;
$k_2 f_{ub} \cdot A_s / \gamma_{M2}$:	$F_{t,Rd}$:	90,43 kN	- tension resistance, EN 1993-1-8, table 3.4;
$F_{t,Ed} / F_{t,Rd}$:	Utilization:	0,133	
Punching resistance check (EN 1993-1-8, table 3.4):			
	d_m:	24 mm	- the mean of the across points and across flats dimenstions of the bolts is smaller;
	t_p:	7 mm	- thickness;
$0.6 \cdot \pi \cdot d_m \cdot t_p \cdot f_u / \gamma_{M2}$:	$B_{p,Rd}$:	202,67 kN	- punching resistance, EN 1993-1-8, table 3.4;
$F_{t,Ed} / B_{p,Rd}$:	Utilization:	0,059	
Shear resistance check (EN 1993-1-8, table 3.4):			
	n:	4	- number of shear
$A_s \cdot n$:	A:	628 mm²	- tensile stress area of the bolt;
	α_V:	0,60	- reducting factor, EN 1991-1-8, table 3.4;
$\alpha_V f_{ub} \cdot A_s / \gamma_{M2}$:	$F_{V,Rd}$:	241,15 kN	- shear resistance, EN 1993-1-8, table 3.4;
$F_{V,Ed} / F_{V,Rd}$:	Utilization:	0,166	

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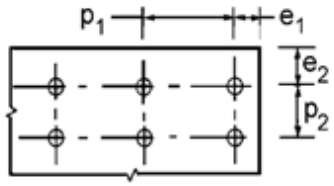
Bearing resistance check (EN 1993-1-8, table 3.4):			
	e_2:	35 mm	- the edge distance from the centre of a fastener hole to the adjacent edge of any part, measured at right angles to the direction ofload transfer;
	p_2:	0 mm	- the spacing measured perpendicular to the load transfer direction between adjacent lines of fasteners;
	e_1:	45 mm	- the end distance from the centre of a fastener hole to the adjacent end of any part, measured in the direction of load transfer;
	p_1:	50 mm	- the spacing between centres of fasteners in a line in the direction of load transfer;
	d_0:	18 mm	- the hole diameter for a bolt;
		For edge bolts	- factor for edge distance and bolt spacing perpendicular to the direction of load transfer, EN 1993-1-8, table 3.4;
$\min(2.8 \cdot e_2/d_0-1.7;2.5)$:	k_1:	2,50	
		For end bolts	
$e_1/(3 \cdot d_0)$:	α_d:	0,83	
$\min(\alpha_d;f_{ub}/f_u;1.0)$:	α_b:	0,83	- factor, EN 1991-1-8, table 3.4;
	t_p:	7 mm	- thickness;
	d:	14,1 mm	- nominal diameter of the fastener;
$k_1 \cdot \alpha_b \cdot f_u \cdot d \cdot t_p / \gamma_{M2}$:	$F_{b,Rd}$:	131,60 kN	- bearing resistance, EN 1993-1-8, table 3.4;
$F_{V,Ed} / F_{b,Rd}$:	Utilization:	0,305	
Interaction of tension and shear (EN 1993-1-8, table 3.4):			
$F_{V,Ed} / F_{V,Rd} + F_{t,Ed} / (1.4 \cdot F_{t,Rd})$:	Utilization:	0,261	

BOLTS RESISTANCE (SUMMARY)

VALUES			COMMENTS
Tension resistance check (EN 1993-1-8, table 3.4):			
$k_2 \cdot f_{ub} \cdot A_s / \gamma_{M2}$:	$F_{t,Rd}$:	90,43 kN	- tension resistance, EN 1993-1-8, table 3.4;
Punching resistance check (EN 1993-1-8, table 3.4):			
$0.6 \cdot \pi \cdot d_m \cdot t_p \cdot f_u / \gamma_{M2}$:	$B_{p,Rd}$:	202,67 kN	- punching resistance, EN 1993-1-8, table 3.4;
Shear resistance check (EN 1993-1-8, table 3.4):			
$\alpha_V \cdot f_{ub} \cdot A_s / \gamma_{M2}$:	$F_{V,Rd}$:	241,15 kN	- shear resistance, EN 1993-1-8, table 3.4;
Bearing resistance check (EN 1993-1-8, table 3.4):			
$k_1 \cdot \alpha_b \cdot f_u \cdot d \cdot t_p / \gamma_{M2}$:	$F_{b,Rd}$:	131,60 kN	- bearing resistance, EN 1993-1-8, table 3.4;
Interaction of tension and shear (EN 1993-1-8, table 3.4):			
$F_{V,Ed} / F_{V,Rd} + F_{t,Ed} / (1.4 \cdot F_{t,Rd})$:	Utilization:	0,261	
Utilization in tension:			
$F_{t,Ed} / \min(F_{t,Rd}; B_{p,Rd})$:	Utilization:	0,133	
Utilization in shear:			
$F_{V,Ed} / \min(F_{t,Rd}; F_{b,Rd})$:	Utilization:	0,305	

Išvados:

- Jungimo mazgas tenkina stiprumo sąlygas. Didžiausias parinktų varžtų M16 išnaudojimas lygus 0,305 < 1,0

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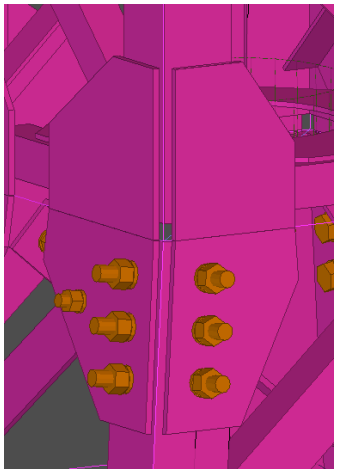
Kojų jungimo mazgo tikrinimas

Tikrinamas varžtų stiprumas glemžimui, kirpimui, praspaudimui.



BOLTS RESISTANCE (CALCULATION)			
VALUES			COMMENTS
	$F_{V,Ed}$:	60,00 kN	- the design shear force per bolt for ultimate limite state;
	$F_{t,Ed}$:	30,00 kN	- the design tensile force per bolt for the ultimate limite state;
		M20	- diameter of bolt;
		Class: 8.8	- class of bolt;
	f_{ub}:	800 N/mm²	- ultimate tensile strength of the bolt, EN 1993-1-8, table 3.1;
	f_u:	800 N/mm²	- ultimate strength, EN 1993-1-1, table 3.1;
	A_s:	245 mm²	- tensile stress area of the bolt;
Tension resistance check (EN 1993-1-8, table 3.4):			
	k_2:	0,90	- factor, EN 1993-1-8, table 3.4;
	γ_{M2}:	1,25	- safety factor;
$k_2 f_{ub} \cdot A_s / \gamma_{M2}$:	$F_{t,Rd}$:	141,12 kN	- tension resistance, EN 1993-1-8, table 3.4;
$F_{t,Ed} / F_{t,Rd}$:	Utilization:	0,213	
Punching resistance check (EN 1993-1-8, table 3.4):			
	d_m:	32 mm	- the mean of the across points and across flats dimenstions of the bolts is smaller;
	t_p:	8 mm	- thickness;
$0.6 \cdot \pi \cdot d_m \cdot t_p \cdot f_u / \gamma_{M2}$:	$B_{p,Rd}$:	308,83 kN	- punching resistance, EN 1993-1-8, table 3.4;
$F_{t,Ed} / B_{p,Rd}$:	Utilization:	0,097	
Shear resistance check (EN 1993-1-8, table 3.4):			
	n:	4	- number of shear
$A_s \cdot n$:	A:	980 mm²	- tensile stress area of the bolt;
	α_V:	0,60	- reducting factor, EN 1991-1-8, table 3.4;
$\alpha_V \cdot f_{ub} \cdot A_s / \gamma_{M2}$:	$F_{V,Rd}$:	376,32 kN	- shear resistance, EN 1993-1-8, table 3.4;
$F_{V,Ed} / F_{V,Rd}$:	Utilization:	0,159	

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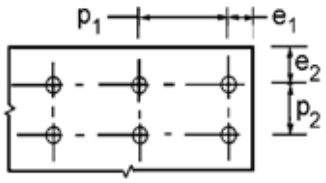
Bearing resistance check (EN 1993-1-8, table 3.4):			
	e_2:	45 mm	- the edge distance from the centre of a fastener hole to the adjacent edge of any part, measured at right angles to the direction ofload transfer;
	p_2:	0 mm	- the spacing measured perpendicular to the load transfer direction between adjacent lines of fasteners;
	e_1:	40 mm	- the end distance from the centre of a fastener hole to the adjacent end of any part, measured in the direction of load transfer;
	p_1:	60 mm	- the spacing between centres of fasteners in a line in the direction of load transfer;
	d_0:	23 mm	- the hole diameter for a bolt;
		For edge bolts	- factor for edge distance and bolt spacing perpendicular to the direction of load transfer, EN 1993-1-8, table 3.4;
min(2.8·e2/d0-1.7;2.5):	k_1:	2,50	
		For end bolts	
e1/(3·d0):	α_d:	0,58	
min(α_d;f_{ub}/f_u;1.0):	α_b:	0,58	- factor, EN 1991-1-8, table 3.4;
	t_p:	8 mm	- thickness;
	d:	17,6 mm	- nominal diameter of the fastener;
$k_1 \cdot \alpha_b f_u \cdot d t_p / \gamma_{M2}$:	$F_{b,Rd}$:	130,60 kN	- bearing resistance, EN 1993-1-8, table 3.4;
$F_{V,Ed} / F_{b,Rd}$:	Utilization:	0,459	
Interaction of tension and shear (EN 1993-1-8, table 3.4):			
$F_{V,Ed} / F_{V,Rd} + F_{t,Ed} / (1.4 \cdot F_{t,Rd})$:	Utilization:	0,311	

BOLTS RESISTANCE (SUMMARY)

VALUES			COMMENTS
Tension resistance check (EN 1993-1-8, table 3.4):			
$k_2 f_{ub} \cdot A_s / \gamma_{M2}$:	$F_{t,Rd}$:	141,12 kN	- tension resistance, EN 1993-1-8, table 3.4;
Punching resistance check (EN 1993-1-8, table 3.4):			
$0.6 \cdot \pi \cdot d_m \cdot t_p \cdot f_u / \gamma_{M2}$:	$B_{p,Rd}$:	308,83 kN	- punching resistance, EN 1993-1-8, table 3.4;
Shear resistance check (EN 1993-1-8, table 3.4):			
$\alpha_V f_{ub} \cdot A_s / \gamma_{M2}$:	$F_{V,Rd}$:	376,32 kN	- shear resistance, EN 1993-1-8, table 3.4;
Bearing resistance check (EN 1993-1-8, table 3.4):			
$k_1 \cdot \alpha_b f_u \cdot d t_p / \gamma_{M2}$:	$F_{b,Rd}$:	130,60 kN	- bearing resistance, EN 1993-1-8, table 3.4;
Interaction of tension and shear (EN 1993-1-8, table 3.4):			
$F_{V,Ed} / F_{V,Rd} + F_{t,Ed} / (1.4 \cdot F_{t,Rd})$:	Utilization:	0,311	
Utilization in tension:			
$F_{t,Ed} / min(F_{t,Rd}; B_{p,Rd})$:	Utilization:	0,213	
Utilization in shear:			
$F_{V,Ed} / min(F_{t,Rd}; F_{b,Rd})$:	Utilization:	0,459	

Išvados:

- Jungimo mazgas tenkina stiprumo sąlygas. Didžiausias parinktų varžtų M20 išnaudojimas lygus 0,459 < 1,0

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5. PORTALO VĖJO APKROVOS SKAIČIAVIMAS

Portalo vėjo apkrovos skaičiavimas

(remiantis EN 1991-1-4:2005 ir EN 1993-3-1:2006)

Krypties ir metų laikų koeficientai:

$c_{dir} := 1.0$ $c_{0.z} := 1.0$ (kalnuotumo koeficientas) $k_I := 1.0$ (turbulencijos koeficientas)

$c_{season} := 1.0$ $\rho := 1.25 \frac{kg}{m^3}$ (oro tankis) $c_{pi} := 0.4$

Vėjo greičio reikšmė priklausanti nuo vėjo apkrovos rajono:

$V_r := 1$

$$v_{b.0} := \begin{cases} 24 \frac{m}{s} & \text{if } V_r = 1 \\ 28 \frac{m}{s} & \text{also if } V_r = 2 \\ 32 \frac{m}{s} & \text{also if } V_r = 3 \end{cases} = 24 \frac{m}{s}$$

Pagrindinis vėjo greitis:

$$v_b := c_{dir} \cdot c_{season} \cdot v_{b.0} = 24 \frac{m}{s}$$

Pagrindinio vėjo greičio slėgio reikšmė:

$$q_b := \frac{\rho}{2} \cdot v_b^{\,2} = 0.36 \frac{kN}{m^2}$$

Vietovės koeficientas:

$V_k := 2$ $z_{0.II} := 0.05$

$$z_0 := \begin{cases} 0.003 & \text{if } V_k = 0 \\ 0.01 & \text{also if } V_k = 1 \\ 0.05 & \text{also if } V_k = 2 \\ 0.3 & \text{also if } V_k = 3 \\ 1.0 & \text{also if } V_k = 4 \end{cases} = 0.05 \qquad z_{min} := \begin{cases} 1.0 & \text{if } V_k = 0 \\ 1.0 & \text{also if } V_k = 1 \\ 2.0 & \text{also if } V_k = 2 \\ 5.0 & \text{also if } V_k = 3 \\ 10.0 & \text{also if } V_k = 4 \end{cases} = 2$$

$$k_r := 0.19 \cdot \left(\frac{z_0}{z_{0.II}} \right)^{0.07} = 0.19$$

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Šiurkštumo koeficientas:

$z_{min} = 2 \quad \leq \quad z := 5.65 \text{ (m)} \qquad c_{rz} := k_r \cdot \ln\left(\frac{z}{z_0}\right) = 0.898$

Vidutinis vėjo greitis:

$$v_{mz} := c_{rz} \cdot c_{0.z} \cdot v_b = 21.557 \ \frac{m}{s}$$

Vėjo turbulencija:

$$I_{v.z} := \frac{k_I}{c_{0.z} \cdot \ln\left(\frac{z}{z_0}\right)} = 0.212$$

Ekspozicijos koeficientas:

$$c_{ez} := 1 + \frac{7}{\ln\left(\frac{z}{z_0}\right)} = 2.481$$

Viršūninis vėjo greičio slėgis:

$$q_{pz} := \left(1 + 7 \cdot I_{v.z}\right) \cdot \frac{1}{2} \cdot \rho \cdot {v_{mz}}^2 = 0.72 \ \frac{kN}{m^2}$$

Konstrukcijos charakteristikos:

Konstrukcijos plotis:

$b_v := 0.5 \ m$ (viršutinės dalies)

$b_a := 1.85 \ m$ (apatinės dalies)

Konstrukcijos aukštis:

$h_k := 5.65 \ m$

Paviršiaus ribomis apimtas plotas:

$$A_c := \frac{b_v + b_a}{2} \cdot h_k = 6.639 \ m^2$$

Vidutinis k-jos plotis:

$$b_k := \frac{b_v + b_a}{2} = 1.175 \ m$$

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Visuminis elementų ir mazgų lakštų paviršių projekcijos plotas:

1) $b_1 := 50\ mm$ $l_1 := 1.6\ m$ 2) $b_2 := 70\ mm$ $l_2 := 1.8\ m$ 3) $b_3 := 50\ mm$ $l_3 := 1.75\ m$

$A_1 := b_1 \cdot l_1 = 0.08\ m^2$ $A_2 := b_2 \cdot l_2 = 0.126\ m^2$ $A_3 := b_3 \cdot l_3 = 0.088\ m^2$

4) $b_4 := 50\ mm$ $l_4 := 1.6\ m$ 5) $b_5 := 50\ mm$ $l_5 := 1.4\ m$ 6) $b_6 := 70\ mm$ $l_6 := 1.3\ m$

$A_4 := b_4 \cdot l_4 = 0.08\ m^2$ $A_5 := b_5 \cdot l_5 = 0.07\ m^2$ $A_6 := b_6 \cdot l_6 = 0.091\ m^2$

7) $b_7 := 70\ mm$ $l_7 := 1.1\ m$ 8) $b_8 := 70\ mm$ $l_8 := 1\ m$ 9) $b_9 := 70\ mm$ $l_9 := 0.55\ m$

$A_7 := b_7 \cdot l_7 = 0.077\ m^2$ $A_8 := b_8 \cdot l_8 = 0.07\ m^2$ $A_9 := b_9 \cdot l_9 = 0.039\ m^2$

10) $b_{10} := 50\ mm$ $l_{10} := 0.25\ m$ 11) $b_{11} := 100\ mm\ l_{11} := 6\ m$ 12) $b_{12} := 100\ mm\ l_{12} := 6\ m$

$A_{10} := b_{10} \cdot l_{10} = 0.013\ m^2$ $A_{11} := b_{11} \cdot l_{11} = 0.6\ m^2$ $A_{12} := b_{12} \cdot l_{12} = 0.6\ m^2$

Lakštai:

13) $b_{13} := 450\ mm$ $l_{13} := 250\ mm$ 14) $b_{14} := 380\ mm$ $l_{14} := 250\ mm$

$A_{13} := 2\ (b_{13} \cdot l_{13}) = 0.225\ m^2$ $A_{14} := 2\ (b_{14} \cdot l_{14}) = 0.19\ m^2$

$$A := A_1 + A_2 + A_3 + A_4 + A_5 + A_6 + A_7 + A_8 + A_9 + A_{10} + A_{11} + A_{12} + A_{13} + A_{14} = 2.348\ m^2$$

Vientisumo santykis:

$$\varphi := \frac{A}{A_c} = 0.354$$

Visuminis projekcijos plotas statmenai plokščiųjų elementų paviršiui:

$$A_f := A_c$$

Visuminis projekcijos plotas statmenai apskritojo skerspjūvio elementų paviršiui, kai srautas nėra kritinis:

$$A_c := 0\ m^2$$

Visuminis projekcijos plotas statmenai apskritojo skerspjūvio elementų paviršiui, kai srautas yra kritinis:

$$A_{c.sp} := 0\ m^2$$

Suminis plotas:

$$A_s := A_f + A_c + A_{c.sp} = 6.639\ m^2$$

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Koeficientas K1:

$$K_1 := \frac{0.55 \cdot A_f}{A_s} + \frac{0.8 \cdot (A_c + A_{c_sup})}{A_s} = 0.55$$

Koeficientas K2:

$$K_2 := \begin{cases} \text{if } 0 \le \varphi \le 0.2 \\ \quad 0.2 \\ \text{also if } 0.2 < \varphi \le 0.5 \\ \quad \varphi \\ \text{also if } 0.5 < \varphi \le 0.8 \\ \quad 1 - \varphi \\ \text{also if } 0.8 \le \varphi \le 1.0 \\ \quad 0.2 \end{cases} = 0.354$$

Vėjo krypties koeficientas:

$\theta := 0°$ $\qquad K_\theta := 1 + K_1 \cdot K_2 \cdot \sin(2 \cdot \theta)^2 = 1$

Bendrasis vėjo apkrovos koeficientas:

$$C_1 := 2.25$$
$$C_2 := 1.5$$

$$c_{f.0.f} := 1.76 \cdot C_1 \cdot \left(1 - C_2 \cdot \varphi + \varphi^2\right) = 2.355$$

$$c_{f.0.c} := C_1 \cdot (1 - C_2 \cdot \varphi) + (C_1 + 0.875) \cdot \varphi^2 = 1.447$$

$$c_{f.0.c_sup} := 1.9 - \sqrt{((1 - \varphi) \cdot (2.8 - 1.14 \cdot C_1 + \varphi))} = 1.283$$

$$c_{f.s.0} := c_{f.0.f} \cdot \frac{A_f}{A_s} + c_{f.0.c} \cdot \frac{A_c}{A_s} + c_{f.0.c_sup} \cdot \frac{A_{c.sup}}{A_s} = 2.355$$

Spragotosios konstrukcijos visuminis konstrukcijos dalies vėjo apkrovos koeficientas vėjo kryptimi:

$$c_{f.s} := K_\theta \cdot c_{f.s.0} = 2.355$$

Visuminės vėjo apkrovos koeficientas:

1.Pagalbinės įrangos koeficientas: $c_{f.A} := 0$

$$c_{f.0} := c_{f.s} + c_{f.A} = 2.355$$

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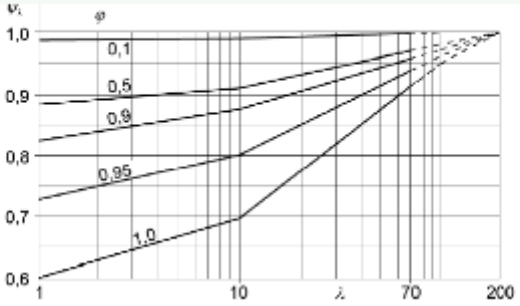
Eektyvusis liaunis:

$$\lambda_1 := \begin{cases} \text{if } h_k \geq 50\ m \\ \quad 1.4 \cdot \dfrac{h_k}{b_k} \\ \text{also if } h_k < 15\ m \\ \quad 2 \cdot \dfrac{h_k}{b_k} \\ \text{also if } 15\ m < h_k < 50\ m \\ \quad \left(\dfrac{\left| (h_k - 15\ m) \cdot 3 \right|}{50\ m - 15\ m} \right) + 1.4 \cdot \dfrac{h_k}{b_k} \end{cases} = 9.617 \qquad \lambda_2 := 70$$

Efektyvusis liaunis priimamas mažesnis:

$$\lambda := min(\lambda_1, \lambda_2) = 9.617$$

Nustatomas galinio efekto koeficientas:



7.36 paveikslas. Galinio efekto koeficiento ψ_λ būdingosios reikšmės, atsižvelgiant į vientisumo santykį φ liaunio λ atžvilgiu

$$\psi_\lambda := 0.98$$

Spragotos konstrukcijos jėgos koeficiento apskaičiavimas:

$$c_f := c_{f.0} \cdot \psi_\lambda = 2.308$$

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Savojo svorio sukeltas didžiausias poslinkis, metrais:

$$x_1 := \frac{14.5\ m}{500} = 0.029\ m$$

Laisvųjų svyravimų dažnis:

$$n_{1.x} := \frac{1}{2 \cdot \pi} \cdot \sqrt{\frac{g}{x_1}} = 2.927\ Hz$$

Turbulencinio ilgio reikšmė:

Atskaitos ilgis: $L_t := 300\ m$

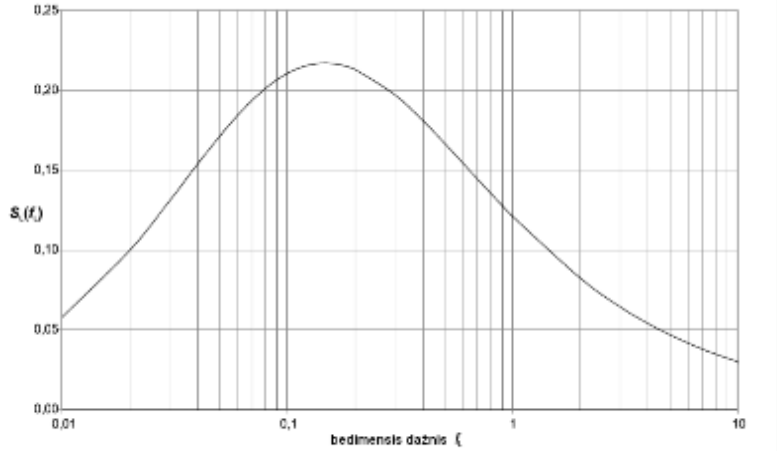
Atskaitos aukštis: $z_t := 200\ m$

$$L_z := L_t \cdot \left(\frac{h_k}{z_t}\right)^{0.67 + 0.05 \cdot \ln(z_0)} = 46.916\ m$$

Bematis dažnis:

$$f_L := \frac{n_{1.x} \cdot L_z}{v_{mz}} = 6.37$$

Spektrinės galios tankio funkcija:



$$S_L := 0.04$$

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Aerodinaminio laidumo funkcijos:

$$\eta_h := \frac{4.6 \cdot h_k}{L_z} \cdot f_L = 3.529$$

$$\eta_b := \frac{4.6 \cdot b_k}{L_z} \cdot f_L = 0.734$$

$$R_h := \begin{cases} 1 & \text{if } \eta_h = 0 \\ \dfrac{1}{\eta_h} - \dfrac{1}{2 \cdot \eta_h^{\,2}} \cdot \left(1 - e^{-2 \cdot \eta_h}\right) & \text{else if } \eta_h > 0 \end{cases} = 0.243$$

$$R_b := \begin{cases} 1 & \text{if } \eta_b = 0 \\ \dfrac{1}{\eta_b} - \dfrac{1}{2 \cdot \eta_b^{\,2}} \cdot \left(1 - e^{-2 \cdot \eta_b}\right) & \text{else if } \eta_b > 0 \end{cases} = 0.648$$

Konstrukcinio logaritminio slopimo dekrementas:

Spragotiesiems bokštams: $\delta := 0.03$

Kvazistatinės reakcijos koeficientas:

$$B' := \frac{1}{1 + 0.9 \cdot \left(\dfrac{b_k + h_k}{L_z}\right)^{0.63}} = 0.789$$

Rezonansinės reakcijos koeficientas:

$$R' := \frac{\pi^2}{2 \cdot \delta} \cdot S_L \cdot R_h \cdot \eta_h \cdot R_b \cdot \eta_b = 2.687$$

Kylančios sankirtos dažnis:

$$v := n_{1_x} \cdot \sqrt{\frac{R'}{B' + R'}} = 2.573\ Hz$$

Vidutinio vėjo greičio vidurkinimo trukmė:

$$T := 600\ s$$

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Viršūninis koeficientas:

$$k_p := \max\left(\sqrt{2\cdot\ln(v\cdot T)} + \frac{0.6}{\sqrt{2\cdot\ln(v\cdot T)}}, 3\right) = 3.989$$

Dinaminis koeficientas:

$$c_d := \frac{1+2\cdot k_p\cdot I_{v.z}\cdot\sqrt{B'+R'}}{1+7\cdot I_{v.z}\cdot\sqrt{B'}} = 1.791$$

Mastelio koeficientas:

$$c_s := \frac{1+7\cdot I_{v.z}\cdot\sqrt{B'}}{1+7\cdot I_{v.z}} = 0.933$$

Konstrukcinis koficientas:

$$c_s c_d := c_s\cdot c_d = 1.671$$

Konstrukcija veikianti vėjo jėga:

$$F_w := c_s c_d\cdot c_f\cdot q_{pz}\cdot A = 6.523\ kN$$

Konstrukcija veikianti vėjo jėga į išorinį paviršių:

$$q_{w.iš} := \frac{F_w}{A_f} = 0.983\ \frac{kN}{m^2}$$

Konstrukcija veikianti vėjo jėga į vidinį paviršių:

$$q_{w.vid} := q_{w.iš}\cdot c_{pi} = 0.393\ \frac{kN}{m^2}$$

5.1. Vėjo apkrovos nuo laidų skaičiavimas

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Vėjo apkrovos skaičiavimas
(remiantis LST EN 1991-1-4:2004)

Krypties, metų laikų ir turbulencijos koeficientai:

$c_{dir} := 1.0$ $c_{0.z} := 1.0$ $c_{season} := 1.0$ $\rho := 1.25 \frac{kg}{m^3}$ $k_I := 1.0$

Vėjo greičio reikšmė priklausanti nuo vėjo apkrovos rajono:

$V_r := 1$

$$v_{b.0} := \begin{cases} 24 \frac{m}{s} & \text{if } V_r = 1 \\ 28 \frac{m}{s} & \text{also if } V_r = 2 \\ 32 \frac{m}{s} & \text{also if } V_r = 3 \end{cases} = 24 \frac{m}{s}$$

Pradinis vėjo greitis:

$$v_b := c_{dir} \cdot c_{season} \cdot v_{b.0} = 24 \frac{m}{s}$$

Pagrindinio vėjo greičio slėgio reikšmė:

$$q_b := \frac{\rho}{2} \cdot v_b^{\,2} = 0.36 \frac{kN}{m^2}$$

Vietovės koeficientas:

$V_k := 2$

$z_{0.II} := 0.05$

$$z_0 := \begin{cases} 0.003 & \text{if } V_k = 0 \\ 0.01 & \text{also if } V_k = 1 \\ 0.05 & \text{also if } V_k = 2 \\ 0.3 & \text{also if } V_k = 3 \\ 1.0 & \text{also if } V_k = 4 \end{cases} = 0.05$$

$$z_{min} := \begin{cases} 1.0 & \text{if } V_k = 0 \\ 1.0 & \text{also if } V_k = 1 \\ 2.0 & \text{also if } V_k = 2 \\ 5.0 & \text{also if } V_k = 3 \\ 10.0 & \text{also if } V_k = 4 \end{cases} = 2$$

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$$k_r := 0.19 \cdot \left(\frac{z_0}{z_{0.II}} \right)^{0.07} = 0.19$$

Šiurkštumo koeficientas:

$z_{min} = 2 \quad \leq \quad z := 14.5 \ (m) \qquad c_{rz} := k_r \cdot \ln\left(\frac{z}{z_0}\right) = 1.077$

Vidutinis vėjo greitis:

$$v_{mz} := c_{rz} \cdot c_{0.z} \cdot v_b = 25.855 \ \frac{m}{s}$$

Vėjo turbulencija:

$$I_{v.z} := \frac{k_I}{c_{0.z} \cdot \ln\left(\frac{z}{z_0}\right)} = 0.176$$

Ekspozicijos koeficientas:

$$c_{ez} := 1 + \frac{7}{\ln\left(\frac{z}{z_0}\right)} = 2.235$$

Viršūninis vėjo greičio slėgis:

$$q_{pz} := \left(1 + 7 \cdot I_{v.z}\right) \cdot \frac{1}{2} \cdot \rho \cdot {v_{mz}}^2 = 0.934 \ \frac{kN}{m^2}$$

Slėgis į išorinį laido paviršių:

1. Koeficientas laidams ir lynams (kartu padengtiems ledu): $c_x := 1.2$

$$q_l := q_{pz} \cdot c_x = 1.12 \ \frac{kN}{m^2}$$

Laido charakteristikos:

1. Laido skersmuo: $d := 21.8 \ mm$

2. Laido ilgis: $l := 25 \ m$

$$F_{Lw} := q_l \cdot d \cdot \frac{l}{2} = 0.305 \ kN$$

$$F_{Lw.45} := q_l \cdot d \cdot \frac{l}{2} \cdot 1.25 = 0.382 \ kN$$

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5.2. Apšalas nuo laidų ir įrenginių į portalą

Laido apledėjimo apkrovos skaičiavimas

Ledo tankis:

$$\rho := 900\ \frac{kg}{m^3}$$

Apledėjimo sienelės storis:

$A_r := 1$

$$b := \begin{cases} 6.2\ mm & \text{if } A_r = 1 \\ 8.5\ mm & \text{also if } A_r = 2 \\ 11.5\ mm & \text{also if } A_r = 3 \\ 14.5\ mm & \text{also if } A_r = 4 \end{cases} = 6.2\ mm$$

Apledėjimo storio kitimo koeficientas priklausomai nuo aukščio:

Aukštis: $h := 14.5\ m$

$$k := \begin{cases} 0.8 & \text{if } h \le 5\ m \\ 1.0 & \text{also if } 5\ m < h \le 10\ m \\ 1.2 & \text{also if } 10\ m < h \le 20\ m \\ 1.4 & \text{also if } 20\ m < h \le 30\ m \\ 1.6 & \text{also if } 30\ m < h \le 50\ m \\ 1.8 & \text{also if } 50\ m < h \le 70\ m \\ 2.0 & \text{also if } 70\ m < h \le 80\ m \end{cases} = 1.2$$

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Koeficientas priklausantis nuo apvalaus elemento skerspjūvio skersmens:

Laido charakteristikos:

1.Laido skersmuo: $d := 21.8\ mm$

2.Laido ilgis: $l := 25\ m$

3.Laido svoris: $p_l := 10\ \frac{N}{m}$

$$\mu_1 := \begin{cases} 1.1 & \text{if } d \le 5\ mm \\ 1.0 & \text{also if } 5\ mm < d \le 10\ mm \\ 0.9 & \text{also if } 10\ mm < d \le 20\ mm \\ 0.8 & \text{also if } 20\ mm < d \le 30\ mm \\ 0.7 & \text{also if } 30\ mm < d \le 50\ mm \\ 0.6 & \text{also if } 50\ mm < d \le 70\ mm \\ \text{"Tikrinti"} & \text{else} \end{cases} = 0.8$$

Apledėjimo apkrova:

$$i_k := \pi \cdot b \cdot k \cdot \mu_1 \cdot (d + b \cdot k \cdot \mu_1) \cdot \rho \cdot g = 4.58\ \frac{N}{m}$$

Vertikali jėga veikianti k-ją nuo laido savojo svorio:

$$F_l := \frac{p_l \cdot l}{2} = 0.125\ kN$$

Vertikali jėga veikianti k-ją nuo laido ir apšalo svorio:

$$F_V := F_l + \frac{i_k \cdot l}{2} = 0.182\ kN$$

Apšalo apkrova nuo elementų:

1. Įrenginio masė: $m := 50\ kg$

2. Įrenginio svoris: $F := m \cdot g = 0.49\ kN$

3. Apšalo svoris: $F_a := \frac{F}{2} = 0.245\ kN$

$F_{l.g} := F + F_a = 0.735\ kN$

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6. PORTALŲ PAMATŲ PROJEKTAVIMAS

Portalų pamatai skaičiuoti ir parinkti pagal nepalankiausią apkrovų derinį. Pamatai parinkti priklausomai nuo pamatą veikiančių rovimo, gniuždymo ir skersinių jėgų reikšmių bei geologinių ir hidrogeologinių sąlygų.

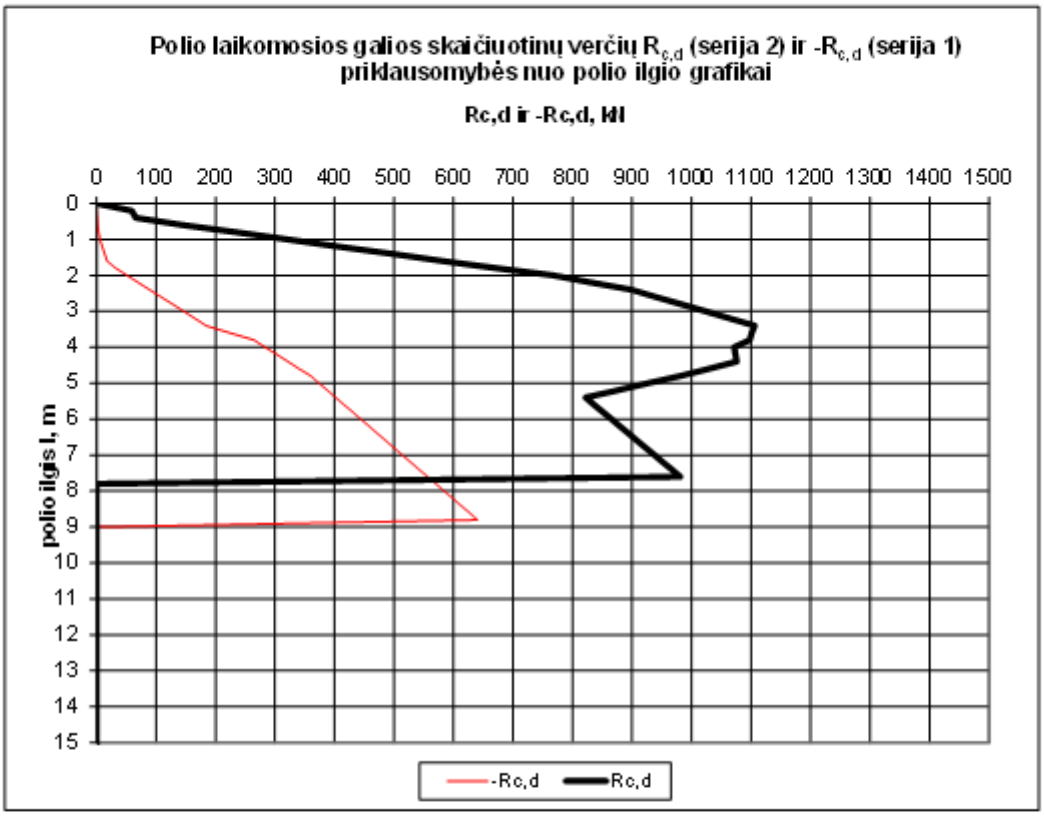
6.1. Portalo pamatų laikomosios galios tikrinimas (GR-1)

Objektas: Nemenčinė

Pagal GR- 1

Pagal EN 1997-1:2001(E)2-as skaičiavimų atvejis

Kombinacija 2: A2 "+" (M1 ar M2) "+" R4



Projektinės apkrovos

$R_{o,d}$, kN	115 kN
$-R_{o,d}$, kN	114 kN

Pasirinktas polis

Polio tipas	Vientiso sraigtinio grezimo
Skersmuo, b	600 mm
Skerspjūvis	Apskritas
Polio ilgis (skaičiuotas)	2,8 m

Koeficientai			γ_{Rb}	γ_{Rs}			ξ	ξ	γ_t	$\gamma_{s,t}$
			2,00	1,50			1,40	1,40	1,55	1,60
Polis	R_b	R_s	$R_{o,cal(b)}$	$R_{o,cal(s)}$	$R_{o,cal}$	$-R_{o,cal}$	$R_{o,k}$	$-R_{o,k}$	$R_{o,d}$	$-R_{o,d}$
2,8	3691	428	1845	285	2131	285	1522	204	982	127

Skaičiavimo rezultatai

		Polių ilgiai	Pado alt.	Būtinas polio ilgis	Pado alt.
pagal	Rc,d, kN	0,6 m	117,30	2,8 m	115,1
pagal	-Rc,d, kN	2,8 m	115,10		

Betono sąnaudos: 0,791 m^3

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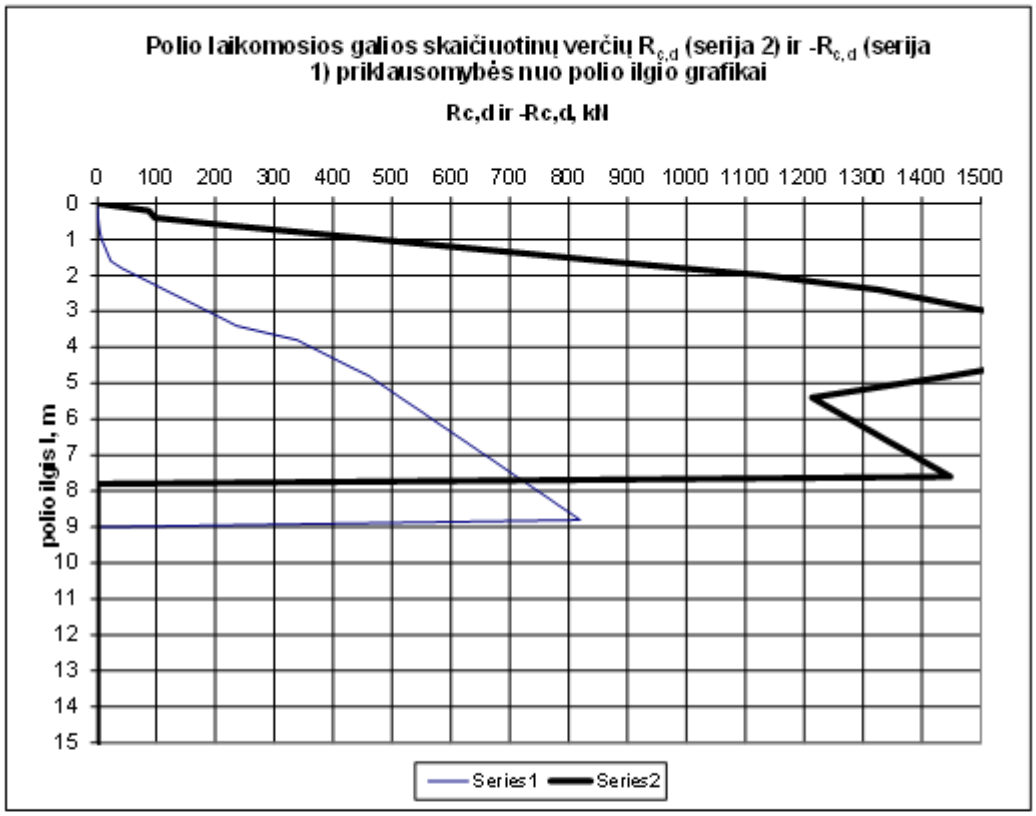
Objektas: Nemenčinė

Pagal GR- **1**

Pagal EN 1997-1:2001(E) **1-as skaičiavimų atvejis**

Kombinacija 1: A1 "+" M1 "+" R1



Projektinės apkrovos

$R_{o,d}$, kN	115 kN
$-R_{o,d}$, kN	114 kN

Pasirinktas polis

Polio tipas	Vientiso sraigtinio grezimo
Skersmuo, b	600 mm
Skerspjūvis	Apskritas
Polio ilgis (skaičiuotas)	2,4 m

Koeficientai			γ_{Rb}	γ_{Rs}			ξ	ξ	γ_t	$\gamma_{s,t}$
			2	1,5			1,4	1,4	1,05	1,25
Polis	R_b	R_s	$R_{o,cal(b)}$	$R_{o,cal(s)}$	$R_{o,cal}$	$-R_{o,cal}$	$R_{o,k}$	$-R_{o,k}$	$R_{o,d}$	$-R_{o,d}$
2,4	3501	300	1751	200	1951	200	1393	143	1327	114

Skaičiavimo rezultatai

	Polių ilgiai	Pado alt.	Būtinas polio ilgis	Pado alt.
pagal Rc,d, kN	0,6 m	117,3	2,4 m	115,5
pagal -Rc,d, kN	2,4 m	115,5		

Betono sąnaudos

0,678 m^3

Išvados:

- Atliktus skaičiavimus gauta, kad reikalingas poliaus ilgis min. 2,80m esant 600mm skersmeniui ties gręžiniu GR-1. Priimtas polius 3,0m ilgio ir 600mm skersmens tenkina laikomosios galios sąlygas.

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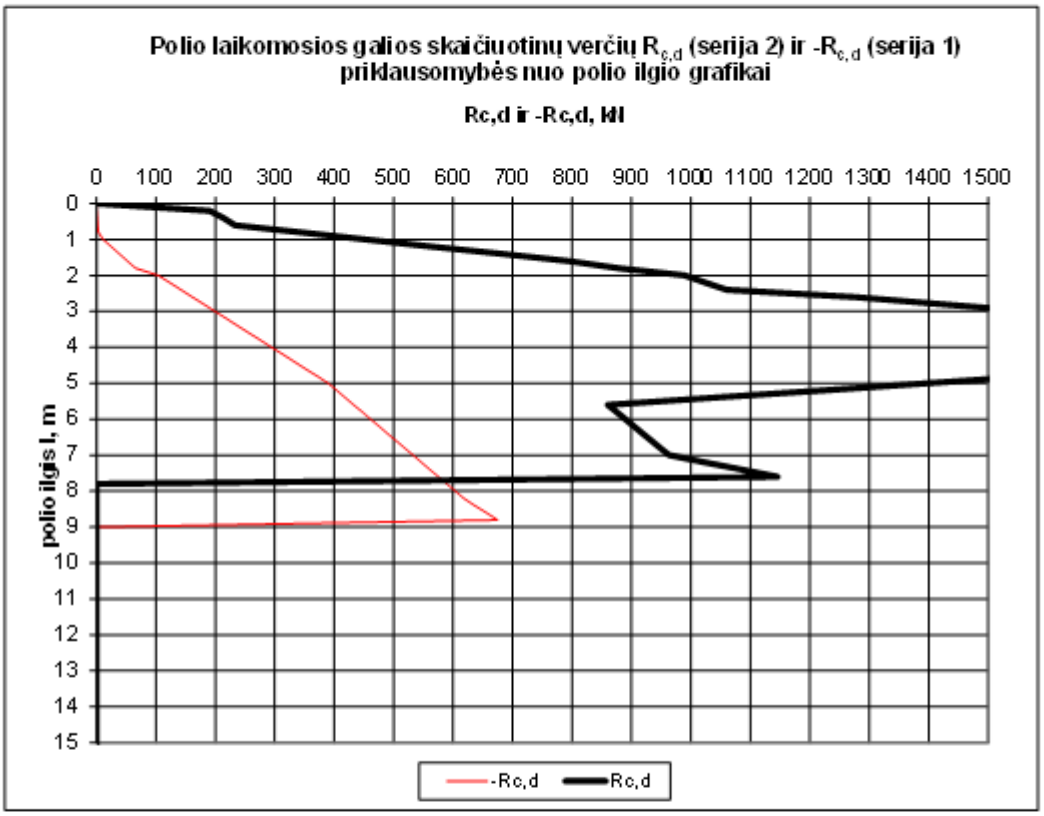
6.2. Portalo pamatų laikomosios galios tikrinimas (GR-3)

Objektas: Nemenčinė

Pagal GR- 3

Pagal EN 1997-1:2001(E)2-as skaičiavimų atvejis

Kombinacija 2: A2 "+" (M1 ar M2) "+" R4



Projektinės apkrovos

$R_{c,d}$, kN	115 kN
$-R_{c,d}$, kN	114 kN

Pasirinktas polis

Polio tipas		Vientiso sraigtinio grezimo	
Skersmuo, b		600	mm
Skerspjūvis		Apskritas	
Polio ilgis (skaičiuotas)		2,2	m

Koeficientai			γ_{Rb}	γ_{Rs}			ξ	ξ	γ_t	$\gamma_{s,t}$
			2,00	1,50			1,40	1,40	1,55	1,60
Polis	R_b	R_s	$R_{c,cal(b)}$	$R_{c,cal(s)}$	$R_{c,cal}$	$-R_{c,cal}$	$R_{c,k}$	$-R_{c,k}$	$R_{c,d}$	$-R_{c,d}$
2,2	3896	414	1948	276	2224	276	1588	197	1025	123

Skaičiavimo rezultatai

		Polių ilgiai	Pado alt.	Būtinas polio ilgis	Pado alt.
pagal	Rc,d, kN	0,2 m	117,75	2,2 m	115,8
pagal	-Rc,d, kN	2,2 m	115,75		

Betono sąnaudos

0,622 m^3

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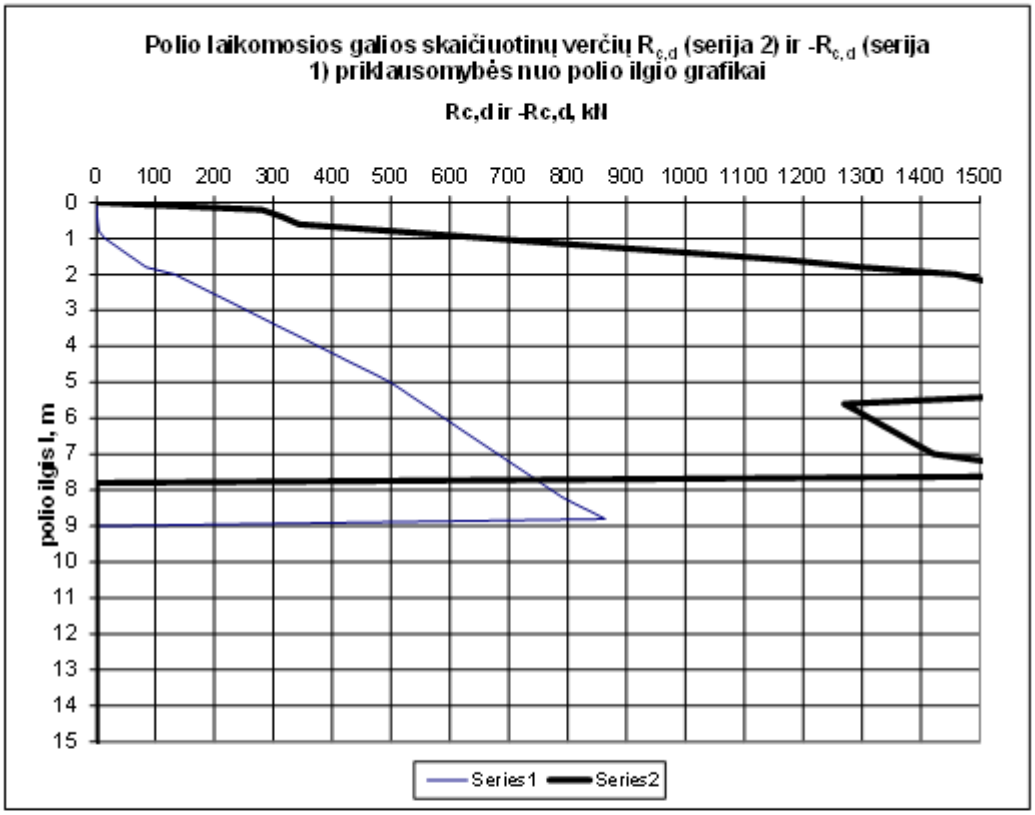
Objektas: Nemenčinė

Pagal GR- 3

Pagal EN 1997-1:2001(E) **1-as skaičiavimų atvejis**

Kombinacija 1: A1 "+" M1 "+" R1



Projektinės apkrovos

$R_{c,d}$, kN	115 kN
$-R_{c,d}$, kN	114 kN

Pasirinktas polis

Polio tipas	Vientiso sraigtinio grezimo
Skersmuo, b	600 mm
Skerspjūvis	Apskritas
Polio ilgis (skaičiuotas)	2,0 m

Koeficientai			γ_{Rb}	γ_{Rs}			ξ	ξ	γ_t	$\gamma_{s,t}$
			2	1,5			1,4	1,4	1,05	1,25
Polis	R_b	R_s	$R_{c,cal(b)}$	$R_{c,cal(s)}$	$R_{c,cal}$	$-R_{c,cal}$	$R_{c,k}$	$-R_{c,k}$	$R_{c,d}$	$-R_{c,d}$
2	0	0	0	0	0	0	0	0	0	0

Skaičiavimo rezultatai

	Polių ilgiai	Pado alt.	Būtinas polio ilgis	Pado alt.
pagal Rc,d, kN	2 m	116,0	2 m	116,0
pagal -Rc,d, kN	2 m	116,0		

Betono sąnaudos

0,565 m^3

Išvados:

- Atliktus skaičiavimus gauta, kad reikalingas poliaus ilgis min. 2,20m esant 600mm skersmeniui ties gręžiniu GR-3. Priimtas polius 3,0m ilgio ir 600mm skersmens tenkina laikomosios galios sąlygas.

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6.3 Portalų inkarinių varžtų laikomosios galios skaičiavimas

Portalų bazės inkariniai varžtai HPM30L tikrinami dviem atvejais, kai:
Ned = 114,87 kN, Vxd = 14,20 kN, Vyd = 12,90 kN
Ned = -104,18 kN, Vxd = -16,7 kN, Vyd = -13,00 kN.

Summary

Name	Stage	#	Load Case	Page No.	Max Utilization	Status
Column 1	Final	1	Nd=114,9, Mxd=0,0, Myd=0,0, Vxd=14,2, Vyd=12,9	4	72%	OK
	Final	2	Nd=-104,2, Mxd=0,0, Myd=0,0, Vxd=-16,7, Vyd=-13,0	5	3%	OK

Column 1

Note:

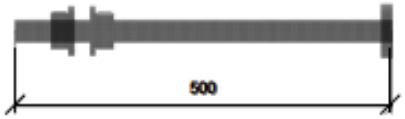
Number of Columns: 1

Peikko Products

Bolts: 2 x HPM30L

Totals

Product	Amount
HPM30L	2



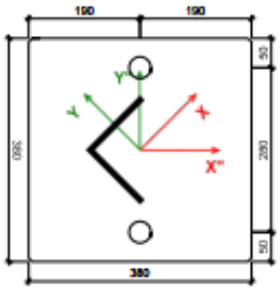
Minimum required torque value of nuts : T_{min} = 250 Nm
Maximum allowed torque value of nuts : T_{max} = 450 Nm
Bolt installation template: PPL30-2 280

Materials and Geometry

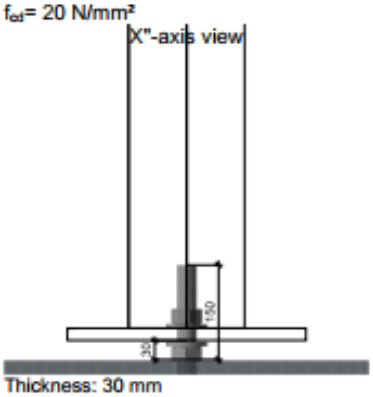
Column: 130x130

f_{cd}= 20 N/mm²

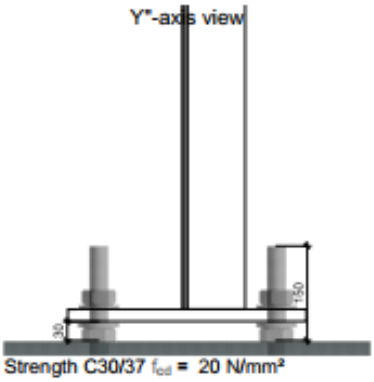
Plane View



X"-axis view



Y"-axis view



Grouting:

Thickness: 30 mm

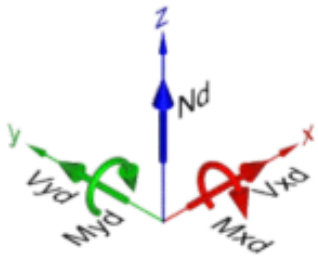
Strength C30/37 f_{cd} = 20 N/mm²

X; Y = local coordinate system of profile
X"; Y" = local coordinate system of anchors

Load Cases

NOTE: Loads are defined in the local coordinate system of the profile.

(Design loads)



Final Stage

#	Name	N_d [kN]	M_{xd} [kNm]	M_{yd} [kNm]	V_{xd} [kN]	V_{yd} [kN]
1		114,9	0,0	0,0	14,2	12,9
2		-104,2	0,0	0,0	-16,7	-13,0

Erection stage

No load case for this stage defined

Resistance Diagrams

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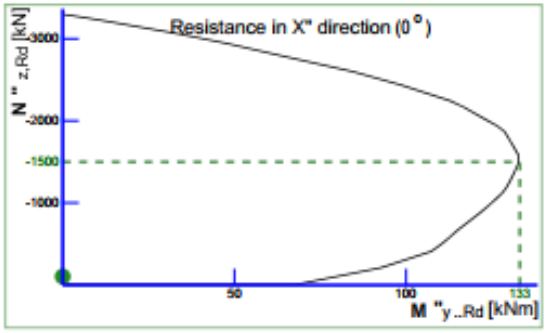
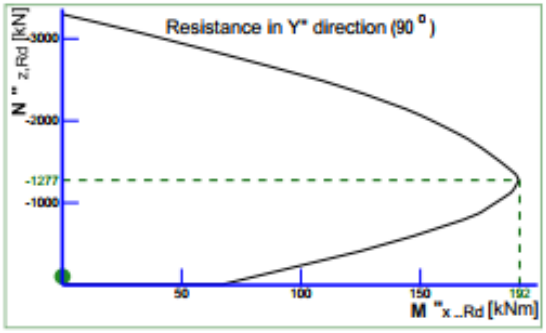




Base Structure

Concrete	C30/37
Uncracked	No
Aggregate size	16 mm
Footing dimension X-axis direction (b)	800 mm
Footing dimension Y-axis direction (h)	800 mm
Height of Footing	800 mm
Eccentricity of bolted column (e_x)	0 mm
Eccentricity of bolted column (e_y)	0 mm

Anchor Bolts Failure Verifications

Final Stage Bolts

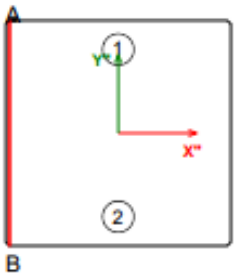
Load Case #1 : Nd=114,9, Mxd=0,0, Myd=0,0, Vxd=14,2, Vyd=12,9

Steel Failure: Sufficient capacity **Concrete failure: Sufficient capacity**

Steel failure verification

Design value of normal compressive force in the column	$N_{c,Ed}$	0	kN
Friction coefficient (between base plate and grout layer)	C_{fd}	0,2	
Joint friction resistance	$F_{f,Rd}$	0	kN
Resultant shear force	V_{sd}	19,18	kN
Resultant shear force taking account friction contribution	$V_{sd,f}$	19,18	kN

Neutral axis in (X"/Y") = A(-180,9 / 190,0); B(-181,0 / -190,0)
Resultant tension force in (X"/Y") = N $^{0}_{Ed}$(0,0/0,0)



Bolt Pos.	Acting axial force [kN]	Design tension resistance [kN]	Axial capacity usage [%]	Acting shear force [kN]	Design shear resistance [kN]	Shear capacity usage [%]	Interaction [%]
1	57,4	202,0	28,4	9,59	71,6	13,4	33,7
2	57,5	202,0	28,4	9,59	71,6	13,4	33,7

Concrete failure verifications

Proof	Load [kN]	Capacity [kN]	Utilization [%]	Status
Pull-Out Failure	57,5	450,5	12,8	Ok
Cone failure				Ok
Covered with reinforcement:				
1) Foundation (Plain Concrete)	114,9	134,3	85,5	

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2) Assigned Hanger Reinforcement	57,5	131,4	43,7	
3) Requirement of Strut and Tie Model	17,0	24,6	n/r	
Splitting Failure				Ok
Covered with reinforcement:				
1) Foundation (Plain Concrete)	114,9	151,2	76,0	
2)Assigned Splitting Reinforcement || X	57,4	196,7	29,0	
3)Assigned Splitting Reinforcement || Y	57,4	172,1	33,0	
Blow-Out Failure	0,0	0,0	n/r	Ok
Pry-out failure	19,2	268,7	7,1	Ok
Edge failure				Ok
Concrete decisive:				
1) -X (Left) Edge (Plain Concrete)	19,2	132,4	14,5	
2) +X (Right) Edge (Plain Concrete)	19,2	131,6	14,6	
3) +Y (Top) Edge (Plain Concrete)	19,2	59,3	32,4	
4) -Y (Bottom) Edge (Plain Concrete)	0,9	148,1	0,6	
5)Assigned Edge Reinforcement (-X)	4,6	0,0	n/r	
6)Assigned Edge Reinforcement (+X)	4,6	0,0	n/r	
7)Assigned Edge Reinforcement (+Y)	24,1	0,0	n/r	
8)Assigned Edge Reinforcement (-Y)	0,5	0,0	n/r	
Combined Resistance	$\beta_N^{2/3}+\beta_V^{2/3}\leq 1$		72,5	Ok

Explanation:

n/r - Verification of failure mode not required

n/a - Not applicable failure mode

(-) - Failure mode has no resistance to actions

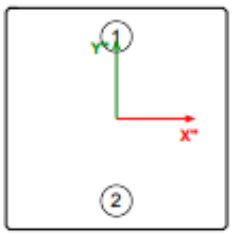
Load Case #2 : Nd=-104,2, Mxd=0,0, Myd=0,0, Vxd=-16,7, Vyd=-13,0

Steel Failure: Sufficient capacity **Concrete failure: Sufficient capacity**

Steel failure verification

Design value of normal compressive force in the column	$N_{c,Ed}$	-104,2	kN
Friction coefficient (between base plate and grout layer)	C_{fd}	0,2	
Joint friction resistance	$F_{f,Rd}$	20,84	kN
Resultant shear force	V_{sd}	21,16	kN
Resultant shear force taking account friction contribution	$V_{sd,f}$	0,32	kN

Resultant compression force (concrete) in (X"/Y") = F_{cc}(0,0/0,0)



Bolt Pos.	Acting axial force [kN]	Design tension resistance [kN]	Axial capacity usage [%]	Acting shear force [kN]	Design shear resistance [kN]	Shear capacity usage [%]	Interaction [%]
1	-3,82	202,0	1,9	0,162	71,6	0,2	n/r
2	-3,81	202,0	1,9	0,162	71,6	0,2	n/r

Concrete failure verifications

Proof	Load [kN]	Capacity [kN]	Utilization [%]	Status
Pull-Out Failure	0,0	0,0	0,0	Ok
Cone failure				Ok
Covered with reinforcement:				
1) Foundation (Plain Concrete)	0,0	0,0	n/r	
2) Assigned Hanger Reinforcement	0,0	131,4	0,0	

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3) Requirement of Strut and Tie Model	17,0	24,6	69,1	
Splitting Failure				Ok
Concrete decisive:				
1) Foundation (Plain Concrete)	0,0	0,0	n/r	
2)Assigned Splitting Reinforcement || X	0,0	196,7	n/r	
3)Assigned Splitting Reinforcement || Y	0,0	172,1	n/r	
Blow-Out Failure	0,0	0,0	n/r	Ok
Pry-out failure	0,3	268,7	0,1	Ok
Edge failure				Ok
Concrete decisive:				
1) -X (Left) Edge (Plain Concrete)	0,3	127,4	0,3	
2) +X (Right) Edge (Plain Concrete)	0,3	132,4	0,2	
3) +Y (Top) Edge (Plain Concrete)	0,0	148,1	0,0	
4) -Y (Bottom) Edge (Plain Concrete)	0,3	59,6	0,5	
5)Assigned Edge Reinforcement (-X)	0,1	0,0	n/r	
6)Assigned Edge Reinforcement (+X)	0,1	0,0	n/r	
7)Assigned Edge Reinforcement (+Y)	0,0	0,0	n/r	
8)Assigned Edge Reinforcement (-Y)	0,4	0,0	n/r	
Combined Resistance	$\beta_V \leq 1$		0,5	Ok

Explanation:

n/r - Verification of failure mode not required

n/a - Not applicable failure mode

(-) - Failure mode has no resistance to actions

Supplementary Bolt Reinforcement

Concrete side cover	35 mm
Concrete top cover	35 mm
Concrete bottom cover	50 mm
Rebar Material	B500B
f_{yd}= 434,8	

Hanger reinforcement for tension force

Calculated stirrups per bolt	2 Ø10
The stirrups are located with a radial distance to the leg not further than R	89 mm
Splitting reinforcement parallel to X ($A_{sp,x}$)	424 mm²
Splitting reinforcement parallel to Y ($A_{sp,y}$)	396 mm²

Detailing of required reinforcement must be executed according to product technical manual. See also CEN/TS 1992-4-2, Figure 2

Išvados:

- Parenkami pamatų inkariniai varžtai HPM30L.
- Nepalankiausiu apkrovų derinių apkrautų inkarinių varžtų išnaudojimas 72%.

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6.4 Polių armavimo ir armatūros inkarinio ilgio skaičiavimai

Tikrinamas portalų polių armavimas. Poliai portalams parinkti L=3,0m ir d=600mm. Armuoti 6 d16 armatūros strypais.

General

Design code: Eurocode 2
Analysis: Check section

Loads: N, Mx

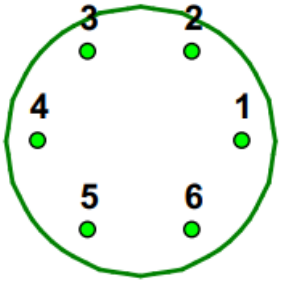
N>0 is compression !

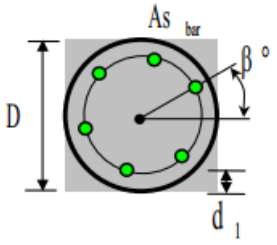
Section

Data [cm]

D =60

d1 =7





Materials

Concrete: C25/30
SSR: Rectangular

fck = 25.00 MPa
Ec = 30471.58 MPa
ecu = -3.500 o/oo

Reinforcing steel: S500
SSR: Standard

fyk = 500.00 MPa
Es = 200000.00 MPa
esu = 10.000 o/oo

Factors

Concrete: gama_c = 1.50
Steel: gama_s = 1.15

Reinforcement

Bars =6
beta = 0.00 deg
As,bar =2.01cm2

Loads

Load	N [kN]	Mx [kNm]
L1	-114	1
L2	104.2	1

Solve data

II order moments: No

Results: Legend

Np, Mp - Maximal permissible loads

Ratio = Applied load / Maximal permissible load

Load	Np [kN]	Mxp[kNm]	Ratio	Permissible

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L1	-503.18	4.41	0.227	Yes
L2	4278.47	41.06	0.024	Yes

Section properties

Reinforcement :

As,tot = 12.06 cm2

Concrete section:

Ac = 2822.27 cm2
Ic,x = 633850.86 cm4
Ic,y = 633850.86 cm4

R/C section:

Ared = 2889.36 cm2
Ired,x = 651597.69 cm4
Ired,y = 651597.69 cm4
rx = 15.02 cm
ry = 15.02 cm

Išvados:

- Priimtas poliaus armavimas pakankamas ir tenkina laikomosios galios sąlygas. Išnaudojimas 0,23 < 1,0.

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Skaičiuojamas inkaravimo ilgis galvenoje:

		VALUES			
	σ_{sd}:	500 MPa			
	f_{ck}:	30 MPa			
	γ_c:	1,5			
	α_{ct}:	1			
$0,3*(f_{ck})^{(2/3)}$	f_{ctm}:	2,89 MPa			
$0,7*f_{ctm}$	$f_{ctk\,0,05}$:	2,02 MPa			
$\alpha_{ct}*f_{ctk0,05}/\gamma_c$	f_{ctd}:	1,35 MPa			
Form of reinforcing bar:		**Straigth**			
		Tension bar		**Compression bar**	
		Poor bond conditions	Good bond conditions	Poor bond conditions	Good bond conditions
Coefficient realted to the quality of the bond condition and the bar during concreting:	μ_1:	0,7	1	0,7	1
Coefficient related to the bar diameter, when d≤32mm: μ_2=1,0; when d>32mm: μ_2=(132-d)/100:	μ_2:	1,00		1,00	
$2,25*\mu_1*\mu_2*f_{ctd}$	f_{bd}:	2,12 MPa	3,03 MPa	2,12 MPa	3,03 MPa
	d:	16 mm			
	α_1:	1,0		1,0	
1-0,15(c.d-d)/d if 0,7≤1-0,15*(c.d-d)/d≤1,0 0,7 if 1-0,15*(c.d-d)/d<0,7 1,0 if 1-0,15*(c.d-d)/d>1,0*	α_2:	0,775		1,0	
$\alpha_3=1-K\lambda$	α_3:	1,0		1,0	
	λ:	0			
	$\sum A_{st}$:	0			
	$\sum A_{st\,min}$:	0			
	A_s:	1			
	K:	0			
	α_4:	1,0		0,9	
	α_5:	1,000		-	
	p:	0 MPa			
	c_d:	40 mm			
$(d/4)*(\sigma_{sd}/f_{bd})$	$l_{b,rqd}$:	942 mm	659 mm	942 mm	659 mm
$\alpha_1*\alpha_2*\alpha_3*\alpha_4*\alpha_5*l_{b,rqd}$	l_{bd}:	730 mm	511 mm	847 mm	593 mm
$max(0,3*l_{b,rqd}; 10*d; 100mm)$	$l_{b,min,tens.}$:	282 mm	198 mm	-	-
$max(0,6*l_{b,rqd}; 10*d; 100mm)$	$l_{b,min,compr.}$:	-	-	565 mm	395 mm
$max(l_{bd}; l_{b,min,tens.}; l_{b,min,compr.})$	l_{bd}:	**730 mm**	**511 mm**	**848 mm**	**594 mm**
l_{bd}/d		**46**	**32**	**53**	**38**
	α_6:	1,5			
$\alpha_1*\alpha_2*\alpha_3*\alpha_4*\alpha_5*\alpha_6*l_{b,rqd}$	l_0:	1 095 mm	766 mm	1 271 mm	890 mm
$max(0,3*\alpha_6*l_{b,rqd}; 15*d; 200mm)$	$l_{0,min}$:	424 mm	297 mm	424 mm	297 mm
$max(l_0, l_{0,min})$	l_0:	**1 095 mm**	**767 mm**	**1 272 mm**	**890 mm**
l_0/d		**69**	**48**	**80**	**56**

Išvados:

- Reikalingas minimalus inkaravimo ilgis esant parinktai d16 armatūrai: tempimui – 511mm, gniuždymui – 594mm. Priimtas inakravimo ilgis 650mm tenkina laikomosios galios sąlygas.

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6.5 Galvenos armavimo skaičiavimai

Tikrinama galvena praspaudimui:

VALUES			COMMENTS
	V_{Ed}:	150 kN	- design force;
	M_{Ed}:	50 kNm	- design bending moment;
Sectional parameters:			
	h:	0,80 m	- hight of the section;
	a_{sx}:	50 mm	- distance between edge of the section and center of the long tension reinforcement;
	a_{sy}:	50 mm	- distance between edge of the section and center of the long tension reinforcement;
$h-a_{sx}$:	d_x:	0,75 m	- effective depth in x- direction of the control section;
$h-a_{sy}$:	d_y:	0,75 m	- effective depth in y- direction of the control section;
	α:	90 deg	- angle of punching reinforcement;
Longitudinal reinforcement:			
	n_{1x}:	6	- number of bars in x direction;
	d_{1x}:	12 mm	- diameter of the bar in x direction;
	b:	0,60 m	- width of the section for caculation of reinforcement ratio;
	n_{1y}:	6	- number of bars in y direction;
	d_{1y}:	12 mm	- diameter of the bar in y direction;
$(\pi \cdot d_{1x}^2 \cdot n_{1x})/4$:	A_{sx}:	6,79 cm2	- the area of all bars;
$A_{sx}/(b \cdot d_x)$:	ρ_x:	0,00151	
$(\pi \cdot d_{1y}^2 \cdot n_{1y})/4$:	A_{sy}:	6,79 cm2	- the area of all bars;
$A_{sy}/(b \cdot d_y)$:	ρ_y:	0,00151	
$(d_x+d_y)/2$	d_{sy}:	0,750 m	- the effective depth of the slab;
$SQRT(\rho_x \cdot \rho_y)$:	ρ:	0,00151	
Material properties:			
	f_{ck}:	30 MPa	- characteristic compressive cylinder strength of concrete at 28 days;
	γ_c:	1,5	- EN 1992-1-1, 2.4.2.4 (1);
	α_{cc}:	1,0	- is the coefficient taking account of long term effects on the compressive strength and of unfavorable effects, resulting from the way the load is applied;
	α_{ct}:	1,0	- is the coefficient taking account of long term effects on the tensile strength and of unfavorable effects, resulting from the way the load is applied;
	γ_s:	1,15	- EN 1992-1-1, 2.4.2.4 (1);
$f_{ck}+8MPa$:	f_{cm}:	38 MPa	- EN 1992-1-1, 3.1.3, table 3.1;
$22 \cdot (f_{cm}/10 \cdot MPa)^{0,3} \cdot GPa$:	E_{cm}:	32 837 MPa	- EN 1992-1-1, 3.1.3, table 3.1;
$\alpha_{cc} f_{ck}/\gamma_c$:	f_{cd}:	20,00 MPa	- EN 1992-1-1, 3.1.6 (1);
$0,3 \cdot (f_{ck} \cdot MPa^{-1})^{2/3}$ *if* $f_{ck} \leq 50$ *MPa* $2,12 \cdot \ln[1+(f_{cm} \cdot MPa^{-1} \cdot 10^{-1})]$ *otherwise*	f_{ctm}:	2,90 MPa	- EN 1992-1-1, 3.1.3, table 3.1;
$0,7 \cdot f_{ctm}$:	$f_{ctk,0.05}$:	2,03 MPa	- EN 1992-1-1, 3.1.3, table 3.1;
$\alpha_{ct} f_{ctk,0.05}/\gamma_c$:	f_{ctd}:	1,35 MPa	- EN 1992-1-1, 3.1.6 (7);
$250+0,25 \cdot d_{sy} \cdot 10^3$:	$f_{ywd,ef}$:	437,50 MPa	- EN 1992-1-1, 6.4.5 (1);
	$f_{ywd,lap}$:	200 MPa	- design stresses dependent or anchoring, splicing of reinforcement and crack width limitation;
$min(f_{ywd,lap}; f_{ywd,ef})$	f_{ywd}:	200 MPa	
Column form:		**A circle column**	
	-	0,0 mm	
	D.pile:	400,0 mm	- pile diameter;

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$1,5 \cdot d_{xy}$:		1 125 mm	- to correspond to the 1,5d in EN-1992-1-1 eq. 6.52, it is desirable to consider only the reinforcement within a radial band of 1,5d;
$2 \cdot d_{xy}$:		1 500 mm	
$0,3 \cdot d_{xy}$:		225,0 mm	- reinforcement should be placed 1,5d from the loaded perimeter (EN 1992-1-1, 9.4.3);
2·(0,3·d.xy)+D.pile:		850,0 mm	
	γ:	90,0 deg	- enter the required angle
2·(d.xy·2)+D.pile:	d_{max}:	3,400 m	- only reinforcement further than 0,2d inside the control perimeter should be included;
2·(d.xy·2)+D.pile-2·(d.xy-0,2):		3,100 m	
$0,2 \cdot d_{xy}$:		150,0 mm	
D.pile·π:	u_0:	1,257 m	- perimeter around face of the column;
dmax/2·(π/180·γ):	u_1:	2,670 m	- basic control perimeter;
	d:	8 mm	- punching reinforcement within radial band 1,5d (diameter / number of bars);
	n_p:	6 vnt	
$\pi \cdot d^2/4$:	A_{sp}:	0,503 cm2	- area of bar;
$n_p \cdot A_{sp}$:	A_{tot}:	3,0 cm2	- area of all needed bars;
Concrete punching resistance:			
	k_1:	0,15	
$0,18/\gamma_c$:	$C_{Rd,c}$:	0,12	
min(2, 1+SQRT(200/dxy)):	k:	1,516	
min(ρ;0,02):	ρ_l:	0,00151	
$C_{Rd,c} \cdot k \cdot (100 \cdot \rho \cdot f_{ck} \cdot MPa^{-1})^{1/3}$:	$v_{Rd,c1}$:	0,301 MPa	
$0,035 \cdot SQRT(k^3) \cdot SQRT(f_{ck} \cdot MPa^{-1}) \cdot MPa$:	$v_{Rd,c,min}$:	0,358 MPa	
$max(v_{Rd,c1}; v_{Rd,c,min})$:	$v_{Rd,c}$:	0,358 MPa	- the design value of the punching shear resistance of a slab without punching shear reinforcement along the control section considered;
0,6·(1-f_{ck}/250MPa):	v:	0,528	
		EC2	- choose a document of requirements (TRVFS or EC2);
0,5·u.0·d.xy·v·f.cd	$V_{Rd,max}$:	4 976,3 kN	- EN 1992-1-1 6.4.5 (3);
$V_{Ed}/V_{Rd,max}$:	Utilization:	0,036	
Required punching reinforcement:			
$c_1^2/2+c_1 \cdot c_2+4 \cdot c_2 \cdot d_{xy}+16 \cdot d_2+2 \cdot \pi \cdot d_{xy} \cdot c_1$:	W:	10,2000 m	
M_{Ed}/V_{Ed}:	e:	0,333333333	- eccentricity;
	k:	0,6	- a coefficient dependent on the ratio between the column dimensions, suitable values are tabulated in EN 1992-1-1, table 6.1;
1+0,6·π·e/(D.pile+4·d.xy):	β:	1,185	- EN 1992-1-1 6.4.3 (3), no moment to be transferred to column;
$\beta \cdot V_{Ed}/(u_1 \cdot d_{xy})$:	v_{Ed}:	0,0887 MPa	- the maximum punching shear stress, EN 1992-1-1 6.4.3 (3);
Check condition: $v_{Ed} > v_{Rd,c}$:		No punching reinforcement!	
$((v_{Ed}-0,75 \cdot v_{Rd,c}) \cdot u_2 \cdot d_{xy})/(f_{ywd} \cdot \sin(\alpha))$:	A_{sw}:	-	- needed punching reinforcement area of bars;
A_{sw}/A_{tot}:	Utilization:	-	
$v_{Ed}/v_{Rd,c}$:	Utilization:	0,248	

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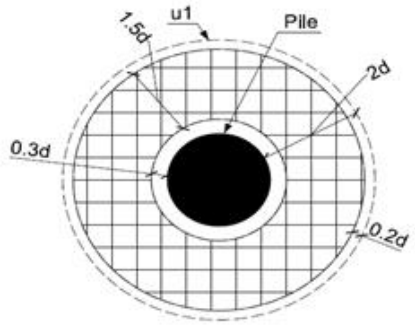


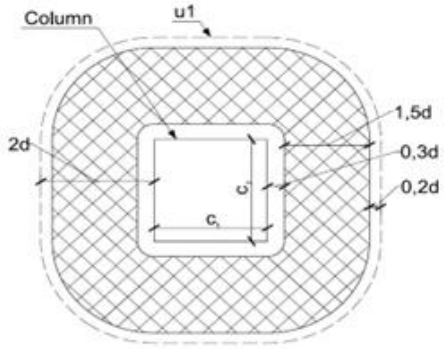


Table 6.2: Values of *k* for rectangular loaded areas

c_1/c_2	≤ 0,5	1,0	2,0	≥ 3,0
k	0,45	0,60	0,70	0,80

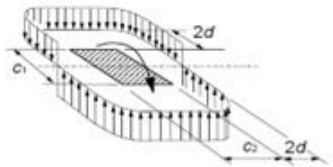
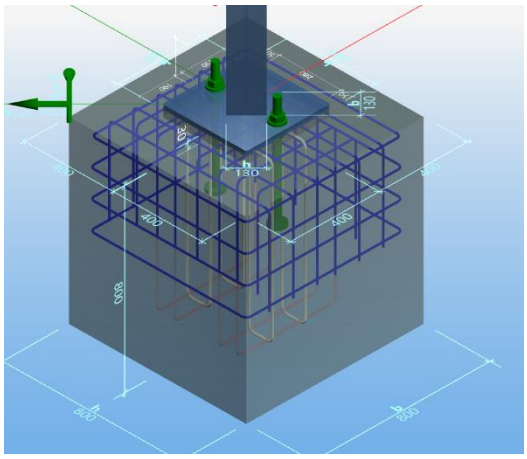


Figure 6.19: Shear distribution due to an unbalanced moment at a slab-internal column connection

Papildomas galvenos armavimas parenkamas pagal inkarinių varžtų skaičiavimus:



Prie kiekvieno inkarinio varžto papildomai reikia 2 vnt. d6 sankabų. Tai pat žemiau pateikiamas reikiamas armatūros kiekis dėl pleišėjimo:

Supplementary Bolt Reinforcement	
Concrete side cover	35 mm
Concrete top cover	35 mm
Concrete bottom cover	50 mm
Rebar Material	B500B
f_{yd}= 434,8	
Hanger reinforcement for tension force	
Calculated stirrups per bolt	2 Ø10
The stirrups are located with a radial distance to the leg not further than R	91 mm
Splitting reinforcement parallel to X ($A_{sp,x}$)	754 mm²
Splitting reinforcement parallel to Y ($A_{sp,y}$)	704 mm²

Detailing of required reinforcement must be executed according to product technical manual. See also CEN/TS 1992-4-2, Figure 2

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Išvados:

- Galvenos stiprumas praspaudimo sąlygai pakankamas su 0,25 < 1,0 išnaudojimu.
- Galvenos armavimas tenkina praspaudimo, stiprumo sąlygas.
- Papildomas galvenos armavimas tenkina minimalius armavimo reikalavimus pagal inkarinių varžtų skaičiavimus.

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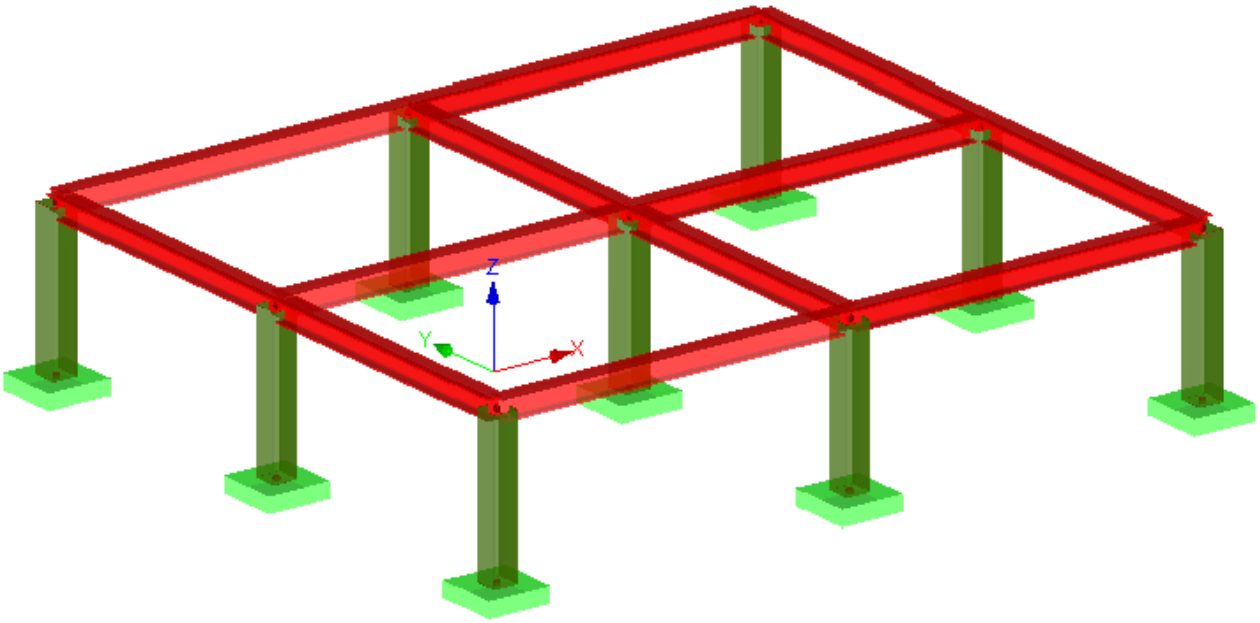
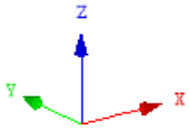
7 110KV KILNOJAMO VP MODULIO PAMATŲ KONSTRUKCIJŲ SKAIČIAVIMAI

7.1 Plieninių rėmo konstrukcijų skaičiavimai

Kilnojamo VP modulio pamatų konstrukcijos sudarytos iš plieninio rėmo ir pamatinės plokštės. Plieninio rėmo konstrukcijos suprojektuotos naudojant europinį plieną ir europinio tipo profilius. Naudojamas S275J2 stiprumo klasės plienas. Konstrukcijų elementai tarpusavyje jungiami virintiniais sujungimais ir varžtais.





1.3 Materials

Matl. No.	Modulus E [kN/cm²]	Modulus G [kN/cm²]	Poisson's Ratio n [-]	Spec. Weight g [kN/m³]	Coeff. of Th. Exp. a [1/°C]	Partial Factor γ_M [-]	Material Model
1	Steel S 275 J2 | EN 10025-2:2004-11						
	21000.00	8076.92	0.300	78.50	1.20E-05	1.00	Isotropic Linear Elastic
	S275J2						
4	Concrete C25/30 | EN 1992-1-1:2004/A1:2014						
	3100.00	1291.67	0.200	25.00	1.00E-05	1.00	Isotropic Linear Elastic
	C25/30						

1.7 Nodal Supports

Support No.	Nodes No.	Axis System	Column in Z	Support Conditions u_X	u_Y	u_Z	j_X	j_Y	j_Z
1	239,245,251,257,263,269,275,281,287	Global X,Y,Z	-	x	x	x	x	x	x

1.13 Cross-Sections

Section No.	Matl. No.	J [cm⁴] A [cm²]	I_y [cm⁴] A_y [cm²]	I_z [cm⁴] A_z [cm²]	Principal Axes a [°]	Rotation a' [°]	Overall Dimensions [mm] Width b	Height h
5	HE B 160 | DIN 1025-2:1995							

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1.13 Cross-Sections

Section No.	Matl. No.	J [cm⁴] A [cm²]	I_y [cm⁴] A_y [cm²]	I_z [cm⁴] A_z [cm²]	Principal Axes a [°]	Rotation a' [°]	Overall Dimensions [mm] Width b	Height h
	1	31.40	2490.00	889.00	0.00	0.00	160.0	160.0
		54.30	34.72	10.81				
	HEB160							
8	QRO 200x6 | EN 10219-2:2006							
	1	4459.00	2833.00	2833.00	0.00	0.00	200.0	200.0
		45.60	19.56	19.56				

1.17 Members

Mbr. No.	Line No.	Member	Rotation Type	Rotation b [°]	Cross-Section Start	Cross-Section End	Hinge No. Start	Hinge No. End	Ecc. No.	Div. No.	Length L [m]	
37	37	Beam	Angle	180.00	5	5	-	-	-	-	2.875	X
46	46	Beam	Angle	180.00	5	5	-	-	-	-	2.875	X
55	55	Beam	Angle	180.00	5	5	-	-	-	-	2.875	X
64	64	Beam	Angle	180.00	5	5	-	-	-	-	2.875	X
73	73	Beam	Angle	180.00	5	5	-	-	-	-	2.875	X
84	84	Beam	Angle	180.00	5	5	-	-	-	-	2.875	X
105	105	Beam	Angle	180.00	5	5	-	-	-	-	4.850	Y
130	130	Beam	Angle	180.00	5	5	-	-	-	-	4.850	Y
179	179	Beam	Angle	180.00	5	5	-	-	-	-	4.850	Y
216	216	Beam	Angle	90.00	8	8	-	-	-	-	1.215	Z
221	221	Beam	Angle	90.00	8	8	-	-	-	-	1.215	Z
226	226	Beam	Angle	90.00	8	8	-	-	-	-	1.215	Z
231	231	Beam	Angle	90.00	8	8	-	-	-	-	1.215	Z
236	236	Beam	Angle	90.00	8	8	-	-	-	-	1.215	Z
241	241	Beam	Angle	90.00	8	8	-	-	-	-	1.215	Z
246	246	Beam	Angle	90.00	8	8	-	-	-	-	1.215	Z
251	251	Beam	Angle	90.00	8	8	-	-	-	-	1.215	Z
256	256	Beam	Angle	90.00	8	8	-	-	-	-	1.215	Z

2.1 Load Cases

Load Case	Load Case Description	EN 1990 | CEN Action Category	Self-Weight - Factor in Direction Active	X	Y	Z
LC1	Nuosavas svoris	Permanent	x	0.000	0.000	-1.000
LC2	Spintu apkrova	Permanent	-			
LC3	Namelio apkrova	Permanent	-			

2.1.1 Load Cases - Calculation Parameters

Load Case	Load Case Description	Calculation Parameters			
LC1	Nuosavas svoris	Method of analysis	: x	Geometrically linear analysis
		Method for solving system of nonlinear algebraic equations	: x	Newton-Raphson
		Activate stiffness factors of:	: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
LC2	Spintu apkrova	Method of analysis	: x	Geometrically linear analysis
		Method for solving system of nonlinear algebraic equations	: x	Newton-Raphson
		Activate stiffness factors of:	: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
LC3	Namelio apkrova	Method of analysis	: x	Geometrically linear analysis
		Method for solving system of nonlinear algebraic equations	: x	Newton-Raphson
		Activate stiffness factors of:	: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)

2.5 Load Combinations

Load Combin.	DS	Load Combination Description	No.	Factor	Load Case	
CO1	STR	1.35*LC1 + 1.35*LC2 + 1.35*LC3	1	1.35	LC1	Nuosavas svoris
			2	1.35	LC2	Spintu apkrova
			3	1.35	LC3	Namelio apkrova
CO2	S Ch	LC1 + LC2 + LC3	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC2	Spintu apkrova
			3	1.00	LC3	Namelio apkrova

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2.5 Load Combinations

Load Combin.	DS	Load Combination Description	No.	Factor	Load Case	
CO3	S Fr	LC1 + LC2 + LC3	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC2	Spintu apkrova
			3	1.00	LC3	Namelio apkrova
CO4	S Qp	LC1 + LC2 + LC3	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC2	Spintu apkrova
			3	1.00	LC3	Namelio apkrova

2.5.2 Load Combinations - Calculation Parameters

Load Combin.	Description	Calculation Parameters		
CO1	1.35*LC1 + 1.35*LC2 + 1.35*LC3	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO2	LC1 + LC2 + LC3	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO3	LC1 + LC2 + LC3	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO4	LC1 + LC2 + LC3	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
				x Normal forces N
				x Shear forces V_y and V_z
				x Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)

2.7 Result Combinations

Result Combin	Description	Loading
RC1	ULS (STR/GEO) - Permanent / transient - Eq. 6.10	CO1/p
RC2	SLS - Characteristic	CO2/p
RC3	SLS - Frequent	CO3/p
RC4	SLS - Quasi-permanent	CO4/p

LC2

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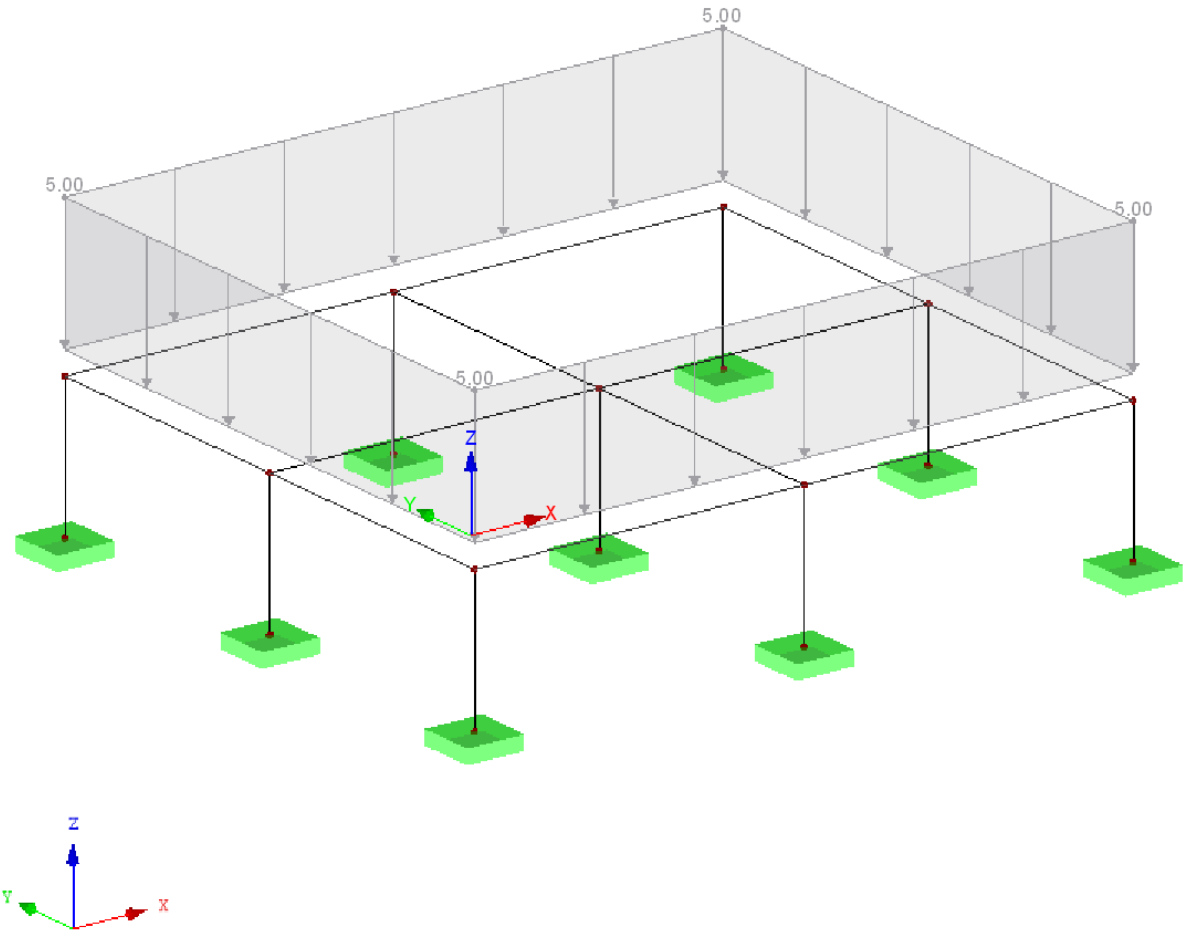
LC2 : Spintu apkrova
Loads [kN/m^2]



LC2: Spintu apkrova

3.15 Generated Loads

No.	Load Description			
1	From Area Loads via Plane			
	Area load direction	Perpendicular to the plane	:	x z
	Member load direction	Direction of generated member loads:	:	x Local in x, y, z
	Area of load application	x Fully closed plane		
	Load distribution type:	x Combined		

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3.15 Generated Loads

No.	Load Description				
	Area load magnitude	x Constant		:	5.00 kN/m²
	Boundary of the area load plane	Corner nodes		:	276,288,252,240
		Note		:	Each row in the drop down list box denotes one plane
	Generating total loads in direction	S P Areas	X	:	0.000 kN
			Y	:	0.000 kN
			Z	:	-139.438 kN
		SP Members	X	:	0.000 kN
			Y	:	0.000 kN
			Z	:	-139.438 kN
	Total moment to the origin	S M Areas	X	:	-355.566 kNm
			Y	:	418.312 kNm
			Z	:	0.000 kNm
		SM Members	X	:	-355.566 kNm
			Y	:	418.313 kNm
			Z	:	0.000 kNm
	Cells selected for generating	S number of cells		:	4
		S cell area		:	27.887 m²
	Convert loads to members No.			:	37,46,55,64,73,84,105,130, 179

Model
LC3
Namelio apkrova

3.15 Generated Loads

No.	Load Description				
1	From Area Loads via Plane				
	Area load direction	Perpendicular to the plane		:	x z
	Member load direction	Direction of generated member loads:		:	x Local in x, y, z
	Area of load application	x Fully closed plane			
	Load distribution type:	x Combined			
	Area load magnitude	x Constant		:	2.00 kN/m²
	Boundary of the area load plane	Corner nodes		:	276,288,252,240
		Note		:	Each row in the drop down list box denotes one plane
	Generating total loads in direction	S P Areas	X	:	0.000 kN
			Y	:	0.000 kN
			Z	:	-55.775 kN
		SP Members	X	:	0.000 kN
			Y	:	0.000 kN
			Z	:	-55.775 kN
	Total moment to the origin	S M Areas	X	:	-142.226 kNm
			Y	:	167.325 kNm
			Z	:	0.000 kNm
		SM Members	X	:	-142.226 kNm
			Y	:	167.325 kNm
			Z	:	0.000 kNm
	Cells selected for generating	S number of cells		:	4
		S cell area		:	27.887 m²
	Convert loads to members No.			:	37,46,55,64,73,84,105,130, 179

Model

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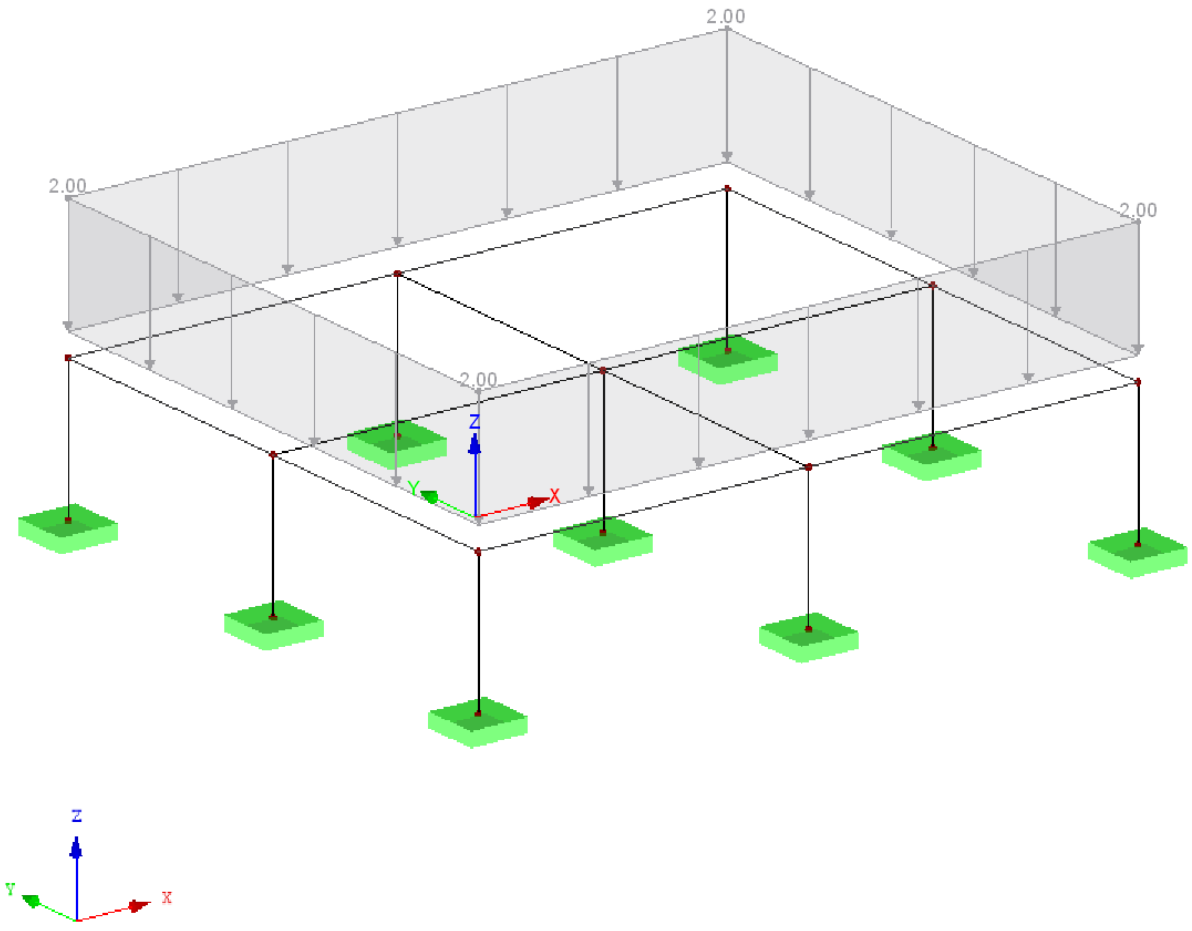
LC3 : Namelio apkrova
Loads [kN/m^2]



4.1 Nodes - Support Forces

Result Combinations

Node No.	RC		Support Forces [kN] $P_{X'}$	$P_{Y'}$	$P_{Z'}$	Support Moments [kNm] $M_{X'}$	$M_{Y'}$	$M_{Z'}$	
239	RC1	Max	-4.78	-2.90	-16.97	0.95	-1.54	0.00	
									ULS (STR/GEO) - Permanent / transient - Eq. 6.10
		Min	-4.78	-2.90	-16.97	0.95	-1.54	0.00	
									ULS (STR/GEO) - Permanent / transient - Eq. 6.10
	RC2	Max	-3.54	-2.15	-12.57	0.70	-1.14	0.00	SLS - Characteristic

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7.1 Nodes - Support Forces

Result Combi

Node No.	RC		Support Forces [kN] $P_{X'}$	$P_{Y'}$	$P_{Z'}$	Support Moments [kNm] $M_{X'}$	$M_{Y'}$	$M_{Z'}$	
		Min	-3.54	-2.15	-12.57	0.70	-1.14	0.00	SLS - Characteristic
	RC3	Max	-3.54	-2.15	-12.57	0.70	-1.14	0.00	SLS - Frequent
		Min	-3.54	-2.15	-12.57	0.70	-1.14	0.00	SLS - Frequent
	RC4	Max	-3.54	-2.15	-12.57	0.70	-1.14	0.00	SLS - Quasi-permanent
		Min	-3.54	-2.15	-12.57	0.70	-1.14	0.00	SLS - Quasi-permanent
245	RC1	Max	0.00	-5.61	-36.37	1.83	0.00	0.00	
									ULS (STR/GEO) - Permanent / transient - Eq. 6.10
		Min	0.00	-5.61	-36.37	1.83	0.00	0.00	
									ULS (STR/GEO) - Permanent / transient - Eq. 6.10
	RC2	Max	0.00	-4.15	-26.94	1.35	0.00	0.00	SLS - Characteristic
		Min	0.00	-4.15	-26.94	1.35	0.00	0.00	SLS - Characteristic
	RC3	Max	0.00	-4.15	-26.94	1.35	0.00	0.00	SLS - Frequent
		Min	0.00	-4.15	-26.94	1.35	0.00	0.00	SLS - Frequent
	RC4	Max	0.00	-4.15	-26.94	1.35	0.00	0.00	SLS - Quasi-permanent
		Min	0.00	-4.15	-26.94	1.35	0.00	0.00	SLS - Quasi-permanent
251	RC1	Max	4.78	-2.90	-16.97	0.95	1.54	0.00	
									ULS (STR/GEO) - Permanent / transient - Eq. 6.10
		Min	4.78	-2.90	-16.97	0.95	1.54	0.00	
									ULS (STR/GEO) - Permanent / transient - Eq. 6.10
	RC2	Max	3.54	-2.15	-12.57	0.70	1.14	0.00	SLS - Characteristic
		Min	3.54	-2.15	-12.57	0.70	1.14	0.00	SLS - Characteristic
	RC3	Max	3.54	-2.15	-12.57	0.70	1.14	0.00	SLS - Frequent
		Min	3.54	-2.15	-12.57	0.70	1.14	0.00	SLS - Frequent
	RC4	Max	3.54	-2.15	-12.57	0.70	1.14	0.00	SLS - Quasi-permanent
		Min	3.54	-2.15	-12.57	0.70	1.14	0.00	SLS - Quasi-permanent
257	RC1	Max	-9.25	0.00	-35.40	0.00	-2.99	0.00	
									ULS (STR/GEO) - Permanent / transient - Eq. 6.10
		Min	-9.25	0.00	-35.40	0.00	-2.99	0.00	
									ULS (STR/GEO) - Permanent / transient - Eq. 6.10
	RC2	Max	-6.85	0.00	-26.22	0.00	-2.21	0.00	SLS - Characteristic
		Min	-6.85	0.00	-26.22	0.00	-2.21	0.00	SLS - Characteristic
	RC3	Max	-6.85	0.00	-26.22	0.00	-2.21	0.00	SLS - Frequent
		Min	-6.85	0.00	-26.22	0.00	-2.21	0.00	SLS - Frequent
	RC4	Max	-6.85	0.00	-26.22	0.00	-2.21	0.00	SLS - Quasi-permanent
		Min	-6.85	0.00	-26.22	0.00	-2.21	0.00	SLS - Quasi-permanent
263	RC1	Max	0.00	0.00	-75.70	0.00	0.00	0.00	
									ULS (STR/GEO) - Permanent / transient - Eq. 6.10
		Min	0.00	0.00	-75.70	0.00	0.00	0.00	
									ULS (STR/GEO) - Permanent / transient - Eq. 6.10
	RC2	Max	0.00	0.00	-56.08	0.00	0.00	0.00	SLS - Characteristic
		Min	0.00	0.00	-56.08	0.00	0.00	0.00	SLS - Characteristic
	RC3	Max	0.00	0.00	-56.08	0.00	0.00	0.00	SLS - Frequent
		Min	0.00	0.00	-56.08	0.00	0.00	0.00	SLS - Frequent
	RC4	Max	0.00	0.00	-56.08	0.00	0.00	0.00	SLS - Quasi-permanent
		Min	0.00	0.00	-56.08	0.00	0.00	0.00	SLS - Quasi-permanent
269	RC1	Max	9.25	0.00	-35.40	0.00	2.99	0.00	
									ULS (STR/GEO) - Permanent / transient - Eq. 6.10
		Min	9.25	0.00	-35.40	0.00	2.99	0.00	
									ULS (STR/GEO) - Permanent / transient - Eq. 6.10
	RC2	Max	6.85	0.00	-26.22	0.00	2.21	0.00	SLS - Characteristic
		Min	6.85	0.00	-26.22	0.00	2.21	0.00	SLS - Characteristic
	RC3	Max	6.85	0.00	-26.22	0.00	2.21	0.00	SLS - Frequent
		Min	6.85	0.00	-26.22	0.00	2.21	0.00	SLS - Frequent
	RC4	Max	6.85	0.00	-26.22	0.00	2.21	0.00	SLS - Quasi-permanent
		Min	6.85	0.00	-26.22	0.00	2.21	0.00	SLS - Quasi-permanent
275	RC1	Max	-4.78	2.90	-16.97	-0.95	-1.54	0.00	
									ULS (STR/GEO) - Permanent / transient - Eq. 6.10
		Min	-4.78	2.90	-16.97	-0.95	-1.54	0.00	
									ULS (STR/GEO) - Permanent / transient - Eq. 6.10
	RC2	Max	-3.54	2.15	-12.57	-0.70	-1.14	0.00	SLS - Characteristic
		Min	-3.54	2.15	-12.57	-0.70	-1.14	0.00	SLS - Characteristic
	RC3	Max	-3.54	2.15	-12.57	-0.70	-1.14	0.00	SLS - Frequent
		Min	-3.54	2.15	-12.57	-0.70	-1.14	0.00	SLS - Frequent
	RC4	Max	-3.54	2.15	-12.57	-0.70	-1.14	0.00	SLS - Quasi-permanent
		Min	-3.54	2.15	-12.57	-0.70	-1.14	0.00	SLS - Quasi-permanent
281	RC1	Max	0.00	5.61	-36.37	-1.83	0.00	0.00	
									ULS (STR/GEO) - Permanent / transient - Eq. 6.10
		Min	0.00	5.61	-36.37	-1.83	0.00	0.00	

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Result Combi

7.1 Nodes - Support Forces

Node No.	RC		Support Forces [kN] $P_{X'}$	$P_{Y'}$	$P_{Z'}$	Support Moments [kNm] $M_{X'}$	$M_{Y'}$	$M_{Z'}$	
									ULS (STR/GEO) - Permanent / transient - Eq. 6.10
	RC2	Max	0.00	4.15	-26.94	-1.35	0.00	0.00	SLS - Characteristic
		Min	0.00	4.15	-26.94	-1.35	0.00	0.00	SLS - Characteristic
	RC3	Max	0.00	4.15	-26.94	-1.35	0.00	0.00	SLS - Frequent
		Min	0.00	4.15	-26.94	-1.35	0.00	0.00	SLS - Frequent
	RC4	Max	0.00	4.15	-26.94	-1.35	0.00	0.00	SLS - Quasi-permanent
		Min	0.00	4.15	-26.94	-1.35	0.00	0.00	SLS - Quasi-permanent
287	RC1	Max	4.78	2.90	-16.97	-0.95	1.54	0.00	
									ULS (STR/GEO) - Permanent / transient - Eq. 6.10
		Min	4.78	2.90	-16.97	-0.95	1.54	0.00	
									ULS (STR/GEO) - Permanent / transient - Eq. 6.10
	RC2	Max	3.54	2.15	-12.57	-0.70	1.14	0.00	SLS - Characteristic
		Min	3.54	2.15	-12.57	-0.70	1.14	0.00	SLS - Characteristic
	RC3	Max	3.54	2.15	-12.57	-0.70	1.14	0.00	SLS - Frequent
		Min	3.54	2.15	-12.57	-0.70	1.14	0.00	SLS - Frequent
	RC4	Max	3.54	2.15	-12.57	-0.70	1.14	0.00	SLS - Quasi-permanent
		Min	3.54	2.15	-12.57	-0.70	1.14	0.00	SLS - Quasi-permanent

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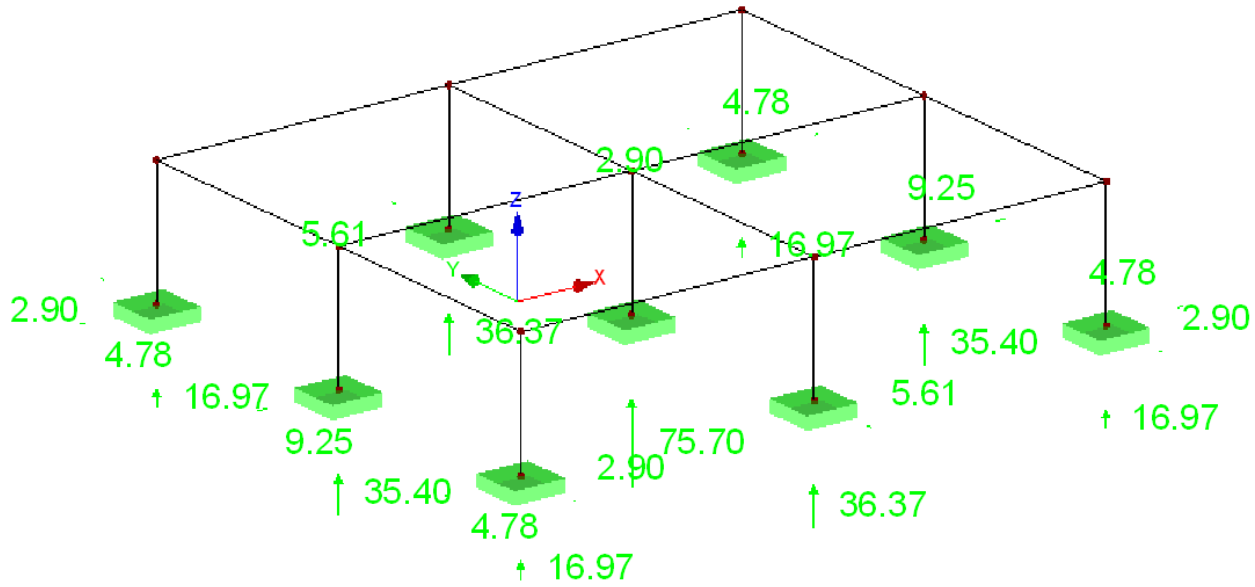
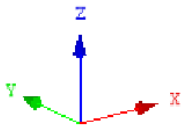
Support Reactions

RC1 : ULS (STR/GEO) - Permanent / transient - Eq. 6.10
Support Reactions[kN]
Result Combinations: Max Values





Max P-X': 9.25, Min P-X': -9.25 kN
Max P-Y': 5.61, Min P-Y': -5.61 kN
Max P-Z': -16.97, Min P-Z': -75.70 kN

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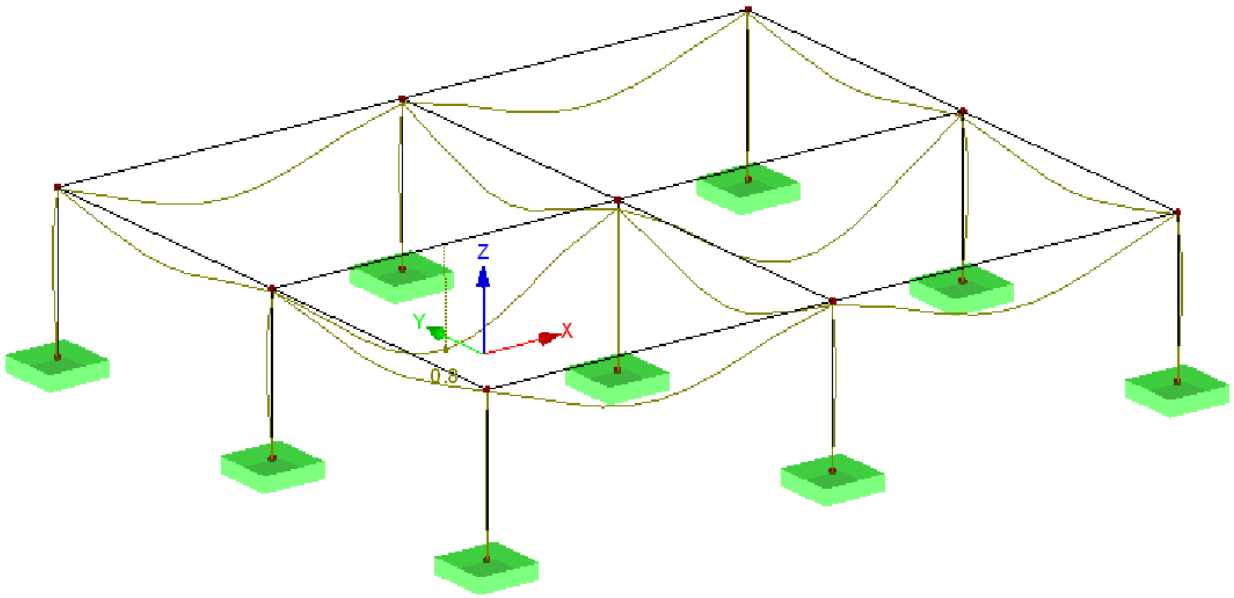
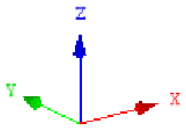
obal Deformations u

RC2 : SLS - Characteristic
Global Deformations u [mm]
Result Combinations: Max Values





Factor of deformations: 910.00
Max u: 0.8, Min u: 0.0 mm

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--STEEL EC3
CA1
Design of steel members
according to Eurocode 3

1.1 General Data

Members to design:	All	
Sets of members to design:		
National Annex:	CEN	
Ultimate Limit State Design		
Result combinations to design:	RC1	ULS (STR/GEO) - Permanent / transient - Eq. 6.10
Serviceability Limit State Design		
Result combinations to design:	RC2	SLS - Characteristic

1.2 Materials

Matl. No.	Material Description	E- Modulus E [kN/cm²]	Shear Modulus G [kN/cm²]	Poisson's Ratio n [-]	Yield Stress f_{yk} [kN/cm²]	Max. Thickness t [mm]
1	Steel S 275 J2 | EN 10025-2:2004-11	21000.00	8076.92	0.300	27.50	3.0
					27.50	16.0
					26.50	40.0
					25.50	63.0
					24.50	80.0
					23.50	100.0
					22.50	150.0
					21.50	200.0
	S275J2					

1.3 Cross-Sections

Sect. No.	Matl. No.	Cross-Section Description	Cross-Section Type	Max Design Ratio	Comment
5	1	HE B 160 | DIN 1025-2:1995	I-section rolled	0.18	HEB160
8	1	QRO 200x6 | EN 10219-2:2006	Box rolled	0.09	

1.5 Effective Lengths - Members

Member No.	Buckling	Buckling About Axis y			Buckling About Axis z			Lateral-Torsional Buckling				
	Possible	Possible	$k_{cr,y}$	$L_{cr,y}$ [m]	Possible	$k_{cr,z}$	$L_{cr,z}$ [m]	Possible	k_z	k_w	L_w [m]	L_T [m]
37	x	x	1.00	2.875	x	1.00	2.875	x	1.0	1.0	2.875	2.875
46	x	x	1.00	2.875	x	1.00	2.875	x	1.0	1.0	2.875	2.875
55	x	x	1.00	2.875	x	1.00	2.875	x	1.0	1.0	2.875	2.875
64	x	x	1.00	2.875	x	1.00	2.875	x	1.0	1.0	2.875	2.875
73	x	x	1.00	2.875	x	1.00	2.875	x	1.0	1.0	2.875	2.875
84	x	x	1.00	2.875	x	1.00	2.875	x	1.0	1.0	2.875	2.875
105	x	x	1.00	4.850	x	1.00	4.850	x	1.0	1.0	4.850	4.850
130	x	x	1.00	4.850	x	1.00	4.850	x	1.0	1.0	4.850	4.850
179	x	x	1.00	4.850	x	1.00	4.850	x	1.0	1.0	4.850	4.850
216	x	x	1.00	1.215	x	1.00	1.215	-	1.0	1.0	1.215	1.215
221	x	x	1.00	1.215	x	1.00	1.215	-	1.0	1.0	1.215	1.215
226	x	x	1.00	1.215	x	1.00	1.215	-	1.0	1.0	1.215	1.215
231	x	x	1.00	1.215	x	1.00	1.215	-	1.0	1.0	1.215	1.215
236	x	x	1.00	1.215	x	1.00	1.215	-	1.0	1.0	1.215	1.215
241	x	x	1.00	1.215	x	1.00	1.215	-	1.0	1.0	1.215	1.215
246	x	x	1.00	1.215	x	1.00	1.215	-	1.0	1.0	1.215	1.215
251	x	x	1.00	1.215	x	1.00	1.215	-	1.0	1.0	1.215	1.215
256	x	x	1.00	1.215	x	1.00	1.215	-	1.0	1.0	1.215	1.215

1.9 Serviceability Data

No.	Reference to	Members/Sets No.	Reference Length Manually	Reference Length l [m]	Direct.	Precamber e_0 [mm]	Beam Type
1	Member	37	-	2.875	y, z	0.0	Beam
2	Member	46	-	2.875	y, z	0.0	Beam
3	Member	55	-	2.875	y, z	0.0	Beam
4	Member	64	-	2.875	y, z	0.0	Beam
5	Member	73	-	2.875	y, z	0.0	Beam
6	Member	84	-	2.875	y, z	0.0	Beam
7	Member	105	-	4.850	y, z	0.0	Beam
8	Member	130	-	4.850	y, z	0.0	Beam
9	Member	179	-	4.850	y, z	0.0	Beam

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2.9 Serviceability Data

No.	Reference to	Members/Sets No.	Reference Length Manually	Reference Length l [m]	Direct.	Precamber e_0 [mm]	Beam Type
10	Member	216	-	1.215	y, z	0.0	Beam
11	Member	221	-	1.215	y, z	0.0	Beam
12	Member	226	-	1.215	y, z	0.0	Beam
13	Member	231	-	1.215	y, z	0.0	Beam
14	Member	236	-	1.215	y, z	0.0	Beam
15	Member	241	-	1.215	y, z	0.0	Beam
16	Member	246	-	1.215	y, z	0.0	Beam
17	Member	251	-	1.215	y, z	0.0	Beam
18	Member	256	-	1.215	y, z	0.0	Beam

2.2 Design by Cross-Section

Sect. No.	Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
5	HE B 160 | DIN 1025-2:1995 - HEB160						
	73	0.000	RC1	0.01	£ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	179	2.425	RC1	0.04	£ 1	CS111)	Cross-section check - Bending about y-axis acc. to 6.2.5 - Class 1 or 2
	46	0.000	RC1	0.08	£ 1	CS121)	Cross-section check - Shear force in z-axis acc. to 6.2.6
	37	0.000	RC1	0.00	£ 1	CS126)	Cross-section check - Shear buckling acc. to 6.2.6(6)
	179	2.425	RC1	0.04	£ 1	CS141)	Cross-section check - Bending and shear force acc. to 6.2.5 and 6.2.8
	46	0.000	RC1	0.14	£ 1	CS181)	Cross-section check - Bending, shear and axial force acc. to 6.2.9.1
	130	2.425	RC1	0.18	£ 1	ST331)	Stability analysis - Lateral torsional buckling acc. to 6.3.2.1 and 6.3.2.3 - I-Section
	37	0.000	RC2	0.00	£ 1	SE400)	Serviceability - Negligible deformations
	73	1.438	RC2	0.08	£ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - z-direction
	105	2.425	RC2	0.00	£ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - y-direction
8	QRO 200x6 | EN 10219-2:2006						
	236	0.000	RC1	0.06	£ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	221	0.405	RC1	0.02	£ 1	CS121)	Cross-section check - Shear force in z-axis acc. to 6.2.6
	241	0.405	RC1	0.03	£ 1	CS123)	Cross-section check - Shear force in y-axis acc. to 6.2.6
	216	0.000	RC1	0.00	£ 1	CS126)	Cross-section check - Shear buckling acc. to 6.2.6(6)
	221	1.215	RC1	0.05	£ 1	CS181)	Cross-section check - Bending, shear and axial force acc. to 6.2.9.1
	241	1.215	RC1	0.09	£ 1	CS201)	Cross-section check - Bending about z-axis, shear and axial force acc. to 6.2.9.1
	226	1.215	RC1	0.01	£ 1	CS221)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9
	236	0.000	RC1	0.06	£ 1	ST301)	Stability analysis - Flexural buckling about y-axis acc. to 6.3.1.1 and 6.3.1.2(4)
	236	0.000	RC1	0.06	£ 1	ST311)	Stability analysis - Flexural buckling about z-axis acc. to 6.3.1.1 and 6.3.1.2(4)
	241	0.000	RC1	0.07	£ 1	ST364)	Stability analysis - Bending and compression acc. to 6.3.3, Method 2
	216	0.000	RC2	0.00	£ 1	SE400)	Serviceability - Negligible deformations
	221	0.810	RC2	0.01	£ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - z-direction
	231	0.810	RC2	0.02	£ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - y-direction

2.4 Design by Member

Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
37	Cross-section No. 5 - HE B 160 | DIN 1025-2:1995					
	0.000	RC1	0.00	Ł 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.04	£ 1	CS121)	Cross-section check - Shear force in z-axis acc. to 6.2.6
	0.000	RC1	0.00	Ł 1	CS126)	Cross-section check - Shear buckling acc. to 6.2.6(6)
	0.000	RC1	0.07	£ 1	CS181)	Cross-section check - Bending, shear and axial force acc. to 6.2.9.1
	0.000	RC1	0.07	Ł 1	ST331)	Stability analysis - Lateral torsional buckling acc. to 6.3.2.1 and 6.3.2.3 - I-Section
	0.000	RC2	0.00	£ 1	SE400)	Serviceability - Negligible deformations
	1.438	RC2	0.04	Ł 1	SE401)	Serviceability - Combination of actions 'Characteristic' - z-direction
46	Cross-section No. 5 - HE B 160 | DIN 1025-2:1995					

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..4 Design by Member

Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.000	RC1	0.01	£ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.08	Ł 1	CS121)	Cross-section check - Shear force in z-axis acc. to 6.2.6
	0.000	RC1	0.00	£ 1	CS126)	Cross-section check - Shear buckling acc. to 6.2.6(6)
	0.000	RC1	0.14	Ł 1	CS181)	Cross-section check - Bending, shear and axial force acc. to 6.2.9.1
	0.000	RC1	0.14	£ 1	ST331)	Stability analysis - Lateral torsional buckling acc. to 6.3.2.1 and 6.3.2.3 - I-Section
	0.000	RC2	0.00	Ł 1	SE400)	Serviceability - Negligible deformations
	1.438	RC2	0.08	£ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - z-direction
55	Cross-section No. 5 - HE B 160 | DIN 1025-2:1995					
	0.000	RC1	0.00	Ł 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.04	£ 1	CS121)	Cross-section check - Shear force in z-axis acc. to 6.2.6
	0.000	RC1	0.00	Ł 1	CS126)	Cross-section check - Shear buckling acc. to 6.2.6(6)
	0.000	RC1	0.07	£ 1	CS181)	Cross-section check - Bending, shear and axial force acc. to 6.2.9.1
	0.000	RC1	0.07	Ł 1	ST331)	Stability analysis - Lateral torsional buckling acc. to 6.3.2.1 and 6.3.2.3 - I-Section
	0.000	RC2	0.00	£ 1	SE400)	Serviceability - Negligible deformations
	1.438	RC2	0.04	Ł 1	SE401)	Serviceability - Combination of actions 'Characteristic' - z-direction
64	Cross-section No. 5 - HE B 160 | DIN 1025-2:1995					
	0.000	RC1	0.00	£ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.04	Ł 1	CS121)	Cross-section check - Shear force in z-axis acc. to 6.2.6
	0.000	RC1	0.00	£ 1	CS126)	Cross-section check - Shear buckling acc. to 6.2.6(6)
	0.000	RC1	0.07	Ł 1	CS181)	Cross-section check - Bending, shear and axial force acc. to 6.2.9.1
	0.000	RC1	0.07	£ 1	ST331)	Stability analysis - Lateral torsional buckling acc. to 6.3.2.1 and 6.3.2.3 - I-Section
	0.000	RC2	0.00	Ł 1	SE400)	Serviceability - Negligible deformations
	1.438	RC2	0.04	£ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - z-direction
73	Cross-section No. 5 - HE B 160 | DIN 1025-2:1995					
	0.000	RC1	0.01	Ł 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.08	£ 1	CS121)	Cross-section check - Shear force in z-axis acc. to 6.2.6
	0.000	RC1	0.00	Ł 1	CS126)	Cross-section check - Shear buckling acc. to 6.2.6(6)
	0.000	RC1	0.14	£ 1	CS181)	Cross-section check - Bending, shear and axial force acc. to 6.2.9.1
	0.000	RC1	0.14	Ł 1	ST331)	Stability analysis - Lateral torsional buckling acc. to 6.3.2.1 and 6.3.2.3 - I-Section
	0.000	RC2	0.00	£ 1	SE400)	Serviceability - Negligible deformations
	1.438	RC2	0.08	Ł 1	SE401)	Serviceability - Combination of actions 'Characteristic' - z-direction
84	Cross-section No. 5 - HE B 160 | DIN 1025-2:1995					
	0.000	RC1	0.00	£ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.04	Ł 1	CS121)	Cross-section check - Shear force in z-axis acc. to 6.2.6
	0.000	RC1	0.00	£ 1	CS126)	Cross-section check - Shear buckling acc. to 6.2.6(6)
	0.000	RC1	0.07	Ł 1	CS181)	Cross-section check - Bending, shear and axial force acc. to 6.2.9.1
	0.000	RC1	0.07	£ 1	ST331)	Stability analysis - Lateral torsional buckling acc. to 6.3.2.1 and 6.3.2.3 - I-Section
	0.000	RC2	0.00	Ł 1	SE400)	Serviceability - Negligible deformations
	1.438	RC2	0.04	£ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - z-direction
105	Cross-section No. 5 - HE B 160 | DIN 1025-2:1995					
	2.425	RC1	0.04	Ł 1	CS111)	Cross-section check - Bending about y-axis acc. to 6.2.5 - Class 1 or 2
	2.425	RC1	0.03	£ 1	CS121)	Cross-section check - Shear force in z-axis acc. to 6.2.6
	0.000	RC1	0.00	Ł 1	CS126)	Cross-section check - Shear buckling acc. to 6.2.6(6)
	2.425	RC1	0.04	£ 1	CS141)	Cross-section check - Bending and shear force acc. to 6.2.5 and 6.2.8
	2.425	RC1	0.09	Ł 1	ST331)	Stability analysis - Lateral torsional buckling acc. to 6.3.2.1 and 6.3.2.3 - I-Section
	0.000	RC2	0.00	£ 1	SE400)	Serviceability - Negligible deformations
	1.213	RC2	0.01	Ł 1	SE401)	Serviceability - Combination of actions 'Characteristic' - z-direction
	2.425	RC2	0.00	£ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - y-direction
130	Cross-section No. 5 - HE B 160 | DIN 1025-2:1995					
	2.425	RC1	0.00	Ł 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	2.425	RC1	0.06	£ 1	CS121)	Cross-section check - Shear force in z-axis acc. to 6.2.6
	0.000	RC1	0.00	Ł 1	CS126)	Cross-section check - Shear buckling acc. to 6.2.6(6)
	2.425	RC1	0.08	£ 1	CS181)	Cross-section check - Bending, shear and axial force acc. to 6.2.9.1
	2.425	RC1	0.18	Ł 1	ST331)	Stability analysis - Lateral torsional buckling acc. to 6.3.2.1 and 6.3.2.3 - I-Section
	0.000	RC2	0.00	£ 1	SE400)	Serviceability - Negligible deformations
	3.638	RC2	0.02	Ł 1	SE401)	Serviceability - Combination of actions 'Characteristic' - z-direction

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..4 Design by Member

Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
179	Cross-section No. 5 - HE B 160 | DIN 1025-2:1995					
	2.425	RC1	0.04	£ 1	CS111)	Cross-section check - Bending about y-axis acc. to 6.2.5 - Class 1 or 2
	2.425	RC1	0.03	Ł 1	CS121)	Cross-section check - Shear force in z-axis acc. to 6.2.6
	0.000	RC1	0.00	£ 1	CS126)	Cross-section check - Shear buckling acc. to 6.2.6(6)
	2.425	RC1	0.04	Ł 1	CS141)	Cross-section check - Bending and shear force acc. to 6.2.5 and 6.2.8
	2.425	RC1	0.09	£ 1	ST331)	Stability analysis - Lateral torsional buckling acc. to 6.3.2.1 and 6.3.2.3 - I-Section
	0.000	RC2	0.00	Ł 1	SE400)	Serviceability - Negligible deformations
	3.638	RC2	0.01	£ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - z-direction
	2.425	RC2	0.00	Ł 1	SE406)	Serviceability - Combination of actions 'Characteristic' - y-direction
216	Cross-section No. 8 - QRO 200x6 | EN 10219-2:2006					
	0.000	RC1	0.01	£ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.405	RC1	0.01	Ł 1	CS121)	Cross-section check - Shear force in z-axis acc. to 6.2.6
	0.405	RC1	0.01	£ 1	CS123)	Cross-section check - Shear force in y-axis acc. to 6.2.6
	0.000	RC1	0.00	Ł 1	CS126)	Cross-section check - Shear buckling acc. to 6.2.6(6)
	1.215	RC1	0.01	£ 1	CS221)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9
	0.000	RC1	0.04	Ł 1	ST364)	Stability analysis - Bending and compression acc. to 6.3.3, Method 2
	0.000	RC2	0.00	£ 1	SE400)	Serviceability - Negligible deformations
	0.810	RC2	0.01	Ł 1	SE401)	Serviceability - Combination of actions 'Characteristic' - z-direction
	0.810	RC2	0.01	£ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - y-direction
221	Cross-section No. 8 - QRO 200x6 | EN 10219-2:2006					
	0.000	RC1	0.03	Ł 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.405	RC1	0.02	£ 1	CS121)	Cross-section check - Shear force in z-axis acc. to 6.2.6
	0.000	RC1	0.00	Ł 1	CS126)	Cross-section check - Shear buckling acc. to 6.2.6(6)
	1.215	RC1	0.05	£ 1	CS181)	Cross-section check - Bending, shear and axial force acc. to 6.2.9.1
	0.000	RC1	0.05	Ł 1	ST364)	Stability analysis - Bending and compression acc. to 6.3.3, Method 2
	0.000	RC2	0.00	£ 1	SE400)	Serviceability - Negligible deformations
	0.810	RC2	0.01	Ł 1	SE401)	Serviceability - Combination of actions 'Characteristic' - z-direction
226	Cross-section No. 8 - QRO 200x6 | EN 10219-2:2006					
	0.000	RC1	0.01	£ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.405	RC1	0.01	Ł 1	CS121)	Cross-section check - Shear force in z-axis acc. to 6.2.6
	0.405	RC1	0.01	£ 1	CS123)	Cross-section check - Shear force in y-axis acc. to 6.2.6
	0.000	RC1	0.00	Ł 1	CS126)	Cross-section check - Shear buckling acc. to 6.2.6(6)
	1.215	RC1	0.01	£ 1	CS221)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9
	0.000	RC1	0.04	Ł 1	ST364)	Stability analysis - Bending and compression acc. to 6.3.3, Method 2
	0.000	RC2	0.00	£ 1	SE400)	Serviceability - Negligible deformations
	0.810	RC2	0.01	Ł 1	SE401)	Serviceability - Combination of actions 'Characteristic' - z-direction
	0.810	RC2	0.01	£ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - y-direction
231	Cross-section No. 8 - QRO 200x6 | EN 10219-2:2006					
	0.000	RC1	0.03	Ł 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.405	RC1	0.03	£ 1	CS123)	Cross-section check - Shear force in y-axis acc. to 6.2.6
	1.215	RC1	0.09	Ł 1	CS201)	Cross-section check - Bending about z-axis, shear and axial force acc. to 6.2.9.1
	0.000	RC1	0.07	£ 1	ST364)	Stability analysis - Bending and compression acc. to 6.3.3, Method 2
	0.000	RC2	0.00	Ł 1	SE400)	Serviceability - Negligible deformations
	0.810	RC2	0.02	£ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - y-direction
236	Cross-section No. 8 - QRO 200x6 | EN 10219-2:2006					
	0.000	RC1	0.06	Ł 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.000	RC1	0.06	£ 1	ST301)	Stability analysis - Flexural buckling about y-axis acc. to 6.3.1.1 and 6.3.1.2(4)
	0.000	RC1	0.06	Ł 1	ST311)	Stability analysis - Flexural buckling about z-axis acc. to 6.3.1.1 and 6.3.1.2(4)
	0.000	RC2	0.00	£ 1	SE400)	Serviceability - Negligible deformations
241	Cross-section No. 8 - QRO 200x6 | EN 10219-2:2006					
	0.000	RC1	0.03	Ł 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.405	RC1	0.03	£ 1	CS123)	Cross-section check - Shear force in y-axis acc. to 6.2.6
	1.215	RC1	0.09	Ł 1	CS201)	Cross-section check - Bending about z-axis, shear and axial force acc. to 6.2.9.1
	0.000	RC1	0.07	£ 1	ST364)	Stability analysis - Bending and compression acc. to 6.3.3, Method 2
	0.000	RC2	0.00	Ł 1	SE400)	Serviceability - Negligible deformations

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..4 Design by Member

Member No.	Location x [m]	LC/CO/ RC	Design		Equation No.	Description
	0.810	RC2	0.02	£ 1	SE406)	Serviceability - Combination of actions 'Characteristic' - y-direction
246	Cross-section No. 8 - QRO 200x6 | EN 10219-2:2006					
	0.000	RC1	0.01	Ł 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.405	RC1	0.01	£ 1	CS121)	Cross-section check - Shear force in z-axis acc. to 6.2.6
	0.405	RC1	0.01	Ł 1	CS123)	Cross-section check - Shear force in y-axis acc. to 6.2.6
	0.000	RC1	0.00	£ 1	CS126)	Cross-section check - Shear buckling acc. to 6.2.6(6)
	1.215	RC1	0.01	Ł 1	CS221)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9
	0.000	RC1	0.04	£ 1	ST364)	Stability analysis - Bending and compression acc. to 6.3.3, Method 2
	0.000	RC2	0.00	Ł 1	SE400)	Serviceability - Negligible deformations
	0.810	RC2	0.01	£ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - z-direction
	0.810	RC2	0.01	Ł 1	SE406)	Serviceability - Combination of actions 'Characteristic' - y-direction
251	Cross-section No. 8 - QRO 200x6 | EN 10219-2:2006					
	0.000	RC1	0.03	£ 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.405	RC1	0.02	Ł 1	CS121)	Cross-section check - Shear force in z-axis acc. to 6.2.6
	0.000	RC1	0.00	£ 1	CS126)	Cross-section check - Shear buckling acc. to 6.2.6(6)
	1.215	RC1	0.05	Ł 1	CS181)	Cross-section check - Bending, shear and axial force acc. to 6.2.9.1
	0.000	RC1	0.05	£ 1	ST364)	Stability analysis - Bending and compression acc. to 6.3.3, Method 2
	0.000	RC2	0.00	Ł 1	SE400)	Serviceability - Negligible deformations
	0.810	RC2	0.01	£ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - z-direction
256	Cross-section No. 8 - QRO 200x6 | EN 10219-2:2006					
	0.000	RC1	0.01	Ł 1	CS102)	Cross-section check - Compression acc. to 6.2.4
	0.405	RC1	0.01	£ 1	CS121)	Cross-section check - Shear force in z-axis acc. to 6.2.6
	0.405	RC1	0.01	Ł 1	CS123)	Cross-section check - Shear force in y-axis acc. to 6.2.6
	0.000	RC1	0.00	£ 1	CS126)	Cross-section check - Shear buckling acc. to 6.2.6(6)
	1.215	RC1	0.01	Ł 1	CS221)	Cross-section check - Biaxial bending, shear and axial force acc. to 6.2.10 and 6.2.9
	0.000	RC1	0.04	£ 1	ST364)	Stability analysis - Bending and compression acc. to 6.3.3, Method 2
	0.000	RC2	0.00	Ł 1	SE400)	Serviceability - Negligible deformations
	0.810	RC2	0.01	£ 1	SE401)	Serviceability - Combination of actions 'Characteristic' - z-direction
	0.810	RC2	0.01	Ł 1	SE406)	Serviceability - Combination of actions 'Characteristic' - y-direction

Design Ratio

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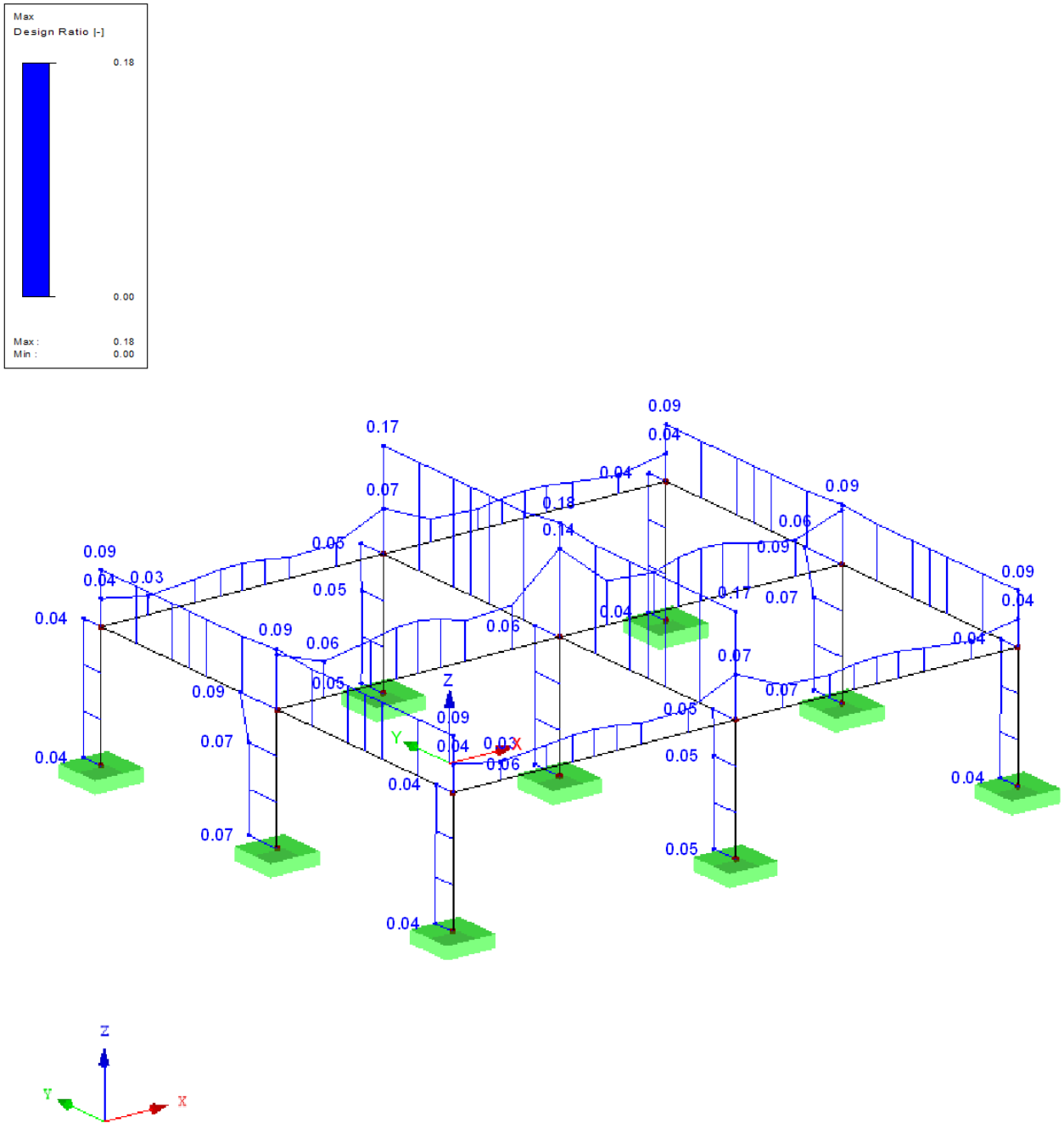
RF-STEEL EC3 CA1
Ultimate Limit State: Cross-Section Design, Stability Design, Weld Design, Pressure Design, Plastic Design
Serviceability Limit State: Deformations, Web Breathing



Max Design Ratio: 0.18

Išvados:

- Pagal atliktus skaičiavimus sijos įlinkis lygus 1 mm. Gauti rezultatai neviršija ribinio poslinkio reikšmės.
- Sijos išnaudojimas maksimalus 0,18 ≤ 1 neviršija ribinių reikšmių.
- Kolonos išnaudojimas maksimalus 0,09 ≤ 1 neviršija ribinių reikšmių.
- Parinkti profiliai sijai HEB 160 ir kolonai TUB 200x5 tenkina keliamus stiprumo ir pastovumo reikalavimus.

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7.2 Plieninių rėmo konstrukcijų jungimo mazgų skaičiavimai

Skaičiuojamas ir tikrinamas labiausiai apkrauto jungimo mazgas. Sijos prie pagrindinės sijos jungiamos flanšine jungtimi naudojant M20 8.8 kl.varžtus.

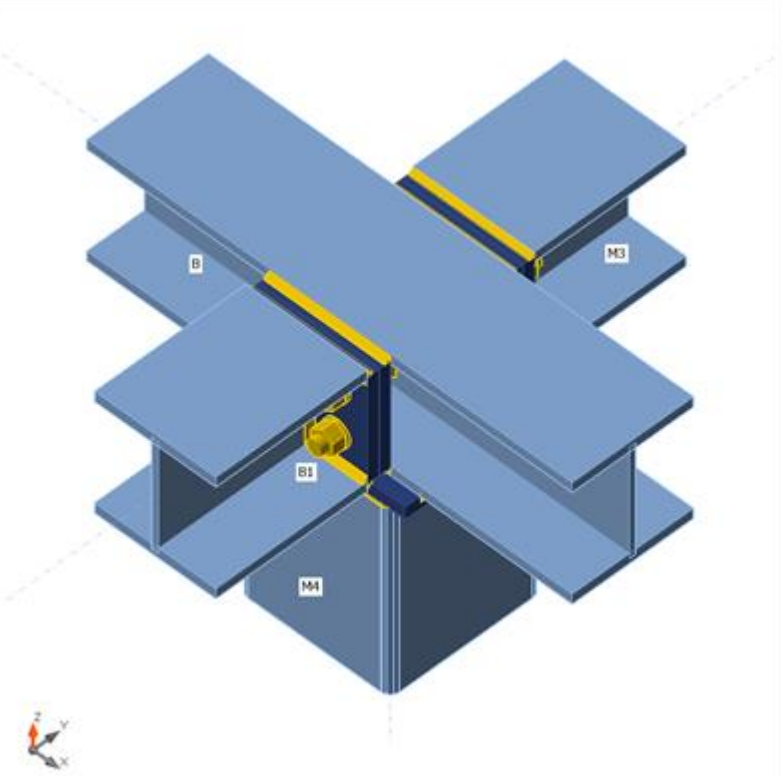
Design

Name	CON1
Description	
Analysis	Stress, strain/ loads in equilibrium

Members

Geometry

B	3 - HEB160	0,0	0,0	0,0	0	0	0	Node
B1	3 - HEB160	-90,0	0,0	0,0	0	0	0	Node
M3	3 - HEB160	90,0	0,0	0,0	0	0	0	Node
M4	4 - SHS200/200/5.0	0,0	-90,0	0,0	80	0	0	Node



Cross-sections

3 - HEB160	S 275
4 - SHS200/200/5.0	S 275

Bolts

M20 8.8	M20 8.8	20	800,0	314

Load effects (forces in equilibrium)

ULS	B	0,0	0,0	0,0	0,0	0,0	0,0
	B	0,0	0,0	0,0	0,0	0,0	0,0
	B1	9,1	0,0	-21,6	0,0	-13,3	0,0
	M3	9,1	0,0	-21,6	0,0	-13,3	0,0
	M4	0,0	0,0	0,0	0,0	0,0	0,0
SLS	B	0,0	0,0	0,0	0,0	0,0	0,0
	B	0,0	0,0	0,0	0,0	0,0	0,0
	B1	6,8	0,0	-16,0	0,0	9,9	0,0
	M3	6,8	0,0	-16,0	0,0	9,9	0,0
	M4	0,0	0,0	0,0	0,0	0,0	0,0

Check

Summary

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Analysis	100,0%	OK
Plates	0,2 < 5,0%	OK
Bolts	70,8 < 100%	OK
Welds	84,5 < 100%	OK
Buckling	Not calculated	

Plates

B-bfl 1	S 275	13,0	ULS	53,7	0,0	7,1	OK
B-tfl 1	S 275	13,0	ULS	75,6	0,0	0,0	OK
B-w 1	S 275	8,0	ULS	69,4	0,0	0,0	OK
B1-bfl 1	S 275	13,0	ULS	170,1	0,0	0,0	OK
B1-tfl 1	S 275	13,0	ULS	86,9	0,0	0,0	OK
B1-w 1	S 275	8,0	ULS	178,1	0,0	0,0	OK
M3-bfl 1	S 275	13,0	ULS	213,0	0,0	0,0	OK
M3-tfl 1	S 275	13,0	SLS	105,3	0,0	0,0	OK
M3-w 1	S 275	8,0	ULS	153,6	0,0	0,0	OK
M4	S 275	5,0	SLS	20,1	0,0	0,0	OK
SEP1a	S 275	15,0	ULS	275,1	0,1	114,2	OK
SEP1b	S 275	15,0	ULS	275,1	0,0	327,1	OK
STIFF	S 355	10,0	ULS	175,1	0,0	0,0	OK
SEP2a	S 275	15,0	ULS	275,3	0,2	90,5	OK
SEP2b	S 275	15,0	ULS	275,2	0,1	285,4	OK
STIFF	S 275	10,0	ULS	156,8	0,0	0,0	OK
EP1	S 275	16,0	ULS	13,7	0,0	2,2	OK

Design data

S 275	275,0	5,0
S 355	355,0	5,0

Symbol explanation

t_p	Plate thickness
σ_{Ed}	Equivalent stress
ε_{Pl}	Plastic strain
$\sigma_{c,Ed}$	Contact stress
f_y	Yield strength
ε_{lim}	Limit of plastic strain

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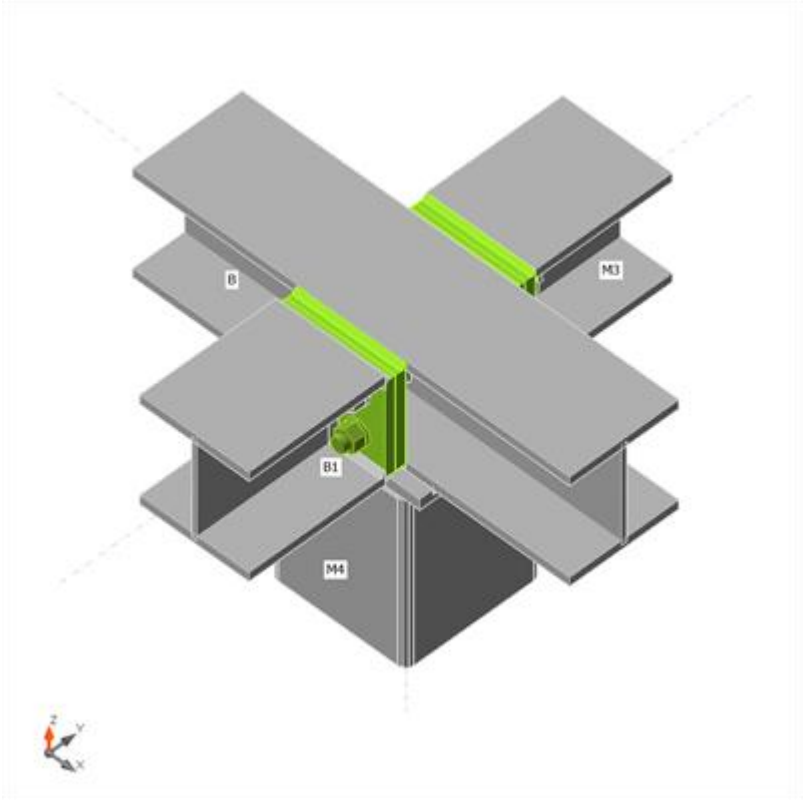
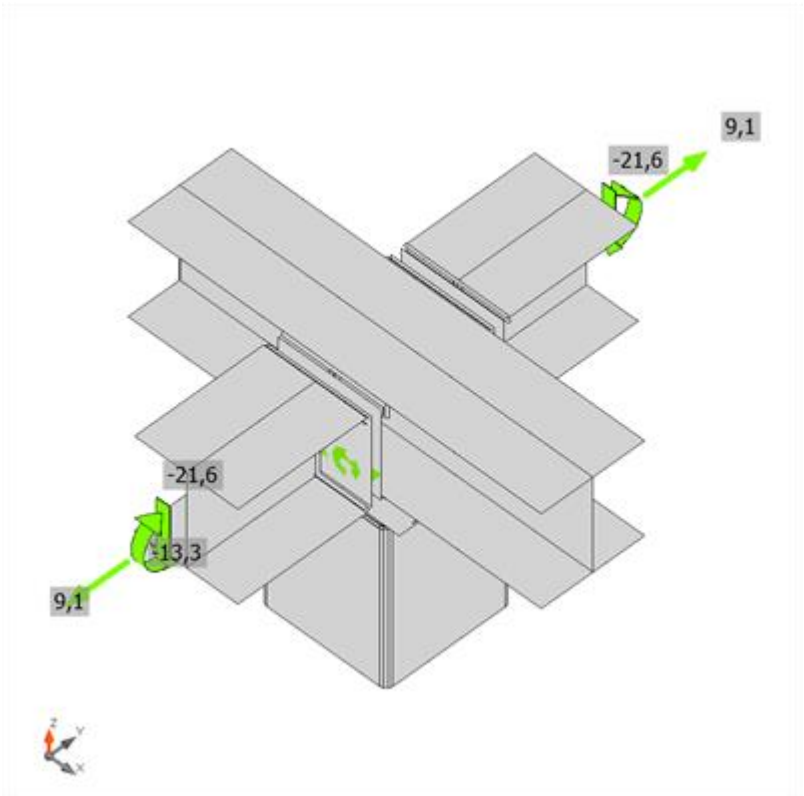
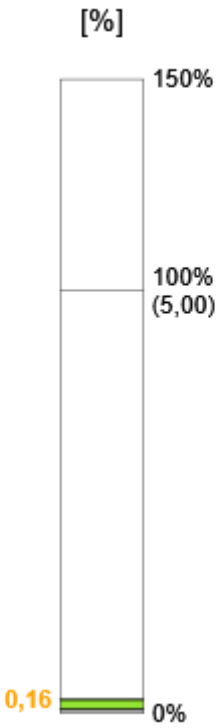


Overall check, ULS





Strain check, ULS

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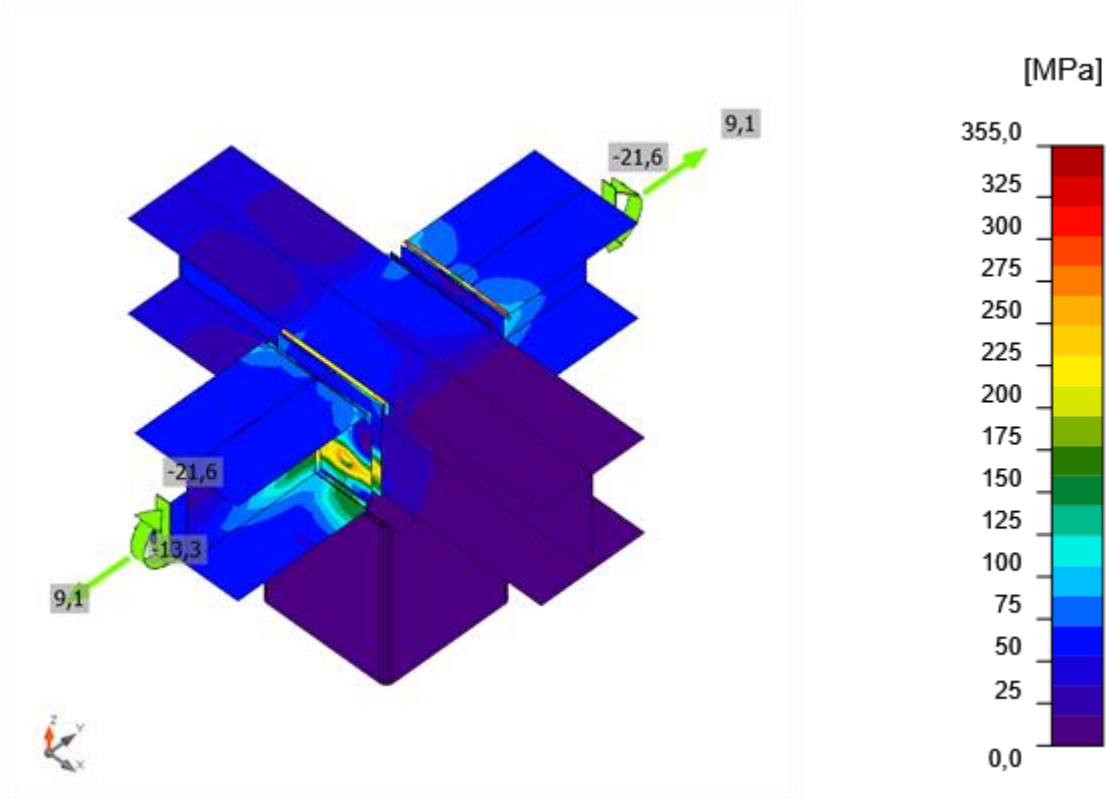
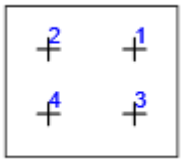
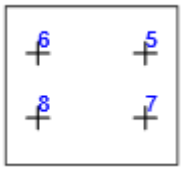


Equivalent stress, ULS

Bolts



B1	M20 8.8 - 1	SLS	51,4	3,9	156,4	36,4	4,1	30,1	OK
B2	M20 8.8 - 1	SLS	51,4	3,9	156,4	36,4	4,2	30,2	OK
B3	M20 8.8 - 1	ULS	93,3	5,5	156,4	66,1	5,8	53,0	OK
B4	M20 8.8 - 1	ULS	93,3	5,5	156,4	66,1	5,9	53,1	OK



B5	M20 8.8 - 1	SLS	54,8	4,0	144,1	38,8	4,2	31,9	OK
B6	M20 8.8 - 1	SLS	54,9	4,0	144,1	38,9	4,2	32,0	OK
B7	M20 8.8 - 1	ULS	99,9	5,4	144,1	70,8	5,7	56,2	OK
B8	M20 8.8 - 1	ULS	99,5	5,4	144,1	70,5	5,7	56,1	OK

Design data

M20 8.8 - 1	141,1	309,0	94,1

Symbol explanation

$F_{t,Ed}$	Tension force
$F_{v,Ed}$	Resultant of bolt shear forces Vy and Vz in shear planes
$F_{b,Rd}$	Plate bearing resistance EN 1993-1-8 – Tab. 3.4
Ut_t	Utilization in tension
Ut_s	Utilization in shear
Ut_{ts}	Interaction of tension and shear EN 1993-1-8 – Tab. 3.4
$F_{t,Rd}$	Bolt tension resistance EN 1993-1-8 – Tab. 3.4
$B_{p,Rd}$	Punching shear resistance EN 1993-1-8 – Tab. 3.4
$F_{v,Rd}$	Bolt shear resistance EN 1993-1-8 – Tab. 3.4

Welds

SEP1a	B-tfl 1	◢ 5,0	160	ULS	260,6	0,0	-114,9	-0,4	135,0	64,4	56,9	OK
SEP1a	B-bfl 1	◢ 5,0	160	SLS	138,2	0,0	-72,1	10,6	-67,2	34,1	30,6	OK
SEP1b	B1-bfl 1	◢ 5,0 ◣	158	ULS	155,7	0,0	130,8	19,1	44,8	42,3	30,4	OK
		◢ 5,0 ◣	158	SLS	131,4	0,0	-95,7	-7,9	-51,4	32,5	27,2	OK
SEP1b	B1-tfl 1	◢ 5,0 ◣	158	ULS	236,2	0,0	-168,4	18,2	93,9	58,4	49,4	OK

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		◢ 5,0 ◣	158	SLS	73,9	0,0	60,9	-10,5	-21,8	19,7	14,2	OK
SEP1b	B1-w 1	◢ 5,0 ◣	139	ULS	232,4	0,0	116,6	1,1	116,1	57,4	33,0	OK
		◢ 5,0 ◣	139	ULS	232,6	0,0	116,1	-0,7	-116,4	57,5	33,0	OK
B-bfl 1	STIFF	◢ 5,0 ◣	61	ULS	100,6	0,0	0,7	57,1	10,3	24,9	20,6	OK
		◢ 5,0 ◣	61	ULS	124,1	0,0	7,5	-71,5	2,1	30,7	23,3	OK
B-w 1	STIFF	◢ 5,0 ◣	103	ULS	113,2	0,0	55,1	15,9	54,9	28,0	22,9	OK
		◢ 5,0 ◣	103	ULS	111,4	0,0	53,8	-15,9	-54,0	27,5	22,8	OK
B-tfl 1	STIFF	◢ 5,0 ◣	61	SLS	100,6	0,0	7,4	-57,6	-6,8	24,9	19,6	OK
		◢ 5,0 ◣	61	SLS	88,1	0,0	1,3	50,7	-4,3	21,8	16,8	OK
SEP1a	STIFF	◢ 5,0 ◣	133	ULS	340,3	0,0	155,3	80,4	155,2	84,1	40,7	OK
		◢ 5,0 ◣	133	ULS	341,9	0,0	155,9	-81,6	-155,6	84,5	41,3	OK
SEP2a	B-tfl 1	◢ 4,0	160	ULS	333,8	0,0	-135,9	1,2	176,0	82,5	75,2	OK
SEP2a	B-bfl 1	◢ 4,0	160	ULS	229,6	0,0	134,0	15,7	106,5	56,7	27,8	OK
SEP2b	M3-bfl 1	◢ 4,0 ◣	158	ULS	252,9	0,0	168,5	-47,2	98,1	62,5	48,5	OK
		◢ 4,0 ◣	158	SLS	158,7	0,0	-87,5	-40,4	-64,9	39,2	34,1	OK
SEP2b	M3-tfl 1	◢ 4,0 ◣	158	ULS	288,7	0,0	-154,0	-76,7	118,3	71,3	62,1	OK
		◢ 4,0 ◣	158	SLS	124,9	0,0	82,3	24,0	-48,6	30,9	23,5	OK
SEP2b	M3-w 1	◢ 4,0 ◣	146	ULS	258,8	0,0	129,2	13,0	128,8	63,9	33,9	OK
		◢ 4,0 ◣	146	ULS	258,7	0,0	128,6	-13,3	-128,9	63,9	33,9	OK
B-bfl 1	STIFF	◢ 4,0 ◣	61	ULS	129,8	0,0	-6,3	74,6	-6,0	32,1	24,7	OK
		◢ 4,0 ◣	61	ULS	122,6	0,0	-7,5	-70,2	7,9	30,3	22,7	OK
B-w 1	STIFF	◢ 4,0 ◣	103	ULS	137,2	0,0	66,9	16,8	67,1	33,9	28,1	OK
		◢ 4,0 ◣	103	ULS	139,5	0,0	68,4	-16,8	-68,1	34,5	28,4	OK
B-tfl 1	STIFF	◢ 4,0 ◣	61	SLS	96,6	0,0	2,8	-55,4	6,5	23,9	19,2	OK
		◢ 4,0 ◣	61	SLS	100,6	0,0	12,9	56,9	-9,2	24,9	20,7	OK
SEP2a	STIFF	◢ 4,0 ◣	133	ULS	329,1	0,0	160,5	34,2	162,3	81,3	45,0	OK
		◢ 4,0 ◣	133	ULS	329,0	0,0	163,1	-34,3	-161,4	81,3	45,0	OK
B-bfl 1	EP1	◢ 4,0	159	SLS	59,3	0,0	59,1	-0,1	3,1	19,1	9,8	OK
B-bfl 1	EP1	◢ 4,0	159	SLS	30,1	0,0	19,9	11,2	-6,7	8,6	5,7	OK
EP1	M4	◢ 3,0 ◣	757	SLS	16,6	0,0	-2,1	-8,3	-4,7	4,1	1,3	OK
		◢ 3,0 ◣	757	ULS	20,3	0,0	12,1	-6,4	-6,9	5,0	1,4	OK

Design data

S 275	0,85	404,7	309,6

Symbol explanation

T_w	Throat thickness a
L	Length
$\sigma_{w,Ed}$	Equivalent stress
ε_{Pl}	Strain
$\sigma_{\perp}$	Perpendicular stress
$\tau_{\parallel}$	Shear stress parallel to weld axis
$\tau_{\perp}$	Shear stress perpendicular to weld axis
Ut	Utilization
Ut_c	Weld capacity utilization
β_w	Correlation factor EN 1993-1-8 – Tab. 4.1
$\sigma_{w,Rd}$	Equivalent stress resistance
0.9 σ	Perpendicular stress resistance: 0.9*fu/γM2
◢	Fillet weld

Buckling

Buckling analysis was not calculated.

Code settings

Safety factor γ_{M0}	1,00	-	EN 1993-1-1: 6.1
Safety factor γ_{M1}	1,00	-	EN 1993-1-1: 6.1
Safety factor γ_{M2}	1,25	-	EN 1993-1-1: 6.1
Safety factor γ_{M3}	1,25	-	EN 1993-1-8: 2.2
Safety factor γ_C	1,50	-	EN 1992-1-1: 2.4.2.4

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Safety factor γ_{Inst}	1,20	-	EN 1992-4: Table 4.1
Joint coefficient βj	0,67	-	EN 1993-1-8: 6.2.5
Effective area - influence of mesh size	0,10	-	
Friction coefficient - concrete	0,25	-	EN 1993-1-8
Friction coefficient in slip-resistance	0,30	-	EN 1993-1-8 tab 3.7
Limit plastic strain	0,05	-	EN 1993-1-5
Detailing	No		
Distance between bolts [d]	2,20	-	EN 1993-1-8: tab 3.3
Distance between bolts and edge [d]	1,20	-	EN 1993-1-8: tab 3.3
Concrete breakout resistance check	Both		EN 1992-4: 7.2.1.4 and 7.2.2.5
Use calculated αb in bearing check.	Yes		EN 1993-1-8: tab 3.4
Cracked concrete	Yes		EN 1992-4
Local deformation check	No		CIDECT DG 1, 3 - 1.1
Local deformation limit	0,03	-	CIDECT DG 1, 3 - 1.1
Geometrical nonlinearity (GMNA)	Yes		Analysis with large deformations for hollow section joints
Braced system	No		EN 1993-1-8: 5.2.2.5

Išvados:

- Pagal atliktus skaičiavimus jungimo mazgas tenkina keliamus stiprumo ir pastovumo reikalavimus.
- Jungimo elementų išnaudojimas neviršyja ribnių reikšmių: varžtai 70,8 < 100%; virintinės siūlės 84,5 < 100%.

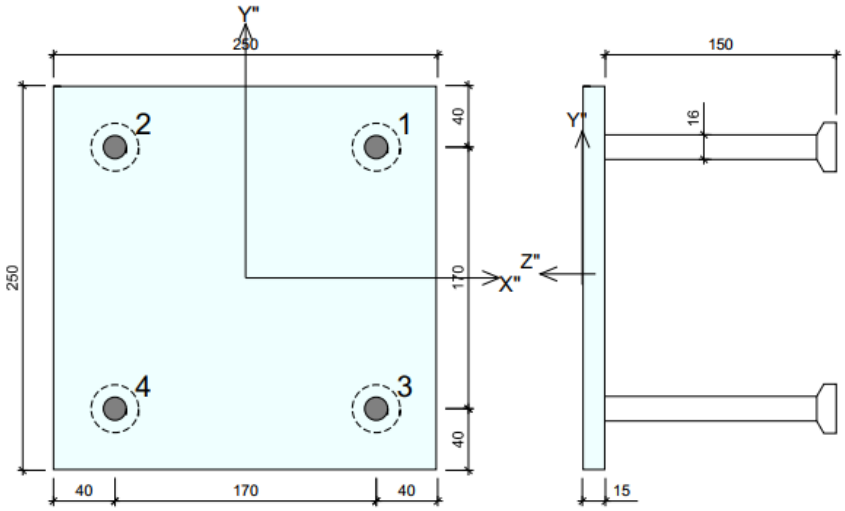
7.3 Įdėtinių detalių skaičiavimai

Įdėtinės detalės skaičiuojamos nuo atraminių reakcijų nuo plieninio rėmo.

Anchor Plate 1

Note:

Anchor Plate:	WELDA 250x250-165
Plate Material:	S355J2+N
Anchors Type:	PSS 16-150
Anchors Material:	Black



Material Strengths

Plate:	S355J2+N	f_{yk} =	345	f_{yd} =	345	[N/mm²]
Anchors:	Black	f_{yk} =	350	f_{yd} =	304,3	[N/mm²]

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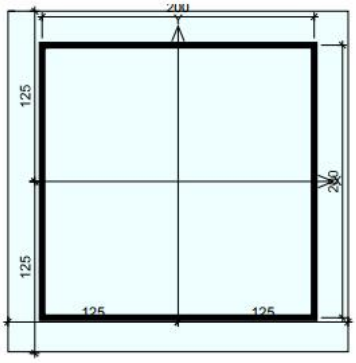
Attached section

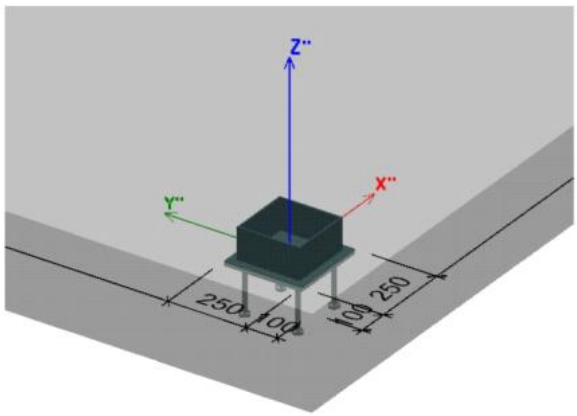
SectionType: Rectangular - Section

Cross-section Dimensions:	[mm]
Width =	200
Height =	200
Wall Thickness =	5

X; Y = local coordinate system of profile
X"; Y" = local coordinate system of plate



Base Structure : Slab 1



Concrete : C25/30
Uncracked : No

Directions and supported edges :
+Y"= Top
+X"= Right
-X"= Left
-Y"= Bottom

(Design loads)

#	Name	N_{Ed} [kN]	M_{xEd} [kNm]	M_{yEd} [kNm]	V_{xEd} [kN]	V_{yEd} [kN]	T_{Ed} [kNm]
1		-17,00	1,00	-2,00	-5,00	-3,00	0,00
2		-36,00	2,00	0,00	0,00	-6,00	0,00
3		-17,00	1,00	2,00	5,00	-3,00	0,00
4		-35,00	0,00	-3,00	-9,00	0,00	0,00
5		-76,00	0,00	0,00	0,00	0,00	0,00
6		-35,00	0,00	3,00	9,00	0,00	0,00
7		-17,00	-1,00	-2,00	-5,00	3,00	0,00
8		-36,00	-2,00	0,00	0,00	6,00	0,00
9		-17,00	-1,00	2,00	5,00	3,00	0,00

NOTE: Loads are defined in the local coordinate system of the profile.

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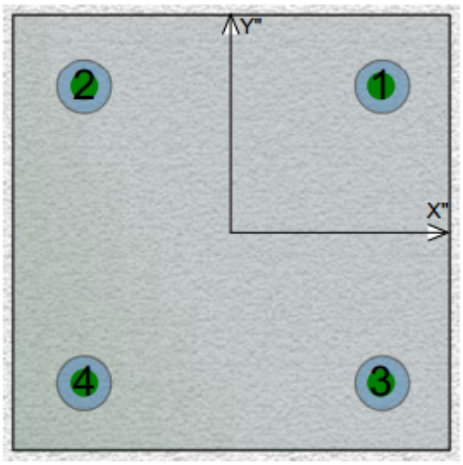
Results per Load Case

Load Case :#1 (N_{Ed}=-17, M_{xEd}=1, M_{yEd}=-2, V_{xEd}=-5, V_{yEd}=-3, T_{Ed}=0)

Anchor Reactions[kN]

Tension force : (+) tension , (-) compression

Anchor	Tension force	Shear force(X)	Shear force(Y)
1	+2,4	-1,3	-0,8
2	-0,4	-1,3	-0,8
3	+1,1	-1,3	-0,8
4	-1,7	-1,3	-0,8



Tension load (CEN/TS 1992-4-2:2009, Section 6.2 and ETA)

Design values

Proof	Load [kN]	Capacity [kN]	Utilization β_N[%]	Status
Steel Failure	2,4	58,8	4,0	OK
Pull-Out Failure	2,4	72,4	3,3	OK
Concrete cone Failure	3,4	59,1	5,8	OK
Blow-Out Failure	n/a	n/a	n/a	n/a
Splitting Failure	3,4	57,4	6,0	OK

Steel Failure	
$N_{Rk,s}$	90,5 [kN]
$\gamma_{M,s}$	1,54
$N_{Rd,s}$	58,8 [kN]
Nh_{Ed}	2,4 [kN]

Pull-Out Failure	
A_h	603,2 [mm²]
$f_{ck,cube}$	30,0 [N/mm²]
$\Psi_{ucr,N}$	1,0
$\gamma_{M,p}$	1,50
$N_{Rk,p}$	108,6 [kN]
$N_{Rd,p}$	72,4 [kN]
Nh_{Ed}	2,4 [kN]

Local blow-out failure	
$A^0_{c,Nb}$	n/a [mm²]
$A_{c,Nb}$	n/a [mm²]
c_1	n/a [mm]
A_h	n/a [mm²]
h_{ef}	n/a [mm]
s_1	n/a [mm]
$\Psi_{s,Nb}$	n/a
$\Psi_{ec,Nb}$	n/a
n	n/a
$\Psi_{g,Nb}$	n/a
$\Psi_{ucr,N}$	n/a
$N^0_{rk,cb}$	n/a [kN]
$\gamma_{M,c}$	1,50
$N_{Rd,cb}$	n/a [kN]
$Ng_{E,d}$	n/a [kN]

Concrete cone Failure	
h_{ef}	157,0 [mm]
$s_{cr,N}$	471,0 [mm]
c	235,5 [mm]
$A^0_{c,N}$	221841 [mm²]
$A_{c,N}$	256931 [mm²]
$\Psi_{ec,N}$	0,88
e_N	32,00 [mm]
$\Psi_{re,N}$	1,00
$\Psi_{s,N}$	0,95
$N^0_{Rkc,c}$	91,59 [kN]
$\gamma_{M,c}$	1,50
$N_{Rd,c}$	59,1 [kN]
$Ng_{E,d}$	3,4 [kN]

Shear load (CEN/TS 1992-4-2:2009, Section 6.3 and ETA)

Design values

Proof	Load [kN]	Capacity [kN]	Utilization β_V[%]	Status

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Steel Failure	1,5	42,4	3,4	OK
Concrete pry-out failure	5,8	132,7	4,4	OK
Concrete edge failure	5,8	35,5	16,4	OK

Steel Failure	
$V_{Rk,s}$	54,3 [kN]
$\gamma_{M,s}$	1,28
$V_{Rd,s}$	42,4 [kN]
Vh_{Sd}	1,5 [kN]

Concrete pry-out failure	
$A_{c,N}$	297570 [mm²]
$A^0_{c,N}$	221841 [mm²]
h_{ef}	157,0 [mm]
$c_{cr,N}$	235,5 [mm]
$s_{cr,N}$	471,0 [mm]
k_3	2,0
$N_{Rk,c}$	99,5 [kN]
$\gamma_{m,c}$	1,50
$V_{Rd,cp}$	132,7 [kN]
$Vg_{E,d}$	5,8 [kN]

Concrete edge failure (Left)	
l_f	128 [mm]
c_1	310,0 [mm]
$A_{c,V}$	232500 [mm²]
$A^0_{c,V}$	432450 [mm²]
$\Psi_{s,V}$	0,79
$\Psi_{h,V}$	1,24
$\Psi_{\alpha,V}$	1,13
e_V	0,00 [mm]
$\Psi_{ec,V}$	1,00
$\Psi_{re,V}$	1,00
α	0,06
β	0,06
$V^0_{Rk,c}$	74,7 [kN]
$\gamma_{M,c}$	1,50
$V_{Rd,c}$	35,5 [kN]
Vg_{Ed}	5,8 [kN]

Note: not applicable proofs/values are marked with 'na'

Steel combined tension and shear loads (CEN/TS 1992-4-2:2009, 6.4.1.1)

β_N	β_V	α	Utilization $\beta_{N,V}$[%]	Status
0	0,034	1	3,4	OK

Combined tension and shear loads (EN 1992-4:2018, Section 7.2.3.1 and ETA)

β_N	β_V	α	Utilization $\beta_{N,V}$[%]	Status
0,0598	0,1642	1,5	8,114	OK

Steel plate failure verification (EC3-1-1, EC3-1-8)

Design values

Stress [N/mm²]	f_{yd} [N/mm²]	Utilization [%]	Status
11,4	345	3,3	OK

Concrete compression failure verification (EC2, EC3, Partially loaded areas)

Design values

Stress [N/mm²]	f_{jd} [N/mm²]	Utilization [%]	Status
1,858	21,33	8,7	OK

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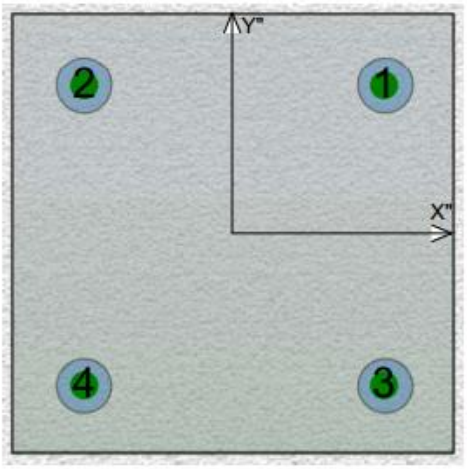
Load Case :#2 (N_{Ed}=-36, M_{xEd}=2, M_{yEd}=0, V_{xEd}=0, V_{yEd}=-6, T_{Ed}=0)

Anchor Reactions[kN]

Tension force : (+) tension , (-) compression

Anchor	Tension force	Shear force(X)	Shear force(Y)
1	0,0	0,0	-1,5
2	0,0	0,0	-1,5
3	-1,3	0,0	-1,5
4	-1,3	0,0	-1,5



Tension load (CEN/TS 1992-4-2:2009, Section 6.2 and ETA)

Design values

Proof	Load [kN]	Capacity [kN]	Utilization β_N[%]	Status
Steel Failure	0,0	58,8	0,0	OK
Pull-Out Failure	0,0	72,4	0,0	OK
Concrete cone Failure	0,0	0,0	0,0	OK
Blow-Out Failure	n/a	n/a	n/a	n/a
Splitting Failure	n/r	n/r	n/r	n/r

Steel Failure	
$N_{Rk,s}$	90,5 [kN]
$\gamma_{M,s}$	1,54
$N_{Rd,s}$	58,8 [kN]
Nh_{Ed}	0,0 [kN]

Pull-Out Failure	
A_h	603,2 [mm²]
$f_{ck,cube}$	30,0 [N/mm²]
$\Psi_{ucr,N}$	1,0
$\gamma_{M,p}$	1,50
$N_{Rk,p}$	108,6 [kN]
$N_{Rd,p}$	72,4 [kN]
Nh_{Ed}	0,0 [kN]

Local blow-out failure	
$A^0_{c,Nb}$	n/a [mm²]
$A_{c,Nb}$	n/a [mm²]
c_1	n/a [mm]
A_h	n/a [mm²]
h_{ef}	n/a [mm]
s_1	n/a [mm]
$\Psi_{s,Nb}$	n/a
$\Psi_{ec,Nb}$	n/a
n	n/a
$\Psi_{g,Nb}$	n/a
$\Psi_{ucr,N}$	n/a
$N^0_{rk,cb}$	n/a [kN]
$\gamma_{M,c}$	1,50
$N_{Rd,cb}$	n/a [kN]
$Ng_{E,d}$	n/a [kN]

Concrete cone Failure	
h_{ef}	157,0 [mm]
$s_{cr,N}$	n/a [mm]
c	n/a [mm]
$A^0_{c,N}$	n/a [mm²]
$A_{c,N}$	n/a [mm²]
$\Psi_{ec,N}$	n/a
e_N	n/a [mm]
$\Psi_{re,N}$	n/a
$\Psi_{s,N}$	n/a
$N^0_{Rkc,c}$	n/a [kN]
$\gamma_{M,c}$	1,50
$N_{Rd,c}$	n/a [kN]
$Ng_{E,d}$	n/a [kN]

Shear load (CEN/TS 1992-4-2:2009, Section 6.3 and ETA)

Design values

Proof	Load [kN]	Capacity [kN]	Utilization β_V[%]	Status
Steel Failure	1,5	42,4	3,5	OK

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Concrete pry-out failure	6,0	150,8	4,0	OK
Concrete edge failure	6,0	31,3	19,2	OK

Steel Failure	
$V_{Rk,s}$	54,3 [kN]
$\gamma_{M,s}$	1,28
$V_{Rd,s}$	42,4 [kN]
Vh_{Sd}	1,5 [kN]

Concrete pry-out failure	
$A_{c,N}$	297570 [mm²]
$A^0_{c,N}$	221841 [mm²]
h_{ef}	157,0 [mm]
$c_{cr,N}$	235,5 [mm]
$s_{cr,N}$	471,0 [mm]
k_3	2,0
$N_{Rk,c}$	113,1 [kN]
$\gamma_{m,c}$	1,50
$V_{Rd,cp}$	150,8 [kN]
$Vg_{E,d}$	6,0 [kN]

Concrete edge failure (Bottom)	
l_f	128 [mm]
c_1	310,0 [mm]
$A_{c,V}$	232500 [mm²]
$A^0_{c,V}$	432450 [mm²]
$\Psi_{s,V}$	0,79
$\Psi_{h,V}$	1,24
$\Psi_{\alpha,V}$	1,00
e_V	0,00 [mm]
$\Psi_{ec,V}$	1,00
$\Psi_{re,V}$	1,00
α	0,06
β	0,06
$V^0_{Rk,c}$	74,7 [kN]
$\gamma_{M,c}$	1,50
$V_{Rd,c}$	31,3 [kN]
Vg_{Ed}	6,0 [kN]

Note: not applicable proofs/values are marked with 'na'

Steel combined tension and shear loads (CEN/TS 1992-4-2:2009, 6.4.1.1)

β_N	β_V	α	Utilization $\beta_{N,V}$[%]	Status
0	0,035	1	3,5	OK

Combined tension and shear loads (EN 1992-4:2018, Section 7.2.3.1 and ETA)

β_N	β_V	α	Utilization $\beta_{N,V}$[%]	Status
0	0,1916	1	19,16	OK

Steel plate failure verification (EC3-1-1, EC3-1-8)

Design values

Stress [N/mm²]	f_{yd} [N/mm²]	Utilization [%]	Status
8,793	345	2,5	OK

Concrete compression failure verification (EC2, EC3, Partially loaded areas)

Design values

Stress [N/mm²]	f_{jd} [N/mm²]	Utilization [%]	Status
1,207	21,33	5,7	OK

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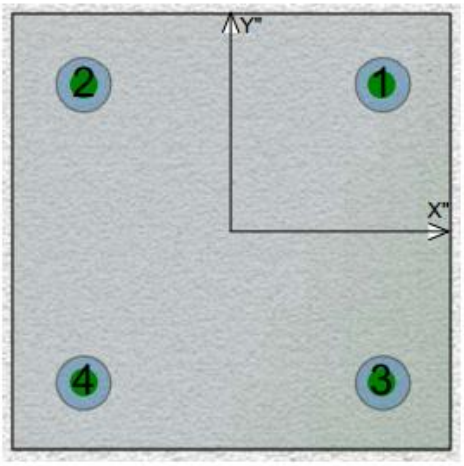
Load Case :#3 (N_{Ed}=-17, M_{xEd}=1, M_{yEd}=2, V_{xEd}=5, V_{yEd}=-3, T_{Ed}=0)

Anchor Reactions[kN]

Tension force : (+) tension , (-) compression

Anchor	Tension force	Shear force(X)	Shear force(Y)
1	-0,4	+1,3	-0,8
2	+2,4	+1,3	-0,8
3	-1,7	+1,3	-0,8
4	+1,1	+1,3	-0,8



Tension load (CEN/TS 1992-4-2:2009, Section 6.2 and ETA)

Design values

Proof	Load [kN]	Capacity [kN]	Utilization β_N[%]	Status
Steel Failure	2,4	58,8	4,0	OK
Pull-Out Failure	2,4	72,4	3,3	OK
Concrete cone Failure	3,4	43,6	7,9	OK
Blow-Out Failure	n/a	n/a	n/a	n/a
Splitting Failure	3,4	42,3	8,1	OK

Steel Failure	
$N_{Rk,s}$	90,5 [kN]
$\gamma_{M,s}$	1,54
$N_{Rd,s}$	58,8 [kN]
Nh_{Ed}	2,4 [kN]

Pull-Out Failure	
A_h	603,2 [mm²]
$f_{ck,cube}$	30,0 [N/mm²]
$\Psi_{ucr,N}$	1,0
$\gamma_{M,p}$	1,50
$N_{Rk,p}$	108,6 [kN]
$N_{Rd,p}$	72,4 [kN]
Nh_{Ed}	2,4 [kN]

Local blow-out failure	
$A^0_{c,Nb}$	n/a [mm²]
$A_{c,Nb}$	n/a [mm²]
c_1	n/a [mm]
A_h	n/a [mm²]
h_{ef}	n/a [mm]
s_1	n/a [mm]
$\Psi_{s,Nb}$	n/a
$\Psi_{ec,Nb}$	n/a
n	n/a
$\Psi_{g,Nb}$	n/a
$\Psi_{ucr,N}$	n/a
$N^0_{rk,cb}$	n/a [kN]
$\gamma_{M,c}$	1,50
$N_{Rd,cb}$	n/a [kN]
$Ng_{E,d}$	n/a [kN]

Concrete cone Failure	
h_{ef}	157,0 [mm]
$s_{cr,N}$	471,0 [mm]
c	235,5 [mm]
$A^0_{c,N}$	221841 [mm²]
$A_{c,N}$	204835 [mm²]
$\Psi_{ec,N}$	0,88
e_N	32,00 [mm]
$\Psi_{re,N}$	1,00
$\Psi_{s,N}$	0,88
$N^0_{Rkc,c}$	91,59 [kN]
$\gamma_{M,c}$	1,50
$N_{Rd,c}$	43,6 [kN]
$Ng_{E,d}$	3,4 [kN]

Shear load (CEN/TS 1992-4-2:2009, Section 6.3 and ETA)

Design values

Proof	Load [kN]	Capacity [kN]	Utilization β_V[%]	Status
Steel Failure	1,5	42,4	3,4	OK

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Concrete pry-out failure	5,8	132,7	4,4	OK
Concrete edge failure	5,8	50,7	11,5	OK

Steel Failure	
$V_{Rk,s}$	54,3 [kN]
$\gamma_{M,s}$	1,28
$V_{Rd,s}$	42,4 [kN]
Vh_{Sd}	1,5 [kN]

Concrete pry-out failure	
$A_{c,N}$	297570 [mm²]
$A^0_{c,N}$	221841 [mm²]
h_{ef}	157,0 [mm]
$c_{cr,N}$	235,5 [mm]
$s_{cr,N}$	471,0 [mm]
k_3	2,0
$N_{Rk,c}$	99,5 [kN]
$\gamma_{m,c}$	1,50
$V_{Rd,cp}$	132,7 [kN]
$Vg_{E,d}$	5,8 [kN]

Concrete edge failure (Bottom)	
l_f	128 [mm]
c_1	310,0 [mm]
$A_{c,V}$	232500 [mm²]
$A^0_{c,V}$	432450 [mm²]
$\Psi_{s,V}$	0,79
$\Psi_{h,V}$	1,24
$\Psi_{\alpha,V}$	1,62
e_V	0,00 [mm]
$\Psi_{ec,V}$	1,00
$\Psi_{re,V}$	1,00
α	0,06
β	0,06
$V^0_{Rk,c}$	74,7 [kN]
$\gamma_{M,c}$	1,50
$V_{Rd,c}$	50,7 [kN]
Vg_{Ed}	5,8 [kN]

Note: not applicable proofs/values are marked with 'na'

Steel combined tension and shear loads (CEN/TS 1992-4-2:2009, 6.4.1.1)

β_N	β_V	α	Utilization $\beta_{N,V}$[%]	Status
0	0,034	1	3,4	OK

Combined tension and shear loads (EN 1992-4:2018, Section 7.2.3.1 and ETA)

β_N	β_V	α	Utilization $\beta_{N,V}$[%]	Status
0,0811	0,1151	1,5	6,216	OK

Steel plate failure verification (EC3-1-1, EC3-1-8)

Design values

Stress [N/mm²]	f_{yd} [N/mm²]	Utilization [%]	Status
11,4	345	3,3	OK

Concrete compression failure verification (EC2, EC3, Partially loaded areas)

Design values

Stress [N/mm²]	f_{jd} [N/mm²]	Utilization [%]	Status
1,859	21,33	8,7	OK

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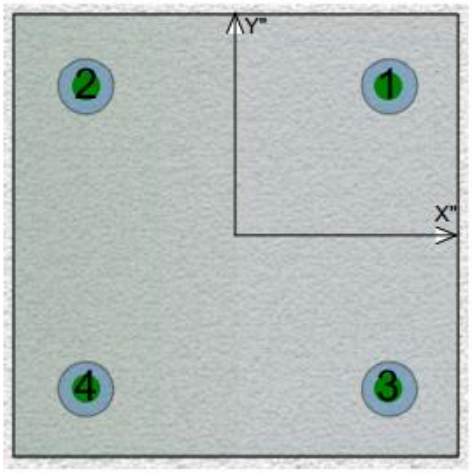
Load Case :#4 (N_{Ed}=-35, M_{xEd}=0, M_{yEd}=-3, V_{xEd}=-9, V_{yEd}=0, T_{Ed}=0)

Anchor Reactions[kN]

Tension force : (+) tension , (-) compression

Anchor	Tension force	Shear force(X)	Shear force(Y)
1	+1,0	-2,3	0,0
2	-1,7	-2,3	0,0
3	+1,0	-2,3	0,0
4	-1,7	-2,3	0,0



Tension load (CEN/TS 1992-4-2:2009, Section 6.2 and ETA)

Design values

Proof	Load [kN]	Capacity [kN]	Utilization β_N[%]	Status
Steel Failure	1,0	58,8	1,7	OK
Pull-Out Failure	1,0	72,4	1,4	OK
Concrete cone Failure	2,0	67,2	3,0	OK
Blow-Out Failure	n/a	n/a	n/a	n/a
Splitting Failure	2,0	65,2	3,1	OK

Steel Failure	
$N_{Rk,s}$	90,5 [kN]
$\gamma_{M,s}$	1,54
$N_{Rd,s}$	58,8 [kN]
Nh_{Ed}	1,0 [kN]

Pull-Out Failure	
A_h	603,2 [mm²]
$f_{ck,cube}$	30,0 [N/mm²]
$\Psi_{ucr,N}$	1,0
$\gamma_{M,p}$	1,50
$N_{Rk,p}$	108,6 [kN]
$N_{Rd,p}$	72,4 [kN]
Nh_{Ed}	1,0 [kN]

Local blow-out failure	
$A^0_{c,Nb}$	n/a [mm²]
$A_{c,Nb}$	n/a [mm²]
c_1	n/a [mm]
A_h	n/a [mm²]
h_{ef}	n/a [mm]
s_1	n/a [mm]
$\Psi_{s,Nb}$	n/a
$\Psi_{ec,Nb}$	n/a
n	n/a
$\Psi_{g,Nb}$	n/a
$\Psi_{ucr,N}$	n/a
$N^0_{rk,cb}$	n/a [kN]
$\gamma_{M,c}$	1,50
$N_{Rd,cb}$	n/a [kN]
$Ng_{E,d}$	n/a [kN]

Concrete cone Failure	
h_{ef}	157,0 [mm]
$s_{cr,N}$	471,0 [mm]
c	235,5 [mm]
$A^0_{c,N}$	221841 [mm²]
$A_{c,N}$	256931 [mm²]
$\Psi_{ec,N}$	1,00
e_N	0,00 [mm]
$\Psi_{re,N}$	1,00
$\Psi_{s,N}$	0,95
$N^0_{Rkc,c}$	91,59 [kN]
$\gamma_{M,c}$	1,50
$N_{Rd,c}$	67,2 [kN]
$Ng_{E,d}$	2,0 [kN]

Shear load (CEN/TS 1992-4-2:2009, Section 6.3 and ETA)

Design values

Proof	Load [kN]	Capacity [kN]	Utilization β_V[%]	Status
Steel Failure	2,3	42,4	5,3	OK

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Concrete pry-out failure	9,0	150,8	6,0	OK
Concrete edge failure	9,0	31,3	28,7	OK

Steel Failure	
$V_{Rk,s}$	54,3 [kN]
$\gamma_{M,s}$	1,28
$V_{Rd,s}$	42,4 [kN]
Vh_{Sd}	2,3 [kN]

Concrete pry-out failure	
$A_{c,N}$	297570 [mm²]
$A^0_{c,N}$	221841 [mm²]
h_{ef}	157,0 [mm]
$c_{cr,N}$	235,5 [mm]
$s_{cr,N}$	471,0 [mm]
k_3	2,0
$N_{Rk,c}$	113,1 [kN]
$\gamma_{m,c}$	1,50
$V_{Rd,cp}$	150,8 [kN]
$Vg_{E,d}$	9,0 [kN]

Concrete edge failure (Left)	
l_f	128 [mm]
c_1	310,0 [mm]
$A_{c,V}$	232500 [mm²]
$A^0_{c,V}$	432450 [mm²]
$\Psi_{s,V}$	0,79
$\Psi_{h,V}$	1,24
$\Psi_{\alpha,V}$	1,00
e_V	0,00 [mm]
$\Psi_{ec,V}$	1,00
$\Psi_{re,V}$	1,00
α	0,06
β	0,06
$V^0_{Rk,c}$	74,7 [kN]
$\gamma_{M,c}$	1,50
$V_{Rd,c}$	31,3 [kN]
Vg_{Ed}	9,0 [kN]

Note: not applicable proofs/values are marked with 'na'

Steel combined tension and shear loads (CEN/TS 1992-4-2:2009, 6.4.1.1)

β_N	β_V	α	Utilization $\beta_{N,V}$[%]	Status
0	0,053	1	5,3	OK

Combined tension and shear loads (EN 1992-4:2018, Section 7.2.3.1 and ETA)

β_N	β_V	α	Utilization $\beta_{N,V}$[%]	Status
0,0313	0,2873	1,5	15,96	OK

Steel plate failure verification (EC3-1-1, EC3-1-8)

Design values

Stress [N/mm²]	f_{yd} [N/mm²]	Utilization [%]	Status
12,23	345	3,5	OK

Concrete compression failure verification (EC2, EC3, Partially loaded areas)

Design values

Stress [N/mm²]	f_{jd} [N/mm²]	Utilization [%]	Status
1,727	21,33	8,1	OK

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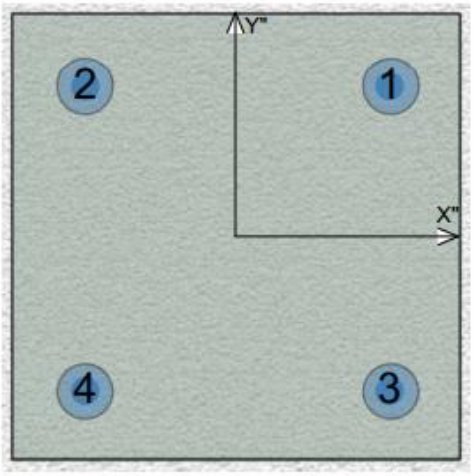
Load Case :#5 (N_{Ed}=-76, M_{xEd}=0, M_{yEd}=0, V_{xEd}=0, V_{yEd}=0, T_{Ed}=0)

Anchor Reactions[kN]

Tension force : (+) tension , (-) compression

Anchor	Tension force	Shear force(X)	Shear force(Y)
1	-1,5	0,0	0,0
2	-1,5	0,0	0,0
3	-1,5	0,0	0,0
4	-1,5	0,0	0,0



Tension load (CEN/TS 1992-4-2:2009, Section 6.2 and ETA)

Design values

Proof	Load [kN]	Capacity [kN]	Utilization β_N[%]	Status
Steel Failure	0,0	58,8	0,0	OK
Pull-Out Failure	0,0	72,4	0,0	OK
Concrete cone Failure	0,0	0,0	0,0	OK
Blow-Out Failure	n/a	n/a	n/a	n/a
Splitting Failure	n/r	n/r	n/r	n/r

Steel Failure	
$N_{Rk,s}$	90,5 [kN]
$\gamma_{M,s}$	1,54
$N_{Rd,s}$	58,8 [kN]
Nh_{Ed}	0,0 [kN]

Pull-Out Failure	
A_h	603,2 [mm²]
$f_{ck,cube}$	30,0 [N/mm²]
$\Psi_{ucr,N}$	1,0
$\gamma_{M,p}$	1,50
$N_{Rk,p}$	108,6 [kN]
$N_{Rd,p}$	72,4 [kN]
Nh_{Ed}	0,0 [kN]

Local blow-out failure	
$A^0_{c,Nb}$	n/a [mm²]
$A_{c,Nb}$	n/a [mm²]
c_1	n/a [mm]
A_h	n/a [mm²]
h_{ef}	n/a [mm]
s_1	n/a [mm]
$\Psi_{s,Nb}$	n/a
$\Psi_{ec,Nb}$	n/a
n	n/a
$\Psi_{g,Nb}$	n/a
$\Psi_{ucr,N}$	n/a
$N^0_{rk,cb}$	n/a [kN]
$\gamma_{M,c}$	1,50
$N_{Rd,cb}$	n/a [kN]
$Ng_{E,d}$	n/a [kN]

Concrete cone Failure	
h_{ef}	157,0 [mm]
$s_{cr,N}$	n/a [mm]
c	n/a [mm]
$A^0_{c,N}$	n/a [mm²]
$A_{c,N}$	n/a [mm²]
$\Psi_{ec,N}$	n/a
e_N	n/a [mm]
$\Psi_{re,N}$	n/a
$\Psi_{s,N}$	n/a
$N^0_{Rkc,c}$	n/a [kN]
$\gamma_{M,c}$	1,50
$N_{Rd,c}$	n/a [kN]
$Ng_{E,d}$	n/a [kN]

Shear load (CEN/TS 1992-4-2:2009, Section 6.3 and ETA)

Design values

Proof	Load [kN]	Capacity [kN]	Utilization β_V[%]	Status
Steel Failure	0,0	42,4	0,0	OK

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Concrete pry-out failure	n/a	n/a	n/a	n/a
Concrete edge failure	n/a	n/a	n/a	n/a

Steel Failure	
$V_{Rk,s}$	54,3 [kN]
$\gamma_{M,s}$	1,28
$V_{Rd,s}$	42,4 [kN]
Vh_{Sd}	0,0 [kN]

Concrete pry-out failure	
$A_{c,N}$	n/a [mm²]
$A^0_{c,N}$	n/a [mm²]
h_{ef}	157,0 [mm]
$c_{cr,N}$	n/a [mm]
$s_{cr,N}$	n/a [mm]
k_3	n/a
$N_{Rk,c}$	n/a [kN]
$\gamma_{m,c}$	n/a
$V_{Rd,cp}$	n/a [kN]
$Vg_{E,d}$	n/a [kN]

Concrete edge failure	
l_f	n/a [mm]
c_1	n/a [mm]
$A_{c,V}$	n/a [mm²]
$A^0_{c,V}$	n/a [mm²]
$\Psi_{s,V}$	n/a
$\Psi_{h,V}$	n/a
$\Psi_{\alpha,V}$	n/a
e_V	n/a [mm]
$\Psi_{ec,V}$	n/a
$\Psi_{re,V}$	n/a
α	n/a
β	n/a
$V^0_{Rk,c}$	n/a [kN]
$\gamma_{M,c}$	n/a
$V_{Rd,c}$	n/a [kN]
Vg_{Ed}	n/a [kN]

Note: not applicable proofs/values are marked with 'na'

Steel combined tension and shear loads (CEN/TS 1992-4-2:2009, 6.4.1.1)

β_N	β_V	α	Utilization $\beta_{N,V}$[%]	Status
0	0	1	0	OK

Combined tension and shear loads (EN 1992-4:2018, Section 7.2.3.1 and ETA)

β_N	β_V	α	Utilization $\beta_{N,V}$[%]	Status
0	0	1	0	OK

Steel plate failure verification (EC3-1-1, EC3-1-8)

Design values

Stress [N/mm²]	f_{yd} [N/mm²]	Utilization [%]	Status
9,224	345	2,7	OK

Concrete compression failure verification (EC2, EC3, Partially loaded areas)

Design values

Stress [N/mm²]	f_{jd} [N/mm²]	Utilization [%]	Status
1,139	21,33	5,3	OK

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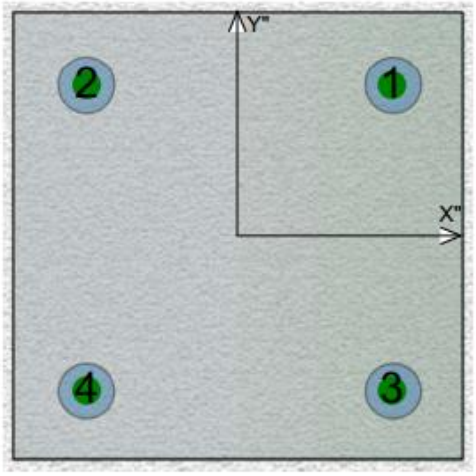
Load Case :#6 (N_{Ed}=-35, M_{xEd}=0, M_{yEd}=3, V_{xEd}=9, V_{yEd}=0, T_{Ed}=0)

Anchor Reactions[kN]

Tension force : (+) tension , (-) compression

Anchor	Tension force	Shear force(X)	Shear force(Y)
1	-1,7	+2,3	0,0
2	+1,0	+2,3	0,0
3	-1,7	+2,3	0,0
4	+1,0	+2,3	0,0



Tension load (CEN/TS 1992-4-2:2009, Section 6.2 and ETA)

Design values

Proof	Load [kN]	Capacity [kN]	Utilization β_N[%]	Status
Steel Failure	1,0	58,8	1,7	OK
Pull-Out Failure	1,0	72,4	1,4	OK
Concrete cone Failure	2,0	49,5	4,1	OK
Blow-Out Failure	n/a	n/a	n/a	n/a
Splitting Failure	2,0	48,0	4,3	OK

Steel Failure	
$N_{Rk,s}$	90,5 [kN]
$\gamma_{M,s}$	1,54
$N_{Rd,s}$	58,8 [kN]
Nh_{Ed}	1,0 [kN]

Pull-Out Failure	
A_h	603,2 [mm²]
$f_{ck,cube}$	30,0 [N/mm²]
$\Psi_{ucr,N}$	1,0
$\gamma_{M,p}$	1,50
$N_{Rk,p}$	108,6 [kN]
$N_{Rd,p}$	72,4 [kN]
Nh_{Ed}	1,0 [kN]

Local blow-out failure	
$A^0_{c,Nb}$	n/a [mm²]
$A_{c,Nb}$	n/a [mm²]
c_1	n/a [mm]
A_h	n/a [mm²]
h_{ef}	n/a [mm]
s_1	n/a [mm]
$\Psi_{s,Nb}$	n/a
$\Psi_{ec,Nb}$	n/a
n	n/a
$\Psi_{g,Nb}$	n/a
$\Psi_{ucr,N}$	n/a
$N^0_{rk,cb}$	n/a [kN]
$\gamma_{M,c}$	1,50
$N_{Rd,cb}$	n/a [kN]
$Ng_{E,d}$	n/a [kN]

Concrete cone Failure	
h_{ef}	157,0 [mm]
$s_{cr,N}$	471,0 [mm]
c	235,5 [mm]
$A^0_{c,N}$	221841 [mm²]
$A_{c,N}$	204835 [mm²]
$\Psi_{ec,N}$	1,00
e_N	0,00 [mm]
$\Psi_{re,N}$	1,00
$\Psi_{s,N}$	0,88
$N^0_{Rkc,c}$	91,59 [kN]
$\gamma_{M,c}$	1,50
$N_{Rd,c}$	49,5 [kN]
$Ng_{E,d}$	2,0 [kN]

Shear load (CEN/TS 1992-4-2:2009, Section 6.3 and ETA)

Design values

Proof	Load [kN]	Capacity [kN]	Utilization β_V[%]	Status
Steel Failure	2,3	42,4	5,3	OK

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Concrete pry-out failure	9,0	150,8	6,0	OK
Concrete edge failure	9,0	78,3	11,5	OK

Steel Failure	
$V_{Rk,s}$	54,3 [kN]
$\gamma_{M,s}$	1,28
$V_{Rd,s}$	42,4 [kN]
Vh_{Sd}	2,3 [kN]

Concrete pry-out failure	
$A_{c,N}$	297570 [mm²]
$A^0_{c,N}$	221841 [mm²]
h_{ef}	157,0 [mm]
$c_{cr,N}$	235,5 [mm]
$s_{cr,N}$	471,0 [mm]
k_3	2,0
$N_{Rk,c}$	113,1 [kN]
$\gamma_{m,c}$	1,50
$V_{Rd,cp}$	150,8 [kN]
$Vg_{E,d}$	9,0 [kN]

Concrete edge failure (Bottom)	
l_f	128 [mm]
c_1	310,0 [mm]
$A_{c,V}$	232500 [mm²]
$A^0_{c,V}$	432450 [mm²]
$\Psi_{s,V}$	0,79
$\Psi_{h,V}$	1,24
$\Psi_{\alpha,V}$	2,50
e_V	0,00 [mm]
$\Psi_{ec,V}$	1,00
$\Psi_{re,V}$	1,00
α	0,06
β	0,06
$V^0_{Rk,c}$	74,7 [kN]
$\gamma_{M,c}$	1,50
$V_{Rd,c}$	78,3 [kN]
Vg_{Ed}	9,0 [kN]

Note: not applicable proofs/values are marked with 'na'

Steel combined tension and shear loads (CEN/TS 1992-4-2:2009, 6.4.1.1)

β_N	β_V	α	Utilization $\beta_{N,V}$[%]	Status
0	0,053	1	5,3	OK

Combined tension and shear loads (EN 1992-4:2018, Section 7.2.3.1 and ETA)

β_N	β_V	α	Utilization $\beta_{N,V}$[%]	Status
0,0425	0,1149	1,5	4,773	OK

Steel plate failure verification (EC3-1-1, EC3-1-8)

Design values

Stress [N/mm²]	f_{yd} [N/mm²]	Utilization [%]	Status
12,23	345	3,5	OK

Concrete compression failure verification (EC2, EC3, Partially loaded areas)

Design values

Stress [N/mm²]	f_{jd} [N/mm²]	Utilization [%]	Status
1,727	21,33	8,1	OK

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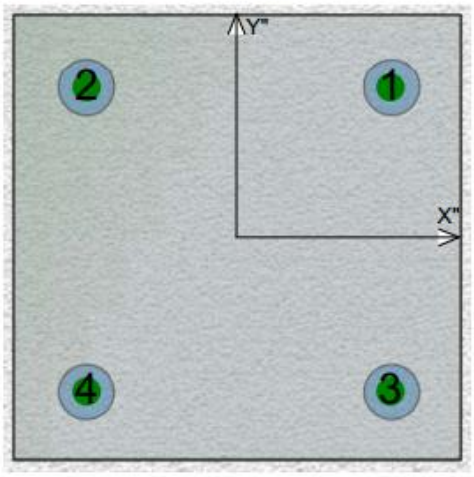
Load Case :#7 (N_{Ed}=-17, M_{xEd}=-1, M_{yEd}=-2, V_{xEd}=-5, V_{yEd}=3, T_{Ed}=0)

Anchor Reactions[kN]

Tension force : (+) tension , (-) compression

Anchor	Tension force	Shear force(X)	Shear force(Y)
1	+1,1	-1,3	+0,8
2	-1,7	-1,3	+0,8
3	+2,4	-1,3	+0,8
4	-0,4	-1,3	+0,8



Tension load (CEN/TS 1992-4-2:2009, Section 6.2 and ETA)

Design values

Proof	Load [kN]	Capacity [kN]	Utilization β_N[%]	Status
Steel Failure	2,4	58,8	4,0	OK
Pull-Out Failure	2,4	72,4	3,3	OK
Concrete cone Failure	3,4	59,1	5,8	OK
Blow-Out Failure	n/a	n/a	n/a	n/a
Splitting Failure	3,4	57,4	6,0	OK

Steel Failure	
$N_{Rk,s}$	90,5 [kN]
$\gamma_{M,s}$	1,54
$N_{Rd,s}$	58,8 [kN]
Nh_{Ed}	2,4 [kN]

Pull-Out Failure	
A_h	603,2 [mm²]
$f_{ck,cube}$	30,0 [N/mm²]
$\Psi_{ucr,N}$	1,0
$\gamma_{M,p}$	1,50
$N_{Rk,p}$	108,6 [kN]
$N_{Rd,p}$	72,4 [kN]
Nh_{Ed}	2,4 [kN]

Local blow-out failure	
$A^0_{c,Nb}$	n/a [mm²]
$A_{c,Nb}$	n/a [mm²]
c_1	n/a [mm]
A_h	n/a [mm²]
h_{ef}	n/a [mm]
s_1	n/a [mm]
$\Psi_{s,Nb}$	n/a
$\Psi_{ec,Nb}$	n/a
n	n/a
$\Psi_{g,Nb}$	n/a
$\Psi_{ucr,N}$	n/a
$N^0_{rk,cb}$	n/a [kN]
$\gamma_{M,c}$	1,50
$N_{Rd,cb}$	n/a [kN]
$Ng_{E,d}$	n/a [kN]

Concrete cone Failure	
h_{ef}	157,0 [mm]
$s_{cr,N}$	471,0 [mm]
c	235,5 [mm]
$A^0_{c,N}$	221841 [mm²]
$A_{c,N}$	256931 [mm²]
$\Psi_{ec,N}$	0,88
e_N	32,00 [mm]
$\Psi_{re,N}$	1,00
$\Psi_{s,N}$	0,95
$N^0_{Rkc,c}$	91,59 [kN]
$\gamma_{M,c}$	1,50
$N_{Rd,c}$	59,1 [kN]
$Ng_{E,d}$	3,4 [kN]

Shear load (CEN/TS 1992-4-2:2009, Section 6.3 and ETA)

Design values

Proof	Load [kN]	Capacity [kN]	Utilization β_V[%]	Status
Steel Failure	1,5	42,4	3,4	OK

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Concrete pry-out failure	5,8	132,7	4,4	OK
Concrete edge failure	5,8	35,5	16,4	OK

Steel Failure	
$V_{Rk,s}$	54,3 [kN]
$\gamma_{M,s}$	1,28
$V_{Rd,s}$	42,4 [kN]
Vh_{Sd}	1,5 [kN]

Concrete pry-out failure	
$A_{c,N}$	297570 [mm²]
$A^0_{c,N}$	221841 [mm²]
h_{ef}	157,0 [mm]
$c_{cr,N}$	235,5 [mm]
$s_{cr,N}$	471,0 [mm]
k_3	2,0
$N_{Rk,c}$	99,5 [kN]
$\gamma_{m,c}$	1,50
$V_{Rd,cp}$	132,7 [kN]
$Vg_{E,d}$	5,8 [kN]

Concrete edge failure (Left)	
l_f	128 [mm]
c_1	310,0 [mm]
$A_{c,V}$	232500 [mm²]
$A^0_{c,V}$	432450 [mm²]
$\Psi_{s,V}$	0,79
$\Psi_{h,V}$	1,24
$\Psi_{\alpha,V}$	1,13
e_V	0,00 [mm]
$\Psi_{ec,V}$	1,00
$\Psi_{re,V}$	1,00
α	0,06
β	0,06
$V^0_{Rk,c}$	74,7 [kN]
$\gamma_{M,c}$	1,50
$V_{Rd,c}$	35,5 [kN]
Vg_{Ed}	5,8 [kN]

Note: not applicable proofs/values are marked with 'na'

Steel combined tension and shear loads (CEN/TS 1992-4-2:2009, 6.4.1.1)

β_N	β_V	α	Utilization $\beta_{N,V}$[%]	Status
0	0,034	1	3,4	OK

Combined tension and shear loads (EN 1992-4:2018, Section 7.2.3.1 and ETA)

β_N	β_V	α	Utilization $\beta_{N,V}$[%]	Status
0,0598	0,1642	1,5	8,114	OK

Steel plate failure verification (EC3-1-1, EC3-1-8)

Design values

Stress [N/mm²]	f_{yd} [N/mm²]	Utilization [%]	Status
11,4	345	3,3	OK

Concrete compression failure verification (EC2, EC3, Partially loaded areas)

Design values

Stress [N/mm²]	f_{jd} [N/mm²]	Utilization [%]	Status
1,859	21,33	8,7	OK

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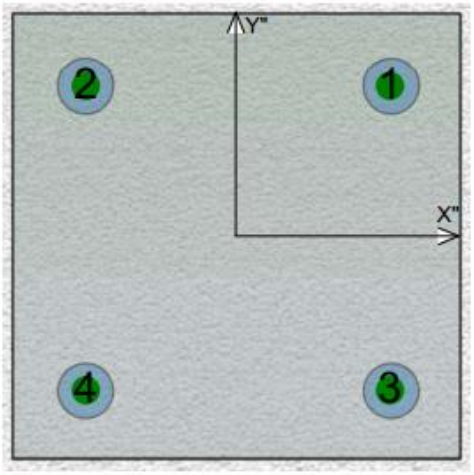
Load Case :#8 (N_{Ed}=-36, M_{xEd}=-2, M_{yEd}=0, V_{xEd}=0, V_{yEd}=6, T_{Ed}=0)

Anchor Reactions[kN]

Tension force : (+) tension , (-) compression

Anchor	Tension force	Shear force(X)	Shear force(Y)
1	-1,3	0,0	+1,5
2	-1,3	0,0	+1,5
3	0,0	0,0	+1,5
4	0,0	0,0	+1,5



Tension load (CEN/TS 1992-4-2:2009, Section 6.2 and ETA)

Design values

Proof	Load [kN]	Capacity [kN]	Utilization β_N[%]	Status
Steel Failure	0,0	58,8	0,0	OK
Pull-Out Failure	0,0	72,4	0,0	OK
Concrete cone Failure	0,0	0,0	0,0	OK
Blow-Out Failure	n/a	n/a	n/a	n/a
Splitting Failure	n/r	n/r	n/r	n/r

Steel Failure	
$N_{Rk,s}$	90,5 [kN]
$\gamma_{M,s}$	1,54
$N_{Rd,s}$	58,8 [kN]
Nh_{Ed}	0,0 [kN]

Pull-Out Failure	
A_h	603,2 [mm²]
$f_{ck,cube}$	30,0 [N/mm²]
$\Psi_{ucr,N}$	1,0
$\gamma_{M,p}$	1,50
$N_{Rk,p}$	108,6 [kN]
$N_{Rd,p}$	72,4 [kN]
Nh_{Ed}	0,0 [kN]

Local blow-out failure	
$A^0_{c,Nb}$	n/a [mm²]
$A_{c,Nb}$	n/a [mm²]
c_1	n/a [mm]
A_h	n/a [mm²]
h_{ef}	n/a [mm]
s_1	n/a [mm]
$\Psi_{s,Nb}$	n/a
$\Psi_{ec,Nb}$	n/a
n	n/a
$\Psi_{g,Nb}$	n/a
$\Psi_{ucr,N}$	n/a
$N^0_{rk,cb}$	n/a [kN]
$\gamma_{M,c}$	1,50
$N_{Rd,cb}$	n/a [kN]
$Ng_{E,d}$	n/a [kN]

Concrete cone Failure	
h_{ef}	157,0 [mm]
$s_{cr,N}$	n/a [mm]
c	n/a [mm]
$A^0_{c,N}$	n/a [mm²]
$A_{c,N}$	n/a [mm²]
$\Psi_{ec,N}$	n/a
e_N	n/a [mm]
$\Psi_{re,N}$	n/a
$\Psi_{s,N}$	n/a
$N^0_{Rkc,c}$	n/a [kN]
$\gamma_{M,c}$	1,50
$N_{Rd,c}$	n/a [kN]
$Ng_{E,d}$	n/a [kN]

Shear load (CEN/TS 1992-4-2:2009, Section 6.3 and ETA)

Design values

Proof	Load [kN]	Capacity [kN]	Utilization β_V[%]	Status
Steel Failure	1,5	42,4	3,5	OK

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Concrete pry-out failure	6,0	150,8	4,0	OK
Concrete edge failure	6,0	78,3	7,7	OK

Steel Failure	
$V_{Rk,s}$	54,3 [kN]
$\gamma_{M,s}$	1,28
$V_{Rd,s}$	42,4 [kN]
Vh_{Sd}	1,5 [kN]

Concrete pry-out failure	
$A_{c,N}$	297570 [mm²]
$A^0_{c,N}$	221841 [mm²]
h_{ef}	157,0 [mm]
$c_{cr,N}$	235,5 [mm]
$s_{cr,N}$	471,0 [mm]
k_3	2,0
$N_{Rk,c}$	113,1 [kN]
$\gamma_{m,c}$	1,50
$V_{Rd,cp}$	150,8 [kN]
$Vg_{E,d}$	6,0 [kN]

Concrete edge failure (Left)	
l_f	128 [mm]
c_1	310,0 [mm]
$A_{c,V}$	232500 [mm²]
$A^0_{c,V}$	432450 [mm²]
$\Psi_{s,V}$	0,79
$\Psi_{h,V}$	1,24
$\Psi_{\alpha,V}$	2,50
e_V	0,00 [mm]
$\Psi_{ec,V}$	1,00
$\Psi_{re,V}$	1,00
α	0,06
β	0,06
$V^0_{Rk,c}$	74,7 [kN]
$\gamma_{M,c}$	1,50
$V_{Rd,c}$	78,3 [kN]
Vg_{Ed}	6,0 [kN]

Note: not applicable proofs/values are marked with 'na'

Steel combined tension and shear loads (CEN/TS 1992-4-2:2009, 6.4.1.1)

β_N	β_V	α	Utilization $\beta_{N,V}$[%]	Status
0	0,035	1	3,5	OK

Combined tension and shear loads (EN 1992-4:2018, Section 7.2.3.1 and ETA)

β_N	β_V	α	Utilization $\beta_{N,V}$[%]	Status
0	0,0766	1	7,662	OK

Steel plate failure verification (EC3-1-1, EC3-1-8)

Design values

Stress [N/mm²]	f_{yd} [N/mm²]	Utilization [%]	Status
8,793	345	2,5	OK

Concrete compression failure verification (EC2, EC3, Partially loaded areas)

Design values

Stress [N/mm²]	f_{jd} [N/mm²]	Utilization [%]	Status
1,207	21,33	5,7	OK

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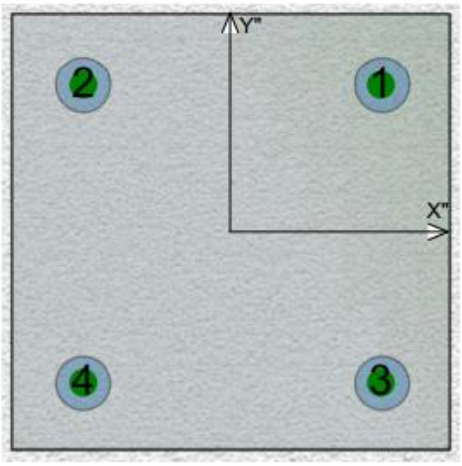
Load Case :#9 (N_{Ed}=-17, M_{xEd}=-1, M_{yEd}=2, V_{xEd}=5, V_{yEd}=3, T_{Ed}=0)

Anchor Reactions[kN]

Tension force : (+) tension , (-) compression

Anchor	Tension force	Shear force(X)	Shear force(Y)
1	-1,7	+1,3	+0,8
2	+1,1	+1,3	+0,8
3	-0,4	+1,3	+0,8
4	+2,4	+1,3	+0,8



Tension load (CEN/TS 1992-4-2:2009, Section 6.2 and ETA)

Design values

Proof	Load [kN]	Capacity [kN]	Utilization β_N[%]	Status
Steel Failure	2,4	58,8	4,0	OK
Pull-Out Failure	2,4	72,4	3,3	OK
Concrete cone Failure	3,4	43,6	7,9	OK
Blow-Out Failure	n/a	n/a	n/a	n/a
Splitting Failure	3,4	42,3	8,1	OK

Steel Failure	
$N_{Rk,s}$	90,5 [kN]
$\gamma_{M,s}$	1,54
$N_{Rd,s}$	58,8 [kN]
Nh_{Ed}	2,4 [kN]

Pull-Out Failure	
A_h	603,2 [mm²]
$f_{ck,cube}$	30,0 [N/mm²]
$\Psi_{ucr,N}$	1,0
$\gamma_{M,p}$	1,50
$N_{Rk,p}$	108,6 [kN]
$N_{Rd,p}$	72,4 [kN]
Nh_{Ed}	2,4 [kN]

Local blow-out failure	
$A^0_{c,Nb}$	n/a [mm²]
$A_{c,Nb}$	n/a [mm²]
c_1	n/a [mm]
A_h	n/a [mm²]
h_{ef}	n/a [mm]
s_1	n/a [mm]
$\Psi_{s,Nb}$	n/a
$\Psi_{ec,Nb}$	n/a
n	n/a
$\Psi_{g,Nb}$	n/a
$\Psi_{ucr,N}$	n/a
$N^0_{rk,cb}$	n/a [kN]
$\gamma_{M,c}$	1,50
$N_{Rd,cb}$	n/a [kN]
$Ng_{E,d}$	n/a [kN]

Concrete cone Failure	
h_{ef}	157,0 [mm]
$s_{cr,N}$	471,0 [mm]
c	235,5 [mm]
$A^0_{c,N}$	221841 [mm²]
$A_{c,N}$	204835 [mm²]
$\Psi_{ec,N}$	0,88
e_N	32,00 [mm]
$\Psi_{re,N}$	1,00
$\Psi_{s,N}$	0,88
$N^0_{Rkc,c}$	91,59 [kN]
$\gamma_{M,c}$	1,50
$N_{Rd,c}$	43,6 [kN]
$Ng_{E,d}$	3,4 [kN]

Shear load (CEN/TS 1992-4-2:2009, Section 6.3 and ETA)

Design values

Proof	Load [kN]	Capacity [kN]	Utilization β_V[%]	Status
Steel Failure	1,5	42,4	3,4	OK

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Concrete pry-out failure	5,8	132,7	4,4	OK
Concrete edge failure	5,0	78,3	6,4	OK

Steel Failure	
$V_{Rk,s}$	54,3 [kN]
$\gamma_{M,s}$	1,28
$V_{Rd,s}$	42,4 [kN]
Vh_{Sd}	1,5 [kN]

Concrete pry-out failure	
$A_{c,N}$	297570 [mm²]
$A^0_{c,N}$	221841 [mm²]
h_{ef}	157,0 [mm]
$c_{cr,N}$	235,5 [mm]
$s_{cr,N}$	471,0 [mm]
k_3	2,0
$N_{Rk,c}$	99,5 [kN]
$\gamma_{m,c}$	1,50
$V_{Rd,cp}$	132,7 [kN]
$Vg_{E,d}$	5,8 [kN]

Concrete edge failure (Bottom)	
l_f	128 [mm]
c_1	310,0 [mm]
$A_{c,V}$	232500 [mm²]
$A^0_{c,V}$	432450 [mm²]
$\Psi_{s,V}$	0,79
$\Psi_{h,V}$	1,24
$\Psi_{\alpha,V}$	2,50
e_V	0,00 [mm]
$\Psi_{ec,V}$	1,00
$\Psi_{re,V}$	1,00
α	0,06
β	0,06
$V^0_{Rk,c}$	74,7 [kN]
$\gamma_{M,c}$	1,50
$V_{Rd,c}$	78,3 [kN]
Vg_{Ed}	5,0 [kN]

Note: not applicable proofs/values are marked with 'na'

Steel combined tension and shear loads (CEN/TS 1992-4-2:2009, 6.4.1.1)

β_N	β_V	α	Utilization $\beta_{N,V}$[%]	Status
0	0,034	1	3,4	OK

Combined tension and shear loads (EN 1992-4:2018, Section 7.2.3.1 and ETA)

β_N	β_V	α	Utilization $\beta_{N,V}$[%]	Status
0,0811	0,0639	1,5	3,924	OK

Steel plate failure verification (EC3-1-1, EC3-1-8)

Design values

Stress [N/mm²]	f_{yd} [N/mm²]	Utilization [%]	Status
11,4	345	3,3	OK

Concrete compression failure verification (EC2, EC3, Partially loaded areas)

Design values

Stress [N/mm²]	f_{jd} [N/mm²]	Utilization [%]	Status
1,858	21,33	8,7	OK

Išvados:

- Pagal atliktus skaičiavimus įdėtinės detalės tenkina stiprumo ir pastovumo sąlygas. Maksimalus įdėtinės detalės išnaudojimas 0,19 < 1,0.

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7.4 Pamatų plokštės skaičiavimai

Kilnojamo VP modulio pamatų konstrukcijos sudarytos iš plieninio rėmo ir pamatinės plokštės. Pamatinė plokštė suprojektuota gelžbetoninė 300mm storio, armuota tinklais viršuje ir apačioje. Kolonos prie pamatų plokštės tvirtinamos per įdėtines detales. Toliau pateikiami detalūs pamatinės gelžbetoninės plokštės skaičiavimai.

1.3 Materials

Matl. No.	Modulus E [kN/cm²]	Modulus G [kN/cm²]	Poisson's Ratio n [-]	Spec. Weight g [kN/m³]	Coeff. of Th. Exp. a [1/°C]	Partial Factor γ_M [-]	Material Model
1	Steel S 275 J2 | EN 10025-2:2004-11						
	21000.00	8076.92	0.300	78.50	1.20E-05	1.00	Isotropic Linear Elastic
	S275J2						
4	Concrete C25/30 | EN 1992-1-1:2004/A1:2014						
	3100.00	1291.67	0.200	25.00	1.00E-05	1.00	Isotropic Linear Elastic
	C25/30						

1.4 Surfaces

Surface No.	Surface Type Geometry	Stiffness	Boundary Lines No.	Matl. No.	Thickness Type	d [mm]	Area A [m²]	Weight W [kg]
1	Plane	Standard	273-276	4	Constant	300.0	32.298	24223.10
2	Plane	Rigid	277-280	-	Constant	-	0.063	
3	Plane	Rigid	284,281-283	-	Constant	-	0.063	
4	Plane	Rigid	288,285-287	-	Constant	-	0.063	
5	Plane	Rigid	291,292,289,290	-	Constant	-	0.063	
6	Plane	Rigid	295,296,293,294	-	Constant	-	0.063	
7	Plane	Rigid	300,297-299	-	Constant	-	0.063	
8	Plane	Rigid	304,301-303	-	Constant	-	0.063	
9	Plane	Rigid	308,305-307	-	Constant	-	0.063	
10	Plane	Rigid	312,309-311	-	Constant	-	0.063	

1.9 Surface Supports

Found. No.	On Surfaces No.	Spring Constants RF-SOILIN	Translation Support or Spring [kN/m³] u_x	u_y	u_z	Shear Spring [kN/m] v_{xz}	v_{yz}
1	1-10	-	5000.000	5000.000	50000.000	5000.000	5000.000

1.23 FE Mesh Refinements

Refinem. No.	FE Mesh Refinement applied to	Nodes No.	Number Divisions	Sphere Radius [m]	Target FE Length [m] Inner	Outer	Comment
1	Lines via FE length	277-312		0.100			

2.1 Load Cases

Load Case	Load Case Description	EN 1990 | CEN Action Category	Self-Weight - Factor in Direction Active	X	Y	Z
LC1	Nuosavas svoris	Permanent	x	0.000	0.000	-1.000
LC2	Rėmo atraminės reakcijos	Permanent	-			

2.1.1 Load Cases - Calculation Parameters

Load Case	Load Case Description	Calculation Parameters		
LC1	Nuosavas svoris	Method of analysis	: x	Geometrically linear analysis
		Method for solving system of nonlinear algebraic equations	: x	Newton-Raphson
		Activate stiffness factors of:	: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
LC2	Rėmo atraminės reakcijos	Method of analysis	: x	Geometrically linear analysis
		Method for solving system of nonlinear algebraic equations	: x	Newton-Raphson
		Activate stiffness factors of:	: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)

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2.5 Load Combinations

Load Combin.	DS	Load Combination Description	No.	Factor	Load Case	
CO1	STR	1.35*LC1 + 1.35*LC2	1	1.35	LC1	Nuosavas svoris
			2	1.35	LC2	Rėmo atraminės reakcijos
CO2	S Ch	LC1 + LC2	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC2	Rėmo atraminės reakcijos
CO3	S Fr	LC1 + LC2	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC2	Rėmo atraminės reakcijos
CO4	S Qp	LC1 + LC2	1	1.00	LC1	Nuosavas svoris
			2	1.00	LC2	Rėmo atraminės reakcijos

2.5.2 Load Combinations - Calculation Parameters

Load Combin.	Description	Calculation Parameters		
CO1	1.35*LC1 + 1.35*LC2	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
			x	Normal forces N
			x	Shear forces V_y and V_z
			x	Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO2	LC1 + LC2	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
			x	Normal forces N
			x	Shear forces V_y and V_z
			x	Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO3	LC1 + LC2	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
			x	Normal forces N
			x	Shear forces V_y and V_z
			x	Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)
CO4	LC1 + LC2	Method of analysis	: x	Second order analysis (P-Delta)
		Method for solving system of nonlinear algebraic equations	: x	Picard
		Options	: x	Consider favorable effects due to tension
			: x	Refer internal forces to deformed system for:
			x	Normal forces N
			x	Shear forces V_y and V_z
			x	Moments M_y, M_z and M_T
		Activate stiffness factors of:	: x	Materials (partial factor gM)
			: x	Cross-sections (factor for J, I_y, I_z, A, A_y, A_z)
			: x	Members (factor for GJ, EI_y, EI_z, EA, GA_y, GA_z)

2.7 Result Combinations

Result Combin	Description	Loading
RC1	ULS (STR/GEO) - Permanent / transient - Eq. 6.10	CO1/p
RC2	SLS - Characteristic	CO2/p
RC3	SLS - Frequent	CO3/p
RC4	SLS - Quasi-permanent	CO4/p

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LC2
Rėmo atraminės reakcijos

3.1 Nodal Loads - By Components - Coordinate System

LC2: Rėmo atraminės reakcijos

No.	On Nodes No.	Coordinate System	Force [kN] P_X / P_U	P_Y / P_V	P_Z / P_W	Moment [kNm] M_X / M_U	M_Y / M_V	M_Z / M_W
1	239	0 | Global XYZ	-3.540	-2.150	-12.570	0.700	-1.140	0.000
2	245	0 | Global XYZ	0.000	-4.150	-26.940	1.350	0.000	0.000
3	251	0 | Global XYZ	3.540	-2.150	-12.570	0.700	1.140	0.000
4	257	0 | Global XYZ	-6.850	0.000	-26.220	0.000	-2.210	0.000
5	263	0 | Global XYZ	0.000	0.000	-56.080	0.000	0.000	0.000
6	269	0 | Global XYZ	6.850	0.000	-26.220	0.000	2.210	0.000
7	275	0 | Global XYZ	-3.540	2.150	-12.570	-0.700	-1.140	0.000
8	281	0 | Global XYZ	0.000	4.150	-26.940	-1.350	0.000	0.000
9	287	0 | Global XYZ	3.540	2.150	-12.570	-0.700	1.140	0.000

LC2: Rėmo atraminės reakcijos

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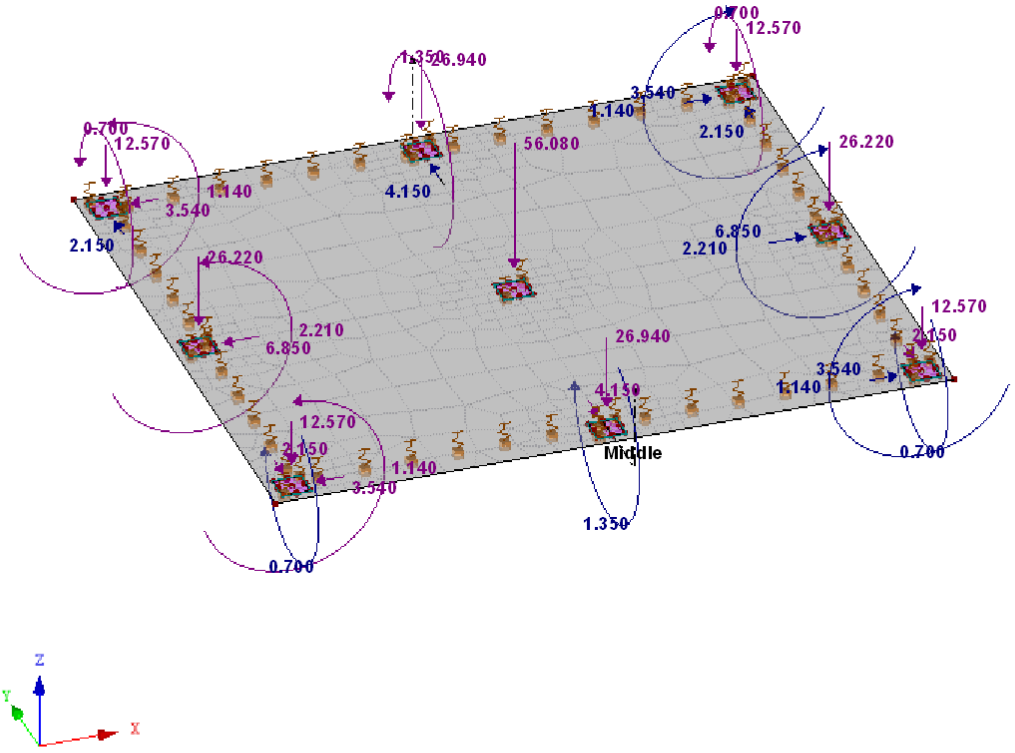
LC2 : Rėmo atraminės reakcijos
Loads [kN], [kNm]

Isometric

Cross-Sections



4.0 Results - Summary

	Description	Value	Unit	Comment
Load Combination CO1 - 1.35*LC1 + 1.35*LC2				
	Sum of loads in X	0.00	kN	
	Sum of support reactions in X	0.00	kN	
	Sum of loads in Y	0.00	kN	
	Sum of support reactions in Y	0.00	kN	
	Sum of loads in Z	-614.13	kN	
	Sum of support reactions in Z	-614.13	kN	Deviation 0.00%
	Resultant of reactions about X	0.00	kN m	At center of gravity of model (X:20.95, Y:4.75, Z:0.00 m)
	Resultant of reactions about Y	0.00	kN m	At center of gravity of model
	Resultant of reactions about Z	0.00	kN m	At center of gravity of model

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4.0 Results - Summary

Description	Value	Unit	Comment
Max. displacement in X	-0.0	mm	FE Mesh Node No. 257 (X: 18.077, Y: 4.751, Z: 0.000 m)
Max. displacement in Y	-0.0	mm	FE Mesh Node No. 245 (X: 20.952, Y: 2.326, Z: 0.000 m)
Max. displacement in Z	-0.5	mm	FE Mesh Node No. 307 (X: 17.852, Y: 2.101, Z: 0.000 m)
Max. vector displacement	0.5	mm	FE Mesh Node No. 307 (X: 17.852, Y: 2.101, Z: 0.000 m)
Max. rotation about X	-0.1	mrad	FE Mesh Node No. 129 (X: 20.823, Y: 7.401, Z: 0.000 m)
Max. rotation about Y	-0.1	mrad	FE Mesh Node No. 92 (X: 17.852, Y: 4.631, Z: 0.000 m)
Max. rotation about Z	-0.0	mrad	FE Mesh Node No. 21 (X: 24.052, Y: 4.510, Z: 0.000 m)
Maximum surface strain	0.000	‰	FE Mesh Node No. 0 (X: 0.000, Y: 0.000, Z: 0.000 m)
Method of analysis	2nd Order		Second order analysis (Nonlinear, Timoshenko)
Internal forces referred to deformed system for...	x		N, V_y, V_z, M_y, M_z, M_T
Reduction of stiffness			Materials, Cross-sections, Members, Surfaces
Consider favorable effects of tensile forces	x		
Divide results by CO factor	-		
Number of load increments	1		
Number of iterations	2		
Maximum value of element of stiffness matrix on diagonal	3.E+11		
Minimum value of element of stiffness matrix on diagonal	4.488E+06		
Stiffness matrix determinant	2.125E+48443		
Infinity Norm	7.026E+11		
Load Combination CO2 - LC1 + LC2			
Sum of loads in X	0.00	kN	
Sum of support reactions in X	0.00	kN	
Sum of loads in Y	0.00	kN	
Sum of support reactions in Y	0.00	kN	
Sum of loads in Z	-454.91	kN	
Sum of support reactions in Z	-454.91	kN	Deviation 0.00%
Resultant of reactions about X	0.0	kNm	At center of gravity of model (X:21.0, Y:4.8, Z:0.0 m)
Resultant of reactions about Y	0.0	kNm	At center of gravity of model
Resultant of reactions about Z	0.0	kNm	At center of gravity of model
Max. displacement in X	-0.0	mm	FE Mesh Node No. 257 (X: 18.077, Y: 4.751, Z: 0.000 m)
Max. displacement in Y	-0.0	mm	FE Mesh Node No. 245 (X: 20.952, Y: 2.326, Z: 0.000 m)
Max. displacement in Z	-0.4	mm	FE Mesh Node No. 307 (X: 17.852, Y: 2.101, Z: 0.000 m)
Max. vector displacement	0.4	mm	FE Mesh Node No. 307 (X: 17.852, Y: 2.101, Z: 0.000 m)
Max. rotation about X	-0.1	mrad	FE Mesh Node No. 129 (X: 20.823, Y: 7.401, Z: 0.000 m)
Max. rotation about Y	-0.1	mrad	FE Mesh Node No. 92 (X: 17.852, Y: 4.631, Z: 0.000 m)
Max. rotation about Z	-0.0	mrad	FE Mesh Node No. 21 (X: 24.052, Y: 4.510, Z: 0.000 m)
Maximum surface strain	0.000	‰	FE Mesh Node No. 0 (X: 0.000, Y: 0.000, Z: 0.000 m)
Method of analysis	2nd Order		Second order analysis (Nonlinear, Timoshenko)
Internal forces referred to deformed system for...	x		N, V_y, V_z, M_y, M_z, M_T
Reduction of stiffness			Materials, Cross-sections, Members, Surfaces
Consider favorable effects of tensile forces	x		
Divide results by CO factor	-		
Number of load increments	1		
Number of iterations	2		
Maximum value of element of stiffness matrix on diagonal	3.E+11		
Minimum value of element of stiffness matrix on diagonal	4.488E+06		
Stiffness matrix determinant	2.124E+48443		
Infinity Norm	7.026E+11		
Load Combination CO3 - LC1 + LC2			
Sum of loads in X	0.00	kN	
Sum of support reactions in X	0.00	kN	
Sum of loads in Y	0.00	kN	
Sum of support reactions in Y	0.00	kN	

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4.0 Results - Summary

	Description	Value	Unit	Comment
	Sum of loads in Z	-454.91	kN	
	Sum of support reactions in Z	-454.91	kN	Deviation 0.00%
	Resultant of reactions about X	0.0	kN m	At center of gravity of model (X:21.0, Y:4.8, Z:0.0 m)
	Resultant of reactions about Y	0.0	kN m	At center of gravity of model
	Resultant of reactions about Z	0.0	kN m	At center of gravity of model
	Max. displacement in X	-0.0	mm	FE Mesh Node No. 257 (X: 18.077, Y: 4.751, Z: 0.000 m)
	Max. displacement in Y	-0.0	mm	FE Mesh Node No. 245 (X: 20.952, Y: 2.326, Z: 0.000 m)
	Max. displacement in Z	-0.4	mm	FE Mesh Node No. 307 (X: 17.852, Y: 2.101, Z: 0.000 m)
	Max. vector displacement	0.4	mm	FE Mesh Node No. 307 (X: 17.852, Y: 2.101, Z: 0.000 m)
	Max. rotation about X	-0.1	mrad	FE Mesh Node No. 129 (X: 20.823, Y: 7.401, Z: 0.000 m)
	Max. rotation about Y	-0.1	mrad	FE Mesh Node No. 92 (X: 17.852, Y: 4.631, Z: 0.000 m)
	Max. rotation about Z	-0.0	mrad	FE Mesh Node No. 21 (X: 24.052, Y: 4.510, Z: 0.000 m)
	Maximum surface strain	0.000	‰	FE Mesh Node No. 0 (X: 0.000, Y: 0.000, Z: 0.000 m)
	Method of analysis	2nd Order		Second order analysis (Nonlinear, Timoshenko)
	Internal forces referred to deformed system for...	x		N, V_y, V_z, M_y, M_z, M_T
	Reduction of stiffness			Materials, Cross-sections, Members, Surfaces
	Consider favorable effects of tensile forces	x		
	Divide results by CO factor	-		
	Number of load increments	1		
	Number of iterations	2		
	Maximum value of element of stiffness matrix on diagonal	3.E+11		
	Minimum value of element of stiffness matrix on diagonal	4.488E+06		
	Stiffness matrix determinant	2.124E+48443		
	Infinity Norm	7.026E+11		
Load Combination CO4 - LC1 + LC2				
	Sum of loads in X	0.00	kN	
	Sum of support reactions in X	0.00	kN	
	Sum of loads in Y	0.00	kN	
	Sum of support reactions in Y	0.00	kN	
	Sum of loads in Z	-454.91	kN	
	Sum of support reactions in Z	-454.91	kN	Deviation 0.00%
	Resultant of reactions about X	0.0	kN m	At center of gravity of model (X:21.0, Y:4.8, Z:0.0 m)
	Resultant of reactions about Y	0.0	kN m	At center of gravity of model
	Resultant of reactions about Z	0.0	kN m	At center of gravity of model
	Max. displacement in X	-0.0	mm	FE Mesh Node No. 257 (X: 18.077, Y: 4.751, Z: 0.000 m)
	Max. displacement in Y	-0.0	mm	FE Mesh Node No. 245 (X: 20.952, Y: 2.326, Z: 0.000 m)
	Max. displacement in Z	-0.4	mm	FE Mesh Node No. 307 (X: 17.852, Y: 2.101, Z: 0.000 m)
	Max. vector displacement	0.4	mm	FE Mesh Node No. 307 (X: 17.852, Y: 2.101, Z: 0.000 m)
	Max. rotation about X	-0.1	mrad	FE Mesh Node No. 129 (X: 20.823, Y: 7.401, Z: 0.000 m)
	Max. rotation about Y	-0.1	mrad	FE Mesh Node No. 92 (X: 17.852, Y: 4.631, Z: 0.000 m)
	Max. rotation about Z	-0.0	mrad	FE Mesh Node No. 21 (X: 24.052, Y: 4.510, Z: 0.000 m)
	Maximum surface strain	0.000	‰	FE Mesh Node No. 0 (X: 0.000, Y: 0.000, Z: 0.000 m)
	Method of analysis	2nd Order		Second order analysis (Nonlinear, Timoshenko)
	Internal forces referred to deformed system for...	x		N, V_y, V_z, M_y, M_z, M_T
	Reduction of stiffness			Materials, Cross-sections, Members, Surfaces
	Consider favorable effects of tensile forces	x		
	Divide results by CO factor	-		
	Number of load increments	1		
	Number of iterations	2		
	Maximum value of element of stiffness matrix on diagonal	3.E+11		
	Minimum value of element of stiffness matrix on diagonal	4.488E+06		
	Stiffness matrix determinant	2.124E+484		

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4.0 Results - Summary

	Description	Value	Unit	Comment
		43		
	Infinity Norm	7.026E+11		
Summary				
	Other Settings:			
	Number of 1D finite elements	0		
	Number of 2D finite elements	864		
	Number of 3D finite elements	0		
	Number of FE mesh nodes	885		
	Number of equations	5310		
	Internal forces referred to deformed system for...:			
	Max. number of iterations	100		
	Number of divisions for member results	10		
	Division of cable/foundation/tapered members	10		
	Number of member divisions for searching maximum values	10		
	Subdivisions of FE mesh for graphical results	0		
	Percentage of iterations according to Picard method in combination with Newton-Raphson method	5	%	
	Options:			
	Activate shear stiffness of members (Ay, Az)	x		
	Activate member divisions for large deformation or post-critical analysis	x		
	Activate entered stiffness modifications	x		
	Ignore rotational degrees of freedom	-		
	Check of critical forces of members	x		
	Nonsymmetric direct solver if demanded by nonlinear model	-		
	Method for the system of equations	Direct		
	Plate bending theory	Mindlin		
	Solver version	64-bit		
	Precision and Tolerance:			
	Change default setting	-		

RF-CONCRETE Surfaces

CA1
Reinforced concrete design

1.1 General Data

Design according to Standard:	LST EN 1992-1-1:2005/NA:2011	
ULTIMATE LIMIT STATE		
Result combination for design:	RC1	ULS (STR/GEO) - Permanent / transient - Eq. 6.10 Persistent and Transient
SERVICEABILITY LIMIT STATE		
Load combinations for design:	CO2	LC1 + LC2 Characteristic with direct load, k_t 0.400, b 0.500
	CO3	LC1 + LC2 Frequent, k_t 0.400, b 0.500
	CO4	LC1 + LC2 Quasi-permanent, k_t 0.400, b 0.500
Definition of Provided Additional Reinforcement	Automatic arrangement according to the specifications in Table 1.4	
Type of SLS method:	Analytical Method By assuming an identical deformation ratio of the longitudinal reinforcement	
Design of		
Concrete Stress Analysis	x	
Steel Stress Analysis	x	

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1.1 General Data

Crack widths	x
Deformation Analysis	x
Consider creeping	x
Consider shrinkage	x
Tension stiffening:	x
Layout of longitudinal reinforcement	
Required longitudinal reinforcement automatically increased for serviceability limit state design:	-

DETAILS

Analysis Method for Reinforcement Envelope	Mixed
Apply the internal forces without the rib components	-

Design Situation Settings for Serviceability Limit State Checks

Load combination:	
Characteristic with direct load	Checks: k_1*f_{ck}, k_3*f_{yk}
Characteristic with imposed deformation	Checks: k_1*f_{ck}, k_4*f_{yk}
Frequent	Checks: w_k
Quasi-permanent	Checks: k_2*f_{ck}, w_k, u_l

RF-CONCRETE Surfaces

CA1
Reinforced concrete design

1.1.1 Parameters of National Annex

2. Basis of design			
2.4.2.4 Partial Factors for Materials			
Partial factor of concrete at the ultimate limit state (persistent, transient)	g_c	1.500	-
Partial factor of steel at the ultimate limit state (persistent, transient)	g_s	1.150	-
Partial factor of concrete at the ultimate limit state (accidental)	g_c	1.200	-
Partial factor of steel at the ultimate limit state (accidental)	g_s	1.000	-
Partial factor of concrete at the serviceability limit state	g_c	1.000	-
Partial factor of steel at the serviceability limit state	g_s	1.000	-
3. Materials			
3.1 Concrete			
Maximum value of strength class of concrete	C_{max}	C90/105	
Factor considering long term actions on compressive strength	a_{cc}	1.000	-
Factor considering long term actions on tensile strength	a_{ct}	1.000	-
3.2 Reinforcing Steel			
Maximum Value of Yield Strength	f_{yk}	600.00	N/mm^2
Factor for calculation of the design value for limit elongation of steel	k_{ud1}	0.900	-
4. Durability and Concrete Cover			
4.4.1 Minimum Concrete Cover			
Structural Class	S.C.	S4	
Modification of Structural Class			
Minimum Concrete Cover			
Additive safety element for increase of minimum concrete cover	$Dc_{dur,g}$	0.000	m
Reduction Factor Under Use of Stainless Steel	$Dc_{dur,st}$	0.000	m
Reduction Factor for Concrete with Additional Protection	$Dc_{dur,add}$	0.000	m
Increase of the cover layer under abrasion loading			
Value of increase for abrasion Class XM1	k_1	0.005	m
Value of increase for abrasion Class XM2	k_2	0.010	m
Value of increase for abrasion Class XM3	k_3	0.015	m
Allowance in Design for Deviation	Dc_{dev}	0.010	m
Value of increase for concreting of uneven surfaces			
Value of increase for prepared ground	k_1	0.040	m
Value of increase for concrete directly against soil	k_2	0.075	m
6. Ultimate Limit States (ULS)			
6.2.2 Members Not Requiring Design Shear Reinforcement			
Factor k_0 for calculation of the design value for shear resistance	k_0	0.180	-
Factor k_1 for calculation of the design value for shear resistance	k_1	0.150	-
Factor k_2 for calculation of the design value for shear resistance	k_2	0.035	-
6.2.3 Members Requiring Design Shear Reinforcement			
Min Angle of Compression Strut	Q_{min}	21.801	°
Max Angle of Compression Strut	Q_{max}	45.000	°
Reduction Factor for Concrete Cracked in Shear			
Reduction Factor k_1 for Concrete Cracked in Shear	k_1	0.600	-
Reduction Factor k_2 for Concrete Cracked in Shear	k_2	250.000	-
Factor for considering stress condition in compression chord	a_{cw}	1.000	-
7. Serviceability Limit State (SLS)			

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1.1.1 Parameters of National Annex

7.2 Stress Limitation			
Factor k_1 for limitation of compressive stress in concrete	k_1	0.600	-
Factor k_2 for limitation of compressive stress in concrete	k_2	0.450	-
Factor k_3 for stress limitation in steel	k_3	0.800	-
Factor k_4 for stress limitation in steel	k_4	1.000	-
7.3 Crack Control			
Limiting calculated crack width of reinforced concrete and concrete prestressed with unbonded tendons			
Maximum size of crack width for exposure classes X0, XC1	w_{max}	0.400	mm
Maximum size of crack width for exposure classes XC2-4, XD1-3, XS1-3	w_{max}	0.300	mm
Factor k_3 for calculation of maximum crack spacing	k_3	3.400	-
Factor k_4 for calculation of maximum crack spacing	k_4	0.425	-
8. Detailing of Reinforcement and Prestressing Tendons - General			
8.8 Additional Rules for Large Diameter Bars			
Bar diameter	$Ć_{large}$	32.00	mm
9. Detailing of Members and Particular Rules			
9.6 Walls			
9.6.2 Vertical Reinforcement			
Minimum Area of the Vertical Reinforcement $A_{s,vmin}$	k_1	0.002	-
Maximum Area of the Vertical Reinforcement $A_{s,vmax}$	k_2	0.040	-
9.6.3 Horizontal Reinforcement			
Minimum Area of the Horizontal Reinforcement $A_{s,hmin}$ by using k_3	k_3	0.250	-
Minimum Area of the Horizontal Reinforcement $A_{s,hmin}$ by using k_4	k_4	0.001	-
11. Lightweight Aggregate Concrete Structures			
11.3 Materials			
Factor considering long term actions on compressive strength	a_{lcc}	0.850	-
Factor considering long term actions on tensile strength	a_{lct}	0.850	-
11.6 Ultimate Limit State Analysis (ULS)			
11.6.1 Members Not Requiring Design Shear Reinforcement			
Factor k_0 for calculation of the design value for shear resistance	k_0	0.150	-
Factor k_1 for calculation of the design value for shear resistance	k_1	0.150	-
Factor k_2 for calculation of the design value for shear resistance	k_2	0.028	-
11.6.2 Structural Element Requiring Design Shear Reinforcement			
Reduction Factor k_1 for Concrete Cracked in Shear	k_1	0.500	-
Reduction Factor k_2 for Concrete Cracked in Shear	k_2	250.000	-

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1.2 Materials

Material No.	Material Description		Comment
	Concrete Strength Class	Steel Description	
4	Concrete C25/30	B 500 S (A)	

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1.2.1 Material Parameters

Material No.	Description	Name	Size	Unit
4	Concrete Strength Class: Concrete C25/30			
	Characteristic Cylinder Compressive Strength	f_{ck}	25.00	N/mm^2
	5 % Fractile of Axial Tensile Strength	$f_{ctk,0.05}$	1.80	N/mm^2
	Characteristic for Nonlinear Calculations			
	Mean Secant Modulus of Elasticity	E_{cm}	31000.00	N/mm^2
	Mean Cylinder Compressive Strength	f_{cm}	33.00	N/mm^2
	Mean Axial Tensile Strength	f_{ctm}	2.60	N/mm^2
	Ultimate Strain for Pure Compression	e_{c1}	-2.100	‰
	Ultimate Strain at Failure	e_{c1u}	-3.500	‰
	Shear Modulus	G	12916.70	N/mm^2
	Poisson's Ratio	n	0.200	-
	Characteristic Strains for Parabolic-Rectangular Diagram			
	Ultimate Strain for Pure Compression	e_{c2}	-2.000	‰
	Ultimate Strain at Failure	e_{cu2}	-3.500	‰
	Parabola Exponent	n	2.000	-
	Specific Weight	g	25.00	kN/m^3
	Reinforcing Steel: B 500 S (A)			
	Modulus of Elasticity	E_s	200000.00	N/mm^2

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1.2.1 Material Parameters

Material No.	Description	Name	Size	Unit
	Yield Stress Mean Value	f_{ym}	550.00	N/mm^2
	Characteristic Yield Stress	f_{yk}	500.00	N/mm^2
	Tensile Strength Mean Value	f_{tm}	551.25	N/mm^2
	Characteristic Tensile Strength	f_{tk}	525.00	N/mm^2
	Limiting Strain	e_{uk}	25.000	‰

1.3 Surfaces

Surface No.	Matl. No.	Creep coeff. j [-]	Shrinkage e_{cs} [-]	$u_{z,max}$ [mm]	$s_{c,max}$ [N/mm²] / $s_{s,max}$ [N/mm²]	$f_{ct,eff,wk}$ [N/mm²]	$f_{ct,eff,As,min}$ [N/mm²]	$w_{k,+z\ (top)}$ [mm] / $w_{k,-z\ (bottom)}$ [mm]	Effects due to Restraint: Apply	Effects due to Restraint: k_c [-]	Notes
1	Thickness Type: Constant, Thickness: 300.00 mm										
	4	2.53762	-0.00042	8.000	var. var.	2.60	2.60	0.300 0.300	-	1.0	
	Deformation referred to undeformed system										

1.4 Reinforcement Group No. 1

Applied to surfaces:	1
REINFORCEMENT RATIO	
Minimum secondary reinforcement	20.0 %
Basic minimum reinforcement	0.0 %
Minimum compression reinforcement	0.0 %
Minimum tension reinforcement	0.0 %
Maximum reinforcement percentage	4.0 %
Minimum shear reinforcement percentage	0.0 %
REINFORCEMENT AREA FOR DESIGN OF SLS	
Use provided basic reinforcement and required additional reinforcement acc. to Tables 2.1, 2.2, 2.3	
Concrete cover acc. to Standard	-
BASIC REINFORCEMENT LAYOUT - TOP (-z)	
Number of directions	2
Cover to rebar edge	c-1: 35.00, c-2: 47.00 mm
Bar diameter	ds-1: 12.00, ds-2: 12.00 mm
Directions of reinforcement	Phi-1: 0.000°, Phi-2: 90.000°
Reinforcement area	As-1,-z (top): 5.65, As-2,-z (top): 5.65 cm²/m
BASIC REINFORCEMENT LAYOUT - BOTTOM (+z)	
Number of directions	2
Cover to rebar edge	c-1: 35.00, c-2: 47.00 mm
Bar diameter	ds-1: 12.00, ds-2: 12.00 mm
Directions of reinforcement	Phi-1: 0.000°, Phi-2: 90.000°
Reinforcement area	As-1,+z (bottom): 5.65, As-2,+z (bottom): 5.65 cm²/m
ADDITIONAL REINFORCEMENT LAYOUT - TOP (-z)	
Number of directions	2
Cover to rebar edge	c-1: 35.00, c-2: 47.00 mm
Bar diameter	ds-1: 12.00, ds-2: 12.00 mm
Directions of reinforcement	Phi-1: 0.000°, Phi-2: 90.000°
Reinforcement area	Use required additional reinforcement acc. to Tables 2.1, 2.2, 2.3
ADDITIONAL REINFORCEMENT LAYOUT - BOTTOM (+z)	
Number of directions	2
Cover to rebar edge	c-1: 35.00, c-2: 47.00 mm
Bar diameter	ds-1: 12.00, ds-2: 12.00 mm
Directions of reinforcement	Phi-1: 0.000°, Phi-2: 90.000°
Reinforcement area	Use required additional reinforcement acc. to Tables 2.1, 2.2, 2.3
LONGITUDINAL REINFORCEMENT FOR SHEAR FORCE DESIGN	
Apply the greater value resulting from either the required or provided reinforcement (basic and add. reinforcement) per reinforcement direction	
OPTIONS FOR LST EN 1992-1-1:2005/NA:2011	
Minimum longitudinal reinforcement for plates acc. to 9.3.1	x

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2.4 Reinforcement Group No. 1

Direction of minimum reinforcement	
Reinforcement direction with the main tensile force from top (-z) and bottom (+z) surfaces together:	x
Minimum longitudinal reinforcement for walls acc. to 9.6	-
Minimum shear reinforcement	x
Neutral axis depth limitation	x
Variable strut inclination - min	21.801 °
Variable concrete strut inclination - max	45.000 °
Partial safety factor g_s	PT 1.15, AC 1.00, SLS 1.00
Partial safety factor g_c	PT 1.50, AC 1.20, SLS 1.00
Consideration of long-term effects Alpha-cc	PT 1.00, AC 1.00, SLS 1.00
Consideration of long-term effects Alpha-ct	SLS 1.00

RF-CONCRETE Surfaces
CA1
Reinforced concrete design

2.2 Required Reinforcement by Surface (1)

Surface No.	Point No.	Point Coordinates [m] X	Y	Z	Symbol	Required Reinf. ULS	Basic Reinf.	Additional Reinforcement Required	Provided	Unit	Notes
1	M38	23.923	2.101	0.000	$a_{s,1,-z\ (top)}$	3.42	5.65	0.00	0.00	cm^2/m	
	M2	24.052	7.281	0.000	$a_{s,2,-z\ (top)}$	3.42	5.65	0.00	0.00	cm^2/m	
	M40	23.665	2.101	0.000	$a_{s,1,+z\ (bottom)}$	3.42	5.65	0.00	0.00	cm^2/m	
	M1	23.639	2.907	0.000	$a_{s,2,+z\ (bottom)}$	3.42	5.65	0.00	0.00	cm^2/m	
	M1	23.639	2.907	0.000	a_{sw}	0.00	-	-	-	cm^2/m^2	

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CA1
Reinforced concrete design

3.2 Serviceability Check by Surface (1)

Surface No.	Point No.	Point Coordinates [m] X	Y	Z	Load Case	Design Type	Exist. Value	Limit Value	Unit	Ratio	Notes
1	M307	17.852	2.101	0.000	CO4	$u_{z,local}$	-0.464	8.000	mm	0.1	
	M207	20.827	4.793	0.000	CO4	s_c	-0.77	-11.25	N/mm^2	0.1	
	M1	23.639	2.907	0.000	CO2	s_s	0.00	400.00	N/mm^2	0.0	226)
	M1	23.639	2.907	0.000	CO4	lim d_s	12.00	-	mm	0.0	226)
	M1	23.639	2.907	0.000	CO4	lim s_l	0.200	-	m	0.0	226)
	M1	23.639	2.907	0.000	CO4	w_k	0.000	0.300	mm	0.0	226)

RF-CONCRETE Surfaces
CA1
Reinforced concrete design

Serviceability Check Notes

No.	Description
226)	Concrete cracks on neither side.

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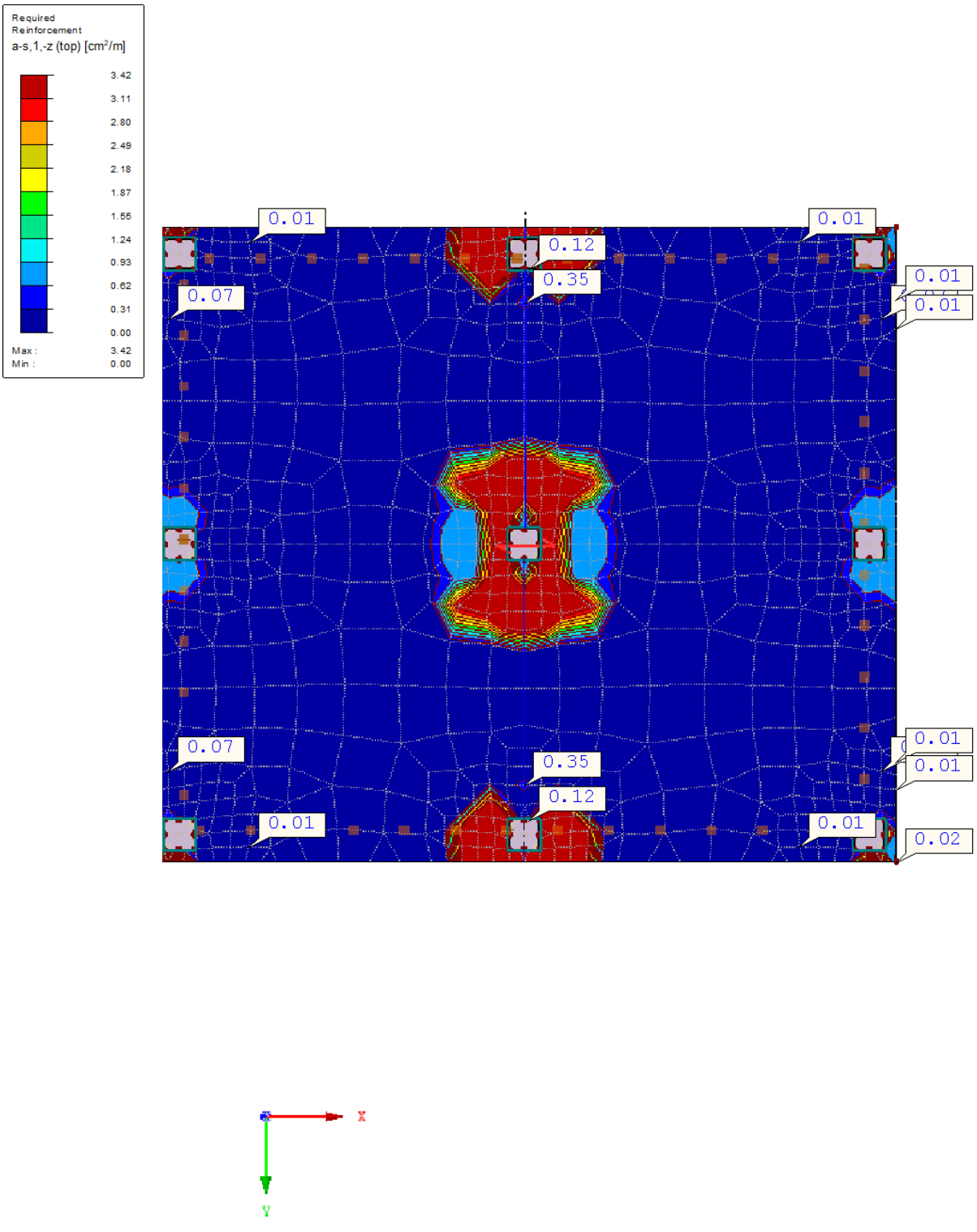
Required Reinforcement $a_{s,1,-z\ (top)}$

RF-CONCRETE Surfaces CA1
Reinforced concrete design
Required Reinforcement a-s,1,-z (top) [cm²/m]
Values: a-s,1,-z (top) [cm^2/m]



Max a-s,1,-z (top): 3.42, Min a-s,1,-z (top): 0.00 cm²/m

	LAPAS	LAPŲ	LAIDA
ED2201-XX-RDP-SK-T1.IS	638	643	0

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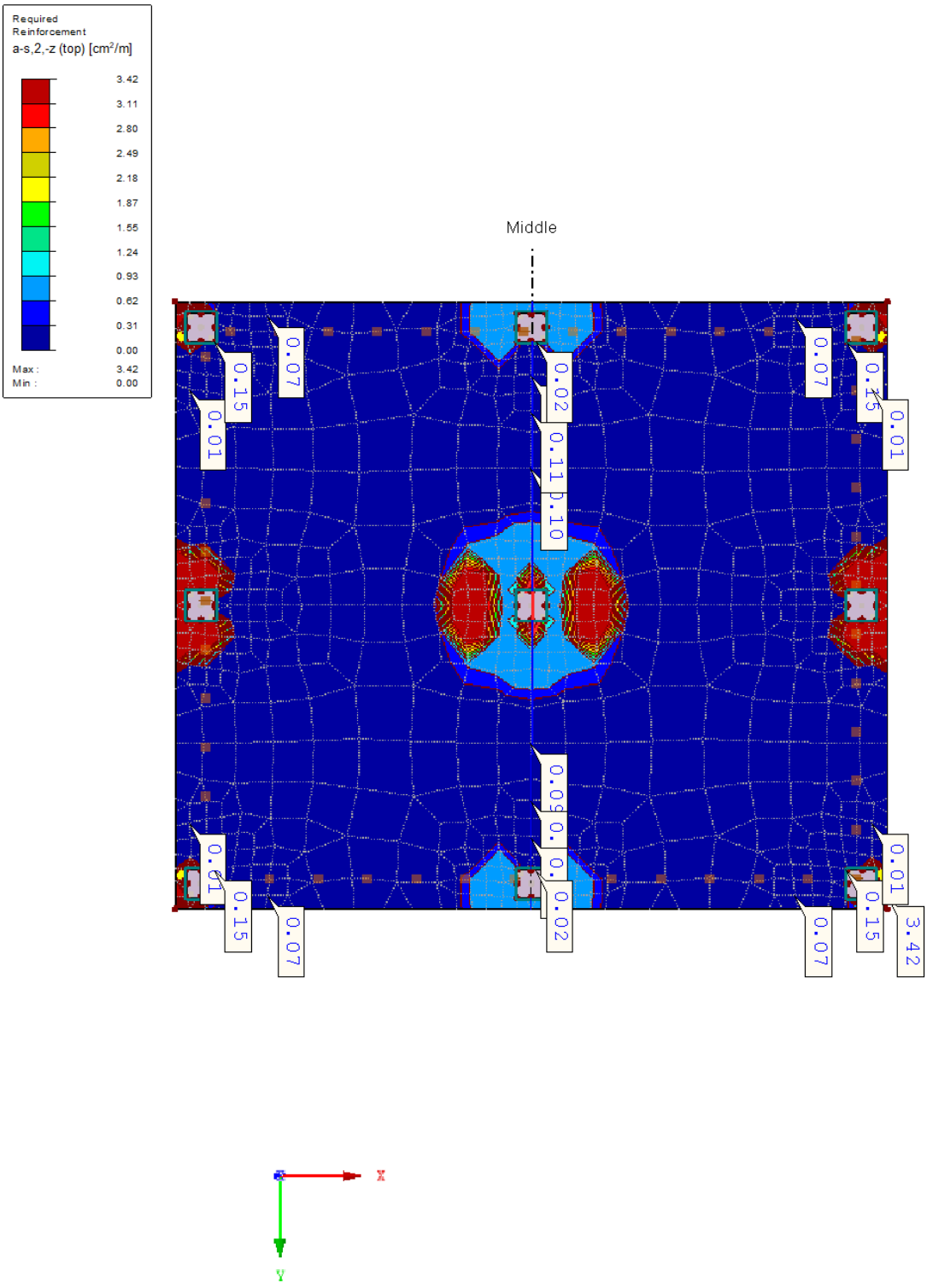
Required Reinforcement $a_{s,2,-z\ (top)}$

RF-CONCRETE Surfaces CA1
Reinforced concrete design
Required Reinforcement a-s,2,-z (top) [cm²/m]
Values: a-s,2,-z (top) [cm^2/m]



1.1 m
M 1:55

Max a-s,2,-z (top): 3.42, Min a-s,2,-z (top): 0.00 cm²/m

	LAPAS	LAPŲ	LAIDA
ED2201-XX-RDP-SK-T1.IS	639	643	0

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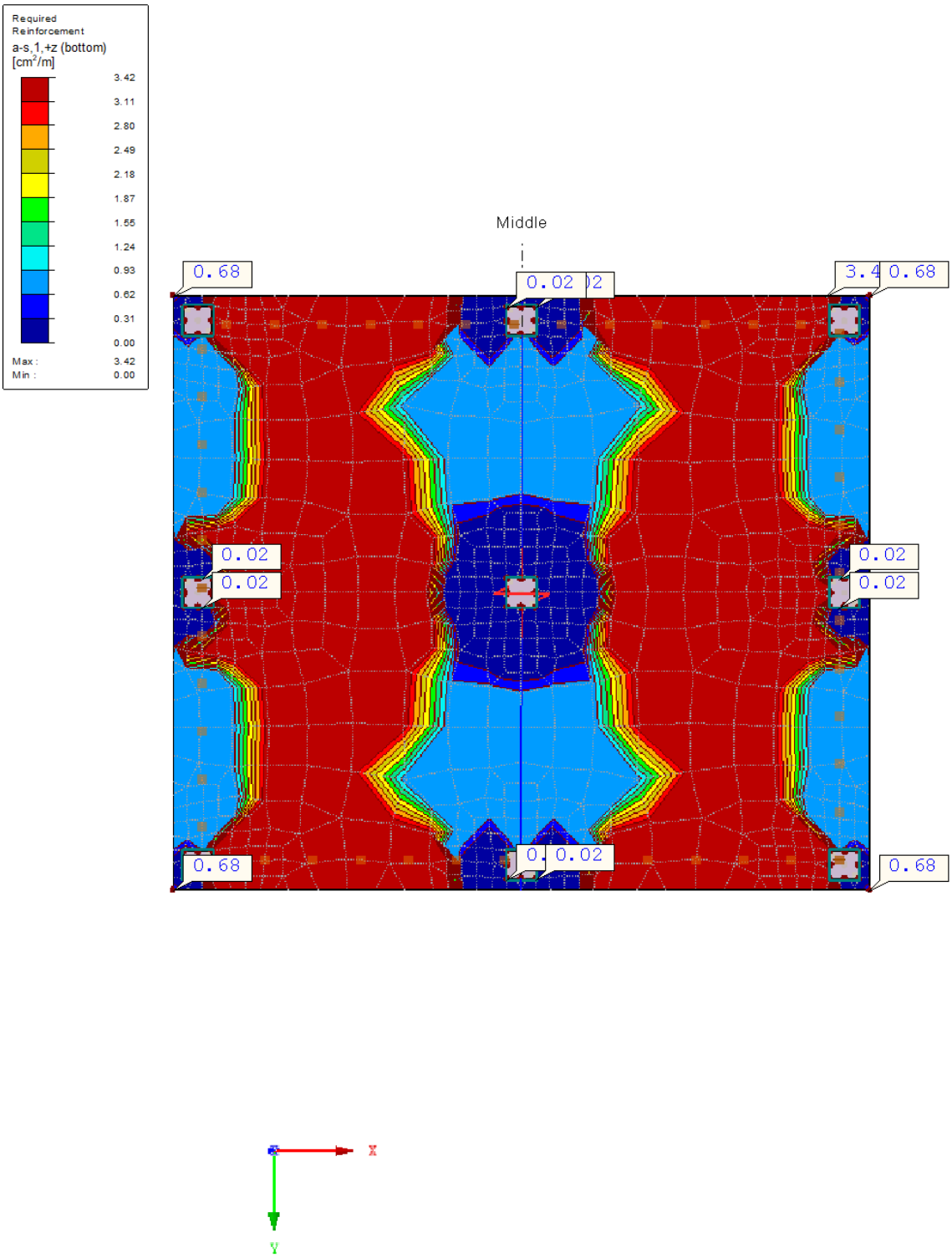
Required Reinforcement $a_{s,1,+z\ (bottom)}$

RF-CONCRETE Surfaces CA1
Reinforced concrete design
Required Reinforcement a-s,1,+z (bottom) [cm²/m]
Values: a-s,1,+z (bottom) [cm^2/m]



1.1 m
M 1:55

Max a-s,1,+z (bottom): 3.42, Min a-s,1,+z (bottom): 0.00 cm²/m

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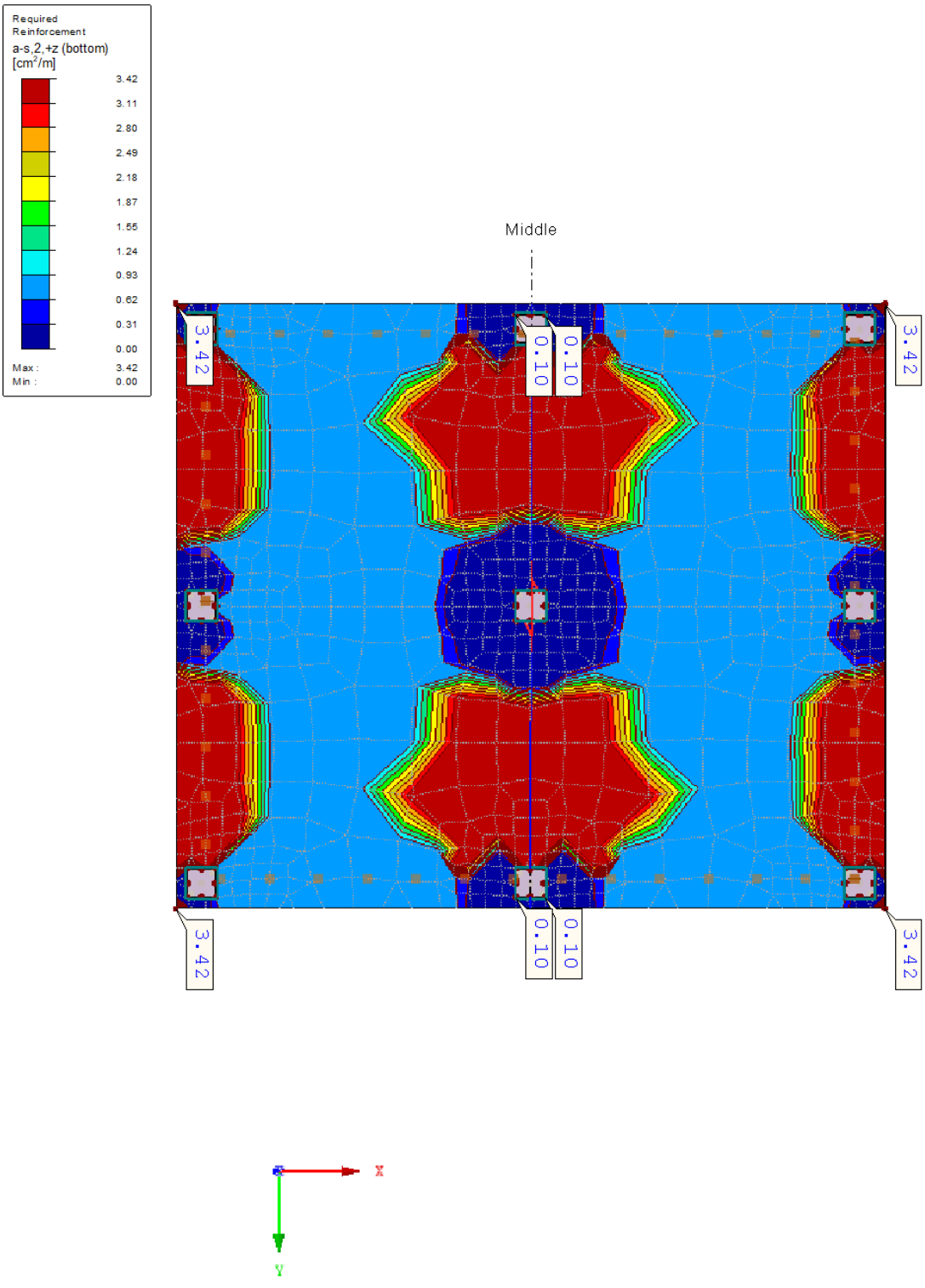
Required Reinforcement $a_{s,2,+z}$ (bottom)

RF-CONCRETE Surfaces CA1
Reinforced concrete design
Required Reinforcement a-s,2,+z (bottom) [cm²/m]
Values: a-s,2,+z (bottom) [cm^2/m]



Max a-s,2,+z (bottom): 3.42, Min a-s,2,+z (bottom): 0.00 cm²/m

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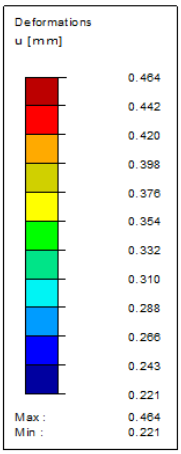
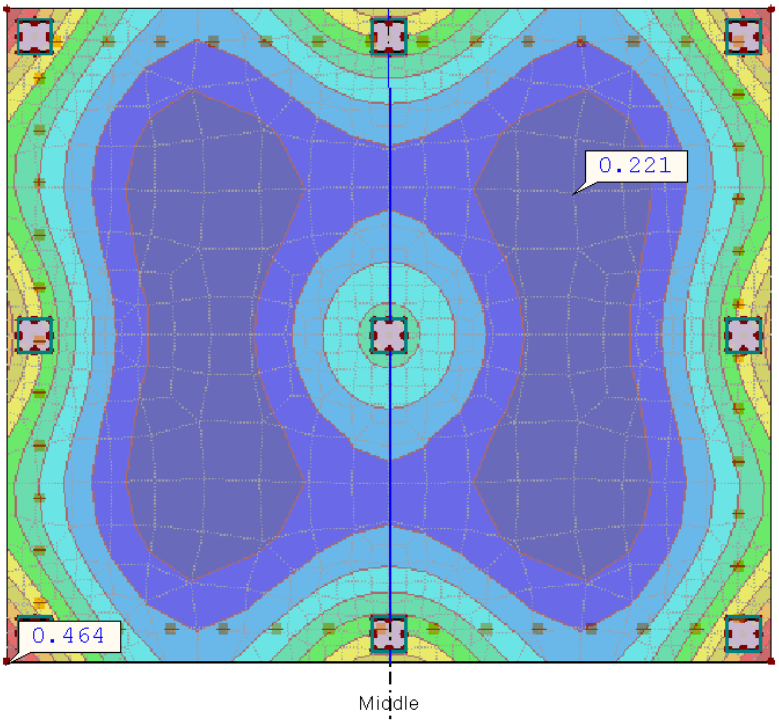
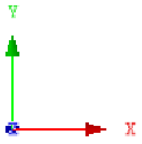
Deformations u

RF-CONCRETE Surfaces CA1 Against Z
Reinforced concrete design
Deformations u [mm]
Values: u [mm]







Factor of deformations: 100.00
Max u: - Min u: -

1.2 m
M 1:60

Išvados:

- Atliktus skaičiavimus ir patikrinus pamatinę plokštę gauta, jog 300mm storio gelžbetoninės plokštės stiprumas ir pastovumas pakankamas esant viršutiniui ir apatiniui armatūros tinklui d12 – 200/200 žingsniu. Maksimalus plokštės nuosėdis 0,5 mm.

	LAPAS	LAPŲ	LAIDA
ED2201-XX-RDP-SK-T1.IS	642	643	0

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8 IŠVADOS

Projektas ir jame priimtos konstrukcijos bei atlikti skaičiavimų rezultatai atitinka Eurokodo keliamus reikalavimus, bei kitus projekto rengimo dokumentų reikalavimus, nurodytus šioje projekto dalyje. Elementų ir mazgų laikomosios galios išnaudojimo neviršija ribinių reikšmių pagal saugos ribinius būvius.

Konstrukcijų poslinkiai, įlinkiai neviršija ir atitinka reikalavimus pagal tinkamumo ribinius būvius.

Pamatai ir pamatų pagrindų laikomosios galios reikšmės atitinka saugos ir tinkamumo ribinius būvius.