1 NASLOVNA STRAN S KLJUČNIMI PODATKI O NAČRTU

Načrt: **2/2 Načrt gradbenih konstrukcij**
JEKLENE KONSTRUKCIJE NADSTREŠKOV

Investitor: **Republika Slovenija, Ministrstvo za infrastrukturo**
Direkcija RS za infrastrukturo
Tržaška cesta 19, 1000 Ljubljana

Objekt/Projekt **Ureditev železniške postaje Litija**

Vrsta projektne dokumentacije: **IZVEDBENI NAČRT**

Za gradnjo: **VZDRŽEVALNA DELA V JAVNO KORIST**

Projektant: **Hiša, d.o.o.**
načrtovanje in svetovanje
Ukmarjeva ulica 4, SI - 1000 Ljubljana

Odgovorni predstavnik projektanta:

mag. Tomaž Habič,
univ. dipl. inž. grad.

Poslujemo brez žiga

Podpis:

Odgovorni projektant:

dr. Leon Hladnik,
univ. dipl. inž. grad.
G-0296

dr. LEON HLADNIK
univ. dipl. inž. grad.
IZS G-0296

Podpis:

Številka načrta: **105/21** *Številka projekta:* **8513**

Kraj in datum: **Ljubljana, marec 2021**

Odgovorni vodja projekta:

Luka Šošo,,,
mag.inž.prom., dipl.inž.grad.
G-4643

LUKA ŠOŠO
mag.inž.prom.
IZS PI P-0055

Podpis:

ZG1000	0205.00	007.1276	S.1	

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3. IZJAVA IZDELOVALCA IZVEDBENEGA NAČRTA

Odgovorni projektant načrta

dr. Leon Hladnik, univ. dipl. inž. grad.

V skladu s 7. točko 27. člena Pravilnika o pogojih in postopku za začetek, izvajanje in dokončanje tekočega in investicijskega vzdrževanja ter vzdrževalnih del v javno korist na področju železniške infrastrukture (Ur. l. RS, št. 82/2006),

I Z J A V L J A M ,

1. da je izvedbeni načrt **»2/2 Načrt gradbenih konstrukcij, JEKLENE KONSTRUKCIJE nadstreškov, Ureditev železniške postaje Litija«** skladen s projektno nalogo,
2. da predmetni, izvedbeni načrt izpolnjuje vse pogoje interoperabilnosti podane v tehnični specifikaciji za interoperabilnost vseevropskega železniškega sistema za konvencionalne hitrosti v zvezi:
   - z »infrastrukturnim« podsistemom TSI-2014/1299/EU« z dne 18.11. 2014
   - z »energijskim« podsistemom TSI-2014/1301/EU« z dne 18.11. 2014
   - s »funkcionalno oviranimi osebami«TSI-2014/1300/EU« z dne 18.11. 2014

105/21	**dr. Leon Hladnik, univ. dipl. inž. grad. G-0296**
(št. načrta)	(ime in priimek, strokovna izobrazba, identifikacijska št.)
Ljubljana, marec 2021	dr. LEON HLADNIK univ. dipl. inž. grad. IZS G-0296
(kraj in datum)	(osebni žig, podpis)

ZG1000	**0205.00**	**007.1276**	**S.5.1**	

4 Tehnično poročilo

ZG1000	0205.00	007.1276	T.1	

4.1 Tehnični opis

ZG1000	0205.00	007.1276	T.1.1	

TEHNIČNI OPIS

rev.0 02.07.2021 po pregledu

Načrt gradbenih konstrukcij – Izvedbeni načrt (IZN)

Nadstreški na železniški postaji Litija

1.0 SPLOŠNI PODATKI

INVESTITOR: Republika Slovenija, Ministrstvo za infrastrukturo Direkcija RS za infrastrukturo

PROJEKT/OBJEKT: Ureditev železniške postaje Litija, Nadstreški

2.0 PODLOGE ZA PROJEKTIRANJE

IZN Načrt arhitekture: Ureditev železniške postaje Litija, projekt. št. 8513, SŽ-projektivno podjetje Ljubljana, april 2021

3.0 OPIS OBJEKTA

V tem načrtu gradbenih konstrukcij so obravnavani naslednji konstrukcijski sklopi:

- Nadstrešek 1
- Peronski nadstrešek 2
- Peronski nadstrešek 3
- Nadstrešek 4
- Jeklene konstrukcije jaškov dvigal
- Zavetišče

Predmet tega načrta so jekleni deli zgoraj navedenih konstrukcijskih sklopov in novi točkovni in pasovni AB temelji. Obstoječe in nove AB podporne konstrukcije nadstreškov v območju podhodov in stopnišč in AB konstrukcije jaškov dvigal niso del tega načrta.

Pred izvedbo je potrebno izdelati delavniško dokumentacijo jeklenih konstrukcij. Za potrebe izdelave delavniške dokumentacije je obvezno potrebno preveriti geometrijo obstoječih in novih AB konstrukcij, ki niso del tega načrta, in po potrebi prilagoditi mere jeklenih nadstreškov.

Peronski nadstrešek 2

Peronski nadstrešek je širine cca. 6.7m in poteka v radiju cca. 592.4m. Višina nadstreška znaša nad koto perona cca. 4.70m (zgornji rob konstrukcije nadstreška). Nosilno jekleno konstrukcijo predstavljajo prečni

okvirji, ki potekajo v rastru 13x9.0m. Okvirna konstrukcija se sestoji iz dveh stebrov iz kvadratnih cevi KC 220x12.5mm, ki imata medsebojni osni razmak 1.00m v območju perona in cca. 2.8 m v območju stopnišča (razdalja se nekoliko razlikuje od lokacije do lokacije. Zgoraj sta obe cevi povezani v okvirno konstrukcijo s prečko, ki jo tvorita zvarjena U profila, ki segata previsno preko stebrov. Prečni okvirji so v vzdolžni smeri povezani z vroče valjanimi profili IPE 240 oziroma UNP 240 po robu nadstreška. Vzdolžne povezave so po statični zasnovi koncipirane kot kontinuirni nosilci preko več polj razpona 9.00m, ki v povezavi s prečnimi okvirji tvorijo okvirno konstrukcijo tudi v vzdolžni smeri strehe. Osni razmak med vzdolžnimi povezavami znaša cca 1.40m. V strešni ravnini je izvedeno horizontalno povezje sistema nateznih diagonal iz okroglega jekla z napenjalci.

Stebri okvirjev so preko sidrnih vijakov M24, ki se s pomočjo šablone vgradijo v betonsko konstrukcijo, vpeti v temelje. Temelji so točkovni dimenzij 3.20x1.80x0.50m (temeljna peta) in temeljni nastavki 0.60x0.60x0.75m. Skupna višina temelja tako znaša 1.25m. V območju stopnišča so stebri podprti z armiranobetonsko konstrukcijo podhoda oziroma stopnišča. Za kritino je izbrana profilirana trapezna pločevina. Obloge strehe niso predmet tega načrta.

Zaradi dolžine in temperaturnih vplivov je konstrukcija na cca. sredini konstrukcije dilatirana, tako da so omogočeni vzdolžni pomiki med levim in desnim delom konstrukcije.

AB konstrukcija podhoda/stopnišč ni predmet tega načrta.

Peronski nadstrešek 3

Peronski nadstrešek je širine cca. 3.8m in poteka v radiju cca. 768.5m. Višina nadstreškov znaša nad koto perona cca. 4.30m. Nosilno jekleno konstrukcijo predstavljajo prečni okvirji, ki potekajo v rastru 8x9.0m. Okvirna konstrukcija se sestoji iz dveh stebrov iz kvadratnih cevi KC 220x8mm, ki imata medsebojni osni razmak 1.00m. Zgoraj sta obe cevi povezani v okvirno konstrukcijo s prečko, ki jo tvorita zvarjena U profila, ki segata previsno preko stebrov. Prečni okvirji so v vzdolžni smeri povezani z vroče valjanimi profili IPE 240 oziroma UNP 240 po robu nadstreška. Vzdolžne povezave so po statični zasnovi koncipirane kot kontinuirni nosilci preko več polj razpona 9.00m, ki v povezavi s prečnimi okvirji tvorijo okvirno konstrukcijo tudi v vzdolžni smeri strehe. Osni razmak med vzdolžnimi povezavami znaša cca 0.70m. V strešni ravnini je izvedeno horizontalno povezje sistema nateznih diagonal iz okroglega jekla z napenjalci.

Stebri okvirjev so preko sidrnih vijakov M20, ki se s pomočjo šablone vgradijo v betonsko konstrukcijo, vpeti v temelje. Temelji so točkovni dimenzij 2.6x1.80x0.45m (temeljna peta) in temeljni nastavki 0.60x0.60x0.75m. Skupna višina temelja tako znaša 1.20m.

Kritina strehe so OSB3 vodoodporne plošče debeline 25 mm podložene z lesenimi morali. Obloge strehe niso predmet tega načrta.

Zaradi dolžine in temperaturnih vplivov je konstrukcija na cca. sredini konstrukcije dilatirana, tako da so omogočeni vzdolžni pomiki med levim in desnim delom konstrukcije.

Nadstrešek 4

Tlorisno je nadstrešek trapezne oblike. Dolžina nadstreška je cca 34.4m, širina pa od 5.5 do 11.2 m. Višina nadstreška znaša nad koto perona cca. 4.40m. Glavno nosilno jekleno konstrukcijo predstavlja momentni

prostorski okvirni sistem, katerega stebri so členkasto podprti z AB podporno konstrukcijo. Stebri okvirja so iz hladno ali vroče oblikovanih cevi dimenzij KC220/10 in KC220/8, glede na nivo obremenitev in zagotavljanja potrebne horizontalne togosti. Stebri podpirajo branasto konstrukcijo oz. nosilce brane iz vročevaljanih profilov HEA260. Stebri in nosilci so momentno stikovani. Po obodu nadstreška poteka robni UNP260 nosilec. Nosilci brane podpirajo sekundarne nosilce v rastru do 1.0m. Priključki sekundarnih nosilcev so členkasti. Sekundarni nosilci so iz hladno ali vroče oblikovanih cevi dimenzij KC60/4, PC120/60/4, PC120/80/4 in KC120/5 glede na njihov razpon.

V ravnini nosilcev brane je vgrajeno horizontalno zavetrovanje sistema nateznih diagonal iz okroglega jekla z napenjalci.

AB podporno konstrukcijo sestavljajo novi AB točkovni temelji in AB konstrukcija podhoda/stopnišč.

Kritina strehe so OSB3 vodoodporne plošče debeline 25 mm podložene z lesenimi morali. Obloge strehe niso predmet tega načrta.

Novi AB točkovni temelji so dimenzij 1.5x1.5x0.8m.

AB konstrukcija podhoda/stopnišč ni predmet tega načrta.

Nadstrešek 1

Tlorisno je nadstrešek razčlenjene oblike. Maksimalna dolžina nadstreška je cca 50.2m, maksimalna širina pa 22.2m. Višina nadstreška znaša nad koto perona cca. 4.40m. Glavno nosilno jekleno konstrukcijo predstavlja momentni prostorski okvirni sistem, katerega stebri so členkasto podprti z AB podporno konstrukcijo, razen ob obstoječem objektu, kjer so stebri, zaradi previsnega dela, vpeti v AB podporno konstrukcijo (novi točkovni temelji). Stebri okvirja so iz hladno ali vroče oblikovanih cevi dimenzij KC260/12.5, KC260/12.5, KC220/10 in KC220/8, glede na nivo obremenitev in zagotavljanja potrebne horizontalne togosti. Stebri podpirajo branasto konstrukcijo oz. nosilce brane iz vročevaljanih profilov HEA260, razen lokalno na največjem razponu in največjih obremenitvah (kopičenje snega) iz profila HEB260. Stebri in nosilci so momentno stikovani. Po obodu nadstreška poteka robni UNP260 nosilec. Nosilci brane podpirajo sekundarne nosilce v rastru do 1.0m. Priključki sekundarnih nosilcev so členkasti. Sekundarni nosilci so iz hladno ali vroče oblikovanih cevi dimenzij KC60/4, PC120/60/4, KC120/5 in KC120/5, glede na njihov razpon in obremenitve.

V ravnini nosilcev brane je vgrajeno horizontalno zavetrovanje sistema nateznih diagonal iz okroglega jekla z napenjalci.

AB podporno konstrukcijo sestavljajo novi AB točkovni temelji in AB konstrukcija podhoda/stopnišč.

Kritina strehe so OSB3 vodoodporne plošče debeline 25 mm podložene z lesenimi morali. Obloge strehe niso predmet tega načrta.

Novi AB točkovni temelji so različnih dimenzij. Na področju členkastega priključka stebra so temelji dimenzij 1.5x1.5x0.8m. Na področju vpetega priključka stebra (v območju obstoječega objekta) so temelji dimenzij . dimenzij 2.4x2.4x0.5m in 2.4x1.80x0.5m (temeljna peta) in temeljni nastavki 0.60x0.60x0.75m. Skupna višina temelja tako znaša 1.25m.

AB konstrukcija podhoda/stopnišč ni predmet tega načrta.

Jeklena konstrukcija jaškov dvigal

Jeklene konstrukcija jaškov dvigal se nahajajo pri Peronskem nadstrešku in Nadstrešku. Nad koto perona/betona je konstrukcija jaška dvigala jeklena. Glavni elementi jeklene konstrukcije so stebri in prečke iz KC140/8, ki tvorijo prostorski okvir. Dimenzije so profilov so izbrane konstruktivno. Konstrukcija je tlorisnih dimenzij 2.1x2.3m. Konstrukcije so lahko v celoti izvedene v delavnici kot »zvarjenec« in transportirane na gradbišče, kjer se preko lepljenih sidrnih vijakov HILTI HVU HAS kv. 5.8 M16 sidra v izvedene AB konstrukcije ali pa se jo z varjenjem na montaži izvede na gradbišču.
AB konstrukcija jaškov dvigal ni predmet tega načrta.

Zavetišče

Zavetišče je tlorisnih dimenzij cca. 5.52x3.32 m in višine cca. 3.94m. Nosilno jekleno konstrukcijo nadstreška predstavljajo prečni okvirji statičnega razpona cca 3.2m, ki skupaj z vzdolžnimi povezavami v konstrukcijskem smislu tvorijo prostorsko okvirno konstrukcijo. V ravnini stropa je izvedeno križno povezje. Za stebre in prečke okvirjev so uporabljene kvadratne cevi KC120x10mm. Stebri so vpeti v nove AB pasovne temelje s sidrnimi vijaki Hilti HVU HAS M16. Temelji so širine 30cm in višine 60cm. Zavetišče je zastekljeno.

4.0 TEMELJNA TLA

Podatki o temeljnih tleh so povzeti po Geološko-geomehanskem poročilu za Ureditev železniške postaje Litija, Lamela, .d.o.o. (Izvedbeni načrt, številka projekta: 8513, številka načrta 255.3, marec 2021).

- Višina postaje Šentjur je na 239-240 m.n.v.
- globina prodiranja mraza 90 do 100 cm
- strižni kot 26°-38°
- tip tal D (SIST EN 1998-1)
- pri projektiranju naj se upošteva nivo podtalnice na absolutni koti 233.50 m n.m.v.

Naknadno so nam bili strani geomehanika posredovani podatki o nosilnost temeljnih tal, predvidenih posedkih in koeficient reakcije tal za predvidene nove temelje nadstreškov (priloga).
Nosilnost temeljnih tal, glede na lokacijo oz. nadstrešek znaša od 370 do 480 kN/m², modul reakcije tal znaša 46000 do 67000 kN/m³, ter predvideni posedki znašajo od 3 do 5 mm.

Maksimalne kontaktne napetosti Rd/A pod novimi temelji pri ULS (faktorirana obtežba) in pri potresnih obtežnih kombinacijah ne presegajo maksimalnih dovoljenih napetosti 370 kN/m².

Kota dna novih AB točkovnih oz. pasovnih temeljev jeklenih nadstreškov je višje od predvidenega nivoja podtalnice.

Sanacija temeljnih tal

Pri vseh novih temeljih je potrebno lokalno sanirati temeljna tla pod temelji s sanacije s kamnito blazino od dna temelja do raščenih tal, povprečno ca. 0.40 m. Modul stisljivosti Me = 60 MPa.

Geotehnični nadzor

Sestav temeljnih tal in skladnost dejanskih razmer na terenu s pogoji geotehničnega poročila določi in potrdi projektant v času gradnje, na mestu samem, v sklopu geotehničnega nadzora. V okviru izvedbe mora biti zagotovljen geotehnični nadzor.

5.0 ANALIZA KONSTRUKCIJE IN VPLIVI NA KONSTRUKCIJO

Določitev obremenitev in dimenzioniranje elementov nosilne konstrukcije je bila opravljena z računalniškim programom ESA ENGINEER ob upoštevanju faktorirane obtežbe in upoštevanju teorije drugega reda in začetne nepopolnosti v skladu s standardi iz družine EVROKOD. Konstrukcija je bila obravnavana prostorsko. Dimenzioniranje in kontrola stabilnosti tipičnih konstrukcijskih elementov je prav tako izvedeno s programom SCIA ENGINEER

Uporabljeni standardi:

SIST EN 1990:	**Osnove projektiranja**
SIST EN 1990:	Osnove projektiranja
SIST EN 1991:	**Vplivi na konstrukcije**
SIST EN 1991-1-1:	Prostorninska teža, lastna teža, koristne obtežbe
SIST EN 1991-1-3:	Obtežba snega
SIST EN 1991-1-4:	Obtežba vetra
SIST EN 1992:	**Projektiranje betonskih konstrukcij**
SIST EN 1992-1-1:	Splošna pravila in pravila za stavbe
SIST EN 1993:	**Projektiranje jeklenih konstrukcij**
SIST EN 1993-1-1:	Splošna pravila in pravila za stavbe
SIST EN 1993-1-8:	Projektiranje spojev
SIST EN 1995:	**Projektiranje lesenih konstrukcij**
SIST EN 1995-1-1:	Splošna pravila in pravila za stavbe
SIST EN 1998:	**Projektiranje potresnoodpornih konstrukcij**
SIST EN 1998-1:	Splošna pravila, potresna obtežba in pravila za stavbe

Upoštevana obtežba:

Lokacija: Litija

Lastna teža

Lastna teža konstrukcije je upoštevana avtomatično v računalniškem programu.

Stalna obtežba

Kritina (PVC folija, npr.: Sika)	0.10 kN/m²
Trapezna pločevina ali OSB plošče	0.20 kN/m²
Inštalacije	0.10 kN/m²
Spuščen strop – profilirana pločevina	0.15 kN/m²
Skupaj	**0.55 kN/m²**

Del kritine pri Nadstrešku 1 je zasteklitev

Steklena kritina	0.70 kN/m²
Podkonstrukcija steklene kritine	0.15 kN/m²
Inštalacije	0.10 kN/m²
Skupaj	**0.95 kN/m²**

Teža LCD zaslona	1.5 kN

Obtežba s snegom S

vsi nadstreški

Cona A2, nadmorska višina 240 m, s_k = 1.43 kN/m2

S1 = $\mu\, s_k$ = 0.8 x 1.43 kN/m² = 1.15 kN/m²

pri Peronskem nadstrešku 2 upoštevano kopičenje v žloti

S2 = $\mu\, s_k$ = (0.8+0.8x8/30) x 1.43 kN/m² = 1.45 kN/m²

pri Nadstrešku 1 upoštevano kopičenje ob obstoječem objektu

dolžina kopičenja

h = 2.5 m, l_s = 2xh = 2x2.5 = 5.0 m; 5 m < l_s < 15 m, l_s = cela širina nadstreška

$\mu_w = \gamma \times h/s_k$ =2x2.5/1.43 = 3.5, $\quad 0.8 < \mu_w < 4 \rightarrow \mu_w = 3.5$

obtežba kopičenja

$S_3 = \mu_w \times s_k$ = 3.5 x 1.43 kN/m² = 5.0 kN/m²

Obtežba z vetrom W

Cona 1, hitrost vetra 20 m/s, II. kategorija terena, z = 5,0 m

$q_p(z) = c_e(z) \times q_b$ = 1.93 x 0.25 = 0.50 kN/m²

$w = c_p * q_p$

- veter na masko $C_p = 1.6$
- veter na profile $C_p = 2.0$
- veter na steklene površine $C_p = 0.8+0.5 = 1.3$
- veter pritisk na streho $C_p = 0.5$
- veter srk na streho $C_p = -1.5$

Horizontalna obtežba na ograjo oziroma stekleno steno:

Kategorija površine ob steni oziroma parapetu (kategorija C2-C4 in D)

H = 1,00 kN/m¹, višina delovanja obtežbe +1,20m nad koto perona

Potres

Pospešek temeljnih tal 0.20g. Faktor obnašanja q = 1.50, Tip tal D, faktor pomembnosti γ=1.0.

Vertikalni zemeljski pritisk

$\gamma = 20$ kN/m³, $p_v = \gamma \times h$

Aerodinamični učinki vlakov

Projektna hitrost vlakov na postaji v = 95km/h

Upoštevamo računsko hitrost vlakov v = 120 km/h

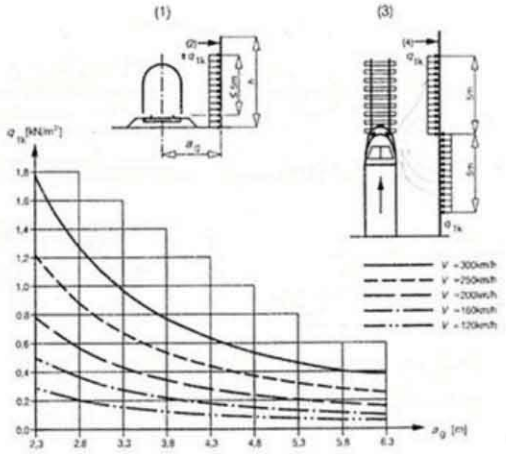
$a_{g1} = 2.3$ m (minimalna razdalja od osi tira vertikalnih stebrov)

$a_{g3} = 2.0$ m (minimalna razdalja od osi tira do roba strehe)

dinamični faktor $d_f = 2.0$

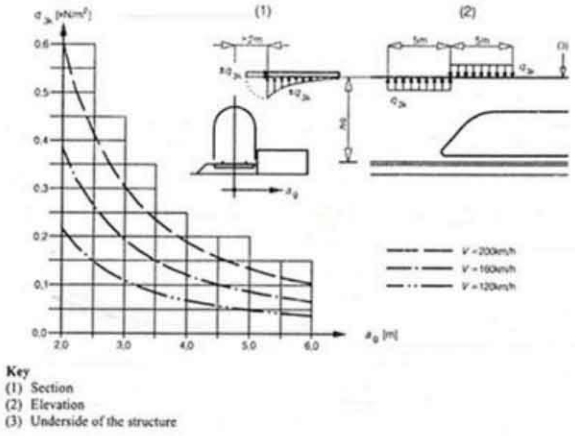
$q_{1k} = 0.30$ kN/m²

$q_{1d} = 0.30 \times 2 = 0.60$ kN/m²



$q_{3k} = 0.22$ kN/m²

$q_{3d} = 0.22 \times 2 = 0.44$ kN/m²



6.0 MATERIAL

Jeklo

- Osnovni material (profili, pločevine) elementov jeklenih konstrukcij je predviden v kvaliteti **S235J2** po SIST EN 10025. Za šablone za vgradnjo sider se lahko uporabi S235JR.

- Za sidranje jeklene konstrukcije Peronskega nadstreška 2 v novo AB podporno konstrukcijo so predvidena predhodno vbetonirana sidra (navojne palice) M24 kvalitete 8.8 v skladu z SIST EN 15048-1 z navojem po celotni dolžini palice.
- Za sidranje jeklene konstrukcije Peronskega nadstreška 3 v novo AB podporno konstrukcijo so predvidena predhodno vbetonirana sidra (navojne palice) M20 kvalitete 8.8 v skladu z SIST EN 15048-1 z navojem po celotni dolžini palice.
- Jeklena konstrukcija Peronskega nadstreška 2 in Peronskega nadstreška 3 je v območju obstoječe AB konstrukcije podhoda/stopnišča sidrana z naknadno lepljenimi sidri M24 HILTI HIT-HY 200 + navojne palice M24 kvalitete 5.6 v skladu z SIST EN 15048-1.
- Na nove AB točkovne Nadstreškov 1 in 4 je pritrjevanje izvedeno z lepljenimi sidri M24 HILTI HIT-HY 200 + navojne palice M24 kvalitete 5.6 v skladu z SIST EN 15048-1 (sidrna dolžina 300 mm).
- Jeklena konstrukcija Nadstreška 1 in Nadstreška 4 je v območju obstoječe AB konstrukcije podhoda/stopnišča sidrana z naknadno lepljenimi sidri M24 HILTI HIT-HY 200 + navojne palice M24 kvalitete 5.6 v skladu z SIST EN 15048-1 (sidrna dolžina 300 mm).
- Za sidranje stebrov s konzolo v nove AB točkovne temelje Nadstreška 1 so predvidena predhodno vbetonirana sidra (navojne palice) M30 kvalitete 8.8 v skladu z SIST EN 15048-1 z navojem po celotni dolžini palice.

Za spajanje jeklenih elementov na gradbišču so predvidene vijačne zveze:

- **kvalitete 8.8**,
  standard **SIST EN 15048-1**, navadni vijaki SB, čvrsto pritegnjeni;
- **kvalitete HV 10.9**,
  standard **SIST EN 14399-1**, razred K1, prednapeti do sile 50% polnega prednapetja z atestiranimi momentnimi ključi.

Visokoprofilirana trapezna pločevina

Arcelor Mitall 85/280 debeline 0.75mm, S320 GD+Z275 – pozitivno polaganje (nosilna kritina pri Peronskem nadstrešku 2).

Beton

- C 12/15 - podložni beton
- C 30/37 - AB konstrukcije, vodoneprepustni beton, PV-II, XC4, XF3, zaščitni sloj 5cm
- S 500 B – armatura

Les

- Leseni morali - masivni les – iglavci kvalitete C24
- OSB 3 vodoodporne plošče D = 25mm (nosilna kritina pri Nadstrešku 1, Nadstrešku 4 ter Peronskem nadstrešku 3)

Podlivanje

- Za podlivanje predlagamo **samorazlivno ekspanzijsko malto visoke trdnosti**, kot je na primer podlivna malta s komercialnim imenom ALTEKS ali ekvivalentna druga.

Ves vgrajen material elementov nosilne jeklene konstrukcije (pločevine, profili, dodajni material, spojna sredstva…) mora biti opremljen s potrdili o kvaliteti v skladu z zakonom o standardizaciji. Potrdila o kvaliteti morajo biti stopnje v skladu z določili podanimi v standardu SIST EN 1090-2.
Izdelki za izdelavo elementov nosilne jeklene konstrukcije, ki so izdelani v skladu z harmoniziranimi standardi (profili, pločevine, dodajni material, vijačne zveze, ležišča,..), morajo biti ustrezno opremljeni s CE znakom in dobavljeni z ustrezno izjavo oziroma certifikatom o skladnosti (Zakon o gradbenih proizvodih).

7.0 IZDELAVA IN MONTAŽA JEKLENE KONSTRUKCIJE

Nosilno jekleno konstrukcijo lahko v delavnici izdeluje le izvajalec, ki ima v skladu z:

- SIST EN 1090-1 Izvedba jeklenih in aluminijastih konstrukcij – 1. del:
  Zahteve za ugotavljanje skladnosti jeklenih konstrukcij,

s strani priglašenega organa certificirano notranjo kontrolo proizvodnje (FPC).
Jeklena konstrukcija mora biti izdelana in montirana v skladu s projektno dokumentacijo in v skladu z določili slovenskega standarda:

- SIST EN 1090-2 Izvedba jeklenih in aluminijastih konstrukcij – 2. del:
  Tehnične zahteve za izvedbo jeklenih konstrukcij,

v katerem so navedene splošne zahteve za izdelavo in montažo jeklenih nosilnih konstrukcij, narejenih iz vroče valjanih, vroče obdelanih, varjenih in hladno oblikovanih jeklenih izdelkov.
V okviru izdelave in montaže jeklenih konstrukcije je potrebno upoštevati tudi druge standarde, ki jih krovni standard SIST EN 1090-2 uvaja oziroma se na njih sklicuje.
Pri izdelavi in montaži nosilne jeklene konstrukcije, pa je potrebno upoštevati tudi določila še vedno veljavnega jugoslovanskega pravilnika (ni bil razveljavljen):

- Pravilnik o tehničnih predpisih za pregled in preizkušanje nosilnih jeklenih konstrukcij (Ul. SFRJ 6/65).

Le ta predpisuje, da je pred pričetkom uporabe potrebno izvršiti tehnični pregled nove nosilne jeklene konstrukcije objektov. Namen tega tehničnega pregleda je, da se ugotovi:

- ali je konstrukcija zgrajena v skladu z projektom;
- ali je kvaliteta izdelave in montaže konstrukcije v skladu z tehničnimi predpisi in posebnimi tehničnimi pogoji.

Izvedbeni razred jeklenih konstrukcij je EXC2.

Izvajalec je dolžan pred začetkom izvedbe oz. gradnje na osnovi IZN izdelati:

- **delavniško dokumentacijo (načrte oz. risbe)**
- plan kontrole in preizkušanj (za izdelavo v delavnici in montažo na gradbišču);
- elaborat protikorozijske zaščite (s točnimi navodili izvedbe in kontrole tako za izvedbo v delavnici in kot izvedbo na gradbišču);
- navodila za montažo
- elaborat varstva pri delu.

Izvajalec mora tako za izdelavo v delavnici kot montažo na gradbišču pripraviti tudi Kontrolno (dokazno dokumentacijo), ki se nanaša na dejansko zgrajeno konstrukcijo in iz katere je razvidno, da so se dela izvajala v skladu s projektno dokumentacijo in da so dela izvedena kvalitetno (potrdila o kvaliteti osnovnega materiala, potrdila o kvaliteti dodajnega materiala (elektrode, varilna žica…), potrdila o kvaliteti spojnega materiala (vijaki), spričevala o usposobljenosti varilcev, varilski in montažni dnevnik, merski protokoli posameznih zvarjencev izdelanih v delavnici, poročila o rezultatih kontrol kvalitete zvarov (vizualna kontrola, neporušne preiskave), protokoli privijanja vijakov (prednapeti, navadni), rezultati kontrol protikorozijske zaščite (meritve debelin in oprijema posameznih premazov in skupne debeline), potrdila o kvaliteti uporabljenih premazov protikorozijske zaščite, pisne potrditve sprememb, ki so nastale v času izdelave in montaže, s strani odgovornega projektanta nosilne jeklene konstrukcije, razni zapisniki in izjave…

Pri izdelavi je potrebno upoštevati sledeče:

- Sledljivost materiala mora biti zagotovljena v vseh fazah izdelave in montaže. Neoznačen material se obravnava kot neustrezen.
- Pri izdelavi posameznih elementov jeklene konstrukcije je potrebno posebno pozornost posvetiti dimenzijski kontroli posameznih elementov in pripravi zvarnih robov.
- Vsi sočelni zvari (K, V, 1/2V, Y,…) morajo biti izvedeni s prevaritvijo korena.
- Varilne deformacije predvidi izvajalec.
- Izvajalec mora upoštevati tolerance valjanih profilov.
- Sestava in varjenje se mora izvajati v skladu s planom varjenja in sestave.
- Med izdelavo in montažo jeklene konstrukcije mora biti zagotovljena stalna merska in geodetska kontrola. Za vse faze izdelave in montaže morajo biti izdelani ustrezni merski protokoli.
- Večje sklope naj se predhodno v delavnici poizkusno zmontira in preveri točnost in naleganje spojev in geometrijske tolerance. Poizkusno montažo je potrebno protokolirati.
- Rokovanje in skladiščenje materiala in že izdelanih elementov konstrukcije se mora vršiti tako, da ne pride do trajnejših deformacij in poškodb površin elementov. Preprečiti je potrebno zadrževanje vode na skladiščenih elementih.

Glede kvalitete zvarov in obsega neporušnih preiskav je potrebno upoštevati določila standarda SIST EN1090-2.

Montaža

Pri montaži je potrebno upoštevati sledeče:

- Pred pričetkom montaže naj se geodetsko kontrolira tlorisni in višinski položaj pripravljenih sidrišč jeklene konstrukcije.
- Montaža se mora izvajati v skladu s planom montaže, ki ga izdela izvajalec.
- Pri montaži je potrebno s pravilnim vrstnim redom montaže zagotoviti stabilnost konstrukcije v času montaže.
- Med izdelavo in montažo jeklene konstrukcije mora biti s strani izvajalca zagotovljena stalna ustrezna kontrola glavnih dimenzij. Za vse faze izdelave in montaže morajo biti izdelani ustrezni merski protokoli.
- Kontrola vijačenja mora biti protokolirana.
- Po posameznih fazah montaže in po končani montaži mora biti zapisniško preverjena glavna geometrija montirane nosilne jeklene konstrukcije. Geometrija montirane konstrukcije mora biti v okviru predpisanih toleranc.
- Nameščanje strešne kritine se lahko prične, šele, ko je nosilna jeklena konstrukcija v celoti montirana.
- Po zaključku montaže in pred nameščanjem strešne kritine in fasadne obloge je potrebno izvesti vsa popravila poškodb AKZ nastalih med transportom in montažo.
- Glede geometrijskih toleranc izdelanih elementov in montirane konstrukcije je potrebno upoštevati določila standarda SIST EN1090-2.

Varjenje

Varjenje tako v delavnici kot na gradbišču se mora izvajati v skladu z zahtevami relevantnih delov standarda: **SIST EN ISO 3834 1-6:2006** Zahteve za kakovost pri talilnem varjenju kovinskih materialov.
Glede na določen izvedbeni razred je potrebno upoštevati sledeče dele standarda SIST EN ISO 3834:

- EXC2 SIST EN ISO 3834-3:2006

Varjenje se mora izvajati v skladu z varilnim planom, ki ga izdela izvajalec jeklene konstrukcije. Izvajalec mora v okviru izdelave plana kontrole kvalitete izdelati tudi plan kontrole kvalitete zvarov.
Varijo lahko le varilci z uspešno opravljenim preizkusom za uporabljeni način in položaj varjenja.
Vse zvare je potrebno 100% vizualno pregledati.
Obseg ostalih NDT (UT, RT, PT, MT) kontrol mora biti v skladu z zahtevami SIST EN 1090-2. Obseg kontrole je odvisen os tipa zvara, izvedbenega razreda in debelin zvarjencev.
Če je potrebno nosilce zaradi različnih trgovskih dolžin variti na pravo dolžino s sočelnimi zvari morajo biti le-ti 100% UZ ali RT kontrolirani.

V primeru montažnega varjenje na gradbišču, mora biti med varjenjem na gradbišču zagotovljena prisotnost varilnega koordinatorja.

Podlivanje

Podlivanje ležiščnih plošč jeklenih stebrov se lahko izvede po končani montaži glavne nosilne jeklene konstrukcije, privitju vijakov in po opravljeni dimenzijski kontroli montirane konstrukcije. Uporabiti je potrebno material za podlivanje v odvisnosti od višine podlitja, v skladu standardom SIST EN 1090-2.

Tehnični list in pogoje vgradnje podane s strani proizvajalca izbrane posebne podlivne malte za podlivanje je potrebno posredovati odgovornemu projektantu nosilne jeklene konstrukcije v pisno potrditev. Uporabi naj se malto z majhnim krčenjem

Za podlivanje predlagamo samorazlivno ekspanzijsko malto visoke trdnosti, kot je na primer podlivna malta s komercialnim imenom ALTEKS ali ekvivalentna druga.

8.0 ZAŠČITA PRED KOROZIJO

Pri načrtovanju in izvedbi protikorozijske zaščite z barvami je potrebno upoštevati določila skupine standardov SIST EN ISO 12944 (deli 1, 2, 3, 4, 5, 6, 7, 8) Barve in laki – Korozijska zaščita jeklenih konstrukcij z zaščitnimi premaznimi sistemi.

Jekleno konstrukcijo je potrebno zaščititi z barvami, ki **zagotavljajo visoko H trajnost (več kot 15 let)** protikorozijske zaščite.

Vplivi okolja in atmosfere za **stebre (soljenje površin pozimi)** sodijo **v zelo visoko kategorijo C5 korozijske ogroženosti** (industrijsko okolje z agresivno atmosfero in visoko vsebnostjo soli).

Stebri (H, C5); Tabela C.5 standard SIST EN ISO 12944-5:2018:

• priprava površine	peskanje Sa2½	
• osnovni premaz	zink epoksi	80µm
• vmesni + končni premazi	epoksi + poliuretan	220µm
	skupaj	300µm

Sidrišče stebrov in del stebra, ki se nahaja pod koto tlaka naj se dodatno protikorozijsko zaščiti (na primer z bitumenskim debelo slojnim premazom kompatibilnim z uporabljenim premazom protikorozijske zaščite).

Vplivi okolja in atmosfere **ostalih delov konstrukcije (strešni del – prečke, nosilci, lege, jeklena konstrukcija jaška dvigala,...) sodijo v srednjo kategorijo C3 korozijske ogroženosti** (urbano in industrijsko okolje z zmerno onesnaženostjo).

Ostala konstrukcija (H, C3); Tabela C.3 standard SIST EN ISO 12944-5:2018:

• priprava površine	peskanje Sa2½	
• osnovni premaz	zink epoksi	80µm
• vmesni + končni premaz	epoksi + poliuretan	100µm
	skupaj	180µm

Izvajalec lahko predlaga svoj sistem zaščite, ki zagotavljajo enak ali višji nivo protikorozijske zaščite in ustreza zgoraj navedenim standardom in zahtevam.

Nianso zaključnega premaza (RAL) določi arhitekt v soglasju z investitorjem.

Zaradi zasnove pogojene iz arhitekturnih razlogov konstrukcija Peronskih nadstreškov 2 in 3 (dva stebra in osrednja prečka je en montažni kos, ki se zvari v delavnici – veliki segmenti za transport) ni primerna za vroče cinkanje.

Pred pričetkom izvedbe protikorozijske zaščite izvajalec izdela poseben Elaborat protikorozijske zaščite, ki ga mora predložiti investitorju, proizvajalcu premazov, projektantu in strokovnemu nadzoru v pregled

in pisno potrditev. Elaborat protikorozijske zaščite mora poleg izbranega sistema protikorozijske zaščite vsebovati tudi opis načina izvedbe protikorozijske zaščite in plan kontrole kvalitete njene izvedbe.
Posebno pozornost je potrebno posvetiti izvedbi protikorozijske zaščite montažnih zvarov – ustrezno čiščenja in zadostna debelina premazov.

9.0 KONTROLA IZDELAVE IN MONTAŽE JEKLENE KONSTRUKCIJE

Konstrukcijo lahko izdela in montira le usposobljeno podjetje. Zagotoviti je potrebno strokovni nadzor nad izvajanjem jeklene konstrukcije. Nadzor mora opraviti strokovnjak za jeklene konstrukcije, ki po zaključeni montaži za potrebe tehničnega pregleda izda zaključno poročilo s strokovnim mnenjem o ustreznosti jeklene konstrukcije. Za vsako spremembo je potrebno pred njeno izvedbo pridobiti pisno soglasje projektanta in strokovnega nadzora.

10.0 IZVEDBA ARMIRANOBETONSKIH KONSTRUKCIJ

Izdelavo betonskih delov konstrukcije je potrebno izvesti v skladu z SIST EN 13670, izvedbeni razred konstrukcije je EXC2.

11.0 OZEMLJITEV JEKLENIH KONSTRUKCIJ

Jeklene konstrukcije je potrebno ozemljiti v skladu z zahtevami načrta ozemljitve oziroma načrta elektro inštalacij.

Priloga: Naknadno posredovani podatki geomehanika

Zapisal:
Dr. Leon Hladnik, udig G-0296

Priloga: Naknadno posredovani podatki geomehanika

Ksenija Štern
Za Jure, jaz

Spoštovani:

V prilogi so izračuni za nadstreške v Litiji odpor tal-napetost, posedek, koeficient reakcije tal

Nadstrešek 1: ca. 420 kN/m2, s = 3 mm, 67 000 kN/m3

Nadstrešek 2: 480 kN/m2, s = 5 mm, 46 000 kN/m3

Nadstrešek 3: 430 kN/m2 s = 5 mm 58 000 kN/m3

Nadstrešek 4: ca. 370 kN/m2 s = 3 mm 64 000 kN/m3

Dvigalo: 220 kN/m2, ni posedkov 100 000 kN/m3

Nekaj je predpostavk, vendar glede rezultatov ni pričakovati večjih odstopanj.

V poročilu se naj predvidi lokalne sanacije s kamnito blazino od dna temelja do raščenih tal, povprečno ca. 0,40 m. Modul stisljivosti Me = 60 MPa.

Predlagam pa, da elaborat dopolnim po recenziji. Trenutno se mi časovno ne izide.

Lep pozdrav in prijeten vikend.

Ksenija Štern, univ.dipl.inž.grad.
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4.2 Analiza konstrukcije

ZG1000	0205.00	007.1276	T.1.2	

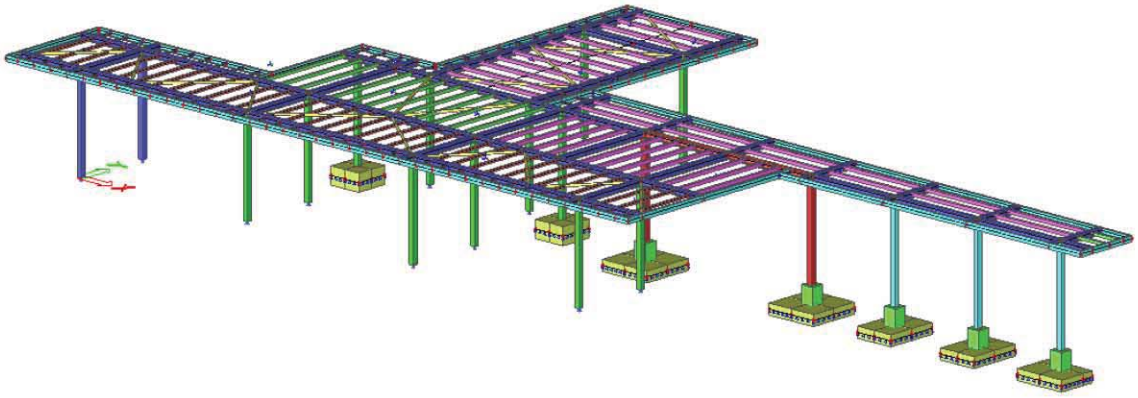
NADSTREŠEK 1

Železniška postaja Litija

ANALIZA KONSTRUKCIJE

Faza: IZN

Revizija:0



April 2021

Računal:
Dr. Leon Hladnik, udig G-0296.

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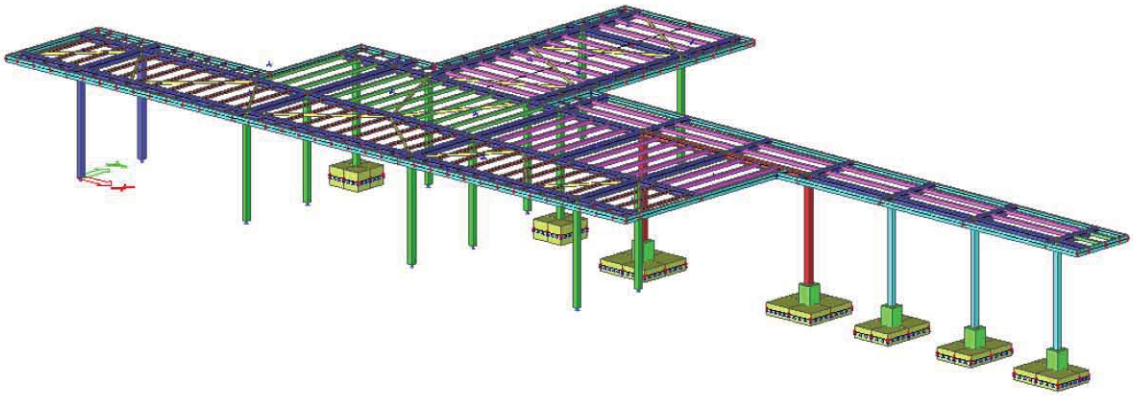
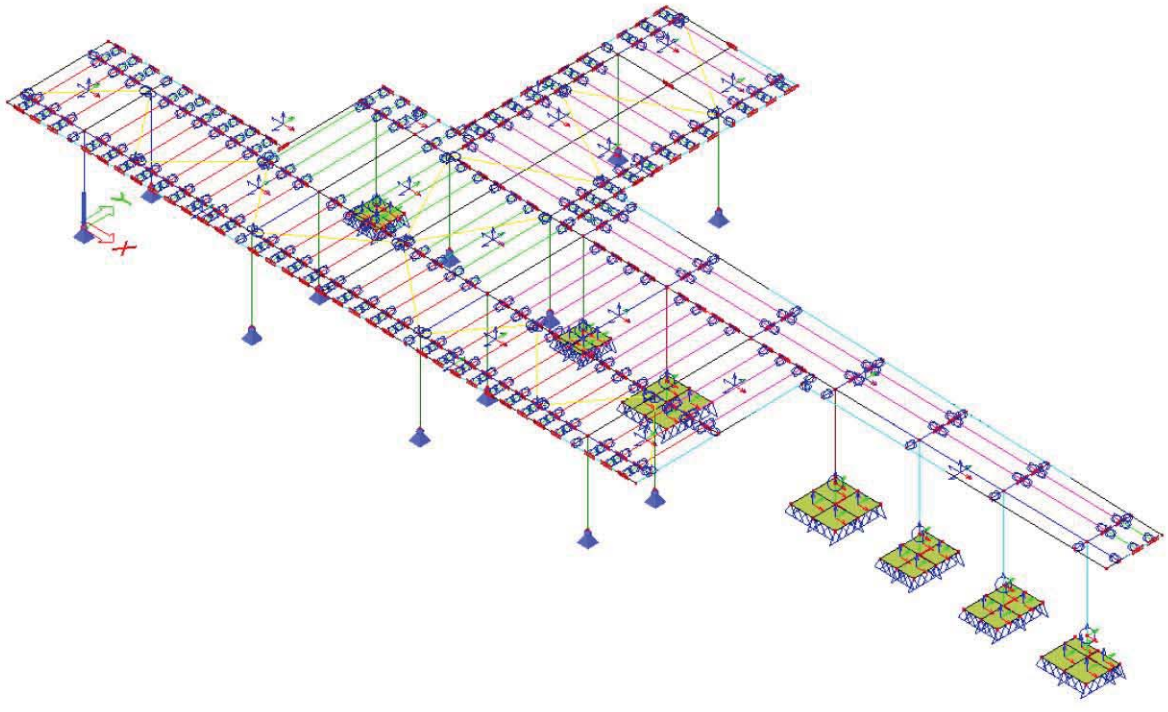
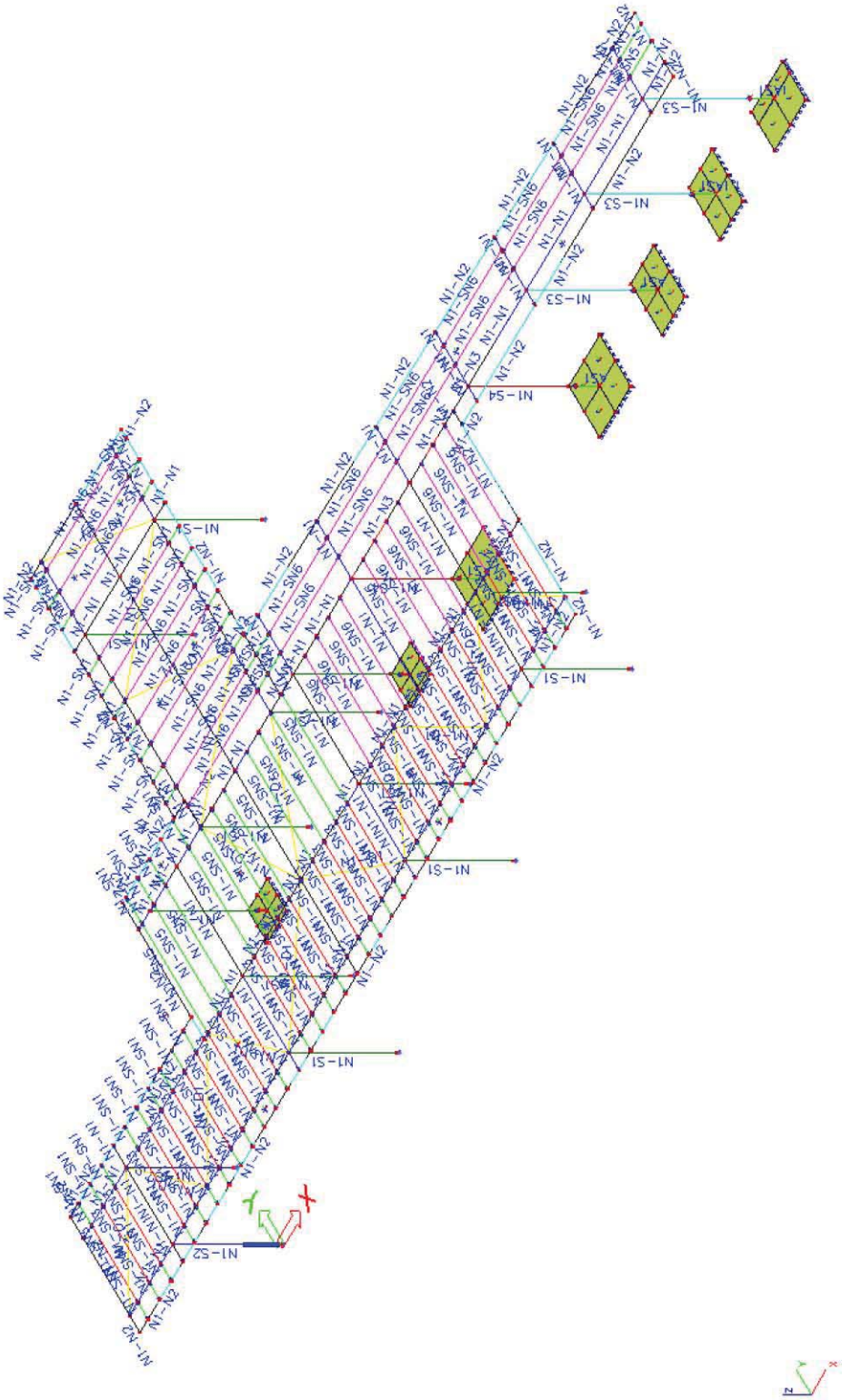
1. RAČUNSKI MODEL

1.1. Statični model







1.2. Marterial in profili

1. Bill of material

Selection: All
Type of sorting: Material

Summary

Material	Mass [kg]	Surface [m^2]	Volume [m^3]
Steel	31803.94	697.430	4.0515e+00
Concrete	44100.00	40.980	1.7640e+01
Total	75903.94	738.410	2.1691e+01

Note: Value 'Surface' represents for 1D members the total exposed surface area, while for 2D members it corresponds only to the surface area of the centroidal plane.

Steel (1D)

Material	Density [kg/m^3]	Mass [kg]	Surface [m^2]	Volume [m^3]
S 235	7850.00	31803.94	697.430	4.0515e+00
Total		31803.94	697.430	4.0515e+00

Concrete (1D)

Material	Density [kg/m^3]	Mass [kg]	Surface [m^2]	Volume [m^3]
C25/30	2500.00	4500.00	12.000	1.8000e+00
Total		4500.00	12.000	1.8000e+00

Concrete (2D)

Material	Density [kg/m^3]	Mass [kg]	Surface [m^2]	Volume [m^3]
C25/30	2500.00	39600.00	28.980	1.5840e+01
Total		39600.00	28.980	1.5840e+01

2. Materials

Steel EC3

Name	ρ [kg/m^3]	E_{mod} [MPa]	μ	Lower limit [mm]	Upper limit [mm]	F_y [kN/cm^2]	F_u [kN/cm^2]	Colour
		G_{mod} [MPa]	α [m/mK]					
S 235	7850.00	2.1000e+05	0.3	0	100	23.5	36.0	
		8.0769e+04	0.00					

Name	Type	ρ [kg/m^3]	Density in fresh state [kg/m^3]	E_{mod} [MPa]	μ	α [m/mK]	$f_{c,k,28}$ [MPa]	Colour
C25/30	Concrete	2500.00	2600.00	3.1500e+04	0.2	0.00	25.00	

Explanations of symbols	
Density in fresh state	The value in the density in fresh state property is used only in case a composite deck is input and its self-weight load is taken into account.

3. Cross-sections

Name	Type	Item material	Fabrication	A [m²]	A_y [m²]	I_y [m⁴]	$W_{el,y}$ [m³]	$W_{pl,y}$ [m³]	Colour
	Detailed				A_z [m²]	I_z [m⁴]	$W_{el,z}$ [m³]	$W_{pl,z}$ [m³]	
N1-S1	CFRHS220X220X8	S 235	rolled	6.5640e-03	3.2801e-03	4.8280e-05	4.3891e-04	5.1562e-04	
					3.2801e-03	4.8280e-05	4.3891e-04	5.1562e-04	
N1-S2	CFRHS220X220X10	S 235	rolled	8.0570e-03	4.0251e-03	5.7825e-05	5.2568e-04	6.2465e-04	
					4.0251e-03	5.7825e-05	5.2568e-04	6.2465e-04	
N1-S3	CFRHS220X220X12.5	S 235	rolled	9.7040e-03	4.8460e-03	6.6740e-05	6.0673e-04	7.3492e-04	
					4.8460e-03	6.6740e-05	6.0673e-04	7.3492e-04	
N1-S4	CFRHS260X260X12.5	S 235	rolled	1.1704e-02	5.8460e-03	1.1548e-04	8.8830e-04	1.0628e-03	
					5.8460e-03	1.1548e-04	8.8830e-04	1.0628e-03	
N1-N1	HEA260	S 235	rolled	8.6800e-03	6.3059e-03	1.0500e-04	8.3600e-04	9.2083e-04	
					2.0196e-03	3.6700e-05	2.8200e-04	4.2917e-04	
N1-N2	UNP260	S 235	rolled	4.8300e-03	2.4565e-03	4.8200e-05	3.7100e-04	4.4200e-04	
					2.5786e-03	3.1700e-06	4.7700e-05	9.1600e-05	
N1-N3	HEB260	S 235	rolled	1.1840e-02	8.7661e-03	1.4920e-04	1.1480e-03	1.2830e-03	
					2.7927e-03	5.1350e-05	3.9500e-04	6.0220e-04	
N1-SN1	CFRHS60X60X4	S 235	cold formed	8.5500e-04	4.2702e-04	4.3550e-07	1.4520e-05	1.7640e-05	
					4.2702e-04	4.3550e-07	1.4520e-05	1.7640e-05	
N1-SN3	CFRHS120X60X4	S 235	cold formed	1.3350e-03	4.4468e-04	2.4074e-06	4.0120e-05	5.0490e-05	
					8.8935e-04	8.1250e-07	2.7080e-05	3.1080e-05	
N1-SN5	CFRHS120X120X5	S 235	cold formed	2.2360e-03	1.1172e-03	4.8547e-06	8.0910e-05	9.5450e-05	
					1.1172e-03	4.8547e-06	8.0910e-05	9.5450e-05	
N1-SN6	CFRHS140X140X5	S 235	cold formed	2.6360e-03	1.3172e-03	7.9056e-06	1.1294e-04	1.3230e-04	
					1.3172e-03	7.9056e-06	1.1294e-04	1.3230e-04	
N1-D1	CFCHS101.6X4	S 235	cold formed	1.2260e-03	7.8080e-04	1.4628e-06	2.8800e-05	3.8120e-05	
					7.8080e-04	1.4628e-06	2.8800e-05	3.8120e-05	
TNAS1	Rectangle	C25/30	concrete	3.6000e-01	3.0037e-01	1.0800e-02	3.6000e-02	0.0000e+00	
	600; 600				3.0037e-01	1.0800e-02	3.6000e-02	0.0000e+00	

1.3. Vozlišča, elementi, podpore, sprostitve

4. Nodes

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N1803	0.000	0.000	0.000
N1804	0.000	0.000	4.450
N1805	0.000	3.590	0.000
N1806	0.000	3.590	4.450
N1807	9.000	0.000	0.000
N1808	9.000	0.000	4.450
N1809	9.000	3.590	0.000
N1810	9.000	3.590	4.450
N1811	6.929	8.700	0.000
N1812	6.929	8.700	4.450
N1813	10.829	8.700	0.000
N1814	10.829	8.700	4.450
N1815	18.000	0.000	0.000
N1816	18.000	0.000	4.450
N1817	18.000	3.590	0.000
N1818	18.000	3.590	4.450
N1819	18.000	8.700	0.000
N1820	18.000	8.700	4.450
N1821	16.229	8.700	0.000
N1822	16.229	8.700	4.450
N1823	16.229	17.700	0.000
N1824	16.229	17.700	4.450
N1825	10.829	17.700	0.000
N1826	10.829	17.700	4.450
N1828	27.000	8.700	4.450
N1829	27.000	3.590	0.000
N1830	27.000	3.590	4.450
N1831	22.500	8.700	0.000
N1832	22.500	8.700	4.450
N1833	27.000	0.000	0.000
N1834	27.000	0.000	4.450
N1835	31.529	8.700	0.000
N1836	31.529	8.700	4.450
N1837	36.029	8.700	0.000
N1838	36.029	8.700	4.450
N1839	40.529	8.700	0.000
N1840	40.529	8.700	4.450
N1841	45.029	8.700	0.000
N1842	45.029	8.700	4.450
N1843	-3.324	0.000	4.450
N1844	30.384	0.000	4.450
N1845	-3.324	3.590	4.450
N1846	6.029	3.590	4.450
N1847	10.830	3.590	4.450
N1849	30.384	3.590	4.450
N1850	6.029	8.700	4.450
N1851	9.000	8.700	4.450
N1852	17.029	8.700	4.450
N1853	30.384	8.700	4.450
N1854	46.729	8.700	4.450
N1855	10.029	17.700	4.450
N1856	17.029	17.700	4.450
N1857	0.000	-0.800	4.450
N1858	0.000	4.611	4.450
N1859	9.000	-0.800	4.450
N1860	18.000	-0.800	4.450
N1861	27.000	-0.800	4.450
N1862	9.000	9.945	4.450
N1864	10.829	9.945	4.450
N1865	10.829	21.106	4.450

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N1867	16.229	21.106	4.450
N1868	16.229	3.590	4.450
N1871	18.000	11.471	4.450
N1873	22.500	11.397	4.450
N1874	22.500	3.590	4.450
N1875	27.000	11.322	4.450
N1876	31.529	8.021	4.450
N1877	31.529	11.248	4.450
N1878	36.029	8.021	4.450
N1879	36.029	11.171	4.450
N1880	40.529	8.021	4.450
N1881	40.529	11.099	4.450
N1882	45.029	8.021	4.450
N1883	45.029	11.025	4.450
N1884	46.729	8.021	4.450
N1885	46.729	10.997	4.450
N1886	30.384	8.021	4.450
N1887	30.384	-0.800	4.450
N1888	-3.324	-0.800	4.450
N1889	-3.324	4.611	4.450
N1890	6.029	4.611	4.450
N1891	6.029	9.945	4.450
N1892	10.029	9.945	4.450
N1893	10.029	21.106	4.450
N1894	17.029	21.106	4.450
N1895	17.029	11.487	4.450
N1901	13.529	21.106	4.450
N1902	13.529	17.700	4.450
N1905	13.500	0.000	4.450
N1906	13.500	-0.800	4.450
N2064	0.900	0.000	4.450
N2065	0.900	3.590	4.450
N2066	0.900	-0.800	4.450
N2067	1.800	-0.800	4.450
N2068	1.800	0.000	4.450
N2069	1.800	3.590	4.450
N2070	2.700	-0.800	4.450
N2071	2.700	0.000	4.450
N2072	2.700	3.590	4.450
N2073	3.600	-0.800	4.450
N2074	3.600	0.000	4.450
N2075	3.600	3.590	4.450
N2076	4.500	-0.800	4.450
N2077	4.500	0.000	4.450
N2078	4.500	3.590	4.450
N2079	5.400	-0.800	4.450
N2080	5.400	0.000	4.450
N2081	5.400	3.590	4.450
N2082	6.300	-0.800	4.450
N2083	6.300	0.000	4.450
N2084	6.300	3.590	4.450
N2087	7.200	3.590	4.450
N2090	8.100	3.590	4.450
N2091	9.900	0.000	4.450
N2092	9.900	3.590	4.450
N2093	10.800	0.000	4.450
N2095	11.700	0.000	4.450
N2096	11.700	3.590	4.450
N2097	12.600	0.000	4.450
N2098	12.600	3.590	4.450
N2099	13.500	3.590	4.450
N2100	14.400	0.000	4.450
N2101	14.400	3.590	4.450
N2102	15.300	0.000	4.450
N2103	15.300	3.590	4.450
N2104	16.200	0.000	4.450

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N2106	17.100	0.000	4.450
N2107	17.100	3.590	4.450
N2108	9.900	-0.800	4.450
N2109	10.800	-0.800	4.450
N2110	11.700	-0.800	4.450
N2111	12.600	-0.800	4.450
N2112	14.400	-0.800	4.450
N2113	15.300	-0.800	4.450
N2114	16.200	-0.800	4.450
N2115	17.100	-0.800	4.450
N2116	18.900	0.000	4.450
N2117	18.900	3.590	4.450
N2118	19.800	0.000	4.450
N2119	19.800	3.590	4.450
N2120	20.700	0.000	4.450
N2121	20.700	3.590	4.450
N2122	21.600	0.000	4.450
N2123	21.600	3.590	4.450
N2124	22.500	0.000	4.450
N2125	23.400	0.000	4.450
N2126	23.400	3.590	4.450
N2127	24.300	0.000	4.450
N2128	24.300	3.590	4.450
N2129	25.200	0.000	4.450
N2130	25.200	3.590	4.450
N2131	26.100	0.000	4.450
N2132	26.100	3.590	4.450
N2133	18.900	-0.800	4.450
N2134	19.800	-0.800	4.450
N2135	20.700	-0.800	4.450
N2136	21.600	-0.800	4.450
N2137	22.500	-0.800	4.450
N2138	23.400	-0.800	4.450
N2139	24.300	-0.800	4.450
N2140	25.200	-0.800	4.450
N2141	26.100	-0.800	4.450
N2142	29.700	-0.800	4.450
N2143	29.700	0.000	4.450
N2144	28.800	-0.800	4.450
N2145	28.800	0.000	4.450
N2146	27.900	-0.800	4.450
N2147	27.900	0.000	4.450
N2148	27.900	3.590	4.450
N2149	28.800	3.590	4.450
N2150	29.700	3.590	4.450
N2151	-2.700	0.000	4.450
N2152	-2.700	3.590	4.450
N2153	-1.800	0.000	4.450
N2154	-1.800	3.590	4.450
N2155	-0.900	0.000	4.450
N2156	-0.900	3.590	4.450
N2157	-2.700	-0.800	4.450
N2158	-1.800	-0.800	4.450
N2159	-0.900	-0.800	4.450
N2165	6.300	8.700	4.450
N2167	7.200	8.700	4.450
N2169	8.100	8.700	4.450
N2176	9.900	8.700	4.450
N2177	11.700	8.700	4.450
N2178	12.600	8.700	4.450
N2179	13.500	8.700	4.450
N2180	14.400	8.700	4.450
N2181	15.300	8.700	4.450
N2182	17.100	8.700	4.450
N2183	18.900	8.700	4.450
N2184	19.800	8.700	4.450

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N2185	20.700	8.700	4.450
N2186	21.600	8.700	4.450
N2187	23.400	8.700	4.450
N2188	24.300	8.700	4.450
N2189	25.200	8.700	4.450
N2190	26.100	8.700	4.450
N2191	27.900	8.700	4.450
N2192	28.800	8.700	4.450
N2193	29.700	8.700	4.450
N2194	7.200	0.000	4.450
N2195	7.200	-0.800	4.450
N2196	8.100	0.000	4.450
N2197	8.100	-0.800	4.450
N2198	6.300	9.945	4.450
N2199	7.200	9.945	4.450
N2200	8.100	9.945	4.450
N2201	9.900	9.945	4.450
N2202	-2.700	4.611	4.450
N2203	-1.800	4.611	4.450
N2204	-0.900	4.611	4.450
N2205	0.900	4.611	4.450
N2206	1.800	4.611	4.450
N2207	2.700	4.611	4.450
N2208	3.600	4.611	4.450
N2209	4.500	4.611	4.450
N2210	5.400	4.611	4.450
N2211	16.229	9.700	4.450
N2212	10.829	9.700	4.450
N2214	10.829	10.600	4.450
N2215	16.229	11.600	4.450
N2216	10.829	11.600	4.450
N2217	16.229	12.600	4.450
N2218	10.829	12.600	4.450
N2219	16.229	13.600	4.450
N2220	10.829	13.600	4.450
N2221	16.229	14.600	4.450
N2222	10.829	14.600	4.450
N2223	16.229	15.600	4.450
N2224	10.829	15.600	4.450
N2225	16.229	16.600	4.450
N2226	10.829	16.600	4.450
N2235	17.029	9.700	4.450
N2236	17.029	10.600	4.450
N2237	18.000	9.700	4.450
N2238	18.000	10.600	4.450
N2239	22.500	9.700	4.450
N2240	22.500	10.600	4.450
N2241	27.000	10.600	4.450
N2242	27.000	9.700	4.450
N2243	31.529	9.700	4.450
N2245	36.029	9.700	4.450
N2246	36.029	10.500	4.450
N2247	40.529	9.700	4.450
N2248	45.029	9.700	4.450
N2249	46.729	9.700	4.450
N2250	16.229	10.600	4.450
N2251	31.529	10.600	4.450
N2254	16.229	20.700	4.450
N2255	10.829	20.700	4.450
N2256	16.229	19.700	4.450
N2257	10.829	19.700	4.450
N2258	16.229	18.700	4.450
N2259	10.829	18.700	4.450
N2260	40.529	10.500	4.450
N2261	45.029	10.500	4.450
N2262	46.729	10.500	4.450

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N2263	36.029	10.600	4.450
N2264	17.029	11.600	4.450
N2265	17.029	12.600	4.450
N2266	17.029	13.600	4.450
N2267	17.029	14.600	4.450
N2268	17.029	15.600	4.450
N2269	17.029	16.600	4.450
N2270	17.029	18.700	4.450
N2271	17.029	19.700	4.450
N2272	17.029	20.700	4.450
N2273	10.029	20.700	4.450
N2274	10.029	19.700	4.450
N2275	10.029	18.700	4.450
N2276	10.029	16.600	4.450
N2277	10.029	15.600	4.450
N2278	10.029	14.600	4.450
N2279	10.029	13.600	4.450
N2280	10.029	12.600	4.450
N2281	10.029	11.600	4.450
N2282	10.029	10.600	4.450
N2338	36.929	8.700	-1.000
N2339	36.929	9.900	-1.000
N2340	35.129	8.700	-1.000
N2341	35.129	9.900	-1.000
N2342	36.029	7.500	-1.000
N2343	36.929	7.500	-1.000
N2344	35.129	7.500	-1.000
N2345	36.029	8.700	-1.000
N2346	36.029	9.900	-1.000
N2347	41.429	8.700	-1.000
N2348	41.429	9.900	-1.000
N2349	39.629	8.700	-1.000
N2350	39.629	9.900	-1.000
N2351	40.529	7.500	-1.000
N2352	41.429	7.500	-1.000
N2353	39.629	7.500	-1.000
N2355	40.529	9.900	-1.000
N2356	46.229	8.700	-1.000
N2357	46.229	9.250	-1.000
N2358	43.829	8.700	-1.000
N2359	43.829	9.250	-1.000
N2360	45.029	7.450	-1.000
N2361	46.229	7.450	-1.000
N2362	43.829	7.450	-1.000
N2364	45.029	9.250	-1.000
N2365	23.700	8.700	-1.000
N2366	23.700	9.900	-1.000
N2367	21.300	8.700	-1.000
N2368	21.300	9.900	-1.000
N2369	22.500	7.500	-1.000
N2370	23.700	7.500	-1.000
N2371	21.300	7.500	-1.000
N2373	22.500	9.900	-1.000
N2374	18.750	8.700	-0.400
N2375	18.750	9.450	-0.400
N2376	17.250	8.700	-0.400
N2377	17.250	9.450	-0.400
N2378	18.000	7.950	-0.400
N2379	18.750	7.950	-0.400
N2380	17.250	7.950	-0.400
N2381	18.000	8.700	-0.400
N2382	18.000	9.450	-0.400
N2383	7.679	8.700	-0.400
N2384	7.679	9.450	-0.400
N2385	6.179	8.700	-0.400
N2386	6.179	9.450	-0.400

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N2387	6.929	7.950	-0.400
N2388	7.679	7.950	-0.400
N2389	6.179	7.950	-0.400
N2390	6.929	8.700	-0.400
N2391	6.929	9.450	-0.400
N2402	32.729	9.900	-1.000
N2403	32.729	7.500	-1.000
N2405	32.729	8.700	-1.000
N2406	31.529	9.900	-1.000
N2407	30.329	8.700	-1.000
N2408	30.329	9.900	-1.000
N2409	30.329	7.500	-1.000
N2410	31.529	7.500	-1.000
N2411	45.029	8.700	-1.000
N2412	40.529	8.700	-1.000
N2414	31.529	8.700	-1.000
N2415	22.500	8.700	-1.000

5. Members

Name	Cross-section	Material	Length [m]	Beg. node	End node	Type
B1668	N1-S2 - CFRHS220X220X10	S 235	4.450	N1803	N1804	general (0)
B1669	N1-S2 - CFRHS220X220X10	S 235	4.450	N1805	N1806	general (0)
B1670	N1-S1 - CFRHS220X220X8	S 235	4.450	N1807	N1808	general (0)
B1671	N1-S1 - CFRHS220X220X8	S 235	4.450	N1809	N1810	general (0)
B1672	N1-S1 - CFRHS220X220X8	S 235	4.450	N1811	N1812	general (0)
B1673	N1-S1 - CFRHS220X220X8	S 235	4.450	N1813	N1814	general (0)
B1674	N1-S1 - CFRHS220X220X8	S 235	4.450	N1815	N1816	general (0)
B1675	N1-S1 - CFRHS220X220X8	S 235	4.450	N1817	N1818	general (0)
B1676	N1-S1 - CFRHS220X220X8	S 235	4.450	N1819	N1820	general (0)
B1677	N1-S1 - CFRHS220X220X8	S 235	4.450	N1821	N1822	general (0)
B1678	N1-S1 - CFRHS220X220X8	S 235	4.450	N1823	N1824	general (0)
B1679	N1-S1 - CFRHS220X220X8	S 235	4.450	N1825	N1826	general (0)
B1681	N1-S1 - CFRHS220X220X8	S 235	4.450	N1829	N1830	general (0)
B1682	N1-S4 - CFRHS260X260X12.5	S 235	4.450	N1831	N1832	general (0)
B1683	N1-S1 - CFRHS220X220X8	S 235	4.450	N1833	N1834	general (0)
B1684	N1-S4 - CFRHS260X260X12.5	S 235	4.450	N1835	N1836	general (0)
B1685	N1-S3 - CFRHS220X220X12.5	S 235	4.450	N1837	N1838	general (0)
B1686	N1-S3 - CFRHS220X220X12.5	S 235	4.450	N1839	N1840	general (0)
B1687	N1-S3 - CFRHS220X220X12.5	S 235	4.450	N1841	N1842	general (0)
B1688	N1-N1 - HEA260	S 235	3.324	N1843	N1804	general (0)
B1689	N1-N1 - HEA260	S 235	9.000	N1804	N1808	general (0)
B1690	N1-N1 - HEA260	S 235	9.000	N1808	N1816	general (0)
B1691	N1-N1 - HEA260	S 235	9.000	N1816	N1834	general (0)
B1692	N1-N1 - HEA260	S 235	3.384	N1834	N1844	general (0)
B1693	N1-N1 - HEA260	S 235	3.324	N1845	N1806	general (0)
B1694	N1-N1 - HEA260	S 235	6.029	N1806	N1846	general (0)
B1695	N1-N1 - HEA260	S 235	1.830	N1810	N1847	general (0)
B1696	N1-N1 - HEA260	S 235	4.500	N1818	N1874	general (0)
B1697	N1-N1 - HEA260	S 235	3.384	N1830	N1849	general (0)
B1698	N1-N1 - HEA260	S 235	0.900	N1850	N1812	general (0)
B1699	N1-N1 - HEA260	S 235	2.071	N1812	N1851	general (0)
B1700	N1-N1 - HEA260	S 235	5.400	N1814	N1822	general (0)
B1701	N1-N1 - HEA260	S 235	0.800	N1822	N1852	general (0)
B1702	N1-N1 - HEA260	S 235	4.500	N1820	N1832	general (0)
B1703	N1-N3 - HEB260	S 235	4.500	N1832	N1828	general (0)
B1704	N1-N3 - HEB260	S 235	3.384	N1828	N1853	general (0)
B1705	N1-N1 - HEA260	S 235	4.500	N1836	N1838	general (0)
B1706	N1-N1 - HEA260	S 235	4.500	N1838	N1840	general (0)
B1707	N1-N1 - HEA260	S 235	4.500	N1840	N1842	general (0)
B1708	N1-N1 - HEA260	S 235	1.700	N1842	N1854	general (0)
B1709	N1-N1 - HEA260	S 235	0.800	N1855	N1826	general (0)
B1710	N1-N1 - HEA260	S 235	5.400	N1826	N1824	general (0)
B1711	N1-N1 - HEA260	S 235	0.800	N1824	N1856	general (0)
B1712	N1-N1 - HEA260	S 235	0.800	N1857	N1804	general (0)

Name	Cross-section	Material	Length [m]	Beg. node	End node	Type
B1713	N1-N1 - HEA260	S 235	3.590	N1804	N1806	general (0)
B1714	N1-N1 - HEA260	S 235	1.021	N1806	N1858	general (0)
B1715	N1-N1 - HEA260	S 235	0.800	N1859	N1808	general (0)
B1716	N1-N1 - HEA260	S 235	3.590	N1808	N1810	general (0)
B1717	N1-N1 - HEA260	S 235	0.800	N1860	N1816	general (0)
B1718	N1-N1 - HEA260	S 235	3.590	N1816	N1818	general (0)
B1719	N1-N1 - HEA260	S 235	0.800	N1861	N1834	general (0)
B1720	N1-N1 - HEA260	S 235	3.590	N1834	N1830	general (0)
B1721	N1-N1 - HEA260	S 235	5.110	N1810	N1851	general (0)
B1722	N1-N1 - HEA260	S 235	1.245	N1851	N1862	general (0)
B1724	N1-N1 - HEA260	S 235	1.245	N1814	N1864	general (0)
B1725	N1-N1 - HEA260	S 235	3.406	N1826	N1865	general (0)
B1726	N1-SN5 - CFRHS120X120X5	S 235	5.110	N1868	N1822	general (0)
B1727	N1-N1 - HEA260	S 235	9.000	N1822	N1824	general (0)
B1728	N1-N1 - HEA260	S 235	3.406	N1824	N1867	general (0)
B1729	N1-N1 - HEA260	S 235	1.771	N1868	N1818	general (0)
B1730	N1-N1 - HEA260	S 235	5.399	N1847	N1868	general (0)
B1731	N1-N1 - HEA260	S 235	1.829	N1851	N1814	general (0)
B1732	N1-N1 - HEA260	S 235	5.110	N1818	N1820	general (0)
B1733	N1-N1 - HEA260	S 235	2.771	N1820	N1871	general (0)
B1734	N1-N1 - HEA260	S 235	5.110	N1874	N1832	general (0)
B1735	N1-N1 - HEA260	S 235	2.696	N1832	N1873	general (0)
B1736	N1-N1 - HEA260	S 235	4.500	N1874	N1830	general (0)
B1737	N1-N1 - HEA260	S 235	5.110	N1830	N1828	general (0)
B1738	N1-N1 - HEA260	S 235	2.622	N1828	N1875	general (0)
B1739	N1-N1 - HEA260	S 235	0.680	N1876	N1836	general (0)
B1740	N1-N1 - HEA260	S 235	2.548	N1836	N1877	general (0)
B1741	N1-N1 - HEA260	S 235	0.680	N1878	N1838	general (0)
B1742	N1-N1 - HEA260	S 235	2.470	N1838	N1879	general (0)
B1743	N1-N1 - HEA260	S 235	0.680	N1880	N1840	general (0)
B1744	N1-N1 - HEA260	S 235	2.399	N1840	N1881	general (0)
B1745	N1-N1 - HEA260	S 235	0.680	N1882	N1842	general (0)
B1746	N1-N1 - HEA260	S 235	2.325	N1842	N1883	general (0)
B1747	N1-N2 - UNP260	S 235	1.700	N1882	N1884	general (0)
B1748	N1-N2 - UNP260	S 235	0.680	N1854	N1884	general (0)
B1749	N1-N2 - UNP260	S 235	2.297	N1854	N1885	general (0)
B1750	N1-N2 - UNP260	S 235	1.700	N1885	N1883	general (0)
B1751	N1-N2 - UNP260	S 235	4.501	N1883	N1881	general (0)
B1752	N1-N2 - UNP260	S 235	4.500	N1882	N1880	general (0)
B1753	N1-N2 - UNP260	S 235	4.500	N1880	N1878	general (0)
B1754	N1-N2 - UNP260	S 235	4.500	N1878	N1876	general (0)
B1755	N1-N2 - UNP260	S 235	1.144	N1876	N1886	general (0)
B1756	N1-N2 - UNP260	S 235	4.431	N1849	N1886	general (0)
B1757	N1-N2 - UNP260	S 235	0.680	N1886	N1853	general (0)
B1758	N1-N3 - HEB260	S 235	1.144	N1853	N1836	general (0)
B1759	N1-N2 - UNP260	S 235	3.590	N1849	N1844	general (0)
B1760	N1-N2 - UNP260	S 235	0.800	N1844	N1887	general (0)
B1761	N1-N2 - UNP260	S 235	3.384	N1861	N1887	general (0)
B1762	N1-N2 - UNP260	S 235	9.000	N1861	N1860	general (0)
B1763	N1-N2 - UNP260	S 235	9.000	N1860	N1859	general (0)
B1764	N1-N2 - UNP260	S 235	9.000	N1859	N1857	general (0)
B1765	N1-N2 - UNP260	S 235	3.324	N1857	N1888	general (0)
B1766	N1-N2 - UNP260	S 235	0.800	N1843	N1888	general (0)
B1767	N1-N2 - UNP260	S 235	3.590	N1843	N1845	general (0)
B1768	N1-N2 - UNP260	S 235	1.021	N1845	N1889	general (0)
B1769	N1-N2 - UNP260	S 235	3.324	N1858	N1889	general (0)
B1770	N1-N2 - UNP260	S 235	6.029	N1858	N1890	general (0)
B1771	N1-N2 - UNP260	S 235	5.110	N1850	N1846	general (0)
B1772	N1-N1 - HEA260	S 235	2.971	N1846	N1810	general (0)
B1773	N1-N2 - UNP260	S 235	1.245	N1850	N1891	general (0)
B1775	N1-N2 - UNP260	S 235	2.971	N1862	N1891	general (0)
B1776	N1-N1 - HEA260	S 235	7.755	N1864	N1826	general (0)
B1777	N1-N2 - UNP260	S 235	7.755	N1855	N1892	general (0)
B1778	N1-N2 - UNP260	S 235	0.800	N1892	N1864	general (0)
B1779	N1-N2 - UNP260	S 235	3.406	N1855	N1893	general (0)
B1780	N1-N2 - UNP260	S 235	0.800	N1865	N1893	general (0)

Name	Cross-section	Material	Length [m]	Beg. node	End node	Type
B1781	N1-N2 - UNP260	S 235	5.400	N1865	N1867	general (0)
B1782	N1-N2 - UNP260	S 235	0.800	N1867	N1894	general (0)
B1783	N1-N2 - UNP260	S 235	3.406	N1856	N1894	general (0)
B1784	N1-N2 - UNP260	S 235	6.213	N1856	N1895	general (0)
B1785	N1-N1 - HEA260	S 235	0.971	N1852	N1820	general (0)
B1786	N1-N2 - UNP260	S 235	4.501	N1881	N1879	general (0)
B1787	N1-N2 - UNP260	S 235	4.501	N1879	N1877	general (0)
B1788	N1-N2 - UNP260	S 235	4.529	N1877	N1875	general (0)
B1789	N1-N2 - UNP260	S 235	4.501	N1875	N1873	general (0)
B1790	N1-N2 - UNP260	S 235	4.501	N1873	N1871	general (0)
B1791	N1-N2 - UNP260	S 235	0.971	N1871	N1895	general (0)
B1792	N1-N2 - UNP260	S 235	2.787	N1895	N1852	general (0)
B1921	N1-SN3 - CFRHS120X60X4	S 235	3.590	N2064	N2065	general (0)
B1922	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2066	N2064	general (0)
B1923	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2067	N2068	general (0)
B1924	N1-SN3 - CFRHS120X60X4	S 235	3.590	N2068	N2069	general (0)
B1925	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2070	N2071	general (0)
B1926	N1-SN3 - CFRHS120X60X4	S 235	3.590	N2071	N2072	general (0)
B1927	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2073	N2074	general (0)
B1928	N1-SN3 - CFRHS120X60X4	S 235	3.590	N2074	N2075	general (0)
B1929	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2076	N2077	general (0)
B1930	N1-SN3 - CFRHS120X60X4	S 235	3.590	N2077	N2078	general (0)
B1931	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2079	N2080	general (0)
B1932	N1-SN3 - CFRHS120X60X4	S 235	3.590	N2080	N2081	general (0)
B1933	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2082	N2083	general (0)
B1934	N1-SN3 - CFRHS120X60X4	S 235	3.590	N2083	N2084	general (0)
B1939	N1-SN3 - CFRHS120X60X4	S 235	3.590	N2091	N2092	general (0)
B1940	N1-SN3 - CFRHS120X60X4	S 235	3.590	N2093	N1847	general (0)
B1941	N1-SN3 - CFRHS120X60X4	S 235	3.590	N2095	N2096	general (0)
B1942	N1-SN3 - CFRHS120X60X4	S 235	3.590	N2097	N2098	general (0)
B1943	N1-SN3 - CFRHS120X60X4	S 235	3.590	N1905	N2099	general (0)
B1944	N1-SN3 - CFRHS120X60X4	S 235	3.590	N2100	N2101	general (0)
B1945	N1-SN3 - CFRHS120X60X4	S 235	3.590	N2102	N2103	general (0)
B1946	N1-SN3 - CFRHS120X60X4	S 235	3.590	N2104	N1868	general (0)
B1947	N1-SN3 - CFRHS120X60X4	S 235	3.590	N2106	N2107	general (0)
B1948	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2108	N2091	general (0)
B1949	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2109	N2093	general (0)
B1950	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2110	N2095	general (0)
B1951	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2111	N2097	general (0)
B1952	N1-SN1 - CFRHS60X60X4	S 235	0.800	N1906	N1905	general (0)
B1953	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2112	N2100	general (0)
B1954	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2113	N2102	general (0)
B1955	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2114	N2104	general (0)
B1956	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2115	N2106	general (0)
B1957	N1-SN3 - CFRHS120X60X4	S 235	3.590	N2116	N2117	general (0)
B1958	N1-SN3 - CFRHS120X60X4	S 235	3.590	N2118	N2119	general (0)
B1959	N1-SN3 - CFRHS120X60X4	S 235	3.590	N2120	N2121	general (0)
B1960	N1-SN3 - CFRHS120X60X4	S 235	3.590	N2122	N2123	general (0)
B1961	N1-SN3 - CFRHS120X60X4	S 235	3.590	N2124	N1874	general (0)
B1962	N1-SN3 - CFRHS120X60X4	S 235	3.590	N2125	N2126	general (0)
B1963	N1-SN3 - CFRHS120X60X4	S 235	3.590	N2127	N2128	general (0)
B1964	N1-SN3 - CFRHS120X60X4	S 235	3.590	N2129	N2130	general (0)
B1965	N1-SN3 - CFRHS120X60X4	S 235	3.590	N2131	N2132	general (0)
B1966	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2133	N2116	general (0)
B1967	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2134	N2118	general (0)
B1968	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2135	N2120	general (0)
B1969	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2136	N2122	general (0)
B1970	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2137	N2124	general (0)
B1971	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2138	N2125	general (0)
B1972	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2139	N2127	general (0)
B1973	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2140	N2129	general (0)
B1974	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2141	N2131	general (0)
B1975	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2142	N2143	general (0)
B1976	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2144	N2145	general (0)
B1977	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2146	N2147	general (0)
B1978	N1-SN3 - CFRHS120X60X4	S 235	3.590	N2147	N2148	general (0)

Name	Cross-section	Material	Length [m]	Beg. node	End node	Type
B1979	N1-SN3 - CFRHS120X60X4	S 235	3.590	N2145	N2149	general (0)
B1980	N1-SN3 - CFRHS120X60X4	S 235	3.590	N2143	N2150	general (0)
B1981	N1-SN3 - CFRHS120X60X4	S 235	3.590	N2151	N2152	general (0)
B1982	N1-SN3 - CFRHS120X60X4	S 235	3.590	N2153	N2154	general (0)
B1983	N1-SN3 - CFRHS120X60X4	S 235	3.590	N2155	N2156	general (0)
B1984	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2157	N2151	general (0)
B1985	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2158	N2153	general (0)
B1986	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2159	N2155	general (0)
B1987	N1-SN5 - CFRHS120X120X5	S 235	5.110	N2084	N2165	general (0)
B1988	N1-SN5 - CFRHS120X120X5	S 235	5.110	N2087	N2167	general (0)
B1989	N1-SN5 - CFRHS120X120X5	S 235	5.110	N2090	N2169	general (0)
B1993	N1-SN5 - CFRHS120X120X5	S 235	5.110	N2092	N2176	general (0)
B1994	N1-SN5 - CFRHS120X120X5	S 235	5.110	N2096	N2177	general (0)
B1995	N1-SN5 - CFRHS120X120X5	S 235	5.110	N2098	N2178	general (0)
B1996	N1-SN5 - CFRHS120X120X5	S 235	5.110	N2099	N2179	general (0)
B1997	N1-SN5 - CFRHS120X120X5	S 235	5.110	N2101	N2180	general (0)
B1998	N1-SN5 - CFRHS120X120X5	S 235	5.110	N2103	N2181	general (0)
B1999	N1-SN5 - CFRHS120X120X5	S 235	5.110	N2107	N2182	general (0)
B2000	N1-SN6 - CFRHS140X140X5	S 235	5.110	N2117	N2183	general (0)
B2001	N1-SN6 - CFRHS140X140X5	S 235	5.110	N2119	N2184	general (0)
B2002	N1-SN6 - CFRHS140X140X5	S 235	5.110	N2121	N2185	general (0)
B2003	N1-SN6 - CFRHS140X140X5	S 235	5.110	N2123	N2186	general (0)
B2004	N1-SN6 - CFRHS140X140X5	S 235	5.110	N2126	N2187	general (0)
B2005	N1-SN6 - CFRHS140X140X5	S 235	5.110	N2128	N2188	general (0)
B2006	N1-SN6 - CFRHS140X140X5	S 235	5.110	N2130	N2189	general (0)
B2007	N1-SN6 - CFRHS140X140X5	S 235	5.110	N2132	N2190	general (0)
B2008	N1-SN6 - CFRHS140X140X5	S 235	5.110	N2148	N2191	general (0)
B2009	N1-SN6 - CFRHS140X140X5	S 235	5.110	N2149	N2192	general (0)
B2010	N1-SN6 - CFRHS140X140X5	S 235	5.110	N2150	N2193	general (0)
B2011	N1-SN3 - CFRHS120X60X4	S 235	3.590	N2194	N2087	general (0)
B2012	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2195	N2194	general (0)
B2013	N1-SN3 - CFRHS120X60X4	S 235	3.590	N2196	N2090	general (0)
B2014	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2197	N2196	general (0)
B2015	N1-SN1 - CFRHS60X60X4	S 235	1.245	N2165	N2198	general (0)
B2016	N1-SN1 - CFRHS60X60X4	S 235	1.245	N2167	N2199	general (0)
B2017	N1-SN1 - CFRHS60X60X4	S 235	1.245	N2169	N2200	general (0)
B2018	N1-SN1 - CFRHS60X60X4	S 235	1.245	N2176	N2201	general (0)
B2019	N1-SN1 - CFRHS60X60X4	S 235	1.021	N2152	N2202	general (0)
B2020	N1-SN1 - CFRHS60X60X4	S 235	1.021	N2154	N2203	general (0)
B2021	N1-SN1 - CFRHS60X60X4	S 235	1.021	N2156	N2204	general (0)
B2022	N1-SN1 - CFRHS60X60X4	S 235	1.021	N2065	N2205	general (0)
B2023	N1-SN1 - CFRHS60X60X4	S 235	1.021	N2069	N2206	general (0)
B2024	N1-SN1 - CFRHS60X60X4	S 235	1.021	N2072	N2207	general (0)
B2025	N1-SN1 - CFRHS60X60X4	S 235	1.021	N2075	N2208	general (0)
B2026	N1-SN1 - CFRHS60X60X4	S 235	1.021	N2078	N2209	general (0)
B2027	N1-SN1 - CFRHS60X60X4	S 235	1.021	N2081	N2210	general (0)
B2028	N1-SN6 - CFRHS140X140X5	S 235	5.400	N2211	N2212	general (0)
B2029	N1-SN6 - CFRHS140X140X5	S 235	5.400	N2250	N2214	general (0)
B2030	N1-SN6 - CFRHS140X140X5	S 235	5.400	N2215	N2216	general (0)
B2031	N1-SN6 - CFRHS140X140X5	S 235	5.400	N2217	N2218	general (0)
B2032	N1-SN6 - CFRHS140X140X5	S 235	5.400	N2219	N2220	general (0)
B2033	N1-SN6 - CFRHS140X140X5	S 235	5.400	N2221	N2222	general (0)
B2034	N1-SN6 - CFRHS140X140X5	S 235	5.400	N2223	N2224	general (0)
B2035	N1-SN6 - CFRHS140X140X5	S 235	5.400	N2225	N2226	general (0)
B2040	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2235	N2211	general (0)
B2041	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2236	N2250	general (0)
B2042	N1-SN1 - CFRHS60X60X4	S 235	0.971	N2237	N2235	general (0)
B2043	N1-SN1 - CFRHS60X60X4	S 235	0.971	N2238	N2236	general (0)
B2044	N1-SN6 - CFRHS140X140X5	S 235	4.500	N2239	N2237	general (0)
B2045	N1-SN6 - CFRHS140X140X5	S 235	4.500	N2240	N2238	general (0)
B2046	N1-SN6 - CFRHS140X140X5	S 235	4.500	N2241	N2240	general (0)
B2047	N1-SN6 - CFRHS140X140X5	S 235	4.500	N2242	N2239	general (0)
B2048	N1-SN6 - CFRHS140X140X5	S 235	4.529	N2243	N2242	general (0)
B2049	N1-SN6 - CFRHS140X140X5	S 235	4.529	N2251	N2241	general (0)
B2050	N1-SN6 - CFRHS140X140X5	S 235	4.500	N2245	N2243	general (0)
B2052	N1-SN6 - CFRHS140X140X5	S 235	4.500	N2247	N2245	general (0)

Name	Cross-section	Material	Length [m]	Beg. node	End node	Type
B2053	N1-SN6 - CFRHS140X140X5	S 235	4.500	N2248	N2247	general (0)
B2054	N1-SN5 - CFRHS120X120X5	S 235	1.700	N2249	N2248	general (0)
B2056	N1-SN6 - CFRHS140X140X5	S 235	5.400	N2254	N2255	general (0)
B2057	N1-SN6 - CFRHS140X140X5	S 235	5.400	N2256	N2257	general (0)
B2058	N1-SN6 - CFRHS140X140X5	S 235	5.400	N2258	N2259	general (0)
B2059	N1-SN6 - CFRHS140X140X5	S 235	4.500	N2260	N2246	general (0)
B2060	N1-SN6 - CFRHS140X140X5	S 235	4.500	N2261	N2260	general (0)
B2061	N1-SN5 - CFRHS120X120X5	S 235	1.700	N2262	N2261	general (0)
B2062	N1-SN6 - CFRHS140X140X5	S 235	4.500	N2263	N2251	general (0)
B2063	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2264	N2215	general (0)
B2064	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2265	N2217	general (0)
B2065	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2266	N2219	general (0)
B2066	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2267	N2221	general (0)
B2067	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2268	N2223	general (0)
B2068	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2269	N2225	general (0)
B2069	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2270	N2258	general (0)
B2070	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2271	N2256	general (0)
B2071	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2272	N2254	general (0)
B2072	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2255	N2273	general (0)
B2073	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2257	N2274	general (0)
B2074	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2259	N2275	general (0)
B2075	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2226	N2276	general (0)
B2076	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2224	N2277	general (0)
B2077	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2222	N2278	general (0)
B2078	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2220	N2279	general (0)
B2079	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2218	N2280	general (0)
B2080	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2216	N2281	general (0)
B2081	N1-SN1 - CFRHS60X60X4	S 235	0.800	N2214	N2282	general (0)
B2111	N1-SN5 - CFRHS120X120X5	S 235	5.110	N1847	N1814	general (0)
B2113	N1-N2 - UNP260	S 235	1.029	N1892	N1862	general (0)
B2114	N1-D1 - CFCHS101.6X4	S 235	4.893	N1843	N1806	truss diagonal (90)
B2115	N1-D1 - CFCHS101.6X4	S 235	4.492	N1806	N2071	truss diagonal (90)
B2116	N1-D1 - CFCHS101.6X4	S 235	5.084	N2071	N2084	truss diagonal (90)
B2117	N1-D1 - CFCHS101.6X4	S 235	4.492	N2084	N1808	truss diagonal (90)
B2118	N1-D1 - CFCHS101.6X4	S 235	5.757	N1808	N2099	truss diagonal (90)
B2119	N1-D1 - CFCHS101.6X4	S 235	5.757	N2099	N1816	truss diagonal (90)
B2120	N1-D1 - CFCHS101.6X4	S 235	4.492	N1816	N2121	truss diagonal (90)
B2121	N1-D1 - CFCHS101.6X4	S 235	5.084	N2121	N2127	truss diagonal (90)
B2122	N1-D1 - CFCHS101.6X4	S 235	4.492	N2127	N1830	truss diagonal (90)
B2123	N1-D1 - CFCHS101.6X4	S 235	4.934	N1830	N1844	truss diagonal (90)
B2124	N1-D1 - CFCHS101.6X4	S 235	6.226	N1824	N2222	truss diagonal (90)
B2125	N1-D1 - CFCHS101.6X4	S 235	6.177	N2222	N2215	truss diagonal (90)
B2126	N1-D1 - CFCHS101.6X4	S 235	6.129	N2215	N1814	truss diagonal (90)
B2127	N1-D1 - CFCHS101.6X4	S 235	5.766	N1814	N2099	truss diagonal (90)
B2128	N1-D1 - CFCHS101.6X4	S 235	5.793	N2099	N1822	truss diagonal (90)
B2129	N1-D1 - CFCHS101.6X4	S 235	6.384	N1865	N1824	truss diagonal (90)
B2143	TNAS1 - Rectangle (600; 600)	C25/30	1.000	N1841	N2411	truss diagonal (90)
B2144	TNAS1 - Rectangle (600; 600)	C25/30	1.000	N1839	N2412	truss diagonal (90)
B2145	TNAS1 - Rectangle (600; 600)	C25/30	1.000	N1837	N2345	truss diagonal (90)
B2146	TNAS1 - Rectangle (600; 600)	C25/30	1.000	N1835	N2414	truss diagonal (90)
B2147	TNAS1 - Rectangle (600; 600)	C25/30	1.000	N1831	N2415	truss diagonal (90)

6. 2D members

Name	Layer	Type	Element type	Material	Thickness type	Th. [mm]
S17	konstrukcija	plate (90)	Standard	C25/30	constant	500
S18	konstrukcija	plate (90)	Standard	C25/30	constant	500
S19	konstrukcija	plate (90)	Standard	C25/30	constant	500
S20	konstrukcija	plate (90)	Standard	C25/30	constant	500
S21	konstrukcija	plate (90)	Standard	C25/30	constant	500
S22	konstrukcija	plate (90)	Standard	C25/30	constant	500
S23	konstrukcija	plate (90)	Standard	C25/30	constant	500
S24	konstrukcija	plate (90)	Standard	C25/30	constant	500
S25	konstrukcija	plate (90)	Standard	C25/30	constant	500
S26	konstrukcija	plate (90)	Standard	C25/30	constant	500

Name	Layer	Type	Element type	Material	Thickness type	Th. [mm]
S27	konstrukcija	plate (90)	Standard	C25/30	constant	500
S28	konstrukcija	plate (90)	Standard	C25/30	constant	500
S29	konstrukcija	plate (90)	Standard	C25/30	constant	500
S30	konstrukcija	plate (90)	Standard	C25/30	constant	500
S31	konstrukcija	plate (90)	Standard	C25/30	constant	500
S32	konstrukcija	plate (90)	Standard	C25/30	constant	500
S33	konstrukcija	plate (90)	Standard	C25/30	constant	800
S34	konstrukcija	plate (90)	Standard	C25/30	constant	800
S35	konstrukcija	plate (90)	Standard	C25/30	constant	800
S36	konstrukcija	plate (90)	Standard	C25/30	constant	800
S37	konstrukcija	plate (90)	Standard	C25/30	constant	800
S38	konstrukcija	plate (90)	Standard	C25/30	constant	800
S39	konstrukcija	plate (90)	Standard	C25/30	constant	800
S40	konstrukcija	plate (90)	Standard	C25/30	constant	800
S41	konstrukcija	plate (90)	Standard	C25/30	constant	500
S42	konstrukcija	plate (90)	Standard	C25/30	constant	500
S43	konstrukcija	plate (90)	Standard	C25/30	constant	500
S44	konstrukcija	plate (90)	Standard	C25/30	constant	500

7. Hinges

Name	Member	Position	ux	uy	uz	fix	fiy	fiz
H142	B1922	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H143	B1921	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H144	B1923	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H145	B1924	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H146	B1925	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H147	B1926	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H148	B1927	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H149	B1928	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H150	B1929	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H151	B1930	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H152	B1931	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H153	B1932	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H154	B1933	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H155	B1934	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H160	B1939	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H161	B1940	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H162	B1941	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H163	B1942	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H164	B1943	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H165	B1944	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H166	B1945	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H167	B1946	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H168	B1947	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H169	B1948	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H170	B1949	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H171	B1950	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H172	B1951	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H173	B1952	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H174	B1953	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H175	B1954	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H176	B1955	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H177	B1956	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H178	B1957	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H179	B1958	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H180	B1959	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H181	B1960	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H182	B1961	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H183	B1962	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H184	B1963	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H185	B1964	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H186	B1965	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H187	B1966	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H188	B1967	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H189	B1968	Both	Rigid	Rigid	Rigid	Rigid	Free	Free

Name	Member	Position	ux	uy	uz	fix	fiy	fiz
H190	B1969	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H191	B1970	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H192	B1971	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H193	B1972	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H194	B1973	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H195	B1974	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H196	B1975	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H197	B1976	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H198	B1977	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H199	B1978	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H200	B1979	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H201	B1980	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H202	B1981	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H203	B1982	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H204	B1983	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H205	B1984	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H206	B1985	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H207	B1986	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H208	B1987	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H209	B1988	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H210	B1989	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H214	B1993	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H215	B1994	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H216	B1995	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H217	B1996	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H218	B1997	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H219	B1998	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H220	B1999	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H221	B2000	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H222	B2001	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H223	B2002	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H224	B2003	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H225	B2004	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H226	B2005	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H227	B2006	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H228	B2007	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H229	B2008	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H230	B2009	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H231	B2010	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H232	B2011	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H233	B2012	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H234	B2013	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H235	B2014	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H236	B2015	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H237	B2016	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H238	B2017	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H239	B2018	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H240	B2019	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H241	B2020	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H242	B2021	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H243	B2022	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H244	B2023	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H245	B2024	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H246	B2025	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H247	B2026	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H248	B2027	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H249	B2028	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H250	B2029	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H251	B2030	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H252	B2031	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H253	B2032	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H254	B2033	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H255	B2034	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H256	B2035	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H261	B2040	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H262	B2041	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H263	B2042	Both	Rigid	Rigid	Rigid	Rigid	Free	Free

Name	Member	Position	ux	uy	uz	fix	fiy	fiz
H264	B2043	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H265	B2044	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H266	B2045	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H267	B2046	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H268	B2047	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H269	B2048	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H270	B2049	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H271	B2050	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H273	B2052	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H274	B2053	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H275	B2054	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H277	B2056	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H278	B2057	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H279	B2058	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H280	B2059	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H281	B2060	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H282	B2061	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H283	B2062	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H284	B2063	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H285	B2064	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H286	B2065	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H287	B2066	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H288	B2067	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H289	B2068	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H290	B2069	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H291	B2070	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H292	B2071	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H293	B2072	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H294	B2073	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H295	B2074	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H296	B2075	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H297	B2076	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H298	B2077	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H299	B2078	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H300	B2079	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H301	B2080	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H302	B2081	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H303	B1688	Begin	Rigid	Rigid	Rigid	Rigid	Free	Free
H304	B1693	Begin	Rigid	Rigid	Rigid	Rigid	Free	Free
H305	B1712	Begin	Rigid	Rigid	Rigid	Rigid	Free	Free
H306	B1714	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H307	B1715	Begin	Rigid	Rigid	Rigid	Rigid	Free	Free
H308	B1698	Begin	Rigid	Rigid	Rigid	Rigid	Free	Free
H309	B1717	Begin	Rigid	Rigid	Rigid	Rigid	Free	Free
H310	B1719	Begin	Rigid	Rigid	Rigid	Rigid	Free	Free
H311	B1692	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H312	B1697	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H313	B1739	Begin	Rigid	Rigid	Rigid	Rigid	Free	Free
H314	B1741	Begin	Rigid	Rigid	Rigid	Rigid	Free	Free
H315	B1743	Begin	Rigid	Rigid	Rigid	Rigid	Free	Free
H316	B1745	Begin	Rigid	Rigid	Rigid	Rigid	Free	Free
H317	B1708	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H318	B1746	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H319	B1744	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H320	B1742	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H321	B1740	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H322	B1738	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H323	B1735	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H324	B1733	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H325	B1709	Begin	Rigid	Rigid	Rigid	Rigid	Free	Free
H326	B1725	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H327	B1728	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H328	B1711	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H329	B1791	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H330	B1777	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H331	B1792	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H332	B1778	End	Rigid	Rigid	Rigid	Rigid	Free	Free

Name	Member	Position	ux	uy	uz	fix	fiy	fiz
H333	B1771	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H334	B1757	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H335	B1755	End	Rigid	Rigid	Free	Rigid	Free	Free
H362	B2111	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H363	B1726	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H364	B2114	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H365	B2115	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H366	B2116	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H367	B2117	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H368	B2118	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H369	B2119	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H370	B2120	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H371	B2121	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H372	B2122	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H373	B2123	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H374	B2124	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H375	B2125	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H376	B2126	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H377	B2127	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H378	B2128	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H379	B2129	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H395	B1676	Begin	Rigid	Rigid	Rigid	Rigid	Free	Free
H396	B1672	Begin	Rigid	Rigid	Rigid	Rigid	Free	Free

8. Rigid arms

Name	Master	Slave	Hinge on master	Hinge on slave
RA9	N1819	N2381	No	No
RA10	N1811	N2390	No	No

9. Nodal supports

Name	Node	System	Type	X	Y	Z	Rx	Ry	Rz
Sn63	N1803	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn64	N1805	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn65	N1807	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn66	N1809	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn68	N1813	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn69	N1815	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn70	N1817	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn72	N1821	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn73	N1823	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn74	N1825	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn76	N1829	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn78	N1833	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free

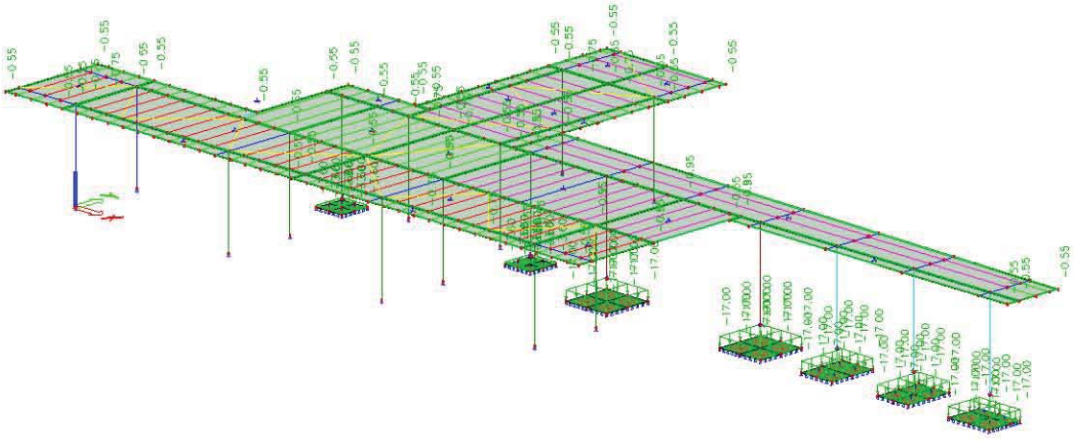
2. OBTEŽBE IN OBTEŽNE KOMBINACIJE

2.1. Obtežbe

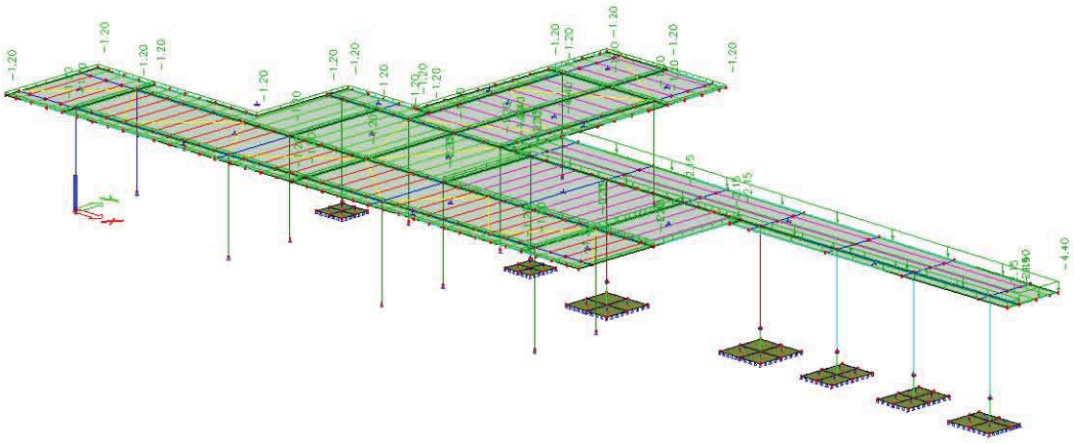
10. Load cases

Name	Description	Action type	Load group	Direction	Duration	Master load case
	Spec	Load type				
lastna		Permanent	L	-Z		
		Self weight				
stalna		Permanent	L			
		Standard				
sneg		Variable	S		Short	None
	Standard	Static				
horiz. ograja		Variable	HO		Short	None
	Standard	Static				
W x		Variable	Wxy		Short	None
	Standard	Static				
W -x		Variable	Wxy		Short	None
	Standard	Static				
W y		Variable	Wxy		Short	None
	Standard	Static				
W -y		Variable	Wxy		Short	None
	Standard	Static				
potres X		Variable	Ex			None
	Seismicity	Dynamic				
potres Y		Variable	Ey			None
	Seismicity	Dynamic				
W pritisk streha		Variable	Wps		Short	None
	Standard	Static				
W srk streha		Variable	Wps		Short	None
	Standard	Static				
Aeropri-1		Variable	aer		Short	None
	Standard	Static				
Aeropri-2		Variable	aer		Short	None
	Standard	Static				
sneg-s1		Variable	S		Short	None
	Standard	Static				
sneg-s2		Variable	S		Short	None
	Standard	Static				

stalna

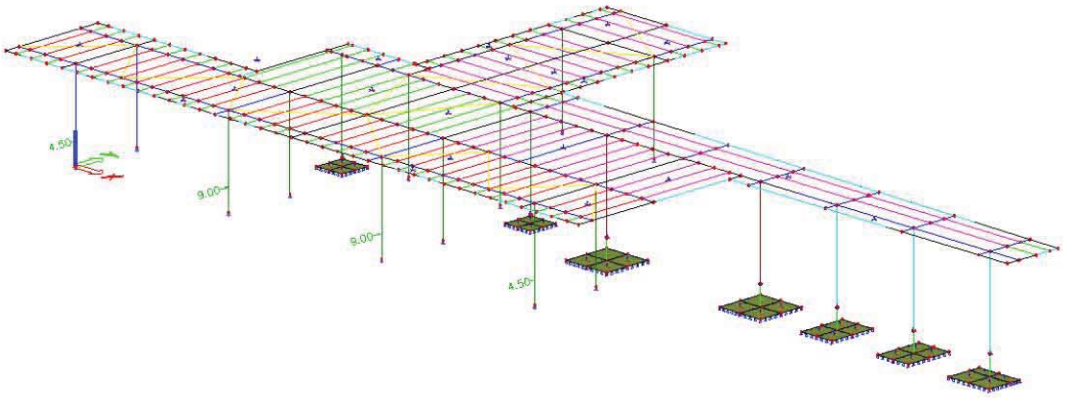


sneg

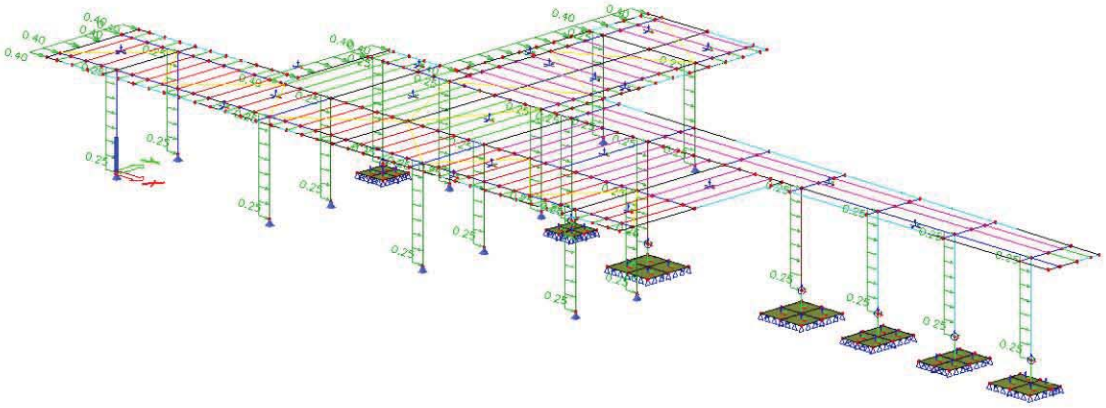


V področju kopoičenja je podana povprečna obtežba kopičenja.

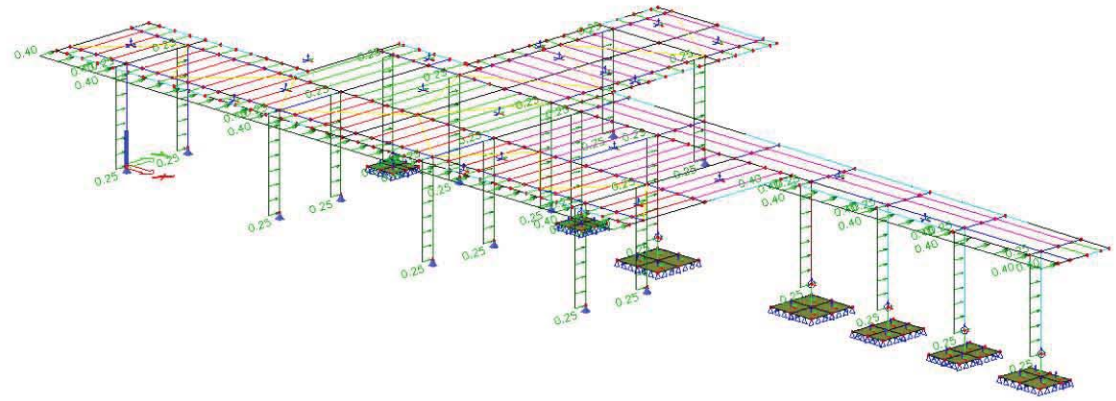
horzontalna ograja



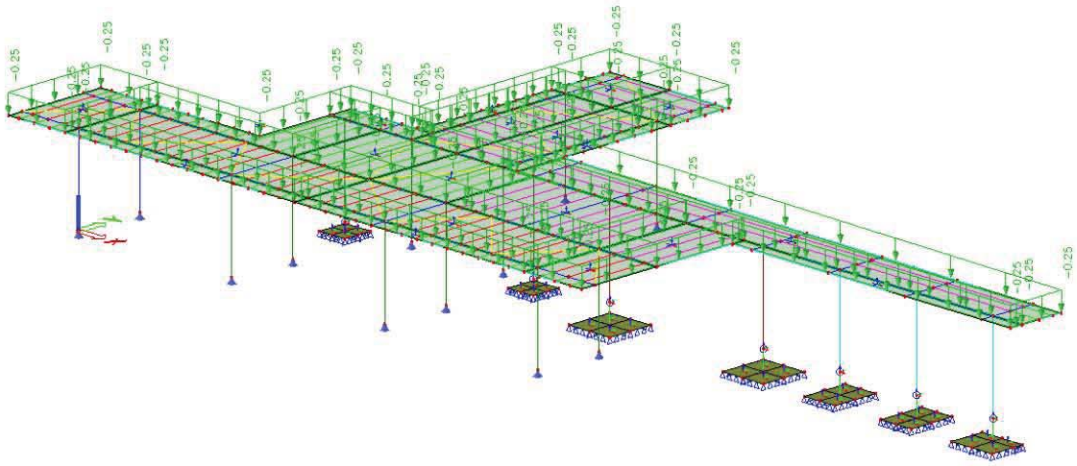
Wx



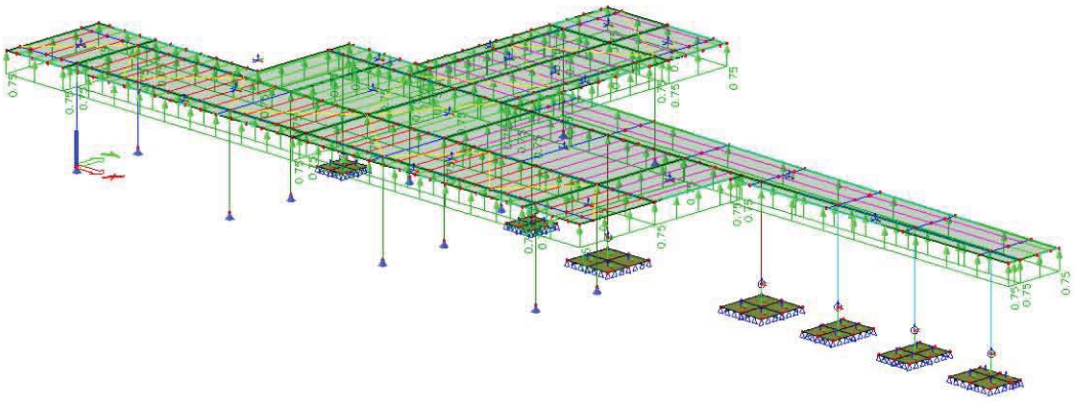
Wy



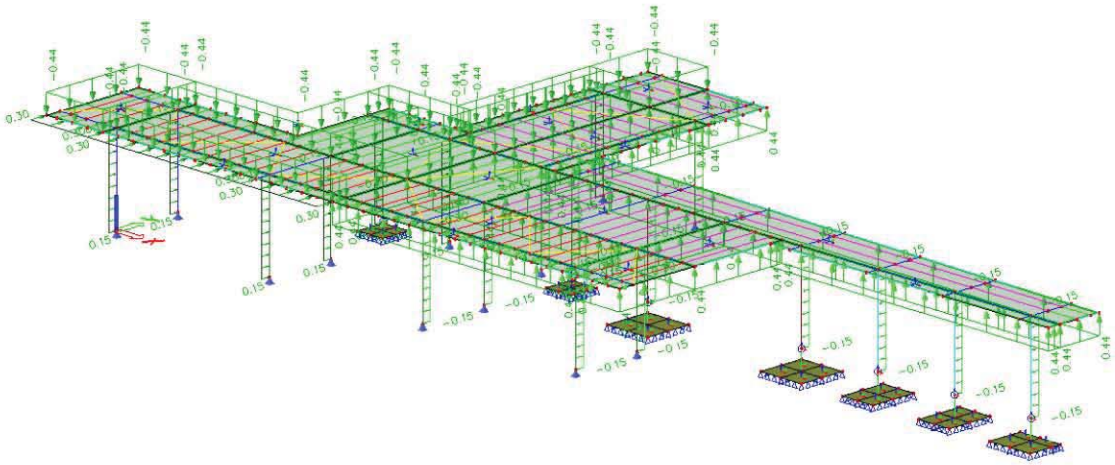
Wpritsk streha



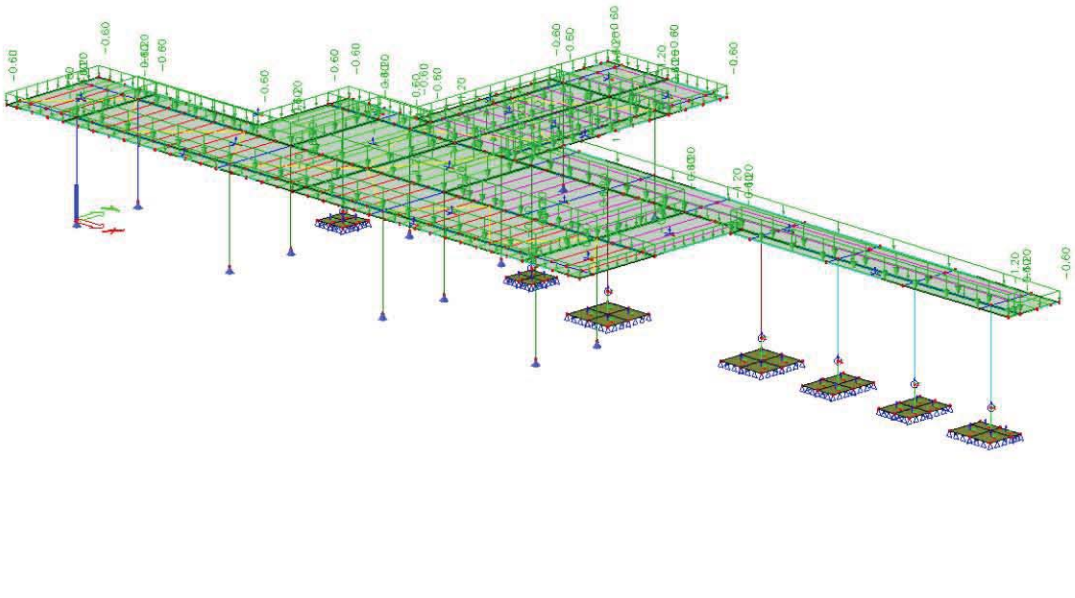
W srk streha



aeroprit-1



sneg-s1



11. Combinations

Name	Description	Type	Load cases	Coeff. [-]
potres 1		Linear - ultimate	lastna	1.00
			stalna	1.00
			potres X	1.00
			potres Y	0.30
potres 2		Linear - ultimate	lastna	1.00
			stalna	1.00
			potres X	1.00
			potres Y	-0.30
potres 3		Linear - ultimate	lastna	1.00
			stalna	1.00
			potres X	-1.00
			potres Y	0.30
potres 4		Linear - ultimate	lastna	1.00
			stalna	1.00
			potres X	-1.00
			potres Y	-0.30
potres 5		Linear - ultimate	lastna	1.00
			stalna	1.00
			potres X	0.30
			potres Y	1.00
potres 6		Linear - ultimate	lastna	1.00
			stalna	1.00
			potres X	-0.30
			potres Y	1.00
potres 7		Linear - ultimate	lastna	1.00
			stalna	1.00
			potres X	0.30
			potres Y	-1.00
potres 8		Linear - ultimate	lastna	1.00
			stalna	1.00
			potres X	-0.30
			potres Y	-1.00
MSN-temelj-1-1		Envelope - ultimate	lastna	1.35
			stalna	1.35
			sneg	1.50
			horiz. ograja	0.90
			W x	0.90
			W -x	0.90
			W y	0.90
			W -y	0.90
			W pritisk streha	0.90
			W srk streha	0.90
			Aeropri-1	0.90
			Aeropri-2	0.90
MSN-temelj-1-2		Envelope - ultimate	lastna	1.00
			stalna	1.00
			sneg	1.50
			horiz. ograja	0.90
			W x	0.90
			W -x	0.90
			W y	0.90
			W -y	0.90
			W pritisk streha	0.90
			W srk streha	0.90
			Aeropri-1	0.90
			Aeropri-2	0.90
MSN-temelj-2-1		Envelope - ultimate	lastna	1.35
			stalna	1.35
			sneg	0.90
			horiz. ograja	1.50
			W x	0.90
			W -x	0.90
			W y	0.90

Name	Description	Type	Load cases	Coeff. [-]
			W -y	0.90
			W pritisk streha	0.90
			W srk streha	0.90
			Aeropri-1	0.90
			Aeropri-2	0.90
MSN-temelj-2-2		Envelope - ultimate	lastna	1.00
			stalna	1.00
			sneg	0.90
			horiz. ograja	1.50
			W x	0.90
			W -x	0.90
			W y	0.90
			W -y	0.90
			W pritisk streha	0.90
			W srk streha	0.90
			Aeropri-1	0.90
			Aeropri-2	0.90
MSN-temelj-3-1		Envelope - ultimate	lastna	1.35
			stalna	1.35
			sneg	0.90
			horiz. ograja	0.90
			W x	1.50
			W -x	1.50
			W y	1.50
			W -y	1.50
			W pritisk streha	0.90
			W srk streha	0.90
			Aeropri-1	0.90
			Aeropri-2	0.90
MSN-temelj-3-2		Envelope - ultimate	lastna	1.00
			stalna	1.00
			sneg	0.90
			horiz. ograja	0.90
			W x	1.50
			W -x	1.50
			W y	1.50
			W -y	1.50
			W pritisk streha	0.90
			W srk streha	0.90
			Aeropri-1	0.90
			Aeropri-2	0.90
MSN-temelj-4-1		Envelope - ultimate	lastna	1.35
			stalna	1.35
			sneg	0.90
			horiz. ograja	0.90
			W x	0.90
			W -x	0.90
			W y	0.90
			W -y	0.90
			W pritisk streha	1.50
			W srk streha	0.90
			Aeropri-1	0.90
			Aeropri-2	0.90
MSN-temelj-4-2		Envelope - ultimate	lastna	1.00
			stalna	1.00
			sneg	0.90
			horiz. ograja	0.90
			W x	0.90
			W -x	0.90
			W y	0.90
			W -y	0.90
			W pritisk streha	1.50
			W srk streha	0.90
			Aeropri-1	0.90
			Aeropri-2	0.90
MSN-temelj-5-1		Envelope - ultimate	lastna	1.35

Name	Description	Type	Load cases	Coeff. [-]
			stalna	1.35
			sneg	0.90
			horiz. ograja	0.90
			W x	0.90
			W -x	0.90
			W y	0.90
			W -y	0.90
			W pritisk streha	0.90
			W srk streha	1.50
			Aeropri-1	0.90
			Aeropri-2	0.90
MSN-temelj-5-2		Envelope - ultimate	lastna	1.00
			stalna	1.00
			sneg	0.90
			horiz. ograja	0.90
			W x	0.90
			W -x	0.90
			W y	0.90
			W -y	0.90
			W pritisk streha	0.90
			W srk streha	1.50
			Aeropri-1	0.90
			Aeropri-2	0.90
MSN-temelj-6-1		Envelope - ultimate	lastna	1.35
			stalna	1.35
			sneg	0.90
			horiz. ograja	0.90
			W x	0.90
			W -x	0.90
			W y	0.90
			W -y	0.90
			W pritisk streha	0.90
			W srk streha	0.90
			Aeropri-1	1.50
			Aeropri-2	1.50
MSN-temelj-6-2		Envelope - ultimate	lastna	1.00
			stalna	1.00
			sneg	0.90
			horiz. ograja	0.90
			W x	0.90
			W -x	0.90
			W y	0.90
			W -y	0.90
			W pritisk streha	0.90
			W srk streha	0.90
			Aeropri-1	1.50
			Aeropri-2	1.50
MSN-temelj-7		Linear - ultimate	lastna	1.35
			stalna	1.35
			W x	0.90
			sneg-s1	1.50
MSN-temelj-8		Linear - ultimate	lastna	1.35
			stalna	1.35
			W -x	0.90
			sneg-s2	1.50

12. Nonlinear combinations

Name	Type	Load cases	Coeff. [-]
NC1	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	1.50
		W pritisk streha	1.50
NC2	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	1.50
		W x	1.50
		W pritisk streha	1.50
NC3	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	1.50
		W -x	1.50
		W pritisk streha	1.50
NC4	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	1.50
		W y	1.50
		W pritisk streha	1.50
NC5	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	1.50
		W -y	1.50
		W pritisk streha	1.50
NC6	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W x	1.50
		W srk streha	1.50
NC7	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W -x	1.50
		W srk streha	1.50
NC8	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W y	1.50
		W srk streha	1.50
NC9	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W -y	1.50
		W srk streha	1.50
NC10	Serviceability	lastna	1.00
		stalna	1.00
		sneg	1.00
		horiz. ograja	1.00
		W x	1.00
		W pritisk streha	1.00
NC11	Serviceability	lastna	1.00
		stalna	1.00
		sneg	1.00
		horiz. ograja	1.00
		W -x	1.00
		W pritisk streha	1.00
NC12	Serviceability	lastna	1.00
		stalna	1.00

Name	Type	Load cases	Coeff. [-]
		sneg	1.00
		horiz. ograja	1.00
		W y	1.00
		W pritisk streha	1.00
NC13	Serviceability	lastna	1.00
		stalna	1.00
		sneg	1.00
		horiz. ograja	1.00
		W -y	1.00
		W pritisk streha	1.00
NC14	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W pritisk streha	1.50
		Aeropri-1	0.90
NC15	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W x	1.50
		W pritisk streha	1.50
		Aeropri-1	0.90
NC16	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W -x	1.50
		W pritisk streha	1.50
		Aeropri-1	0.90
NC17	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W y	1.50
		W pritisk streha	1.50
		Aeropri-1	0.90
NC18	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W -y	1.50
		W pritisk streha	1.50
		Aeropri-1	0.90
NC19	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W x	1.50
		W srk streha	1.50
		Aeropri-1	0.90
NC20	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W -x	1.50
		W srk streha	1.50
		Aeropri-1	0.90
NC21	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W y	1.50
		W srk streha	1.50
		Aeropri-1	0.90
NC22	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W -y	1.50

Name	Type	Load cases	Coeff. [-]
		W srk streha	1.50
		Aeropri-1	0.90
NC23	Ultimate	lastna	1.35
		stalna	1.35
		sneg	0.90
		horiz. ograja	1.50
		W pritisk streha	1.50
		Aeropri-2	0.90
NC24	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W x	1.50
		W pritisk streha	1.50
		Aeropri-2	0.90
NC25	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W -x	1.50
		W pritisk streha	1.50
		Aeropri-2	0.90
NC26	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W y	1.50
		W pritisk streha	1.50
		Aeropri-2	0.90
NC27	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W -y	1.50
		W pritisk streha	1.50
		Aeropri-2	0.90
NC28	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W x	1.50
		W srk streha	1.50
		Aeropri-2	0.90
NC29	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W -x	1.50
		W srk streha	1.50
		Aeropri-2	0.90
NC30	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W y	1.50
		W srk streha	1.50
		Aeropri-2	0.90
NC31	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W -y	1.50
		W srk streha	1.50
		Aeropri-2	0.90
NC32	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W pritisk streha	0.90
		Aeropri-1	1.50

Name	Type	Load cases	Coeff. [-]
NC33	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W x	0.90
		W pritisk streha	0.90
		Aeropri-1	1.50
NC34	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W -x	0.90
		W pritisk streha	0.90
		Aeropri-1	1.50
NC35	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W y	0.90
		W pritisk streha	0.90
		Aeropri-1	1.50
NC36	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W -y	0.90
		W pritisk streha	0.90
		Aeropri-1	1.50
NC37	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W x	0.90
		W srk streha	0.90
		Aeropri-1	1.50
NC38	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W -x	0.90
		W srk streha	0.90
		Aeropri-1	1.50
NC39	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W y	0.90
		W srk streha	0.90
		Aeropri-1	1.50
NC40	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W -y	0.90
		W srk streha	0.90
		Aeropri-1	1.50
NC41	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W pritisk streha	0.90
		Aeropri-2	1.50
NC42	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W x	0.90
		W pritisk streha	0.90
		Aeropri-2	1.50
NC43	Ultimate	lastna	1.35

Name	Type	Load cases	Coeff. [-]
		stalna	1.35
		sneg	0.90
		horiz. ograja	1.50
		W -x	0.90
		W pritisk streha	0.90
		Aeropri-2	1.50
NC44	Ultimate	lastna	1.35
		stalna	1.35
		sneg	0.90
		horiz. ograja	1.50
		W y	0.90
		W pritisk streha	0.90
		Aeropri-2	1.50
NC45	Ultimate	lastna	1.35
		stalna	1.35
		sneg	0.90
		horiz. ograja	1.50
		W -y	0.90
		W pritisk streha	0.90
		Aeropri-2	1.50
NC46	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W x	0.90
		W srk streha	0.90
		Aeropri-2	1.50
NC47	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W -x	0.90
		W srk streha	0.90
		Aeropri-2	1.50
NC48	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W y	0.90
		W srk streha	0.90
		Aeropri-2	1.50
NC49	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W -y	0.90
		W srk streha	0.90
		Aeropri-2	1.50
NC50-s1	Ultimate	lastna	1.35
		stalna	1.35
		W x	0.90
		sneg-s1	1.50
NC51-s2	Ultimate	lastna	1.35
		stalna	1.35
		W -x	0.90
		sneg-s2	1.50

13. Mass groups

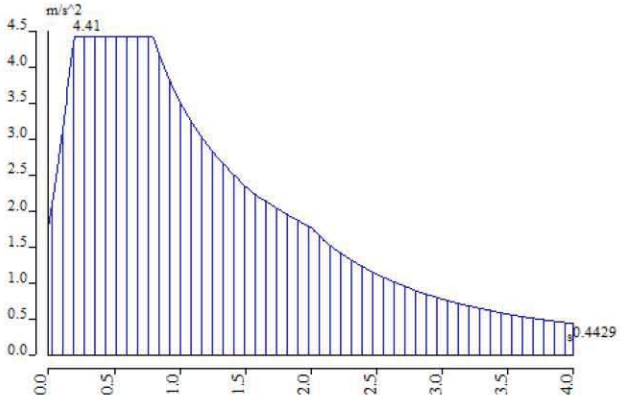
Name	Load case	Description
MG1	lastna	lastna
MG2	stalna	stalna

14. Combination of mass groups

Name	Mass group	Coeff. [-]
CM1	MG1 - lastna	1.00
	MG2 - stalna	1.00
CM1/1 - 1.55		
CM1/2 - 1.88		
CM1/3 - 2.15		
CM1/4 - 2.52		
CM1/5 - 3.66		
CM1/6 - 4.83		
CM1/7 - 5.09		
CM1/8 - 5.33		
CM1/9 - 6.01		
CM1/10 - 6.06		
CM1/11 - 6.32		
CM1/12 - 6.46		
CM1/13 - 6.48		
CM1/14 - 6.48		
CM1/15 - 6.48		
CM1/16 - 6.48		
CM1/17 - 6.48		
CM1/18 - 6.48		
CM1/19 - 6.48		
CM1/20 - 6.48		
CM1/21 - 6.48		
CM1/22 - 6.48		
CM1/23 - 6.48		
CM1/24 - 6.48		
CM1/25 - 6.48		
CM1/26 - 6.49		
CM1/27 - 6.49		
CM1/28 - 6.49		
CM1/29 - 6.49		
CM1/30 - 6.49		
CM1/31 - 6.49		
CM1/32 - 6.49		
CM1/33 - 6.49		
CM1/34 - 6.49		
CM1/35 - 6.49		
CM1/36 - 6.59		
CM1/37 - 6.61		
CM1/38 - 6.64		
CM1/39 - 6.82		
CM1/40 - 6.87		
CM1/41 - 6.90		
CM1/42 - 6.91		
CM1/43 - 6.93		
CM1/44 - 7.19		
CM1/45 - 7.19		
CM1/46 - 7.24		
CM1/47 - 7.28		
CM1/48 - 7.30		
CM1/49 - 7.30		
CM1/50 - 7.33		
CM1/51 - 7.33		
CM1/52 - 7.34		
CM1/53 - 7.35		
CM1/54 - 7.35		
CM1/55 - 7.36		
CM1/56 - 7.36		

Name	Mass group	Coeff. [-]
CM1/57 - 7.36		
CM1/58 - 7.37		
CM1/59 - 7.37		
CM1/60 - 7.37		
CM1/61 - 7.37		
CM1/62 - 7.37		
CM1/63 - 7.37		
CM1/64 - 7.37		
CM1/65 - 7.38		
CM1/66 - 7.38		
CM1/67 - 7.40		
CM1/68 - 7.40		
CM1/69 - 7.41		
CM1/70 - 7.42		
CM1/71 - 7.43		
CM1/72 - 7.43		
CM1/73 - 7.45		
CM1/74 - 7.46		
CM1/75 - 7.46		
CM1/76 - 7.46		
CM1/77 - 7.46		
CM1/78 - 7.46		
CM1/79 - 7.46		
CM1/80 - 7.47		
CM1/81 - 7.47		
CM1/82 - 7.47		
CM1/83 - 7.47		
CM1/84 - 7.47		
CM1/85 - 7.47		
CM1/86 - 7.47		
CM1/87 - 7.47		
CM1/88 - 7.57		
CM1/89 - 7.64		
CM1/90 - 7.71		
CM1/91 - 7.79		
CM1/92 - 7.80		
CM1/93 - 7.81		
CM1/94 - 7.81		
CM1/95 - 7.83		
CM1/96 - 7.90		
CM1/97 - 7.92		
CM1/98 - 7.92		
CM1/99 - 7.92		
CM1/100 - 7.92		

15. Seismic spectrums

Name	Type drawing	Info	Drawing
UniqueID			
EC 8, class D, q = 1.5, ag=0.20	Period	Type code - Eurocode Subsoil type - D Direction - Horizontal Spectrum type - type 1 coeff accel. ag - 0.2 ag - design acceleration - 1.962 beta - 0.2 q - behaviour factor - 1.5	

2.2. Ovojnice

16. Result classes

Name	Description	List
ULS-potres	linearno	potres 2 - Linear - ultimate
		potres 3 - Linear - ultimate
		potres 4 - Linear - ultimate
		potres 5 - Linear - ultimate
		potres 6 - Linear - ultimate
		potres 7 - Linear - ultimate
		potres 8 - Linear - ultimate
		potres 1 - Linear - ultimate
ULS	nelinearno	NC1
		NC2
		NC3
		NC4
		NC5
		NC6
		NC7
		NC8
		NC9
		NC14
		NC15
		NC16
		NC17
		NC18
		NC19
		NC20
		NC21
		NC22
		NC23
		NC24
		NC25
		NC26
		NC27
		NC28
		NC29
		NC30
		NC31
		NC32
		NC33
		NC34
		NC35
		NC36
		NC37
		NC38
		NC39
		NC40
		NC41
		NC42
		NC43
		NC44
		NC45
		NC46
		NC47
		NC48
		NC49
		NC50-s1
		NC51-s2
SLS	linearno	NC10
		NC11
		NC12
		NC13
ULS-temelji	linearno	MSN-temelj-1-1 - Envelope - ultimate
		MSN-temelj-1-2 - Envelope - ultimate

Name	Description	List
		MSN-temelj-2-1 - Envelope - ultimate
		MSN-temelj-2-2 - Envelope - ultimate
		MSN-temelj-3-1 - Envelope - ultimate
		MSN-temelj-3-2 - Envelope - ultimate
		MSN-temelj-4-1 - Envelope - ultimate
		MSN-temelj-4-2 - Envelope - ultimate
		MSN-temelj-5-1 - Envelope - ultimate
		MSN-temelj-5-2 - Envelope - ultimate
		MSN-temelj-6-1 - Envelope - ultimate
		MSN-temelj-6-2 - Envelope - ultimate
		MSN-temelj-7 - Linear - ultimate
		MSN-temelj-8 - Linear - ultimate

2.3. Računski protokoli

17. Calculation protocol

Linear calculation

Number of 2D elements	344
Number of 1D elements	2761
Number of mesh nodes	2996
Number of equations	17976
Bending theory	Mindlin
Load cases	lastna, stalna, sneg, horiz. ograja, W x, W -x, W y, W -y, W pritisk streha, W srk streha, Aeropri-1, Aeropri-2, sneg-s1, sneg-s2
Start of calculation	25.04.2021 18:19
End of calculation	25.04.2021 18:19

Sum of loads and reactions

Load case	Value	X [kN]	Y [kN]	Z [kN]
lastna	loads	0.00	0.00	-744.62
	reaction in nodes	-0.36	-1.43	206.03
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	0.36	1.43	538.59
stalna	loads	0.00	0.00	-716.88
	reaction in nodes	-0.32	-0.91	198.80
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	0.32	0.91	518.09
sneg	loads	0.00	0.00	-864.67
	reaction in nodes	-3.51	-13.03	407.45
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	3.51	13.03	457.22
horiz. ograja	loads	0.00	27.00	0.00
	reaction in nodes	0.39	-24.26	-1.30
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	-0.39	-2.74	1.30
W x	loads	30.31	0.00	0.00
	reaction in nodes	-12.14	-0.15	-0.32
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	-18.16	0.15	0.32
W -x	loads	-29.70	0.00	0.00
	reaction in nodes	11.86	0.15	0.30
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	17.84	-0.15	-0.30
W y	loads	0.00	41.16	0.00
	reaction in nodes	0.60	-22.10	-3.16
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	-0.60	-19.06	3.16
W -y	loads	0.00	-41.16	0.00
	reaction in nodes	-0.60	22.09	3.17
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00

Load case	Value	X [kN]	Y [kN]	Z [kN]
	contact 2D	0.60	19.07	-3.17
W pritisk streha	loads	0.00	0.00	-115.09
	reaction in nodes	-0.17	-0.51	81.41
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	0.17	0.51	33.69
W srk streha	loads	0.00	0.00	345.28
	reaction in nodes	0.51	1.54	-244.22
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	-0.51	-1.54	-101.06
Aeropri-1	loads	0.00	-3.36	53.10
	reaction in nodes	1.26	-1.76	-2.25
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	-1.26	5.12	-50.85
Aeropri-2	loads	0.00	3.36	-53.10
	reaction in nodes	-1.26	1.76	2.25
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	1.26	-5.12	50.85
sneg-s1	loads	0.00	0.00	-371.72
	reaction in nodes	-0.42	-0.58	269.11
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	0.42	0.58	102.61
sneg-s2	loads	0.00	0.00	-403.29
	reaction in nodes	-0.67	-3.23	262.48
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	0.67	3.23	140.81

The following dynamic load cases are detailed separately (see below):potres X, potres Y

Dynamic load case 15 : potres X

Mode	Freq. [Hz]	Damp ratio	Damp coef.	Sax [m/s^2]	Say [m/s^2]	Saz [m/s^2]	G(j) [-]	Fx [kN]	Fy [kN]	Mx [kNm]	My [kNm]
1	1.55	0.05	1	4.415	0.000	0.000	-1.16	2.75	-20.33	88.45	-12.04
2	1.88	0.05	1	4.415	0.000	0.000	-2.59	29.67	56.01	-234.26	-125.92
3	2.15	0.05	1	4.415	0.000	0.000	-5.65	241.84	-40.34	162.02	-998.85
4	2.52	0.05	1	4.415	0.000	0.000	-0.76	8.21	3.90	-14.10	-32.58
5	3.66	0.05	1	4.415	0.000	0.000	0.14	1.25	0.39	-0.97	-4.19
6	4.83	0.05	1	4.415	0.000	0.000	0.02	0.05	0.04	-0.13	-0.12
7	5.09	0.05	1	4.355	0.000	0.000	0.00	0.00	0.00	0.01	0.00
8	5.33	0.05	1	4.251	0.000	0.000	0.01	0.06	0.18	-0.41	-0.27
9	6.01	0.05	1	3.972	0.000	0.000	0.01	0.07	0.13	-0.20	-0.28
10	6.06	0.05	1	3.953	0.000	0.000	-0.01	0.11	0.05	-0.12	-0.49
11	6.32	0.05	1	3.863	0.000	0.000	0.00	0.00	-0.10	0.15	-0.02
12	6.46	0.05	1	3.816	0.000	0.000	0.00	0.00	0.00	0.00	0.00
13	6.48	0.05	1	3.810	0.000	0.000	0.00	0.00	0.00	0.00	0.00
14	6.48	0.05	1	3.809	0.000	0.000	0.00	0.00	0.00	0.00	0.00
15	6.48	0.05	1	3.809	0.000	0.000	0.00	0.00	0.00	0.00	0.00
16	6.48	0.05	1	3.809	0.000	0.000	0.00	0.00	0.00	0.00	0.00
17	6.48	0.05	1	3.809	0.000	0.000	0.00	0.00	0.00	0.00	0.00
18	6.48	0.05	1	3.809	0.000	0.000	0.00	0.00	0.00	0.00	0.00
19	6.48	0.05	1	3.809	0.000	0.000	0.00	0.00	0.00	0.00	0.00
20	6.48	0.05	1	3.809	0.000	0.000	0.00	0.00	0.00	0.00	0.00
21	6.48	0.05	1	3.809	0.000	0.000	0.00	0.00	0.00	0.00	0.00
22	6.48	0.05	1	3.809	0.000	0.000	0.00	0.00	0.00	0.00	0.00
23	6.48	0.05	1	3.809	0.000	0.000	0.00	0.00	0.00	0.00	0.00
24	6.48	0.05	1	3.809	0.000	0.000	0.00	0.00	0.00	0.00	0.00
25	6.48	0.05	1	3.809	0.000	0.000	0.00	0.00	0.00	0.00	0.00
26	6.49	0.05	1	3.809	0.000	0.000	0.00	0.00	0.00	0.00	0.00

Mode	Freq. [Hz]	Damp ratio	Damp coef.	Sax [m/s^2]	Say [m/s^2]	Saz [m/s^2]	G(j) [-]	Fx [kN]	Fy [kN]	Mx [kNm]	My [kNm]
27	6.49	0.05	1	3.809	0.000	0.000	0.00	0.00	0.00	0.00	0.00
28	6.49	0.05	1	3.809	0.000	0.000	0.00	0.00	0.00	0.00	0.00
29	6.49	0.05	1	3.809	0.000	0.000	0.00	0.00	0.00	0.00	0.00
30	6.49	0.05	1	3.809	0.000	0.000	0.00	0.00	0.00	0.00	0.00
31	6.49	0.05	1	3.809	0.000	0.000	0.00	0.00	0.00	0.00	0.00
32	6.49	0.05	1	3.809	0.000	0.000	0.00	0.00	0.00	0.00	0.00
33	6.49	0.05	1	3.809	0.000	0.000	0.00	0.00	0.00	0.00	0.00
34	6.49	0.05	1	3.809	0.000	0.000	0.00	0.00	0.00	0.00	0.00
35	6.49	0.05	1	3.809	0.000	0.000	0.00	0.00	0.00	0.00	0.00
36	6.59	0.05	1	3.777	0.000	0.000	-0.01	0.02	-0.08	0.10	0.03
37	6.61	0.05	1	3.771	0.000	0.000	-0.04	1.40	0.33	-0.46	-1.62
38	6.64	0.05	1	3.763	0.000	0.000	0.00	0.01	-0.02	0.10	-0.02
39	6.82	0.05	1	3.710	0.000	0.000	0.01	0.11	0.00	0.00	-0.09
40	6.87	0.05	1	3.694	0.000	0.000	-0.01	0.08	-0.25	0.22	-0.35
41	6.90	0.05	1	3.688	0.000	0.000	0.00	0.00	0.00	0.00	0.00
42	6.91	0.05	1	3.684	0.000	0.000	0.00	0.00	0.00	-0.03	0.00
43	6.93	0.05	1	3.678	0.000	0.000	0.01	0.07	0.01	0.00	-0.03
44	7.19	0.05	1	3.610	0.000	0.000	0.00	0.01	-0.01	0.02	0.01
45	7.19	0.05	1	3.609	0.000	0.000	0.00	0.01	-0.01	0.00	0.02
46	7.24	0.05	1	3.597	0.000	0.000	0.00	0.01	-0.01	0.01	0.00
47	7.28	0.05	1	3.587	0.000	0.000	-0.01	0.06	-0.05	0.02	-0.10
48	7.30	0.05	1	3.583	0.000	0.000	-0.01	0.10	-0.24	0.10	-0.15
49	7.30	0.05	1	3.581	0.000	0.000	0.00	0.01	-0.02	0.01	-0.02
50	7.33	0.05	1	3.575	0.000	0.000	0.00	0.00	0.00	0.00	0.00
51	7.33	0.05	1	3.574	0.000	0.000	0.00	0.01	0.00	0.00	0.00
52	7.34	0.05	1	3.571	0.000	0.000	0.00	0.00	0.00	0.00	0.00
53	7.35	0.05	1	3.570	0.000	0.000	0.00	0.00	0.00	0.00	0.00
54	7.35	0.05	1	3.569	0.000	0.000	0.00	0.00	0.00	0.00	0.00
55	7.36	0.05	1	3.567	0.000	0.000	0.00	0.00	0.00	0.00	0.00
56	7.36	0.05	1	3.567	0.000	0.000	0.00	0.00	0.00	0.00	0.00
57	7.36	0.05	1	3.567	0.000	0.000	0.00	0.00	0.00	0.00	0.00
58	7.37	0.05	1	3.565	0.000	0.000	0.00	0.00	0.00	0.00	0.00
59	7.37	0.05	1	3.565	0.000	0.000	0.00	0.00	0.00	0.00	0.00
60	7.37	0.05	1	3.564	0.000	0.000	0.00	0.00	0.00	0.00	0.00
61	7.37	0.05	1	3.564	0.000	0.000	0.00	0.00	0.00	0.00	0.00
62	7.37	0.05	1	3.564	0.000	0.000	0.00	0.00	0.00	0.00	0.00
63	7.37	0.05	1	3.564	0.000	0.000	0.00	0.00	0.00	0.00	0.00
64	7.37	0.05	1	3.564	0.000	0.000	0.00	0.00	0.00	0.00	0.00
65	7.38	0.05	1	3.562	0.000	0.000	0.00	0.00	-0.01	0.00	0.01
66	7.38	0.05	1	3.562	0.000	0.000	-0.01	0.08	0.13	-0.04	-0.15
67	7.40	0.05	1	3.557	0.000	0.000	0.00	0.00	0.00	0.00	0.00
68	7.40	0.05	1	3.557	0.000	0.000	0.00	0.00	0.00	0.00	0.00
69	7.41	0.05	1	3.553	0.000	0.000	0.00	0.00	0.00	0.00	0.00
70	7.42	0.05	1	3.553	0.000	0.000	0.00	0.01	0.00	0.00	0.00
71	7.43	0.05	1	3.551	0.000	0.000	0.00	0.00	0.00	0.00	0.00
72	7.43	0.05	1	3.549	0.000	0.000	0.00	0.00	0.00	0.00	0.00
73	7.45	0.05	1	3.544	0.000	0.000	0.00	0.01	0.02	0.00	-0.01
74	7.46	0.05	1	3.543	0.000	0.000	0.00	0.00	0.00	0.00	0.00
75	7.46	0.05	1	3.542	0.000	0.000	0.00	0.00	0.00	0.00	0.00
76	7.46	0.05	1	3.542	0.000	0.000	0.00	0.00	0.00	0.00	0.00
77	7.46	0.05	1	3.541	0.000	0.000	0.00	0.00	0.00	0.00	0.00
78	7.46	0.05	1	3.541	0.000	0.000	0.00	0.00	0.00	0.00	0.00
79	7.46	0.05	1	3.541	0.000	0.000	0.00	0.00	0.00	0.00	0.00
80	7.47	0.05	1	3.540	0.000	0.000	0.00	0.00	0.00	0.00	0.00
81	7.47	0.05	1	3.540	0.000	0.000	0.00	0.00	0.00	0.00	0.00
82	7.47	0.05	1	3.540	0.000	0.000	0.00	0.00	0.00	0.00	0.00
83	7.47	0.05	1	3.540	0.000	0.000	0.00	0.00	0.00	0.00	0.00
84	7.47	0.05	1	3.540	0.000	0.000	0.00	0.00	0.00	0.00	0.00
85	7.47	0.05	1	3.540	0.000	0.000	0.00	0.00	0.00	0.00	0.00
86	7.47	0.05	1	3.540	0.000	0.000	0.00	0.00	0.00	0.00	0.00
87	7.47	0.05	1	3.540	0.000	0.000	0.00	0.00	0.00	0.00	0.00
88	7.57	0.05	1	3.515	0.000	0.000	0.00	0.00	0.00	0.00	0.00
89	7.64	0.05	1	3.502	0.000	0.000	0.00	0.01	-0.04	0.00	-0.01
90	7.71	0.05	1	3.486	0.000	0.000	0.00	0.00	0.00	0.00	0.00
91	7.79	0.05	1	3.468	0.000	0.000	0.00	0.00	0.10	0.04	0.00
92	7.80	0.05	1	3.465	0.000	0.000	0.00	0.01	0.04	0.01	0.00

Mode	Freq. [Hz]	Damp ratio	Damp coef.	Sax [m/s^2]	Say [m/s^2]	Saz [m/s^2]	G(j) [-]	Fx [kN]	Fy [kN]	Mx [kNm]	My [kNm]
93	7.81	0.05	1	3.464	0.000	0.000	0.00	0.00	-0.02	-0.01	0.00
94	7.81	0.05	1	3.464	0.000	0.000	-0.01	0.26	0.19	0.05	0.01
95	7.83	0.05	1	3.460	0.000	0.000	0.00	0.01	0.57	0.16	0.00
96	7.90	0.05	1	3.444	0.000	0.000	0.00	0.00	0.00	0.00	0.00
97	7.92	0.05	1	3.441	0.000	0.000	0.00	0.00	0.00	0.00	0.00
98	7.92	0.05	1	3.441	0.000	0.000	0.01	0.06	0.03	0.01	-0.09
99	7.92	0.05	1	3.440	0.000	0.000	0.00	0.00	0.00	0.00	0.00
100	7.92	0.05	1	3.439	0.000	0.000	0.00	0.00	0.00	0.00	0.00
Level=	0.00							243.81	-72.07	298.58	-1007.37

Dynamic load case 16 : potres Y

Mode	Freq. [Hz]	Damp ratio	Damp coef.	Sax [m/s^2]	Say [m/s^2]	Saz [m/s^2]	G(j) [-]	Fx [kN]	Fy [kN]	Mx [kNm]	My [kNm]
1	1.55	0.05	1	0.000	4.415	0.000	8.60	-20.33	150.17	-653.49	88.95
2	1.88	0.05	1	0.000	4.415	0.000	-4.89	56.01	105.72	-442.18	-237.68
3	2.15	0.05	1	0.000	4.415	0.000	0.94	-40.34	6.73	-27.03	166.63
4	2.52	0.05	1	0.000	4.415	0.000	-0.36	3.90	1.85	-6.69	-15.46
5	3.66	0.05	1	0.000	4.415	0.000	0.04	0.39	0.12	-0.30	-1.31
6	4.83	0.05	1	0.000	4.415	0.000	0.01	0.04	0.04	-0.11	-0.11
7	5.09	0.05	1	0.000	4.355	0.000	0.02	0.00	0.08	-0.36	0.01
8	5.33	0.05	1	0.000	4.251	0.000	0.04	0.18	0.54	-1.22	-0.81
9	6.01	0.05	1	0.000	3.972	0.000	0.02	0.13	0.25	-0.37	-0.53
10	6.06	0.05	1	0.000	3.953	0.000	-0.01	0.05	0.02	-0.05	-0.21
11	6.32	0.05	1	0.000	3.863	0.000	0.07	-0.10	2.85	-4.21	0.58
12	6.46	0.05	1	0.000	3.816	0.000	0.00	0.00	0.00	0.00	0.00
13	6.48	0.05	1	0.000	3.810	0.000	0.00	0.00	0.00	0.00	0.00
14	6.48	0.05	1	0.000	3.809	0.000	0.00	0.00	0.00	0.00	0.00
15	6.48	0.05	1	0.000	3.809	0.000	0.00	0.00	0.00	0.00	0.00
16	6.48	0.05	1	0.000	3.809	0.000	0.00	0.00	0.00	0.00	0.00
17	6.48	0.05	1	0.000	3.809	0.000	0.00	0.00	0.00	0.00	0.00
18	6.48	0.05	1	0.000	3.809	0.000	0.00	0.00	0.00	0.00	0.00
19	6.48	0.05	1	0.000	3.809	0.000	0.00	0.00	0.00	0.00	0.00
20	6.48	0.05	1	0.000	3.809	0.000	0.00	0.00	0.00	0.00	0.00
21	6.48	0.05	1	0.000	3.809	0.000	0.00	0.00	0.00	0.00	0.00
22	6.48	0.05	1	0.000	3.809	0.000	0.00	0.00	0.00	0.00	0.00
23	6.48	0.05	1	0.000	3.809	0.000	0.00	0.00	0.00	0.00	0.00
24	6.48	0.05	1	0.000	3.809	0.000	0.00	0.00	0.00	0.00	0.00
25	6.48	0.05	1	0.000	3.809	0.000	0.00	0.00	0.00	0.00	0.00
26	6.49	0.05	1	0.000	3.809	0.000	0.00	0.00	0.00	0.00	0.00
27	6.49	0.05	1	0.000	3.809	0.000	0.00	0.00	0.00	0.00	0.00
28	6.49	0.05	1	0.000	3.809	0.000	0.00	0.00	0.00	0.00	0.00
29	6.49	0.05	1	0.000	3.809	0.000	0.00	0.00	0.00	0.00	0.00
30	6.49	0.05	1	0.000	3.809	0.000	0.00	0.00	0.00	0.00	0.00
31	6.49	0.05	1	0.000	3.809	0.000	0.00	0.00	0.00	0.00	0.00
32	6.49	0.05	1	0.000	3.809	0.000	0.00	0.00	0.00	0.00	0.00
33	6.49	0.05	1	0.000	3.809	0.000	0.00	0.00	0.00	0.00	0.00
34	6.49	0.05	1	0.000	3.809	0.000	0.00	0.00	0.00	0.00	0.00
35	6.49	0.05	1	0.000	3.809	0.000	0.00	0.00	0.00	0.00	0.00
36	6.59	0.05	1	0.000	3.777	0.000	0.02	-0.08	0.32	-0.40	-0.13
37	6.61	0.05	1	0.000	3.771	0.000	-0.01	0.33	0.08	-0.11	-0.38
38	6.64	0.05	1	0.000	3.763	0.000	0.00	-0.02	0.02	-0.12	0.02
39	6.82	0.05	1	0.000	3.710	0.000	0.00	0.00	0.00	0.00	0.00
40	6.87	0.05	1	0.000	3.694	0.000	0.03	-0.25	0.79	-0.70	1.11
41	6.90	0.05	1	0.000	3.688	0.000	0.00	0.00	0.01	0.00	0.01
42	6.91	0.05	1	0.000	3.684	0.000	0.00	0.00	0.00	-0.03	0.00
43	6.93	0.05	1	0.000	3.678	0.000	0.00	0.01	0.00	0.00	-0.01
44	7.19	0.05	1	0.000	3.610	0.000	-0.01	-0.01	0.03	-0.04	-0.02
45	7.19	0.05	1	0.000	3.609	0.000	0.00	-0.01	0.01	0.00	-0.02
46	7.24	0.05	1	0.000	3.597	0.000	0.00	-0.01	0.00	0.00	0.00
47	7.28	0.05	1	0.000	3.587	0.000	0.01	-0.05	0.04	-0.02	0.08
48	7.30	0.05	1	0.000	3.583	0.000	0.02	-0.24	0.55	-0.22	0.35
49	7.30	0.05	1	0.000	3.581	0.000	0.01	-0.02	0.03	-0.01	0.03
50	7.33	0.05	1	0.000	3.575	0.000	0.00	0.00	0.00	0.00	0.00
51	7.33	0.05	1	0.000	3.574	0.000	0.00	0.00	0.00	0.00	0.00

Mode	Freq. [Hz]	Damp ratio	Damp coef.	Sax [m/s^2]	Say [m/s^2]	Saz [m/s^2]	G(j) [-]	Fx [kN]	Fy [kN]	Mx [kNm]	My [kNm]
52	7.34	0.05	1	0.000	3.571	0.000	0.00	0.00	0.01	0.00	0.00
53	7.35	0.05	1	0.000	3.570	0.000	0.00	0.00	0.00	0.00	0.00
54	7.35	0.05	1	0.000	3.569	0.000	0.00	0.00	0.00	0.00	0.00
55	7.36	0.05	1	0.000	3.567	0.000	0.00	0.00	0.00	-0.01	0.00
56	7.36	0.05	1	0.000	3.567	0.000	0.01	0.00	0.05	-0.01	-0.01
57	7.36	0.05	1	0.000	3.567	0.000	0.00	0.00	0.00	0.00	0.00
58	7.37	0.05	1	0.000	3.565	0.000	0.00	0.00	0.00	0.00	0.00
59	7.37	0.05	1	0.000	3.565	0.000	0.00	0.00	0.00	0.00	0.00
60	7.37	0.05	1	0.000	3.564	0.000	0.00	0.00	0.00	0.00	0.00
61	7.37	0.05	1	0.000	3.564	0.000	0.00	0.00	0.00	0.00	0.00
62	7.37	0.05	1	0.000	3.564	0.000	0.00	0.00	0.00	0.00	0.00
63	7.37	0.05	1	0.000	3.564	0.000	0.00	0.00	0.00	0.00	0.00
64	7.37	0.05	1	0.000	3.564	0.000	0.00	0.00	0.00	0.00	0.00
65	7.38	0.05	1	0.000	3.562	0.000	-0.01	-0.01	0.04	-0.01	-0.04
66	7.38	0.05	1	0.000	3.562	0.000	-0.01	0.13	0.19	-0.06	-0.23
67	7.40	0.05	1	0.000	3.557	0.000	0.00	0.00	0.00	0.00	0.00
68	7.40	0.05	1	0.000	3.557	0.000	0.00	0.00	0.00	0.00	0.00
69	7.41	0.05	1	0.000	3.553	0.000	0.00	0.00	0.00	0.00	0.00
70	7.42	0.05	1	0.000	3.553	0.000	0.00	0.00	0.00	0.00	0.00
71	7.43	0.05	1	0.000	3.551	0.000	0.00	0.00	0.00	0.00	0.00
72	7.43	0.05	1	0.000	3.549	0.000	0.01	0.00	0.09	-0.02	-0.03
73	7.45	0.05	1	0.000	3.544	0.000	-0.01	0.02	0.08	-0.02	-0.05
74	7.46	0.05	1	0.000	3.543	0.000	0.00	0.00	0.00	0.00	0.00
75	7.46	0.05	1	0.000	3.542	0.000	0.00	0.00	0.00	0.00	0.00
76	7.46	0.05	1	0.000	3.542	0.000	0.00	0.00	0.00	0.00	0.00
77	7.46	0.05	1	0.000	3.541	0.000	0.00	0.00	0.00	0.00	0.00
78	7.46	0.05	1	0.000	3.541	0.000	0.00	0.00	0.00	0.00	0.00
79	7.46	0.05	1	0.000	3.541	0.000	0.00	0.00	0.00	0.00	0.00
80	7.47	0.05	1	0.000	3.540	0.000	0.00	0.00	0.00	0.00	0.00
81	7.47	0.05	1	0.000	3.540	0.000	0.00	0.00	0.00	0.00	0.00
82	7.47	0.05	1	0.000	3.540	0.000	0.00	0.00	0.00	0.00	0.00
83	7.47	0.05	1	0.000	3.540	0.000	0.00	0.00	0.00	0.00	0.00
84	7.47	0.05	1	0.000	3.540	0.000	0.00	0.00	0.00	0.00	0.00
85	7.47	0.05	1	0.000	3.540	0.000	0.00	0.00	0.00	0.00	0.00
86	7.47	0.05	1	0.000	3.540	0.000	0.00	0.00	0.00	0.00	0.00
87	7.47	0.05	1	0.000	3.540	0.000	0.00	0.00	0.02	-0.01	0.00
88	7.57	0.05	1	0.000	3.515	0.000	0.13	0.00	23.75	-1.27	-0.55
89	7.64	0.05	1	0.000	3.502	0.000	0.01	-0.04	0.27	0.01	0.08
90	7.71	0.05	1	0.000	3.486	0.000	0.00	0.00	0.00	-0.02	0.00
91	7.79	0.05	1	0.000	3.468	0.000	0.05	0.10	4.23	1.49	-0.01
92	7.80	0.05	1	0.000	3.465	0.000	0.01	0.04	0.25	0.10	0.00
93	7.81	0.05	1	0.000	3.464	0.000	0.03	-0.02	1.91	0.84	-0.01
94	7.81	0.05	1	0.000	3.464	0.000	-0.01	0.19	0.14	0.03	0.00
95	7.83	0.05	1	0.000	3.460	0.000	-0.18	0.57	54.37	15.20	0.23
96	7.90	0.05	1	0.000	3.444	0.000	0.00	0.00	0.00	0.00	0.00
97	7.92	0.05	1	0.000	3.441	0.000	0.00	0.00	0.00	0.00	0.00
98	7.92	0.05	1	0.000	3.441	0.000	0.00	0.03	0.01	0.00	-0.04
99	7.92	0.05	1	0.000	3.440	0.000	0.00	0.00	0.00	0.00	0.00
100	7.92	0.05	1	0.000	3.439	0.000	0.00	0.00	0.02	0.01	0.00
Level=	0.00							-72.07	193.20	-789.68	304.00

18. Calculation protocol

Solution of Free vibration

Number of 2D elements	344
Number of 1D elements	2761
Number of mesh nodes	2996
Number of equations	17976
Combination of mass groups	MC1 CM1
Number of frequencies	100
Method	Lanczos
Bending theory	Mindlin
Type of analysis model	Standard
Start of calculation	25.04.2021 18:18

End of calculation	25.04.2021 18:19

Sum of masses

	X [kg]	Y [kg]	Z [kg]
1	148487.56	148487.56	148487.56
1	148773.15	148773.15	148773.15

Relative modal masses

Mode	Omega [rad/s]	Period [s]	Freq. [Hz]	W_{xi}/W_{xtot}	W_{yi}/W_{ytot}	W_{zi}/W_{ztot}	W_{xi_R}/W_{xtot_R}	W_{yi_R}/W_{ytot_R}	W_{zi_R}/W_{ztot_R}
1	9.72743	0.65	1.55	0.0042	0.2291	0.0000	0.1284	0.0006	0.4547
2	11.8201	0.53	1.88	0.0453	0.1613	0.0012	0.0922	0.0054	0.0277
3	13.5219	0.46	2.15	0.3689	0.0103	0.0003	0.0061	0.0169	0.0110
4	15.8083	0.40	2.52	0.0125	0.0028	0.0009	0.0024	0.0049	0.0111
5	23.0139	0.27	3.66	0.0019	0.0002	0.0003	0.0002	0.0001	0.0001
6	30.3414	0.21	4.83	0.0001	0.0001	0.0003	0.0000	0.0000	0.0001
7	31.9696	0.20	5.09	0.0000	0.0001	0.0030	0.0024	0.0033	0.0001
8	33.5088	0.19	5.33	0.0001	0.0008	0.0000	0.0002	0.0002	0.0000
9	37.7537	0.17	6.01	0.0001	0.0004	0.0039	0.0001	0.0026	0.0002
10	38.0564	0.17	6.06	0.0002	0.0000	0.0025	0.0008	0.0018	0.0000
11	39.7236	0.16	6.32	0.0000	0.0050	0.0549	0.0000	0.0001	0.0000
12	40.6103	0.15	6.46	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
13	40.7233	0.15	6.48	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
14	40.7333	0.15	6.48	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
15	40.7391	0.15	6.48	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
16	40.7417	0.15	6.48	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
17	40.7431	0.15	6.48	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
18	40.7434	0.15	6.48	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
19	40.7449	0.15	6.48	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
20	40.745	0.15	6.48	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
21	40.745	0.15	6.48	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
22	40.7459	0.15	6.48	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
23	40.7459	0.15	6.48	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
24	40.7463	0.15	6.48	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
25	40.7463	0.15	6.48	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
26	40.7465	0.15	6.49	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
27	40.7465	0.15	6.49	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
28	40.7465	0.15	6.49	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
29	40.7465	0.15	6.49	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
30	40.7466	0.15	6.49	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
31	40.7466	0.15	6.49	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
32	40.7467	0.15	6.49	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
33	40.7467	0.15	6.49	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
34	40.7467	0.15	6.49	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
35	40.7467	0.15	6.49	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
36	41.399	0.15	6.59	0.0000	0.0006	0.0028	0.0003	0.0067	0.0000
37	41.5311	0.15	6.61	0.0025	0.0001	0.0009	0.0006	0.0013	0.0000
38	41.7018	0.15	6.64	0.0000	0.0000	0.0162	0.0536	0.0163	0.0001
39	42.8537	0.15	6.82	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000
40	43.1856	0.15	6.87	0.0001	0.0014	0.0289	0.0242	0.0089	0.0000
41	43.3236	0.15	6.90	0.0000	0.0000	0.0015	0.0001	0.0009	0.0000
42	43.4027	0.14	6.91	0.0000	0.0000	0.0079	0.0310	0.0101	0.0000
43	43.5259	0.14	6.93	0.0001	0.0000	0.0001	0.0000	0.0001	0.0000
44	45.1794	0.14	7.19	0.0000	0.0001	0.0000	0.0001	0.0009	0.0000
45	45.1974	0.14	7.19	0.0000	0.0000	0.0005	0.0005	0.0032	0.0000
46	45.4958	0.14	7.24	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mode	Omega [rad/s]	Period [s]	Freq. [Hz]	W_{xi}/W_{xtot}	W_{yi}/W_{ytot}	W_{zi}/W_{ztot}	W_{xi_R}/W_{xtot_R}	W_{yi_R}/W_{ytot_R}	W_{zi_R}/W_{ztot_R}
47	45.7505	0.14	7.28	0.0001	0.0001	0.0000	0.0001	0.0014	0.0000
48	45.8571	0.14	7.30	0.0002	0.0010	0.0051	0.0000	0.0074	0.0000
49	45.8893	0.14	7.30	0.0000	0.0001	0.0056	0.0008	0.0065	0.0000
50	46.0378	0.14	7.33	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
51	46.0761	0.14	7.33	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
52	46.1434	0.14	7.34	0.0000	0.0000	0.0003	0.0000	0.0005	0.0000
53	46.1819	0.14	7.35	0.0000	0.0000	0.0016	0.0002	0.0008	0.0000
54	46.2059	0.14	7.35	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
55	46.2387	0.14	7.36	0.0000	0.0000	0.0003	0.0008	0.0002	0.0000
56	46.2419	0.14	7.36	0.0000	0.0001	0.0000	0.0002	0.0001	0.0000
57	46.2566	0.14	7.36	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
58	46.289	0.14	7.37	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
59	46.2981	0.14	7.37	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
60	46.3112	0.14	7.37	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
61	46.3157	0.14	7.37	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
62	46.3177	0.14	7.37	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
63	46.3178	0.14	7.37	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
64	46.3187	0.14	7.37	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
65	46.3656	0.14	7.38	0.0000	0.0001	0.0000	0.0002	0.0000	0.0000
66	46.3797	0.14	7.38	0.0002	0.0004	0.0000	0.0007	0.0000	0.0000
67	46.4834	0.14	7.40	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000
68	46.5057	0.14	7.40	0.0000	0.0000	0.0011	0.0002	0.0005	0.0000
69	46.585	0.13	7.41	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
70	46.5934	0.13	7.42	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
71	46.6535	0.13	7.43	0.0000	0.0000	0.0001	0.0005	0.0000	0.0000
72	46.6922	0.13	7.43	0.0000	0.0002	0.0007	0.0004	0.0006	0.0000
73	46.8114	0.13	7.45	0.0000	0.0001	0.0000	0.0001	0.0000	0.0000
74	46.8476	0.13	7.46	0.0000	0.0000	0.0002	0.0001	0.0001	0.0000
75	46.8593	0.13	7.46	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
76	46.8645	0.13	7.46	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
77	46.8845	0.13	7.46	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
78	46.8887	0.13	7.46	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
79	46.8975	0.13	7.46	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
80	46.9065	0.13	7.47	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
81	46.9091	0.13	7.47	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
82	46.9109	0.13	7.47	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
83	46.9113	0.13	7.47	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
84	46.9116	0.13	7.47	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
85	46.9119	0.13	7.47	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
86	46.9121	0.13	7.47	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
87	46.9173	0.13	7.47	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
88	47.5891	0.13	7.57	0.0000	0.0455	0.0027	0.0237	0.0009	0.0116
89	47.9866	0.13	7.64	0.0000	0.0005	0.0010	0.0001	0.0001	0.0002
90	48.4393	0.13	7.71	0.0000	0.0000	0.0017	0.0186	0.0017	0.0000
91	48.9625	0.13	7.79	0.0000	0.0082	0.0001	0.0004	0.0015	0.0196
92	49.0388	0.13	7.80	0.0000	0.0005	0.0001	0.0000	0.0006	0.0011
93	49.0613	0.13	7.81	0.0000	0.0037	0.0001	0.0000	0.0018	0.0074
94	49.0845	0.13	7.81	0.0005	0.0003	0.0000	0.0000	0.0000	0.0004
95	49.1937	0.13	7.83	0.0000	0.1058	0.0066	0.0175	0.0105	0.1491
96	49.6449	0.13	7.90	0.0000	0.0000	0.0004	0.0006	0.0004	0.0000
97	49.7351	0.13	7.92	0.0000	0.0000	0.0008	0.0040	0.0008	0.0000
98	49.749	0.13	7.92	0.0001	0.0000	0.0024	0.0029	0.0041	0.0000
99	49.7751	0.13	7.92	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000
100	49.787	0.13	7.92	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
				0.4377	0.5792	0.1573	0.4157	0.1251	0.6949

3. REZULTATI ANALIZE KONSTRUKCIJE

3.1. Notranje sile

19. Internal forces on member

Nonlinear calculation, Extreme : Global, System : Principal
Selection : All
Class : ULS
Cross-section : N1-S1 - CFRHS220X220X8

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1681	N1-S1 - CFRHS220X220X8	0.000	NC42	**-181.35**	-10.54	2.31	0.00	0.00	0.00
B1671	N1-S1 - CFRHS220X220X8	4.450	NC31	**21.98**	0.91	0.36	0.00	1.54	8.97
B1683	N1-S1 - CFRHS220X220X8	0.000	NC4	-55.37	**-18.05**	2.82	0.00	0.00	0.00
B1673	N1-S1 - CFRHS220X220X8	0.000	NC18	-115.41	**8.69**	-0.20	0.00	0.00	0.00
B1678	N1-S1 - CFRHS220X220X8	0.000	NC25	-119.94	-7.85	**-6.43**	0.00	0.00	0.00
B1670	N1-S1 - CFRHS220X220X8	0.000	NC24	-82.79	-7.57	**5.62**	0.00	0.00	0.00
B1676	N1-S1 - CFRHS220X220X8	4.450	NC25	-78.27	0.80	-1.10	**-0.08**	-9.18	2.33
B1678	N1-S1 - CFRHS220X220X8	4.450	NC25	-117.00	-6.39	-4.07	**0.05**	**-23.80**	-32.32
B1670	N1-S1 - CFRHS220X220X8	4.450	NC24	-79.85	0.20	3.52	-0.01	**20.58**	-7.45
B1683	N1-S1 - CFRHS220X220X8	4.450	NC26	-59.33	-10.13	3.28	-0.02	15.25	**-57.13**
B1673	N1-S1 - CFRHS220X220X8	4.450	NC18	-112.43	6.70	-0.16	-0.01	-0.83	**34.88**

20. Internal forces on member

Linear calculation, Extreme : Global, System : Principal
Selection : All
Class : ULS-potres
Cross-section : N1-S1 - CFRHS220X220X8

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1671	N1-S1 - CFRHS220X220X8	0.000	potres 7/1	**-62.45**	**14.49**	-6.86	0.00	0.00	0.00
B1670	N1-S1 - CFRHS220X220X8	4.450	potres 6/2	**4.87**	-13.17	9.08	0.00	**41.61**	-59.96
B1671	N1-S1 - CFRHS220X220X8	0.000	potres 6/2	-11.31	**-14.83**	6.85	0.00	0.00	0.00
B1678	N1-S1 - CFRHS220X220X8	0.000	potres 2/3	-54.08	-5.75	**-9.92**	0.00	0.00	0.00
B1670	N1-S1 - CFRHS220X220X8	0.000	potres 6/2	2.62	-13.69	**9.54**	0.00	0.00	0.00
B1676	N1-S1 - CFRHS220X220X8	0.000	potres 7/1	-19.02	-8.49	-4.12	**-0.07**	0.00	0.00
B1672	N1-S1 - CFRHS220X220X8	0.000	potres 6/2	-20.79	-0.37	3.14	**0.06**	0.00	0.00
B1678	N1-S1 - CFRHS220X220X8	4.450	potres 2/3	-51.83	-5.52	-9.26	0.00	**-42.94**	-25.16
B1671	N1-S1 - CFRHS220X220X8	4.450	potres 6/2	-9.07	-14.30	6.48	0.00	29.80	**-65.01**
B1671	N1-S1 - CFRHS220X220X8	4.450	potres 7/1	-60.20	13.96	-6.50	0.00	-29.86	**63.51**

21. Internal forces on member

Nonlinear calculation, Extreme : Global, System : Principal
Selection : All
Class : ULS
Cross-section : N1-S2 - CFRHS220X220X10

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1669	N1-S2 - CFRHS220X220X10	0.000	NC35	**-104.95**	-2.64	-0.33	0.00	0.00	0.00
B1669	N1-S2 - CFRHS220X220X10	4.450	NC31	**15.32**	1.99	0.73	0.00	3.20	13.85
B1668	N1-S2 - CFRHS220X220X10	0.000	NC21	-1.96	**-9.34**	-0.76	0.00	0.00	0.00
B1669	N1-S2 - CFRHS220X220X10	0.000	NC27	-60.31	**9.05**	0.45	0.00	0.00	0.00
B1669	N1-S2 - CFRHS220X220X10	0.000	NC16	-93.03	2.25	**-2.09**	0.00	0.00	0.00
B1668	N1-S2 - CFRHS220X220X10	0.000	NC24	-75.56	-0.33	**4.65**	0.00	0.00	0.00
B1668	N1-S2 - CFRHS220X220X10	4.450	NC17	-75.52	-1.14	1.18	**-0.02**	5.55	-15.48

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1669	N1-S2 - CFRHS220X220X10	4.450	NC27	-56.65	6.35	0.45	**0.03**	2.02	**34.54**
B1668	N1-S2 - CFRHS220X220X10	4.450	NC38	-19.84	-0.84	-0.75	0.00	**-5.69**	-11.10
B1668	N1-S2 - CFRHS220X220X10	4.450	NC42	-65.62	3.70	3.23	0.01	**17.35**	14.63
B1669	N1-S2 - CFRHS220X220X10	4.450	NC21	-23.38	-3.63	-0.32	0.00	-1.40	**-21.55**

22. Internal forces on member

Linear calculation, Extreme : Global, System : Principal
Selection : All
Class : ULS-potres
Cross-section : N1-S2 - CFRHS220X220X10

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1669	N1-S2 - CFRHS220X220X10	0.000	potres 7/1	**-86.36**	**22.94**	-5.79	0.00	0.00	0.00
B1669	N1-S2 - CFRHS220X220X10	4.450	potres 6/2	**31.12**	-20.93	5.32	0.00	24.79	-95.57
B1668	N1-S2 - CFRHS220X220X10	0.000	potres 6/2	-78.77	**-22.54**	**8.66**	0.00	0.00	0.00
B1668	N1-S2 - CFRHS220X220X10	0.000	potres 7/1	23.07	22.49	**-8.08**	0.00	0.00	0.00
B1668	N1-S2 - CFRHS220X220X10	0.000	potres 5/4	-70.90	-19.92	5.47	**0.00**	0.00	0.00
B1668	N1-S2 - CFRHS220X220X10	4.450	potres 7/1	25.83	21.56	-7.55	0.00	**-34.99**	98.38
B1668	N1-S2 - CFRHS220X220X10	4.450	potres 6/2	-76.00	-21.61	8.13	0.00	**37.56**	**-98.58**
B1669	N1-S2 - CFRHS220X220X10	4.450	potres 7/1	-83.60	22.01	-5.36	0.00	-24.99	**100.39**

23. Internal forces on member

Nonlinear calculation, Extreme : Global, System : Principal
Selection : All
Class : ULS
Cross-section : N1-S3 - CFRHS220X220X12.5

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1686	N1-S3 - CFRHS220X220X12.5	0.000	NC41	**-122.31**	-0.08	1.01	0.47	-1.94	110.55
B1686	N1-S3 - CFRHS220X220X12.5	4.450	NC19	**4.39**	0.02	2.82	-0.10	7.74	-4.14
B1687	N1-S3 - CFRHS220X220X12.5	4.450	NC26	-104.48	**-7.69**	-1.31	0.49	-5.47	99.27
B1685	N1-S3 - CFRHS220X220X12.5	0.000	NC18	-85.92	**11.14**	-4.27	-0.34	6.79	53.85
B1685	N1-S3 - CFRHS220X220X12.5	0.000	NC25	-93.09	6.33	**-9.19**	-0.58	**15.93**	79.49
B1686	N1-S3 - CFRHS220X220X12.5	0.000	NC15	-108.28	1.94	**5.81**	0.32	-11.25	92.64
B1687	N1-S3 - CFRHS220X220X12.5	4.450	NC25	-100.32	-4.17	-6.21	**-1.32**	-17.05	99.00
B1686	N1-S3 - CFRHS220X220X12.5	4.450	NC24	-115.11	-2.76	3.78	**0.75**	10.40	101.97
B1685	N1-S3 - CFRHS220X220X12.5	4.450	NC25	-88.78	4.32	-7.41	-1.14	**-21.37**	103.35
B1687	N1-S3 - CFRHS220X220X12.5	0.000	NC22	-2.08	4.95	0.09	0.13	-0.21	**-19.82**
B1687	N1-S3 - CFRHS220X220X12.5	0.000	NC26	-109.17	-6.15	-1.36	0.63	0.51	**130.60**

24. Internal forces on member

Linear calculation, Extreme : Global, System : Principal
Selection : All
Class : ULS-potres
Cross-section : N1-S3 - CFRHS220X220X12.5

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1687	N1-S3 - CFRHS220X220X12.5	0.000	potres 2/3	**-39.10**	**-12.98**	-25.52	-0.05	58.85	**74.40**
B1687	N1-S3 - CFRHS220X220X12.5	4.450	potres 3/5	**1.42**	12.42	24.22	0.03	51.41	6.44
B1687	N1-S3 - CFRHS220X220X12.5	0.000	potres 3/5	-1.91	**13.14**	24.77	0.03	-57.88	**-48.52**
B1685	N1-S3 - CFRHS220X220X12.5	0.000	potres 2/3	-22.70	-9.07	**-27.70**	-0.05	59.79	57.81
B1686	N1-S3 - CFRHS220X220X12.5	0.000	potres 3/5	-32.06	11.34	**27.08**	0.04	-58.90	-41.92
B1687	N1-S3 - CFRHS220X220X12.5	0.000	potres 7/1	-31.90	-12.09	-12.80	**-0.06**	29.43	68.28
B1687	N1-S3 - CFRHS220X220X12.5	0.000	potres 6/2	-9.11	12.25	12.05	**0.04**	-28.45	-42.41
B1685	N1-S3 - CFRHS220X220X12.5	4.450	potres 2/3	-19.37	-8.58	-27.12	-0.05	**-62.44**	19.44
B1686	N1-S3 - CFRHS220X220X12.5	4.450	potres 3/5	-28.72	10.70	26.50	0.04	**60.59**	5.30

25. Internal forces on member

Nonlinear calculation, Extreme : Global, System : Principal
Selection : All
Class : ULS
Cross-section : N1-S4 - CFRHS260X260X12.5

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1682	N1-S4 - CFRHS260X260X12.5	0.000	NC42	**-346.40**	-14.02	-20.98	0.60	19.83	82.82
B1682	N1-S4 - CFRHS260X260X12.5	4.450	NC22	**13.06**	6.76	1.31	0.17	4.12	12.28
B1682	N1-S4 - CFRHS260X260X12.5	2.670	NC26	-340.19	**-23.78**	-23.94	0.46	-38.21	42.20
B1684	N1-S4 - CFRHS260X260X12.5	0.000	NC18	-234.23	**27.34**	20.85	0.03	-20.80	42.43
B1682	N1-S4 - CFRHS260X260X12.5	0.445	NC25	-337.19	-8.37	**-33.39**	-0.88	33.22	62.42
B1684	N1-S4 - CFRHS260X260X12.5	0.445	NC24	-259.42	17.76	**34.27**	-0.07	-31.32	97.83
B1682	N1-S4 - CFRHS260X260X12.5	4.450	NC25	-332.43	-10.26	-30.07	**-1.63**	**-96.33**	24.36
B1684	N1-S4 - CFRHS260X260X12.5	4.450	NC26	-257.11	9.29	27.40	**1.65**	92.65	158.16
B1684	N1-S4 - CFRHS260X260X12.5	4.450	NC24	-255.09	12.84	31.19	1.57	**101.72**	159.95
B1682	N1-S4 - CFRHS260X260X12.5	0.000	NC22	9.06	9.06	1.29	0.18	-1.67	**-22.90**
B1684	N1-S4 - CFRHS260X260X12.5	4.450	NC27	-255.00	19.39	21.91	0.84	79.45	**163.75**

26. Internal forces on member

Linear calculation, Extreme : Global, System : Principal
Selection : All
Class : ULS-potres
Cross-section : N1-S4 - CFRHS260X260X12.5

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1682	N1-S4 - CFRHS260X260X12.5	0.000	potres 6/2	**-79.22**	**38.86**	14.99	**0.09**	-40.59	**-101.11**
B1684	N1-S4 - CFRHS260X260X12.5	4.450	potres 2/3	**-29.16**	-17.67	-34.71	-0.07	-69.45	11.26
B1682	N1-S4 - CFRHS260X260X12.5	0.000	potres 7/1	-41.37	**-42.13**	-22.85	**-0.11**	49.77	**118.64**
B1682	N1-S4 - CFRHS260X260X12.5	0.000	potres 2/3	-47.87	-28.90	**-43.92**	-0.07	97.35	82.57
B1684	N1-S4 - CFRHS260X260X12.5	0.000	potres 3/5	-58.22	24.20	**44.30**	0.04	-96.97	-75.55
B1682	N1-S4 - CFRHS260X260X12.5	4.450	potres 2/3	-43.87	-28.47	-43.23	-0.07	**-97.03**	-45.33
B1684	N1-S4 - CFRHS260X260X12.5	4.450	potres 3/5	-54.20	23.63	43.62	0.04	**99.04**	32.46

27. Internal forces on member

Nonlinear calculation, Extreme : Global, System : Principal
Selection : All
Class : ULS
Cross-section : N1-N1 - HEA260

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1729	N1-N1 - HEA260	1.771	NC25	**-47.86**	-3.04	-66.23	-0.14	-108.10	-2.21
B1691	N1-N1 - HEA260	0.900	NC17	**38.69**	-0.15	26.00	-0.02	-17.06	0.14
B1745	N1-N1 - HEA260	0.680	NC17	-2.31	**-9.34**	-5.66	-0.30	-3.33	-6.34
B1740	N1-N1 - HEA260	1.000	NC17	2.77	**24.65**	85.07	-0.19	-62.38	-1.72
B1736	N1-N1 - HEA260	4.500	NC42	-33.95	-0.65	**-77.36**	-0.15	-120.72	-1.35
B1735	N1-N1 - HEA260	0.000	NC27	-1.91	-2.68	**105.81**	-0.40	**-186.34**	0.25
B1740	N1-N1 - HEA260	0.000	NC26	2.90	22.68	97.82	**-1.24**	-162.26	-24.08
B1739	N1-N1 - HEA260	0.680	NC25	-0.78	14.21	-6.89	**0.46**	-4.10	9.64
B1727	N1-N1 - HEA260	3.900	NC26	-5.57	-0.03	1.00	0.06	**63.82**	-0.26
B1740	N1-N1 - HEA260	0.000	NC17	2.42	24.47	89.69	-1.10	-149.81	**-26.07**
B1705	N1-N1 - HEA260	0.000	NC17	25.29	-9.04	31.52	-0.23	-78.31	**19.97**

28. Internal forces on member

Linear calculation, Extreme : Global, System : Principal
Selection : All
Class : ULS-potres
Cross-section : N1-N1 - HEA260

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1702	N1-N1 - HEA260	4.320	potres 2/3	**-98.47**	5.78	1.39	0.03	21.08	4.67

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1702	N1-N1 - HEA260	4.320	potres 3/5	**104.29**	-5.06	-25.92	-0.02	-55.00	-4.10
B1702	N1-N1 - HEA260	4.320	potres 6/2	68.25	**-7.70**	-20.52	-0.03	-40.77	-6.45
B1702	N1-N1 - HEA260	4.320	potres 7/1	-62.43	**8.41**	-4.01	0.04	6.85	7.02
B1702	N1-N1 - HEA260	4.500	potres 3/5	104.29	-5.06	**-26.07**	-0.02	**-59.67**	-5.00
B1701	N1-N1 - HEA260	0.000	potres 2/3	-90.56	-3.26	**27.14**	-0.01	-27.94	3.43
B1698	N1-N1 - HEA260	0.000	potres 7/1	-1.16	-0.47	-0.62	**-0.53**	0.00	0.00
B1698	N1-N1 - HEA260	0.000	potres 6/2	1.26	0.43	-4.68	**0.58**	0.00	0.00
B1696	N1-N1 - HEA260	4.500	potres 6/2	-28.04	6.26	-8.06	0.03	**28.82**	7.26
B1702	N1-N1 - HEA260	4.500	potres 6/2	68.25	-7.70	-20.67	-0.03	-44.47	**-7.83**
B1702	N1-N1 - HEA260	4.500	potres 7/1	-62.43	8.41	-4.15	0.04	6.11	**8.53**

29. Internal forces on member

Nonlinear calculation, Extreme : Global, System : Principal
Selection : All
Class : ULS
Cross-section : N1-N2 - UNP260

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1791	N1-N2 - UNP260	0.000	NC17	**-17.13**	-0.05	-2.52	0.02	3.52	0.05
B1757	N1-N2 - UNP260	0.680	NC17	**40.86**	-1.54	-6.52	0.02	0.00	0.00
B1784	N1-N2 - UNP260	6.157	NC17	-2.99	**-15.59**	-2.50	0.02	-23.41	-0.28
B1749	N1-N2 - UNP260	1.800	NC17	-1.10	**3.60**	-5.09	-0.05	2.74	-0.53
B1789	N1-N2 - UNP260	4.501	NC27	-11.35	1.25	**-18.68**	-0.04	-22.56	0.91
B1788	N1-N2 - UNP260	0.000	NC27	-11.25	-1.05	**17.86**	**-0.06**	-22.10	0.33
B1789	N1-N2 - UNP260	0.900	NC27	-11.48	-0.86	-6.29	**0.08**	23.27	0.23
B1784	N1-N2 - UNP260	6.213	NC26	-4.65	-14.75	-2.25	0.03	**-25.90**	-1.09
B1789	N1-N2 - UNP260	0.000	NC27	-11.51	-1.37	-3.66	0.07	**27.57**	1.25
B1760	N1-N2 - UNP260	0.800	NC16	2.52	-2.61	1.20	0.03	0.00	**-1.38**
B1756	N1-N2 - UNP260	4.431	NC16	38.78	1.79	-4.70	0.02	3.76	**1.92**

30. Internal forces on member

Linear calculation, Extreme : Global, System : Principal
Selection : All
Class : ULS-potres
Cross-section : N1-N2 - UNP260

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1791	N1-N2 - UNP260	0.000	potres 7/1	**-7.73**	0.00	0.48	0.07	-0.22	-0.01
B1764	N1-N2 - UNP260	3.960	potres 7/1	**7.33**	0.38	-0.45	-0.01	-2.01	0.00
B1784	N1-N2 - UNP260	6.100	potres 3/5	1.11	**-2.40**	0.27	0.01	-4.26	0.07
B1783	N1-N2 - UNP260	3.000	potres 3/5	3.17	**1.27**	1.22	0.47	-0.34	0.00
B1784	N1-N2 - UNP260	0.220	potres 7/1	1.98	0.57	**-3.98**	-0.52	5.89	-0.57
B1783	N1-N2 - UNP260	0.200	potres 7/1	3.36	-0.75	**4.23**	-0.28	-5.53	0.00
B1783	N1-N2 - UNP260	1.600	potres 2/3	-2.65	-1.17	1.34	**-0.53**	-2.34	0.00
B1783	N1-N2 - UNP260	1.600	potres 3/5	2.51	1.18	2.34	**0.54**	-2.34	0.00
B1783	N1-N2 - UNP260	0.800	potres 6/2	-2.98	0.28	1.41	0.28	**-6.56**	0.93
B1784	N1-N2 - UNP260	0.000	potres 7/1	2.36	0.33	-3.15	-0.52	**7.02**	-0.89
B1780	N1-N2 - UNP260	0.480	potres 2/3	-1.90	-0.58	-0.56	0.28	-0.26	**-1.56**
B1778	N1-N2 - UNP260	0.000	potres 3/5	0.96	-0.09	0.06	0.23	-0.04	**1.60**

31. Internal forces on member

Nonlinear calculation, Extreme : Global, System : Principal
Selection : All
Class : ULS
Cross-section : N1-N3 - HEB260

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1704	N1-N3 - HEB260	0.000	NC28	**-13.58**	-0.72	-3.24	0.02	12.99	0.67
B1704	N1-N3 - HEB260	3.111	NC16	**26.15**	11.82	-85.08	0.03	-15.33	12.98

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1758	N1-N3 - HEB260	0.000	NC17	14.66	**-27.66**	-98.46	-0.06	-47.35	17.36
B1704	N1-N3 - HEB260	3.384	NC17	16.20	**13.04**	-91.02	-0.06	-47.38	**17.36**
B1758	N1-N3 - HEB260	1.144	NC42	-3.61	-24.08	**-118.03**	-0.25	-186.13	-13.79
B1703	N1-N3 - HEB260	0.000	NC41	-2.75	-4.48	**124.36**	**-0.28**	-192.68	6.44
B1704	N1-N3 - HEB260	0.000	NC41	3.51	1.47	-46.86	**0.61**	188.93	-1.16
B1703	N1-N3 - HEB260	0.000	NC25	11.72	-4.11	123.33	-0.24	**-196.80**	6.12
B1704	N1-N3 - HEB260	0.000	NC26	9.63	2.15	-47.64	0.58	**189.46**	-1.87
B1758	N1-N3 - HEB260	1.144	NC18	13.01	-26.25	-99.24	-0.20	-152.08	**-15.32**

32. Internal forces on member

Linear calculation, Extreme : Global, System : Principal
Selection : All
Class : ULS-potres
Cross-section : N1-N3 - HEB260

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1703	N1-N3 - HEB260	3.420	potres 2/3	**-81.92**	1.78	23.01	-0.02	7.76	-1.31
B1703	N1-N3 - HEB260	3.420	potres 3/5	**81.27**	-1.81	-4.15	0.06	33.59	0.96
B1703	N1-N3 - HEB260	0.000	potres 7/1	-59.68	**-8.06**	31.97	**-0.05**	-56.75	**7.97**
B1703	N1-N3 - HEB260	0.000	potres 6/2	59.02	**7.19**	11.44	**0.09**	-7.42	**-6.76**
B1758	N1-N3 - HEB260	1.144	potres 2/3	0.59	-3.91	**-20.35**	0.02	-29.67	-2.50
B1703	N1-N3 - HEB260	0.000	potres 2/3	-76.87	-5.57	**35.26**	-0.02	**-79.69**	5.67
B1703	N1-N3 - HEB260	3.600	potres 6/2	61.61	-2.58	-0.80	0.09	**39.32**	0.86

33. Internal forces on member

Nonlinear calculation, Extreme : Global, System : Principal
Selection : All
Class : ULS
Cross-section : N1-SN1 - CFRHS60X60X4

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B2063	N1-SN1 - CFRHS60X60X4	0.800	NC17	**-16.27**	0.00	-0.44	-0.06	0.00	0.00
B2018	N1-SN1 - CFRHS60X60X4	0.000	NC27	**3.97**	0.00	0.96	-0.13	0.00	0.00
B2042	N1-SN1 - CFRHS60X60X4	0.971	NC42	-2.07	**-0.01**	**-1.98**	0.06	0.00	0.00
B2043	N1-SN1 - CFRHS60X60X4	0.000	NC26	-3.50	**0.02**	1.95	0.21	0.00	0.00
B2042	N1-SN1 - CFRHS60X60X4	0.000	NC42	-2.07	0.01	**1.98**	0.06	0.00	0.00
B2076	N1-SN1 - CFRHS60X60X4	0.000	NC17	-0.01	0.00	0.57	**-0.25**	0.00	0.00
B2081	N1-SN1 - CFRHS60X60X4	0.320	NC17	-0.27	0.00	0.19	**0.33**	0.14	0.00
B2018	N1-SN1 - CFRHS60X60X4	0.747	NC29	-0.52	0.00	0.10	0.02	**-0.12**	0.00
B2042	N1-SN1 - CFRHS60X60X4	0.583	NC42	-2.08	0.00	-0.70	0.06	**0.60**	0.00
B2077	N1-SN1 - CFRHS60X60X4	0.320	NC17	-0.03	0.00	0.20	-0.20	0.14	**0.00**
B2043	N1-SN1 - CFRHS60X60X4	0.389	NC26	-3.50	0.00	0.69	0.21	0.59	**0.00**

34. Internal forces on member

Linear calculation, Extreme : Global, System : Principal
Selection : All
Class : ULS-potres
Cross-section : N1-SN1 - CFRHS60X60X4

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1948	N1-SN1 - CFRHS60X60X4	0.000	potres 7/1	**-23.87**	-0.63	-0.34	**1.36**	0.41	0.57
B1948	N1-SN1 - CFRHS60X60X4	0.000	potres 6/2	**23.89**	0.63	0.56	**-1.39**	-0.41	-0.57
B1951	N1-SN1 - CFRHS60X60X4	0.320	potres 3/5	4.59	**-0.97**	-0.40	-0.47	0.03	0.00
B1951	N1-SN1 - CFRHS60X60X4	0.320	potres 2/3	-4.59	**0.97**	0.47	0.46	0.03	0.00
B1956	N1-SN1 - CFRHS60X60X4	0.480	potres 6/2	-6.28	-0.68	**-0.94**	-0.49	0.03	0.00
B1956	N1-SN1 - CFRHS60X60X4	0.320	potres 7/1	6.28	0.68	**0.94**	0.50	0.03	0.00
B1956	N1-SN1 - CFRHS60X60X4	0.800	potres 6/2	-6.32	-0.28	-0.54	-0.49	**-1.09**	-0.76
B1956	N1-SN1 - CFRHS60X60X4	0.800	potres 7/1	6.31	0.28	0.31	0.50	**1.09**	0.76
B1951	N1-SN1 - CFRHS60X60X4	0.800	potres 3/5	4.39	-0.41	-0.31	-0.47	-0.51	**-1.11**

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1951	N1-SN1 - CFRHS60X60X4	0.800	potres 2/3	-4.39	0.41	0.08	0.46	0.51	**1.11**

35. Internal forces on member

Nonlinear calculation, Extreme : Global, System : Principal
Selection : All
Class : ULS
Cross-section : N1-SN3 - CFRHS120X60X4

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1961	N1-SN3 - CFRHS120X60X4	1.795	NC26	**-4.11**	0.00	0.00	0.00	4.98	0.00
B1959	N1-SN3 - CFRHS120X60X4	0.000	NC17	**1.89**	0.01	3.80	-0.03	0.00	0.00
B1947	N1-SN3 - CFRHS120X60X4	0.718	NC24	-0.96	**-0.09**	4.60	0.38	4.00	-0.07
B1945	N1-SN3 - CFRHS120X60X4	3.590	NC27	-1.16	**0.03**	-4.79	0.12	0.00	0.00
B1942	N1-SN3 - CFRHS120X60X4	3.590	NC35	-0.35	-0.03	**-5.21**	-0.28	0.00	0.00
B1939	N1-SN3 - CFRHS120X60X4	0.000	NC36	-0.97	-0.07	**6.46**	**-0.43**	0.00	0.00
B1947	N1-SN3 - CFRHS120X60X4	0.718	NC27	-1.15	-0.09	4.62	**0.39**	4.02	-0.07
B1961	N1-SN3 - CFRHS120X60X4	1.795	NC21	-1.82	0.00	0.00	0.01	**-1.22**	0.00
B1962	N1-SN3 - CFRHS120X60X4	1.795	NC41	-2.91	0.00	0.00	0.02	**5.13**	-0.01
B1945	N1-SN3 - CFRHS120X60X4	2.154	NC27	-0.98	-0.03	-1.38	0.07	4.23	**-0.08**
B1944	N1-SN3 - CFRHS120X60X4	2.872	NC17	-0.30	-0.06	-2.46	0.19	2.31	**0.04**

36. Internal forces on member

Linear calculation, Extreme : Global, System : Principal
Selection : All
Class : ULS-potres
Cross-section : N1-SN3 - CFRHS120X60X4

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1947	N1-SN3 - CFRHS120X60X4	1.436	potres 7/1	**-23.84**	0.75	0.69	**1.37**	0.85	0.00
B1947	N1-SN3 - CFRHS120X60X4	1.436	potres 6/2	**23.97**	-0.75	-0.22	**-1.37**	0.85	0.00
B1980	N1-SN3 - CFRHS120X60X4	1.436	potres 7/1	1.71	**-5.76**	-2.24	-0.04	-1.84	-0.61
B1980	N1-SN3 - CFRHS120X60X4	1.436	potres 6/2	-1.91	**5.76**	2.63	-0.02	3.48	0.61
B1980	N1-SN3 - CFRHS120X60X4	3.590	potres 7/1	1.76	0.39	**-3.32**	-0.04	-3.76	0.24
B1981	N1-SN3 - CFRHS120X60X4	0.000	potres 6/2	-1.93	-0.50	**3.30**	0.01	4.62	-0.38
B1981	N1-SN3 - CFRHS120X60X4	0.000	potres 7/1	1.89	0.50	-1.59	-0.01	**-4.62**	0.38
B1981	N1-SN3 - CFRHS120X60X4	0.718	potres 6/2	-1.93	-0.50	3.01	0.01	**5.58**	-0.47
B1934	N1-SN3 - CFRHS120X60X4	3.590	potres 6/2	1.58	0.49	-0.63	0.15	0.95	**-1.47**
B1934	N1-SN3 - CFRHS120X60X4	3.590	potres 7/1	-1.55	-0.49	-1.30	-0.14	-0.95	**1.47**

37. Internal forces on member

Nonlinear calculation, Extreme : Global, System : Principal
Selection : All
Class : ULS
Cross-section : N1-SN5 - CFRHS120X120X5

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1726	N1-SN5 - CFRHS120X120X5	2.385	NC27	**-4.97**	0.00	0.56	-0.51	10.49	-0.02
B2111	N1-SN5 - CFRHS120X120X5	5.110	NC42	**3.99**	0.00	-4.97	0.49	0.00	0.01
B2054	N1-SN5 - CFRHS120X120X5	1.700	NC26	-0.03	**-0.20**	-4.74	0.54	0.00	0.00
B2054	N1-SN5 - CFRHS120X120X5	0.000	NC26	-0.06	**0.21**	4.74	0.54	0.00	0.00
B1998	N1-SN5 - CFRHS120X120X5	5.110	NC41	-1.09	0.00	**-7.91**	-0.38	0.00	-0.01
B1998	N1-SN5 - CFRHS120X120X5	0.000	NC41	-1.12	-0.03	**7.91**	-0.38	0.00	0.01
B1726	N1-SN5 - CFRHS120X120X5	0.000	NC26	-2.91	-0.03	7.59	**-0.55**	0.00	0.01
B2054	N1-SN5 - CFRHS120X120X5	1.020	NC25	-0.59	-0.05	-1.28	**0.60**	2.35	0.10
B1993	N1-SN5 - CFRHS120X120X5	2.385	NC30	-0.45	0.00	-0.12	-0.03	**-2.30**	0.00
B1998	N1-SN5 - CFRHS120X120X5	2.385	NC41	-1.25	0.00	0.58	-0.36	**10.87**	-0.02
B1998	N1-SN5 - CFRHS120X120X5	2.044	NC26	-1.44	0.00	1.67	-0.39	10.16	**-0.02**
B2054	N1-SN5 - CFRHS120X120X5	0.680	NC26	-0.05	0.06	1.28	0.55	2.35	**0.10**

38. Internal forces on member

Linear calculation, Extreme : Global, System : Principal
Selection : All
Class : ULS-potres
Cross-section : N1-SN5 - CFRHS120X120X5

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1999	N1-SN5 - CFRHS120X120X5	0.000	potres 2/3	**-59.27**	0.12	1.57	-0.08	0.00	0.00
B1999	N1-SN5 - CFRHS120X120X5	0.000	potres 3/5	**59.14**	-0.12	1.59	-0.18	0.00	0.00
B1999	N1-SN5 - CFRHS120X120X5	1.022	potres 6/2	6.52	**-0.17**	0.86	-0.12	1.36	0.00
B1999	N1-SN5 - CFRHS120X120X5	1.022	potres 7/1	-6.66	**0.17**	1.16	-0.14	1.36	0.00
B1993	N1-SN5 - CFRHS120X120X5	5.110	potres 7/1	-26.10	0.00	**-1.61**	0.13	-0.04	0.14
B1997	N1-SN5 - CFRHS120X120X5	0.000	potres 6/2	-28.57	0.13	**1.81**	-0.16	0.00	0.00
B1987	N1-SN5 - CFRHS120X120X5	0.000	potres 7/1	-20.55	0.06	1.06	**-0.25**	0.00	0.00
B1993	N1-SN5 - CFRHS120X120X5	0.000	potres 2/3	-7.54	0.10	1.61	**0.19**	0.00	0.00
B1996	N1-SN5 - CFRHS120X120X5	5.110	potres 6/2	-28.49	0.00	-1.59	-0.10	**-0.42**	-0.20
B1996	N1-SN5 - CFRHS120X120X5	3.066	potres 7/1	28.55	0.10	-0.14	0.09	**2.32**	0.13
B1999	N1-SN5 - CFRHS120X120X5	4.088	potres 6/2	6.57	-0.07	-1.14	-0.12	0.96	**-0.27**
B1999	N1-SN5 - CFRHS120X120X5	4.088	potres 7/1	-6.70	0.07	-0.88	-0.14	1.76	**0.27**

39. Internal forces on member

Nonlinear calculation, Extreme : Global, System : Principal
Selection : All
Class : ULS
Cross-section : N1-SN6 - CFRHS140X140X5

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B2048	N1-SN6 - CFRHS140X140X5	2.264	NC17	**-22.32**	0.00	0.00	2.69	18.80	0.37
B2052	N1-SN6 - CFRHS140X140X5	4.500	NC25	**9.63**	-0.52	-15.21	0.84	0.00	0.01
B2053	N1-SN6 - CFRHS140X140X5	4.500	NC26	6.18	**-0.62**	-15.27	0.45	0.00	0.01
B2053	N1-SN6 - CFRHS140X140X5	0.000	NC26	6.17	**0.66**	15.27	0.45	0.00	-0.01
B2048	N1-SN6 - CFRHS140X140X5	4.529	NC42	-14.91	-0.28	**-16.74**	2.97	-0.01	0.04
B2048	N1-SN6 - CFRHS140X140X5	0.000	NC42	-14.76	0.49	**16.73**	2.97	-0.01	-0.07
B2005	N1-SN6 - CFRHS140X140X5	5.110	NC42	-1.16	-0.11	-12.03	**-2.52**	0.00	-0.04
B2049	N1-SN6 - CFRHS140X140X5	2.717	NC26	-0.59	-0.07	-2.99	**3.38**	16.34	0.39
B2048	N1-SN6 - CFRHS140X140X5	2.264	NC21	-4.67	0.00	0.00	0.02	**-1.82**	0.00
B2048	N1-SN6 - CFRHS140X140X5	2.264	NC42	-15.15	0.00	0.00	3.03	**20.84**	0.45
B2048	N1-SN6 - CFRHS140X140X5	0.000	NC26	-18.89	0.50	16.58	3.09	-0.01	**-0.07**
B2053	N1-SN6 - CFRHS140X140X5	1.800	NC26	5.93	0.14	3.38	0.49	18.00	**0.75**

40. Internal forces on member

Linear calculation, Extreme : Global, System : Principal
Selection : All
Class : ULS-potres
Cross-section : N1-SN6 - CFRHS140X140X5

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B2003	N1-SN6 - CFRHS140X140X5	4.088	potres 6/2	**-19.15**	**-40.66**	17.41	0.17	62.51	-142.34
B2003	N1-SN6 - CFRHS140X140X5	4.088	potres 7/1	**18.75**	**40.66**	-20.65	-0.03	-58.14	142.34
B2003	N1-SN6 - CFRHS140X140X5	5.110	potres 2/3	12.23	27.39	**-42.73**	0.00	**-132.88**	101.15
B2003	N1-SN6 - CFRHS140X140X5	0.000	potres 3/5	-12.62	-27.29	**42.55**	0.13	92.76	-73.81
B2005	N1-SN6 - CFRHS140X140X5	0.000	potres 5/4	-0.37	0.02	2.51	**-0.49**	0.00	0.00
B2010	N1-SN6 - CFRHS140X140X5	0.000	potres 5/4	-0.91	0.02	2.29	**0.62**	0.00	0.00
B2003	N1-SN6 - CFRHS140X140X5	5.110	potres 3/5	-12.63	-27.39	37.71	0.13	**132.88**	-101.15
B2003	N1-SN6 - CFRHS140X140X5	5.110	potres 6/2	-19.15	-40.66	16.52	0.17	64.12	**-150.47**
B2003	N1-SN6 - CFRHS140X140X5	5.110	potres 7/1	18.75	40.66	-21.54	-0.03	-64.12	**150.47**

41. Internal forces on member

Nonlinear calculation, Extreme : Global, System : Principal
Selection : All

Class : ULS
Cross-section : N1-D1 - CFCHS101.6X4

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B2123	N1-D1 - CFCHS101.6X4	2.631	NC17	**-45.01**	0.00	-0.04	0.02	0.61	0.00
B2122	N1-D1 - CFCHS101.6X4	4.492	NC4	**18.58**	0.00	-0.26	-0.07	0.00	0.00
B2118	N1-D1 - CFCHS101.6X4	4.221	NC21	-0.29	**-0.03**	-0.05	0.01	-0.01	0.01
B2119	N1-D1 - CFCHS101.6X4	2.303	NC27	15.00	**0.13**	0.13	0.52	1.15	**0.11**
B2118	N1-D1 - CFCHS101.6X4	5.757	NC18	-15.77	0.03	**-0.68**	0.30	0.00	0.00
B2119	N1-D1 - CFCHS101.6X4	0.000	NC25	13.61	0.04	**0.64**	-0.29	0.00	0.00
B2119	N1-D1 - CFCHS101.6X4	4.605	NC27	14.72	-0.02	0.47	**-0.83**	**-0.45**	0.01
B2118	N1-D1 - CFCHS101.6X4	0.000	NC36	-15.39	0.01	-0.28	**0.99**	0.00	-0.01
B2118	N1-D1 - CFCHS101.6X4	3.454	NC33	-16.50	0.01	0.17	-0.75	**1.34**	0.00
B2118	N1-D1 - CFCHS101.6X4	3.454	NC42	-15.61	0.09	0.00	-0.32	0.78	**-0.08**

42. Internal forces on member

Linear calculation, Extreme : Global, System : Principal
Selection : All
Class : ULS-potres
Cross-section : N1-D1 - CFCHS101.6X4

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B2123	N1-D1 - CFCHS101.6X4	0.000	potres 5/4	**-6.89**	0.00	0.23	0.01	0.00	0.00
B2119	N1-D1 - CFCHS101.6X4	4.605	potres 1/6	**5.16**	-0.01	0.18	-0.18	-0.14	0.01
B2129	N1-D1 - CFCHS101.6X4	0.000	potres 4/7	0.59	**-0.02**	**0.30**	-0.02	0.00	0.00
B2129	N1-D1 - CFCHS101.6X4	0.000	potres 5/4	-0.42	**0.02**	0.30	-0.02	0.00	0.00
B2129	N1-D1 - CFCHS101.6X4	6.384	potres 4/7	0.59	0.02	**-0.30**	-0.02	0.00	0.00
B2119	N1-D1 - CFCHS101.6X4	4.605	potres 5/4	5.16	-0.01	0.18	**-0.18**	**-0.14**	0.01
B2118	N1-D1 - CFCHS101.6X4	0.000	potres 5/4	-1.74	0.00	-0.05	**0.23**	0.00	0.00
B2129	N1-D1 - CFCHS101.6X4	2.979	potres 4/7	0.59	0.00	0.02	-0.02	**0.48**	-0.03
B2129	N1-D1 - CFCHS101.6X4	2.554	potres 4/7	0.59	-0.01	0.06	-0.02	0.46	**-0.03**
B2129	N1-D1 - CFCHS101.6X4	2.554	potres 5/4	-0.42	0.01	0.06	-0.02	0.46	**0.03**

43. Internal forces on member

Nonlinear calculation, Extreme : Global, System : Principal
Selection : All
Class : ULS
Cross-section : TNAS1 - Rectangle (600; 600)

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B2147	TNAS1 - Rectangle	1.000	NC42	**-358.32**	13.99	-20.89	0.61	-40.77	96.83
B2147	TNAS1 - Rectangle	0.000	NC22	**9.06**	-9.06	1.29	0.18	1.67	-22.90
B2146	TNAS1 - Rectangle	1.000	NC18	-246.15	**-27.41**	20.77	0.02	41.61	15.05
B2147	TNAS1 - Rectangle	0.000	NC26	-343.60	**22.41**	-24.13	0.80	-26.54	104.45
B2147	TNAS1 - Rectangle	0.600	NC25	-344.92	7.95	**-33.32**	-0.84	-68.07	70.87
B2146	TNAS1 - Rectangle	1.000	NC24	-271.88	-18.14	**34.27**	-0.15	**80.85**	71.69
B2147	TNAS1 - Rectangle	0.000	NC25	-337.76	8.03	-33.31	**-0.85**	-48.08	66.07
B2147	TNAS1 - Rectangle	1.000	NC26	-355.53	22.36	-24.04	**0.81**	-50.63	126.84
B2147	TNAS1 - Rectangle	1.000	NC25	-349.69	7.90	-33.31	-0.84	**-81.39**	74.04
B2147	TNAS1 - Rectangle	1.000	NC22	0.23	-9.11	1.25	0.18	2.94	**-31.99**
B2143	TNAS1 - Rectangle	1.000	NC26	-121.09	6.20	-1.30	0.63	-1.84	**136.78**

44. Internal forces on member

Linear calculation, Extreme : Global, System : Principal
Selection : All
Class : ULS-potres
Cross-section : TNAS1 - Rectangle (600; 600)

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B2147	TNAS1 - Rectangle	1.000	potres 5/4	**-70.24**	-1.92	-3.85	-0.02	-8.36	**-2.75**

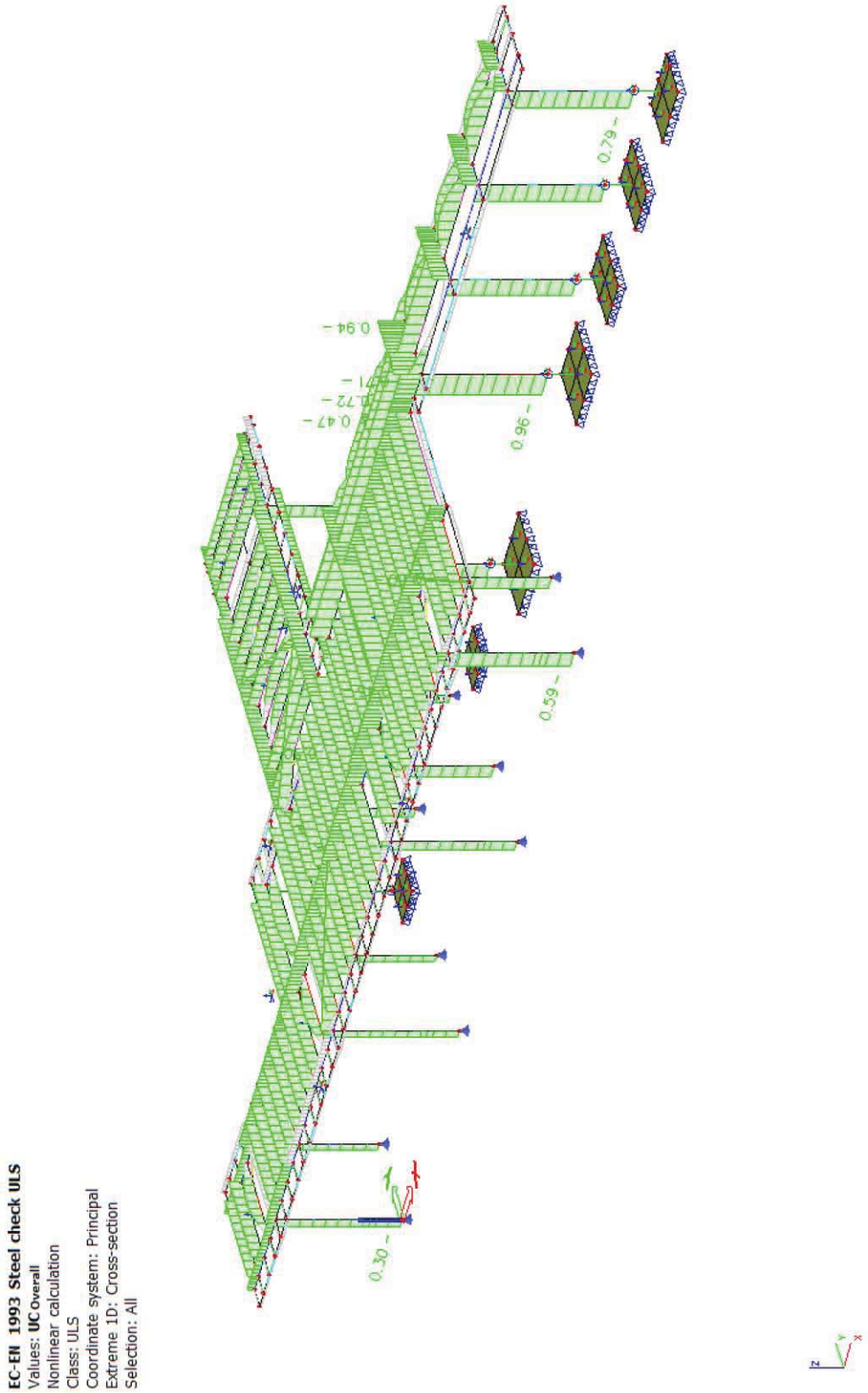
Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B2145	TNAS1 - Rectangle	0.000	potres 5/4	**-16.63**	-0.59	-0.52	-0.01	-0.67	10.12
B2146	TNAS1 - Rectangle	0.800	potres 5/4	-53.12	**-3.04**	4.32	-0.02	8.29	6.04
B2147	TNAS1 - Rectangle	0.800	potres 8/8	-66.24	**5.19**	-4.01	0.00	-7.88	22.51
B2147	TNAS1 - Rectangle	0.800	potres 4/7	-66.24	5.19	**-4.01**	0.00	-7.88	22.51
B2146	TNAS1 - Rectangle	0.800	potres 4/7	-52.39	-2.92	**4.59**	-0.01	8.89	6.39
B2146	TNAS1 - Rectangle	0.000	potres 5/4	-46.06	-3.04	4.32	**-0.02**	4.84	8.47
B2147	TNAS1 - Rectangle	0.000	potres 4/7	-59.18	5.18	-4.01	**0.00**	-4.67	18.36
B2147	TNAS1 - Rectangle	1.000	potres 4/7	-68.01	5.19	-4.01	0.00	**-8.68**	**23.55**
B2146	TNAS1 - Rectangle	1.000	potres 4/7	-54.16	-2.92	4.59	-0.01	**9.81**	5.80

3.2. Izkoriščenost jeklenih elementov

45. EC-EN 1993 Steel check ULS

Nonlinear calculation
Class: ULS
Coordinate system: Principal
Extreme 1D: Cross-section
Selection: All
Overall Unity Check

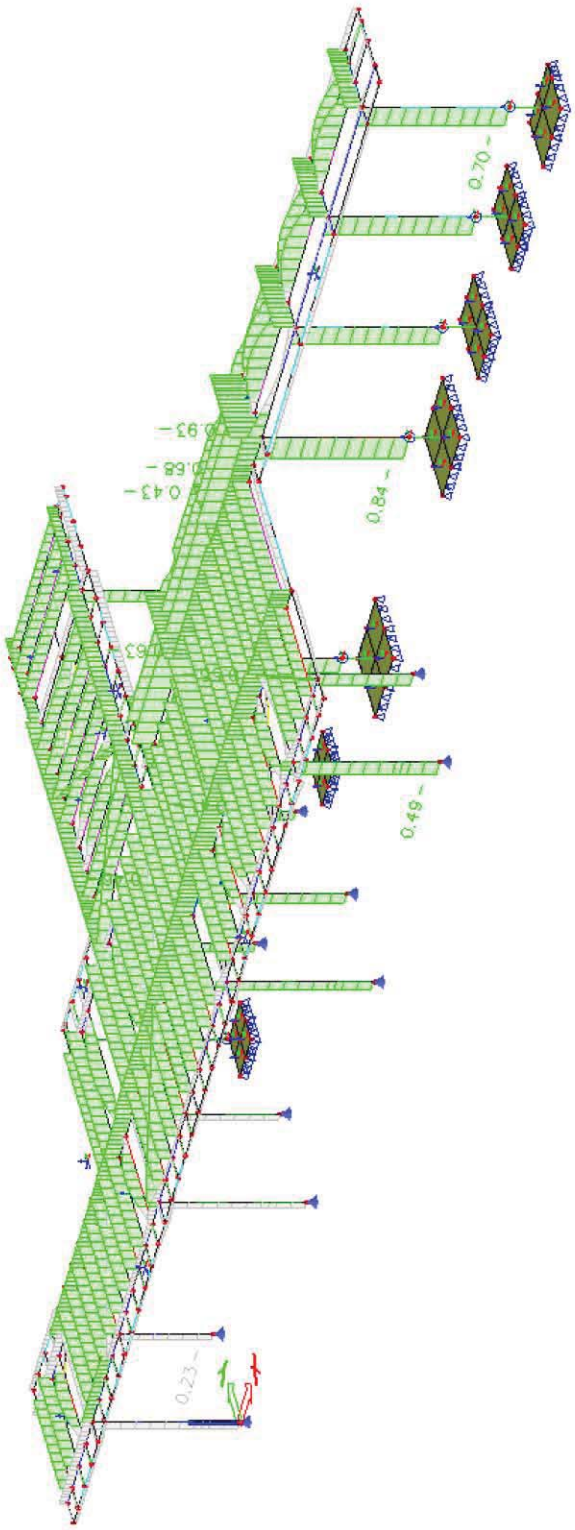
Name	dx [m]	Case	Cross-section	Material	$UC_{Overall}$ [-]	UC_{Sec} [-]	UC_{Stab} [-]
B1668	0.000	NC27	N1-S2 - CFRHS220X220X10	S 235	**0.30**	0.05	0.30
B1683	0.000	NC26	N1-S1 - CFRHS220X220X8	S 235	**0.59**	0.04	0.59
B1684	0.000	NC24	N1-S4 - CFRHS260X260X12.5	S 235	**0.96**	0.36	0.96
B1687	0.000	NC26	N1-S3 - CFRHS220X220X12.5	S 235	**0.79**	0.76	0.79
B1740	2.548	NC27	N1-N1 - HEA260	S 235	**0.94**	0.07	0.94
B1758	1.144	NC42	N1-N3 - HEB260	S 235	**0.71**	0.62	0.71
B1726	2.385	NC42	N1-SN5 - CFRHS120X120X5	S 235	**0.50**	0.48	0.50
B1789	0.000	NC27	N1-N2 - UNP260	S 235	**0.47**	0.33	0.47
B1962	1.795	NC42	N1-SN3 - CFRHS120X60X4	S 235	**0.45**	0.43	0.45
B2043	0.194-	NC26	N1-SN1 - CFRHS60X60X4	S 235	**0.16**	0.09	0.16
B2048	2.264	NC26	N1-SN6 - CFRHS140X140X5	S 235	**0.72**	0.66	0.72


EC-EN 1993 Steel check ULS
Values: UCOverall
Nonlinear calculation
Class: ULS
Coordinate system: Principal
Extreme 1D: Cross-section
Selection: All
0.79
0.94
0.96
0.59
0.30

46. EC-EN 1993 Steel check ULS

Linear calculation
Class: ULS-temelji
Coordinate system: Principal
Extreme 1D: Cross-section
Selection: All
Overall Unity Check

Name	dx [m]	Case	Cross-section	Material	$UC_{Overall}$ [-]	UC_{Sec} [-]	UC_{Stab} [-]
B1669	0.000	MSN-temelj-1-1/1	N1-S2 - CFRHS220X220X10	S 235	**0.23**	0.03	0.23
B1683	0.000	MSN-temelj-1-1/2	N1-S1 - CFRHS220X220X8	S 235	**0.49**	0.04	0.49
B1684	0.000	MSN-temelj-1-1/3	N1-S4 - CFRHS260X260X12.5	S 235	**0.84**	0.29	0.84
B1687	0.000	MSN-temelj-1-1/2	N1-S3 - CFRHS220X220X12.5	S 235	**0.70**	0.64	0.70
B1740	0.000	MSN-temelj-1-1/1	N1-N1 - HEA260	S 235	**0.93**	0.79	0.93
B1703	0.000	MSN-temelj-1-1/4	N1-N3 - HEB260	S 235	**0.63**	0.60	0.63
B1726	2.385	MSN-temelj-1-1/1	N1-SN5 - CFRHS120X120X5	S 235	**0.46**	0.44	0.46
B1789	0.000	MSN-temelj-1-1/1	N1-N2 - UNP260	S 235	**0.43**	0.30	0.43
B1962	1.795	MSN-temelj-1-1/5	N1-SN3 - CFRHS120X60X4	S 235	**0.41**	0.40	0.41
B2043	0.583-	MSN-temelj-1-1/5	N1-SN1 - CFRHS60X60X4	S 235	**0.15**	0.14	0.15
B2048	2.264	MSN-temelj-1-1/5	N1-SN6 - CFRHS140X140X5	S 235	**0.68**	0.64	0.68

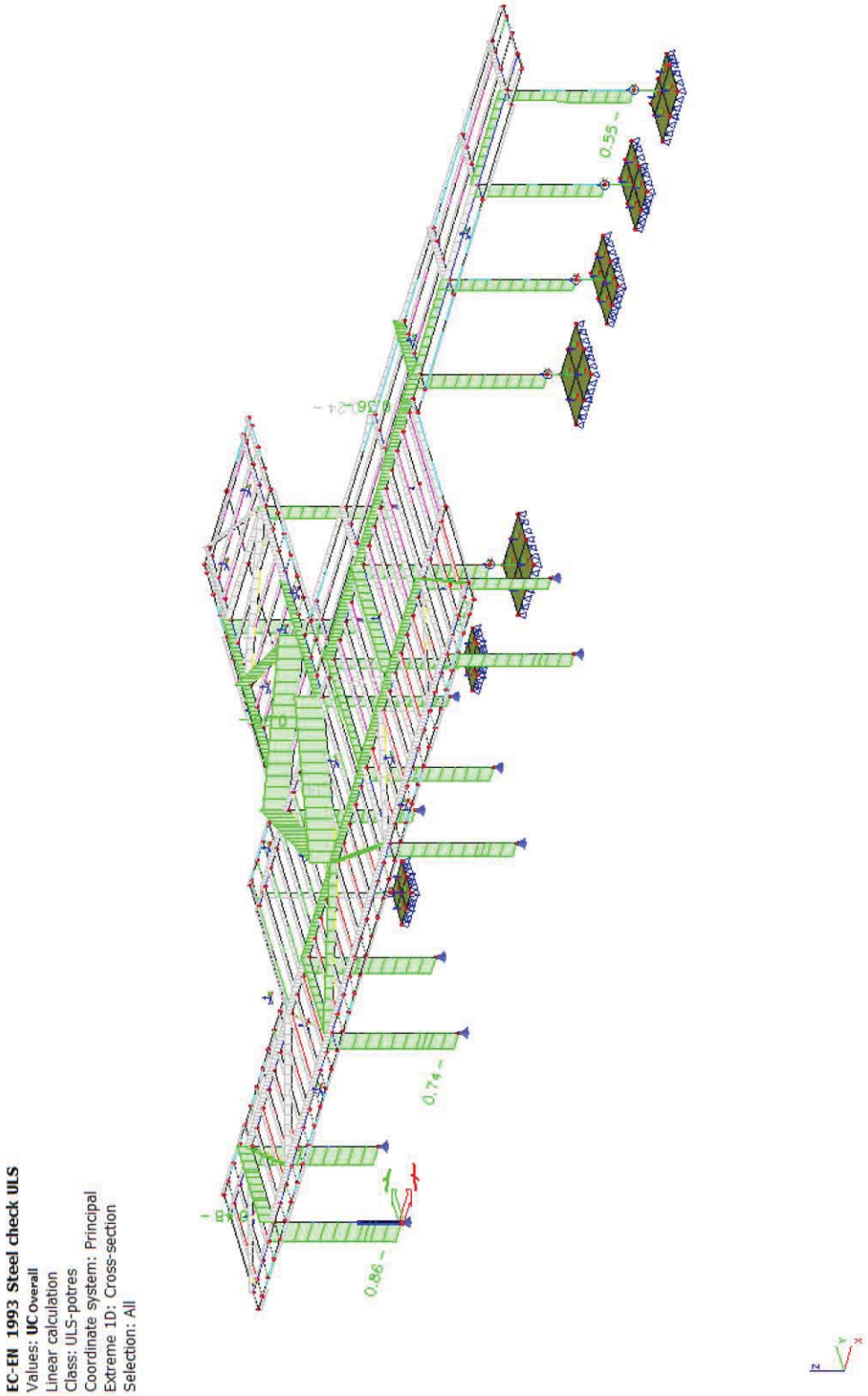


EC-EN 1993 Steel check ULS
Values: **UC** Overall
Linear calculation
Class: ULS-temelji
Coordinate system: Principal
Extreme 1D: Cross-section
Selection: All

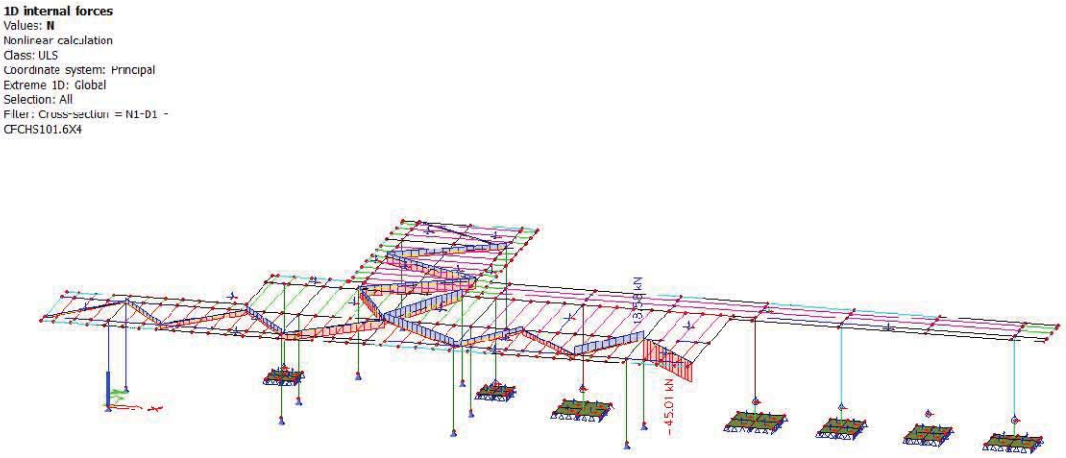
47. EC-EN 1993 Steel check ULS

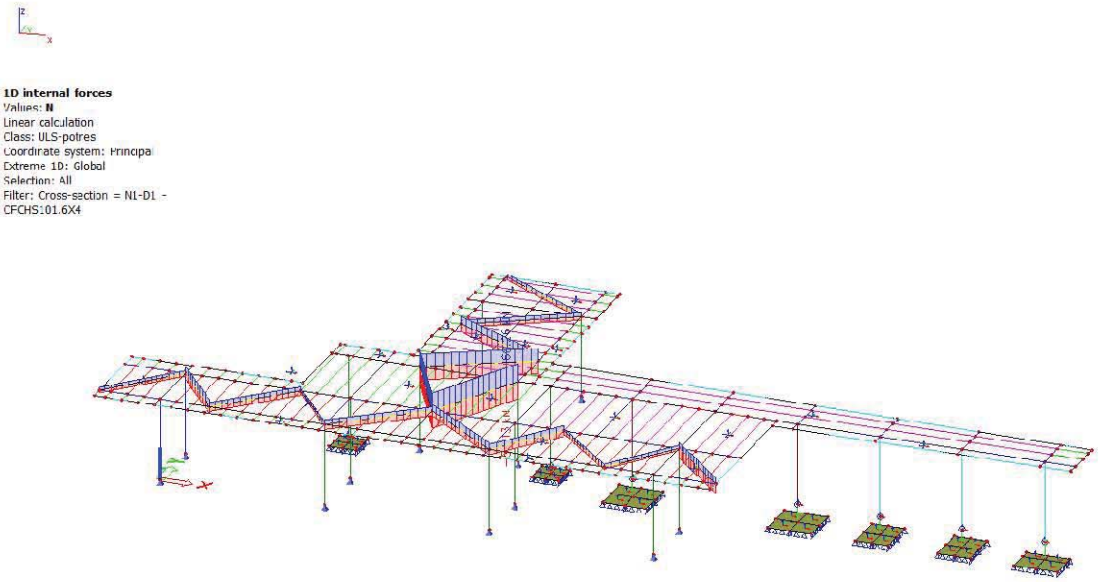
Linear calculation
Class: ULS-potres
Coordinate system: Principal
Extreme 1D: Cross-section
Selection: All
Overall Unity Check

Name	dx [m]	Case	Cross-section	Material	$UC_{Overall}$ [-]	UC_{Sec} [-]	UC_{Stab} [-]
B1668	0.000	potres 6/1	N1-S2 - CFRHS220X220X10	S 235	**0.86**	0.04	0.86
B1670	0.000	potres 7/2	N1-S1 - CFRHS220X220X8	S 235	**0.74**	0.04	0.74
B1682	0.000	potres 6/1	N1-S4 - CFRHS260X260X12.5	S 235	**0.62**	0.48	0.62
B1687	0.000	potres 3/3	N1-S3 - CFRHS220X220X12.5	S 235	**0.55**	0.43	0.55
B1713	0.000	potres 6/1	N1-N1 - HEA260	S 235	**0.48**	0.47	0.48
B1704	3.384	potres 2/4	N1-N3 - HEB260	S 235	**0.36**	0.12	0.36
B1726	1.022-	potres 3/3	N1-SN5 - CFRHS120X120X5	S 235	**0.14**	0.07	0.14
B1788	4.529	potres 7/2	N1-N2 - UNP260	S 235	**0.24**	0.18	0.24
B1961	2.872+	potres 6/1	N1-SN3 - CFRHS120X60X4	S 235	**0.19**	0.06	0.19
B2063	0.640+	potres 6/1	N1-SN1 - CFRHS60X60X4	S 235	**0.12**	0.12	0.12
B2007	1.022-	potres 6/1	N1-SN6 - CFRHS140X140X5	S 235	**0.22**	0.12	0.22


0.55
0.74
0.86
EC-EN 1993 Steel check ULS
Values: UC Overall
Linear calculation
Class: ULS-potres
Coordinate system: Principal
Extreme 1D: Cross-section
Selection: All

Natezna diagonala M24 z napenjalko





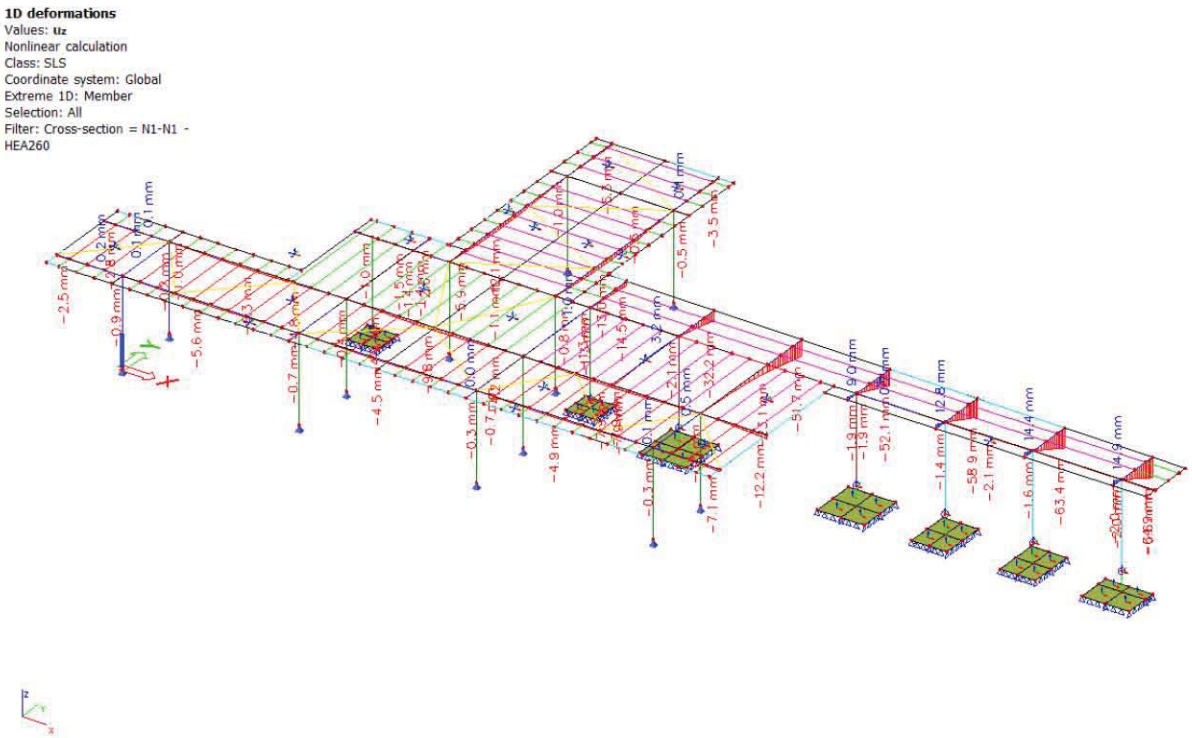
Nameto posamezne natezno tlačne diagonale upoštevane v modelu, vgradimo vgradimo sistem križnih nateznih diagonal z napenjalko.

$F_{t,Ed,max}$ = 61 kN < $F_{t,Rd}$ = 101.7 kN (M24, 4.6 ali S235)

Priključek: vijak M24 8.8 $F_{v,Rd}$ = 135.6 kN

3.3. Pomiki

MSU – vertikalni pomiki



Nosilec HEA260

$$w_{vert,max,Q} = 12.1 \text{ mm} \leq w_{vert,dov,Q} = L/250 = 7750/250 = 31 \text{ mm}$$

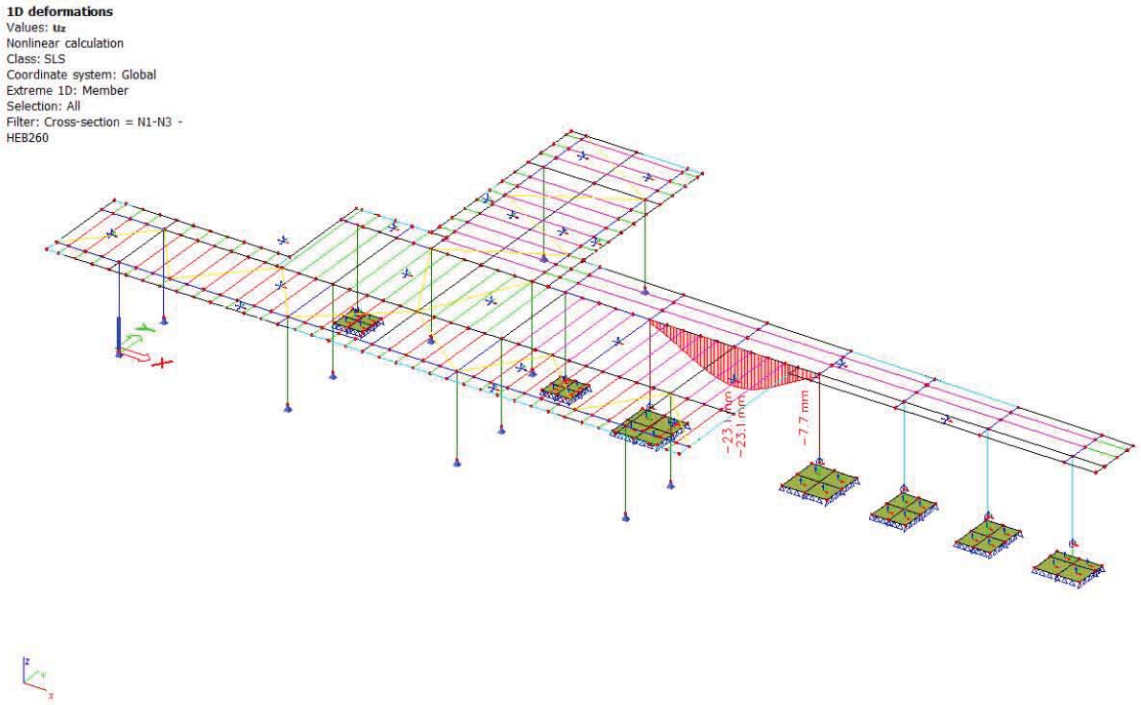
Konzola HEA260 (ob obstoječem objektu)

pomiki pri kopičenju snega $w_{vert,max,Q} = 63.2$ mm

pri kontrili pomikov upštebvanmo običajen sneg in ne kopičenja

ob upoštevanju običajnega snega 63.2x (0.55+1.2)/(0.55+5) = 20 mm

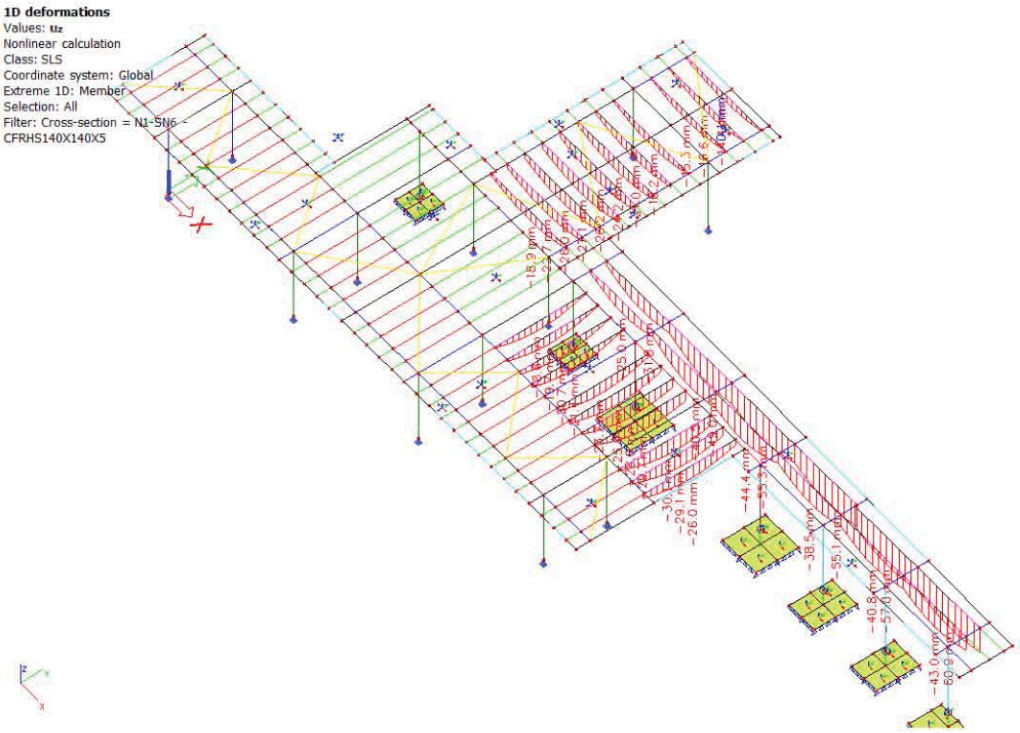
$$w_{vert,max,Q} = 20 \text{ mm} \leq w_{vert,dov,Q} = 2xL/200 = 2x2548/200 = 25.5 \text{ mm}$$



Nosilec HEB260

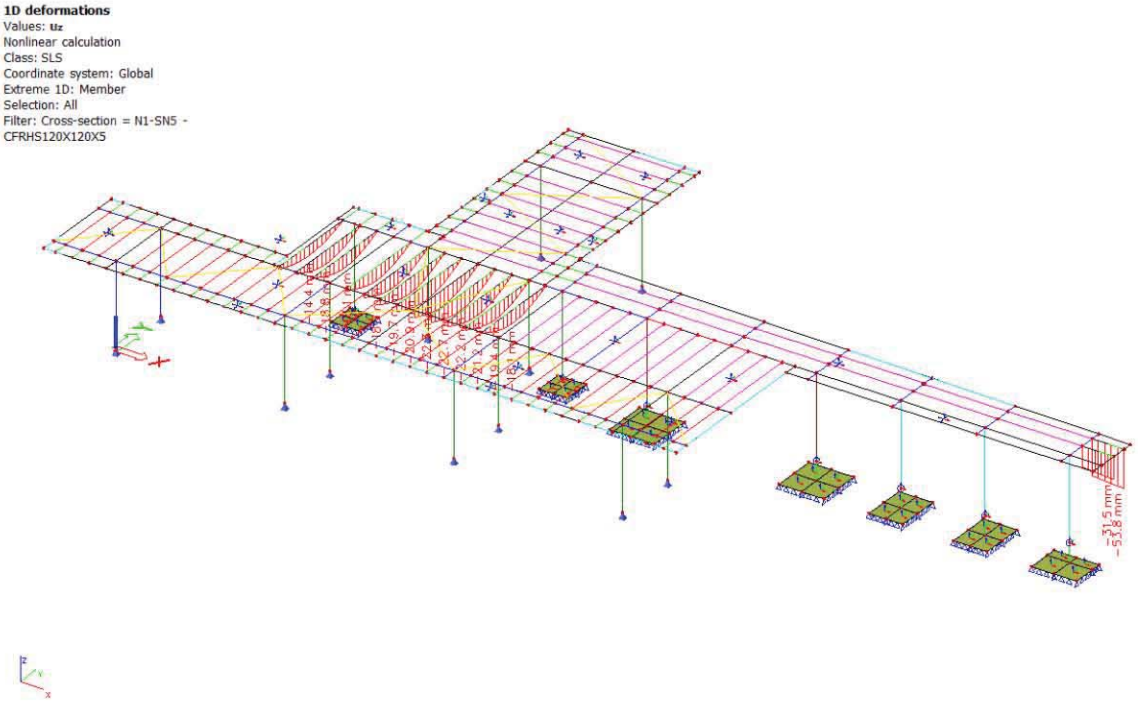
$$w_{vert,max,Q} = 23.1 \text{ mm} \leq w_{vert,dov,Q} = L/250 = 9000/250 = 36 \text{ mm}$$

Sekundarni nosilci

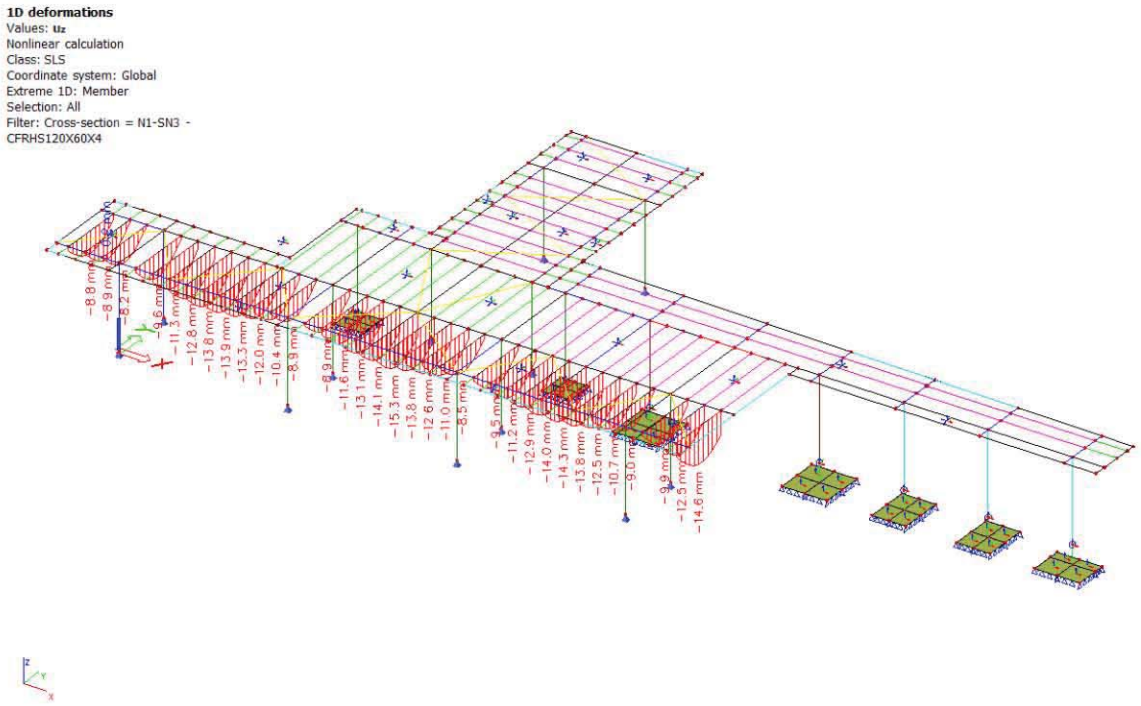


L=5400 $w_{vert,max,Q} = 18.2\ mm \leq w_{vert,dov,Q} = L/250 = 5400/250 = 21.6\ mm$

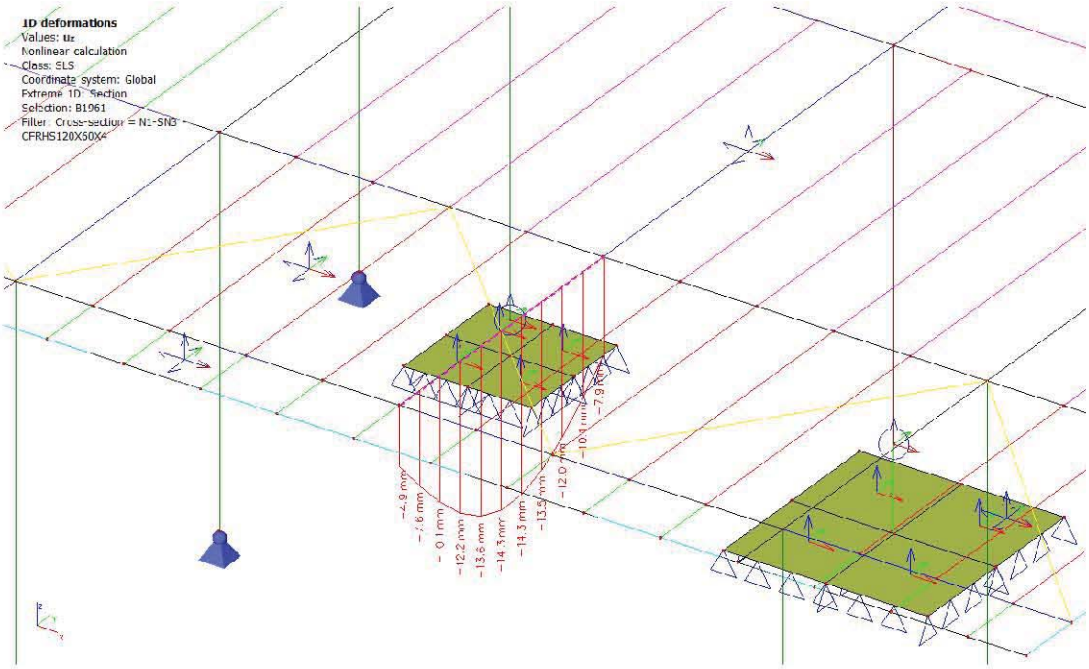
L=5100 $w_{vert,max,Q} = 18.6\ mm \leq w_{vert,dov,Q} = L/250 = 5110/250 = 20.5\ mm$



L=5100 $w_{vert,max,Q} = 18.7\ mm \leq w_{vert,dov,Q} = L/250 = 5110/250 = 20.5\ mm$



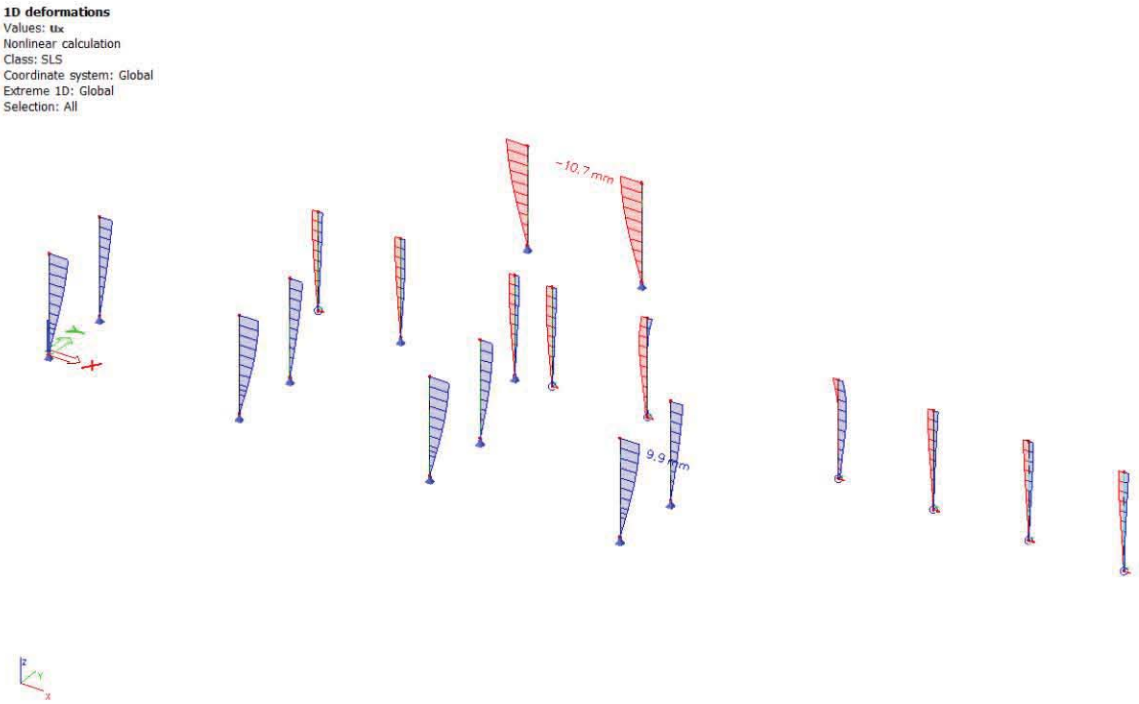
L=3590 $w_{vert,max,Q} = 7.9\ mm \leq w_{vert,dov,Q} = L/250 = 3590/250 = 14.4\ mm$

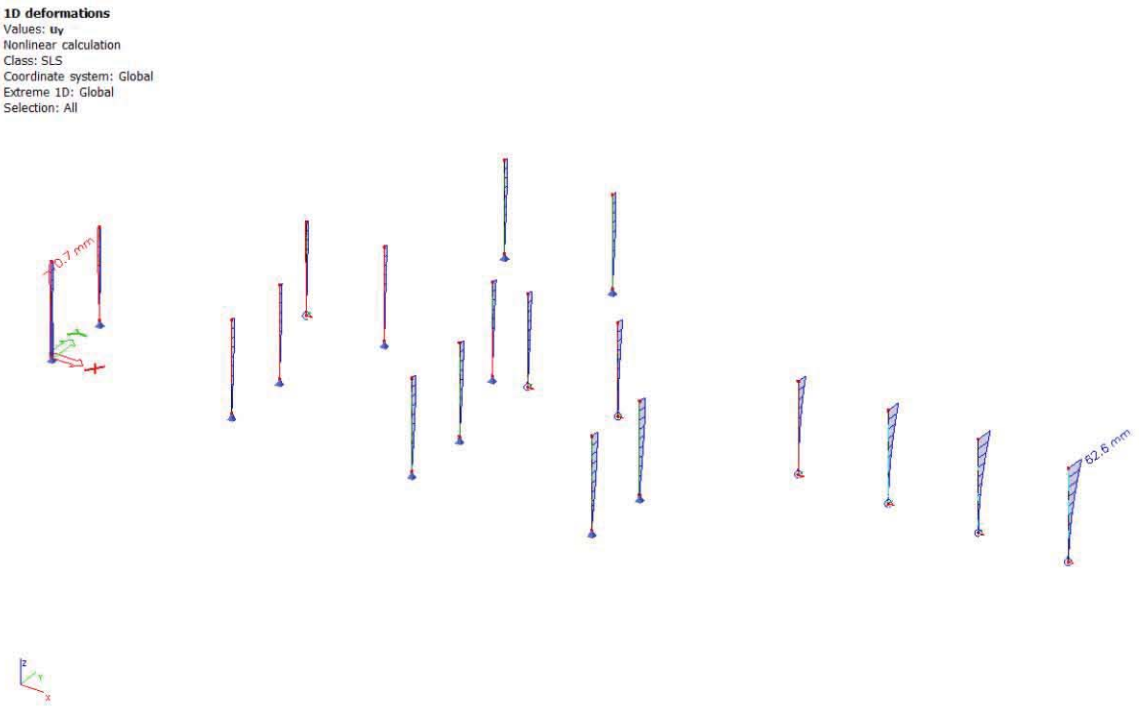


14.3-0.5x(4.9+7.9) = 7.9

Pri vseh sekundarnih noilcih smo kontrolirali relativne pomike.

MSU – horizontalni pomiki



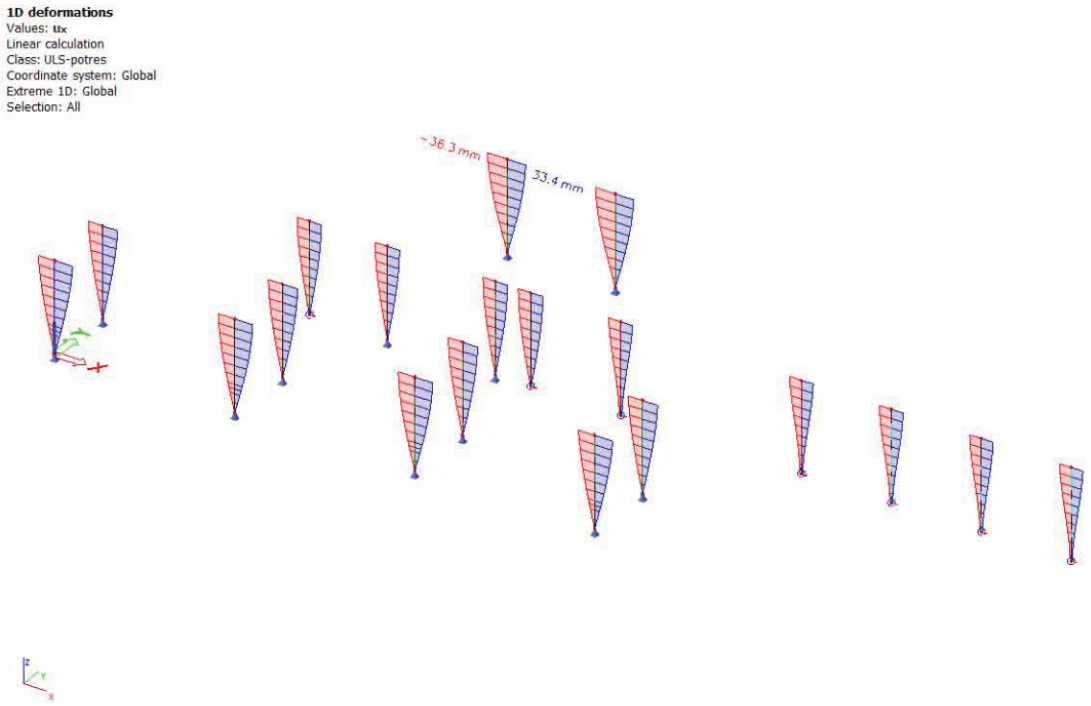


Stebri kot del okvirja: $u_{hor,max,W} = 11 \text{ mm} \leq u_{hor,dov,W} = h/300 = 4450/150 = 29.7 \text{ mm}$

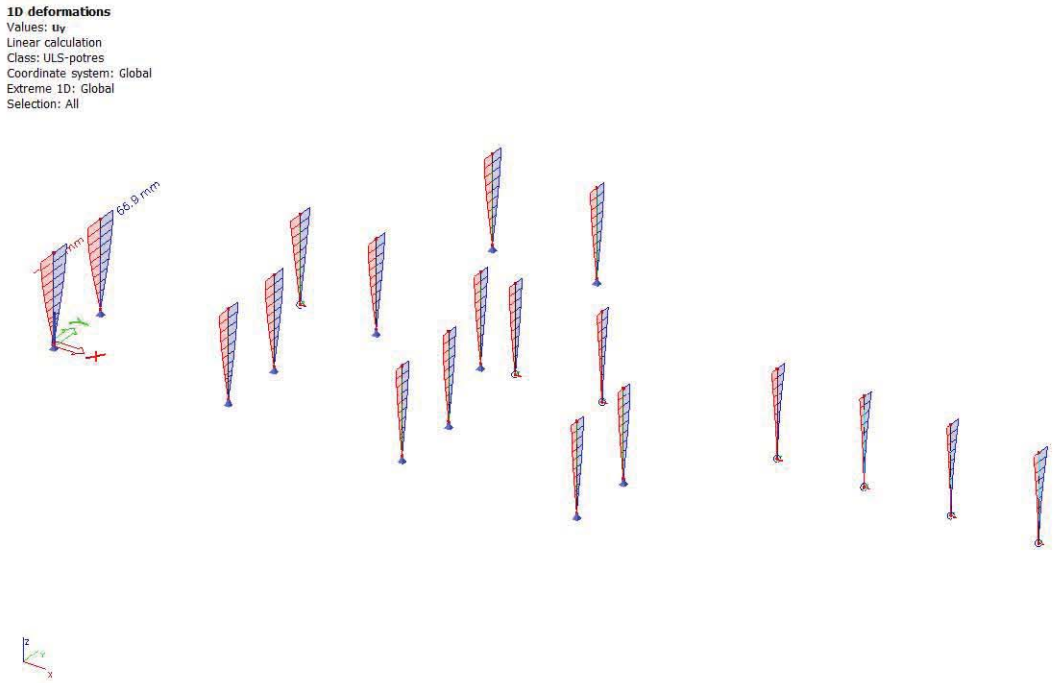
Konzolni steber: $u_{hor,max,W} = 62 \text{ mm} \approx u_{hor,dov,W} = 2xh/300 = 2x4450/150 = 60 \text{ mm}$

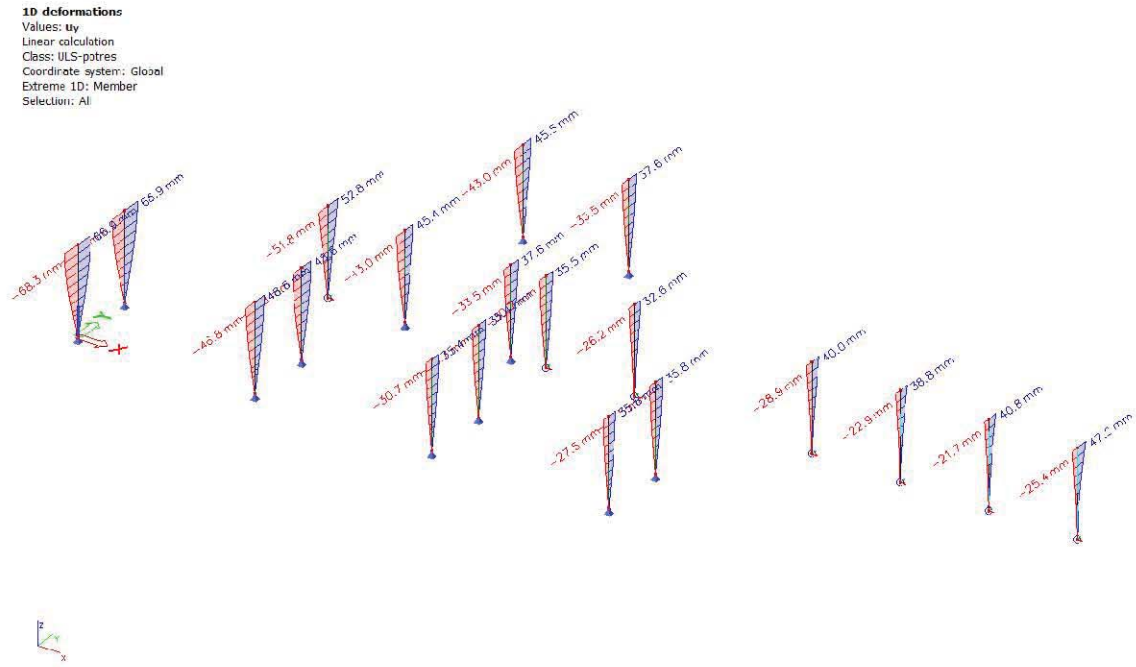
območje kopičenja snega

Potresna kombinacija



$U_{hor,max,E,x}$ = 1.5x37x0.5= 28 mm ≤ $U_{hor,dov,E}$ = 0.010xh = 0.010x4450 = 44.5 mm





Lokalno so sicer pomiki večji od dovoljenih. $U_{lokalno}$ = 69 mm

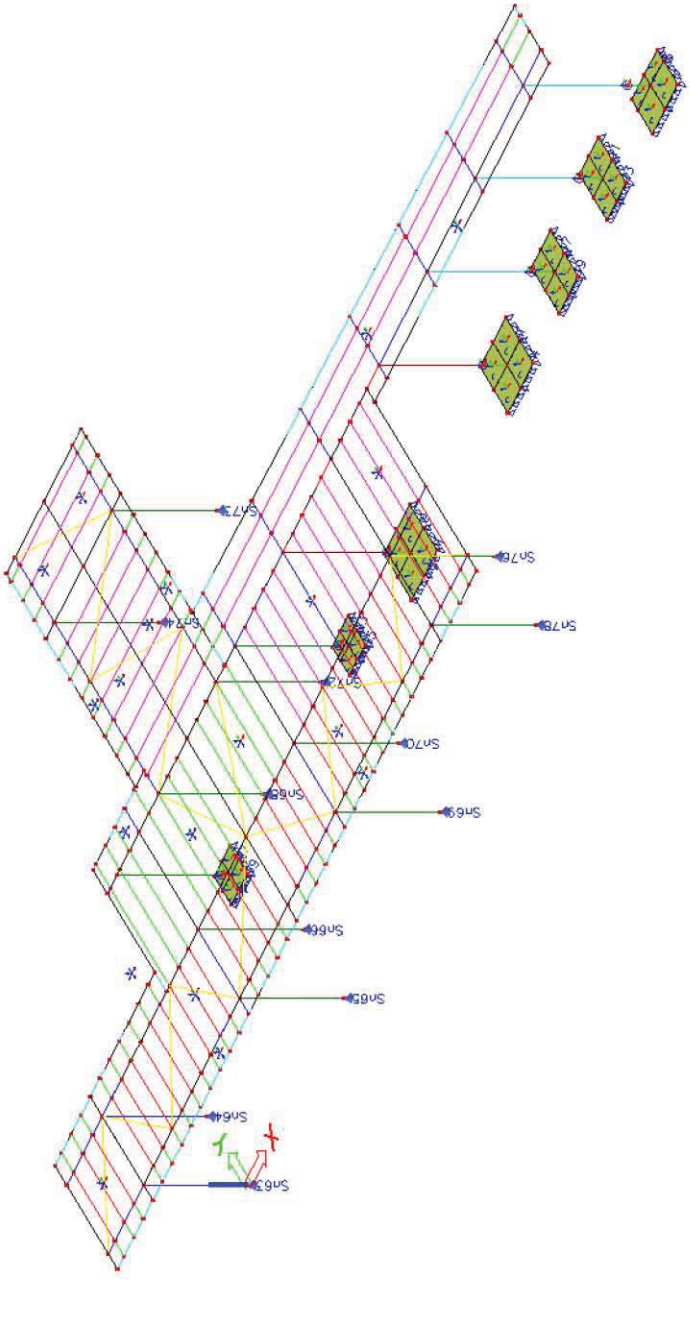
$U_{hor,max,E,pov}$ = 1.5x69x0.5= 52 mm > $U_{hor,dov,E}$ = 0.010xh = 0.010x4450 = 44.5 mm

Zaradi razvejane tlorisne zasnove strehe pomiki znašajo od 21.7 do 66.9 mm. Ker gre za enoetažen objekt smatram, da loklna prekoračitev pomikov ni problematična, poleg tega pa je povprečna velikost pomikov ustrezna.

Povprečni pomiki celotne strehe $U_{povprecno,Y}$ = 45 mm

$U_{hor,max,E,pov,Y}$ = 1.5x45x0.5= 34 mm ≤ $U_{hor,dov,E}$ = 0.010xh = 0.010x4450 = 44.5 mm

4. REAKCIJE



52. Reactions

Nonlinear calculation, Extreme : Global
Selection : All
Class : ULS

Support	Case	Rx [kN]	Ry [kN]	Rz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
Sn65/N1807	NC24	**-4.74**	-6.92	82.90	0.00	0.00	0.00
Sn73/N1823	NC25	**5.10**	-7.76	120.01	0.00	0.00	0.00
Sn78/N1833	NC4	-2.34	**-16.99**	55.72	0.00	0.00	0.00
Sn64/N1805	NC27	-0.69	**8.31**	60.41	0.00	0.00	0.00
Sn66/N1809	NC31	-0.25	3.29	**-19.73**	0.00	0.00	0.00
Sn76/N1829	NC42	-0.87	-7.41	**181.52**	0.00	0.00	0.00
Sn63/N1803	NC1	-1.61	-4.03	80.51	**0.00**	**0.00**	**0.00**

53. Reactions

Nonlinear calculation, Extreme : Node
Selection : All
Class : ULS

Support	Case	Rx [kN]	Ry [kN]	Rz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
Sn63/N1803	NC24	**-3.90**	-0.13	75.61	0.00	0.00	0.00
Sn63/N1803	NC20	**1.83**	-5.45	9.95	0.00	0.00	0.00
Sn63/N1803	NC21	0.76	**-9.32**	2.06	0.00	0.00	0.00
Sn63/N1803	NC27	-2.91	**3.87**	87.06	0.00	0.00	0.00
Sn63/N1803	NC30	-0.66	-6.27	**-8.91**	0.00	0.00	0.00
Sn63/N1803	NC18	-1.66	0.86	**98.14**	0.00	0.00	0.00
Sn63/N1803	NC1	-1.61	-4.03	80.51	**0.00**	**0.00**	**0.00**
Sn64/N1805	NC28	**-2.24**	0.44	-5.88	0.00	0.00	0.00
Sn64/N1805	NC20	**1.59**	-2.10	18.96	0.00	0.00	0.00
Sn64/N1805	NC21	0.43	**-5.76**	26.16	0.00	0.00	0.00
Sn64/N1805	NC27	-0.69	**8.31**	60.41	0.00	0.00	0.00
Sn64/N1805	NC31	-0.65	4.35	**-12.56**	0.00	0.00	0.00
Sn64/N1805	NC35	0.95	-1.85	**104.97**	0.00	0.00	0.00
Sn64/N1805	NC1	0.03	2.13	84.01	**0.00**	**0.00**	**0.00**
Sn65/N1807	NC24	**-4.74**	-6.92	82.90	0.00	0.00	0.00
Sn65/N1807	NC20	**1.85**	-7.34	9.05	0.00	0.00	0.00
Sn65/N1807	NC4	-2.53	**-14.40**	84.31	0.00	0.00	0.00
Sn65/N1807	NC50-s1	-1.78	**-0.70**	75.22	0.00	0.00	0.00
Sn65/N1807	NC30	0.08	-8.98	**-9.64**	0.00	0.00	0.00
Sn65/N1807	NC18	-3.21	-5.29	**103.80**	0.00	0.00	0.00
Sn65/N1807	NC1	-2.77	-11.46	89.42	**0.00**	**0.00**	**0.00**
Sn66/N1809	NC28	**-1.87**	-0.05	-15.32	0.00	0.00	0.00
Sn66/N1809	NC29	**1.40**	0.17	-15.96	0.00	0.00	0.00
Sn66/N1809	NC17	0.39	**-4.85**	146.27	0.00	0.00	0.00
Sn66/N1809	NC31	-0.25	**3.29**	**-19.73**	0.00	0.00	0.00
Sn66/N1809	NC35	0.30	-4.01	**147.16**	0.00	0.00	0.00
Sn66/N1809	NC1	0.15	-1.70	129.63	**0.00**	**0.00**	**0.00**
Sn68/N1813	NC19	**-1.82**	-0.84	8.49	0.00	0.00	0.00
Sn68/N1813	NC29	**1.48**	-0.81	-8.55	0.00	0.00	0.00
Sn68/N1813	NC30	-0.23	**-3.46**	**-9.01**	0.00	0.00	0.00
Sn68/N1813	NC18	-0.44	**7.80**	115.47	0.00	0.00	0.00
Sn68/N1813	NC36	-0.56	6.55	**115.88**	0.00	0.00	0.00
Sn68/N1813	NC1	0.10	5.35	106.22	**0.00**	**0.00**	**0.00**
Sn69/N1815	NC24	**-4.26**	-10.68	91.12	0.00	0.00	0.00
Sn69/N1815	NC20	**1.92**	-6.11	-4.13	0.00	0.00	0.00
Sn69/N1815	NC4	-2.18	**-16.69**	80.25	0.00	0.00	0.00
Sn69/N1815	NC50-s1	-1.06	**-1.37**	74.70	0.00	0.00	0.00
Sn69/N1815	NC21	0.67	-8.68	**-7.70**	0.00	0.00	0.00
Sn69/N1815	NC27	-3.31	-8.20	**97.35**	0.00	0.00	0.00
Sn69/N1815	NC1	-2.43	-14.15	83.89	**0.00**	**0.00**	**0.00**
Sn70/N1817	NC15	**-2.83**	-5.19	122.65	0.00	0.00	0.00
Sn70/N1817	NC20	**1.99**	0.11	-11.54	0.00	0.00	0.00

Support	Case	Rx [kN]	Ry [kN]	Rz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
Sn70/N1817	NC26	-1.25	**-8.64**	144.97	0.00	0.00	0.00
Sn70/N1817	NC22	0.55	**2.94**	**-11.87**	0.00	0.00	0.00
Sn70/N1817	NC41	-1.07	-6.09	**146.71**	0.00	0.00	0.00
Sn70/N1817	NC1	-1.27	-5.83	133.04	**0.00**	**0.00**	**0.00**
Sn72/N1821	NC19	**-1.31**	-1.03	**-4.39**	0.00	0.00	0.00
Sn72/N1821	NC29	**1.81**	-0.66	11.98	0.00	0.00	0.00
Sn72/N1821	NC21	0.21	**-3.35**	-4.34	0.00	0.00	0.00
Sn72/N1821	NC27	0.22	**6.69**	119.08	0.00	0.00	0.00
Sn72/N1821	NC25	1.67	4.46	**119.10**	0.00	0.00	0.00
Sn72/N1821	NC1	0.74	4.41	109.11	**0.00**	**0.00**	**0.00**
Sn73/N1823	NC19	**-2.27**	0.51	-0.51	0.00	0.00	0.00
Sn73/N1823	NC25	**5.10**	-7.76	120.01	0.00	0.00	0.00
Sn73/N1823	NC26	4.11	**-9.71**	**125.55**	0.00	0.00	0.00
Sn73/N1823	NC22	-0.34	**3.00**	**-4.08**	0.00	0.00	0.00
Sn73/N1823	NC1	3.66	-7.12	116.98	**0.00**	**0.00**	**0.00**
Sn74/N1825	NC19	**-2.34**	-0.76	9.89	0.00	0.00	0.00
Sn74/N1825	NC25	**4.23**	-4.10	114.41	0.00	0.00	0.00
Sn74/N1825	NC17	1.90	**-7.58**	127.70	0.00	0.00	0.00
Sn74/N1825	NC31	0.71	**3.27**	-3.56	0.00	0.00	0.00
Sn74/N1825	NC28	-1.28	0.58	**-3.62**	0.00	0.00	0.00
Sn74/N1825	NC16	3.03	-5.48	**127.84**	0.00	0.00	0.00
Sn74/N1825	NC1	2.69	-4.75	119.94	**0.00**	**0.00**	**0.00**
Sn76/N1829	NC50-s1	**-2.48**	-0.85	111.73	0.00	0.00	0.00
Sn76/N1829	NC20	**1.98**	0.84	-6.01	0.00	0.00	0.00
Sn76/N1829	NC26	0.34	**-9.20**	177.39	0.00	0.00	0.00
Sn76/N1829	NC22	0.28	**3.19**	**-6.16**	0.00	0.00	0.00
Sn76/N1829	NC42	-0.87	-7.41	**181.52**	0.00	0.00	0.00
Sn76/N1829	NC1	0.28	-6.40	162.44	**0.00**	**0.00**	**0.00**
Sn78/N1833	NC24	**-4.53**	-13.85	66.29	0.00	0.00	0.00
Sn78/N1833	NC20	**2.15**	-2.35	-3.33	0.00	0.00	0.00
Sn78/N1833	NC4	-2.34	**-16.99**	55.72	0.00	0.00	0.00
Sn78/N1833	NC22	0.52	**-0.21**	0.22	0.00	0.00	0.00
Sn78/N1833	NC21	1.02	-4.55	**-5.70**	0.00	0.00	0.00
Sn78/N1833	NC27	-3.57	-11.27	**70.58**	0.00	0.00	0.00
Sn78/N1833	NC1	-2.57	-14.73	58.97	**0.00**	**0.00**	**0.00**

54. Reactions

Linear calculation
Class: ULS-potres
System: Global
Extreme: Global
Selection: All
Nodal reactions

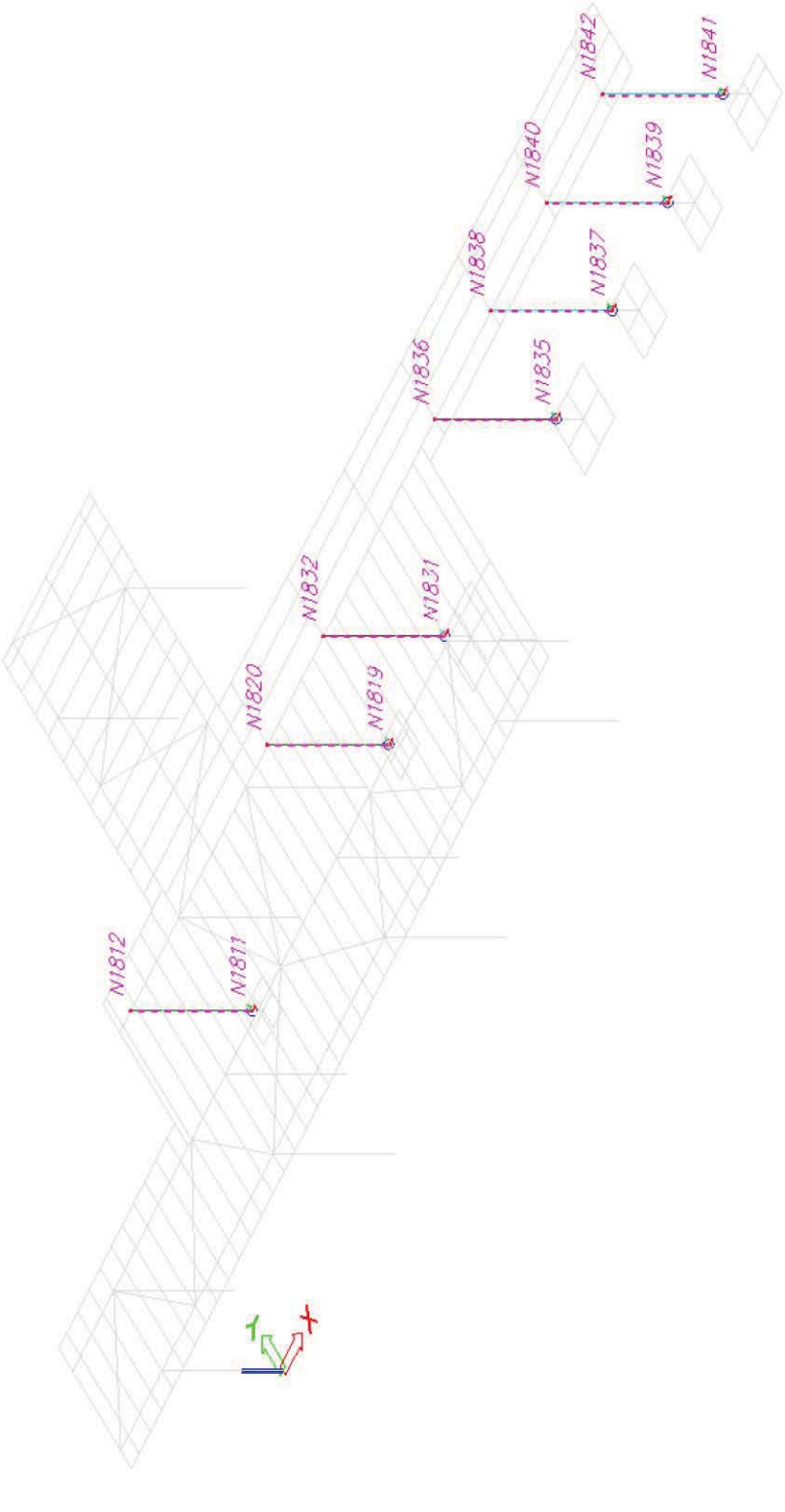
Name	Case	R_x [kN]	R_y [kN]	R_z [kN]	M_x [kNm]	M_y [kNm]	M_z [kNm]	e_x [mm]	e_y [mm]
Sn65/N1807	potres 7/1	**-9.54**	-13.69	60.91	0.00	0.00	0.00	0.0	0.0
Sn73/N1823	potres 3/2	**9.92**	-5.75	20.28	**0.00**	**0.00**	**0.00**	0.0	0.0
Sn64/N1805	potres 6/3	5.79	**22.94**	**-28.36**	0.00	0.00	0.00	0.0	0.0
Sn64/N1805	potres 7/1	-5.75	-21.86	**86.36**	0.00	0.00	0.00	0.0	0.0
Sn63/N1803	potres 7/1	-8.66	**-22.54**	-23.07	0.00	0.00	**0.00**	0.0	0.0

55. Reactions

Linear calculation
Class: ULS-potres
System: Global
Extreme: Mesh
Selection: All
Nodal reactions

Name	Case	R_x [kN]	R_y [kN]	R_z [kN]	M_x [kNm]	M_y [kNm]	M_z [kNm]	e_x [mm]	e_y [mm]
Sn63/N1803	potres 6/1	**8.08**	**22.49**	**78.77**	**0.00**	**0.00**	**0.00**	0.0	0.0

Name	Case	R_x [kN]	R_y [kN]	R_z [kN]	M_x [kNm]	M_y [kNm]	M_z [kNm]	e_x [mm]	e_y [mm]
Sn63/N1803	potres 7/2	**-8.66**	**-22.54**	**-23.07**	0.00	0.00	**0.00**	0.0	0.0
Sn64/N1805	potres 3/3	**6.94**	11.38	2.99	**0.00**	**0.00**	**0.00**	0.0	0.0
Sn64/N1805	potres 7/2	-5.75	**-21.86**	**86.36**	0.00	0.00	0.00	0.0	0.0
Sn64/N1805	potres 6/1	5.79	**22.94**	**-28.36**	0.00	0.00	0.00	0.0	0.0
Sn64/N1805	potres 2/4	**-6.89**	-10.29	55.01	0.00	0.00	**0.00**	0.0	0.0
Sn65/N1807	potres 6/1	**8.72**	**12.81**	**-2.62**	**0.00**	**0.00**	**0.00**	0.0	0.0
Sn65/N1807	potres 7/2	**-9.54**	**-13.69**	**60.91**	0.00	0.00	**0.00**	0.0	0.0
Sn66/N1809	potres 3/3	**7.91**	6.12	24.54	**0.00**	**0.00**	**0.00**	0.0	0.0
Sn66/N1809	potres 7/2	-6.85	**-14.83**	**62.45**	0.00	0.00	0.00	0.0	0.0
Sn66/N1809	potres 6/1	6.86	**14.49**	**11.31**	0.00	0.00	0.00	0.0	0.0
Sn66/N1809	potres 2/4	**-7.89**	-6.45	49.22	0.00	0.00	**0.00**	0.0	0.0
Sn68/N1813	potres 3/3	**6.87**	6.30	25.03	**0.00**	**0.00**	**0.00**	0.0	0.0
Sn68/N1813	potres 7/2	-3.72	**-8.80**	**41.80**	0.00	0.00	0.00	0.0	0.0
Sn68/N1813	potres 6/1	3.42	**12.36**	**24.44**	0.00	0.00	0.00	0.0	0.0
Sn68/N1813	potres 2/4	**-7.17**	-2.74	41.21	0.00	0.00	**0.00**	0.0	0.0
Sn69/N1815	potres 6/1	**8.77**	**-9.88**	**47.25**	**0.00**	**0.00**	**0.00**	0.0	0.0
Sn69/N1815	potres 7/2	**-9.34**	**8.25**	**10.72**	0.00	0.00	**0.00**	0.0	0.0
Sn70/N1817	potres 3/3	**7.60**	-6.57	43.38	**0.00**	**0.00**	**0.00**	0.0	0.0
Sn70/N1817	potres 6/1	6.81	**-11.45**	**45.28**	0.00	0.00	0.00	0.0	0.0
Sn70/N1817	potres 7/2	-6.99	**10.06**	**36.02**	0.00	0.00	0.00	0.0	0.0
Sn70/N1817	potres 2/4	**-7.78**	5.19	37.93	0.00	0.00	**0.00**	0.0	0.0
Sn72/N1821	potres 6/1	3.69	**-6.62**	43.18	0.00	0.00	0.00	0.0	0.0
Sn72/N1821	potres 7/2	-3.30	**9.86**	23.17	**0.00**	**0.00**	**0.00**	0.0	0.0
Sn72/N1821	potres 3/3	**7.16**	-2.52	**46.48**	0.00	0.00	0.00	0.0	0.0
Sn72/N1821	potres 2/4	**-6.78**	5.76	**19.87**	0.00	0.00	**0.00**	0.0	0.0
Sn73/N1823	potres 3/3	**9.92**	-5.75	20.28	**0.00**	**0.00**	**0.00**	0.0	0.0
Sn73/N1823	potres 6/1	8.53	**-10.12**	**16.48**	0.00	0.00	0.00	0.0	0.0
Sn73/N1823	potres 7/2	-7.51	**7.80**	**57.87**	0.00	0.00	0.00	0.0	0.0
Sn73/N1823	potres 2/4	**-8.90**	3.43	54.08	0.00	0.00	**0.00**	0.0	0.0
Sn74/N1825	potres 7/2	-8.11	**-11.86**	27.90	0.00	0.00	0.00	0.0	0.0
Sn74/N1825	potres 6/1	8.64	**10.18**	47.45	**0.00**	**0.00**	**0.00**	0.0	0.0
Sn74/N1825	potres 3/3	**9.76**	3.92	**51.48**	0.00	0.00	0.00	0.0	0.0
Sn74/N1825	potres 2/4	**-9.23**	-5.59	**23.88**	0.00	0.00	**0.00**	0.0	0.0
Sn76/N1829	potres 3/3	**6.39**	-8.21	40.11	**0.00**	**0.00**	**0.00**	0.0	0.0
Sn76/N1829	potres 6/1	5.36	**-10.53**	**35.95**	0.00	0.00	0.00	0.0	0.0
Sn76/N1829	potres 7/2	-5.55	**9.26**	**57.65**	0.00	0.00	0.00	0.0	0.0
Sn76/N1829	potres 2/4	**-6.58**	6.94	53.49	0.00	0.00	**0.00**	0.0	0.0
Sn78/N1833	potres 6/1	**6.94**	**-10.41**	**6.88**	**0.00**	**0.00**	**0.00**	0.0	0.0
Sn78/N1833	potres 7/2	**-7.65**	**7.39**	**41.87**	0.00	0.00	**0.00**	0.0	0.0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N1841
N1840
N1839
N1838
N1837
N1836
N1835
N1832
N1831
N1820
N1819
N1812
N1811
1
X
Z
Y
X

56. Connection forces

Nonlinear calculation, Extreme : Global
Selection : All
Class : ULS

Case	Connection	Node	Beams	Rx [kN]	Ry [kN]	Rz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
NC25	FC1	N1831	B1682	**-33.31**	8.03	-337.76	-66.07	**-48.08**	**0.85**
NC24	FC2	N1835	B1684	**34.25**	-18.14	-259.96	-89.83	**46.58**	0.12
NC18	FC2	N1835	B1684	20.85	**-27.34**	-234.23	-42.43	20.80	-0.03
NC26	FC1	N1831	B1682	-24.13	**22.41**	-343.60	-104.45	-26.54	**-0.80**
NC42	FC1	N1831	B1682	-20.98	14.02	**-346.40**	-82.82	-19.83	-0.60
NC22	FC1	N1831	B1682	1.29	-9.06	**9.06**	**22.90**	1.67	-0.18
NC26	FC5	N1841	B1687	-1.36	6.15	-109.17	**-130.60**	-0.51	-0.63

57. Connection forces

Nonlinear calculation, Extreme : Node
Selection : All
Class : ULS

Case	Connection	Node	Beams	Rx [kN]	Ry [kN]	Rz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
NC25	FC1	N1831	B1682	**-33.31**	8.03	-337.76	-66.07	**-48.08**	**0.85**
NC19	FC1	N1831	B1682	**7.05**	-0.04	5.94	0.45	**14.09**	0.10
NC22	FC1	N1831	B1682	1.29	**-9.06**	**9.06**	**22.90**	1.67	-0.18
NC26	FC1	N1831	B1682	-24.13	**22.41**	-343.60	**-104.45**	-26.54	**-0.80**
NC42	FC1	N1831	B1682	-20.98	14.02	**-346.40**	-82.82	-19.83	-0.60
NC20	FC2	N1835	B1684	**-6.21**	-0.38	2.03	6.10	**-11.98**	0.05
NC24	FC2	N1835	B1684	**34.25**	-18.14	-259.96	-89.83	**46.58**	0.12
NC18	FC2	N1835	B1684	20.85	**-27.34**	-234.23	-42.43	20.80	-0.03
NC30	FC2	N1835	B1684	2.74	**6.17**	-23.62	-27.67	3.35	-0.13
NC41	FC2	N1835	B1684	28.42	-17.17	**-264.61**	-95.13	33.75	0.00
NC22	FC2	N1835	B1684	-1.05	-5.16	**3.93**	**22.04**	-1.02	**-0.13**
NC26	FC2	N1835	B1684	28.85	-13.30	-262.05	**-107.06**	34.83	-0.07
NC25	FC2	N1835	B1684	17.96	-20.94	-261.83	-78.52	11.38	**0.25**
NC25	FC3	N1837	B1685	**-9.19**	-6.33	-93.09	-79.49	**-15.93**	**0.58**
NC19	FC3	N1837	B1685	**4.62**	-0.37	-1.40	4.84	**8.71**	0.09
NC18	FC3	N1837	B1685	-4.27	**-11.14**	-85.92	-53.85	-6.79	0.34
NC30	FC3	N1837	B1685	-0.14	**4.49**	-8.61	-19.59	-0.04	-0.11
NC42	FC3	N1837	B1685	0.15	-4.67	**-95.77**	-88.13	2.77	-0.33
NC20	FC3	N1837	B1685	-3.84	-0.34	**0.03**	4.55	-7.16	0.03
NC26	FC3	N1837	B1685	-2.14	-1.41	-93.73	**-98.53**	-1.49	**-0.42**
NC22	FC3	N1837	B1685	0.20	-4.02	-1.05	**17.03**	0.34	-0.11
NC25	FC4	N1839	B1686	**-5.74**	-1.62	-122.13	-101.93	**-11.79**	**0.67**
NC15	FC4	N1839	B1686	**5.81**	-1.94	-108.28	-92.64	**11.25**	-0.32
NC18	FC4	N1839	B1686	-1.25	**-6.95**	-109.71	-73.55	-3.14	0.41
NC30	FC4	N1839	B1686	0.16	**4.89**	-11.28	-21.50	0.32	-0.12
NC41	FC4	N1839	B1686	1.01	0.08	**-122.31**	-110.55	1.94	-0.47
NC19	FC4	N1839	B1686	4.51	-0.61	**1.07**	5.52	8.57	0.09
NC26	FC4	N1839	B1686	1.32	3.62	-120.73	**-122.50**	2.68	**-0.54**
NC22	FC4	N1839	B1686	0.09	-4.54	0.25	**19.10**	0.21	-0.12
NC25	FC5	N1841	B1687	**-7.95**	1.37	-104.89	-111.62	**-14.82**	**0.73**
NC19	FC5	N1841	B1687	**4.26**	-1.22	-4.48	6.89	**8.54**	0.10
NC22	FC5	N1841	B1687	0.09	**-4.95**	-2.08	**19.82**	0.21	-0.13
NC26	FC5	N1841	B1687	-1.36	**6.15**	-109.17	**-130.60**	-0.51	**-0.63**
NC42	FC5	N1841	B1687	0.81	2.79	**-111.80**	-119.15	3.69	-0.52
NC20	FC5	N1841	B1687	-3.74	-1.00	**0.09**	5.85	-7.27	0.02
NC16	FC6	N1811	B1672	**-2.42**	0.33	-49.43	0.00	0.00	0.03
NC28	FC6	N1811	B1672	**1.74**	-0.29	**2.33**	0.00	0.00	0.01
NC27	FC6	N1811	B1672	-0.87	**-1.17**	-39.34	0.00	**0.00**	0.04
NC17	FC6	N1811	B1672	-0.45	**1.23**	-47.50	0.00	0.00	0.02
NC34	FC6	N1811	B1672	-1.81	0.53	**-50.32**	0.00	0.00	0.03
NC24	FC6	N1811	B1672	1.14	-0.27	-37.33	**0.00**	0.00	0.04
NC25	FC6	N1811	B1672	-2.36	-0.30	-40.64	**0.00**	0.00	0.04

Case	Connection	Node	Beams	Rx [kN]	Ry [kN]	Rz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
NC26	FC6	N1811	B1672	-0.38	0.60	-38.68	0.00	**0.00**	0.03
NC39	FC6	N1811	B1672	0.11	1.05	-15.33	0.00	0.00	**-0.01**
NC42	FC6	N1811	B1672	0.59	-0.48	-33.32	0.00	0.00	**0.04**
NC25	FC7	N1819	B1676	**-2.97**	-0.23	-81.29	**0.00**	0.00	**0.05**
NC19	FC7	N1819	B1676	**1.35**	0.24	5.60	0.00	0.00	0.00
NC18	FC7	N1819	B1676	-1.26	**-3.21**	-70.02	0.00	0.00	0.03
NC4	FC7	N1819	B1676	-0.53	**3.40**	-78.29	0.00	0.00	0.02
NC41	FC7	N1819	B1676	-0.70	0.85	**-83.54**	0.00	0.00	0.04
NC22	FC7	N1819	B1676	-0.27	-2.15	**6.67**	0.00	0.00	-0.01
NC24	FC7	N1819	B1676	0.97	0.72	-81.89	**0.00**	0.00	0.04
NC26	FC7	N1819	B1676	-0.61	3.32	-83.05	0.00	**0.00**	0.03
NC21	FC7	N1819	B1676	-0.16	2.63	4.53	0.00	**0.00**	**-0.02**

58. Connection forces

Linear calculation, Extreme : Global
Selection : All
Class : ULS-potres

Case	Connection	Node	Beams	Rx [kN]	Ry [kN]	Rz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
potres 2/3	FC1	N1831	B1682	**-43.92**	28.90	-47.87	-82.57	**-97.35**	0.07
potres 3/5	FC2	N1835	B1684	**44.30**	-24.20	-58.22	75.55	**96.97**	-0.04
potres 6/2	FC1	N1831	B1682	14.99	**-38.86**	**-79.22**	**101.11**	40.59	**-0.09**
potres 7/1	FC1	N1831	B1682	-22.85	**42.13**	-41.37	**-118.64**	-49.77	**0.11**
potres 3/5	FC5	N1841	B1687	24.77	-13.14	**-1.91**	48.52	57.88	-0.03

59. Connection forces

Linear calculation, Extreme : Node
Selection : All
Class : ULS-potres

Case	Connection	Node	Beams	Rx [kN]	Ry [kN]	Rz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
potres 2/3	FC1	N1831	B1682	**-43.92**	28.90	-47.87	-82.57	**-97.35**	0.07
potres 3/5	FC1	N1831	B1682	**36.06**	-25.63	-72.71	65.04	**88.17**	-0.06
potres 6/2	FC1	N1831	B1682	14.99	**-38.86**	**-79.22**	**101.11**	40.59	**-0.09**
potres 7/1	FC1	N1831	B1682	-22.85	**42.13**	**-41.37**	**-118.64**	-49.77	**0.11**
potres 2/3	FC2	N1835	B1684	**-35.39**	18.24	**-33.16**	-92.74	**-86.91**	0.07
potres 3/5	FC2	N1835	B1684	**44.30**	-24.20	**-58.22**	75.55	**96.97**	-0.04
potres 6/2	FC2	N1835	B1684	25.93	**-29.85**	-56.27	**96.51**	52.71	**-0.05**
potres 7/1	FC2	N1835	B1684	-17.02	**23.89**	-35.11	**-113.70**	-42.66	**0.08**
potres 2/3	FC3	N1837	B1685	**-27.70**	9.07	**-22.70**	-57.81	**-59.79**	0.05
potres 3/5	FC3	N1837	B1685	**26.70**	-10.52	**-10.79**	38.92	**58.53**	-0.04
potres 6/2	FC3	N1837	B1685	12.93	**-11.59**	-11.18	**43.69**	28.72	**-0.04**
potres 7/1	FC3	N1837	B1685	-13.93	**10.14**	-22.30	**-62.57**	-29.98	**0.05**
potres 2/3	FC4	N1839	B1686	**-26.95**	**11.16**	**-10.41**	**-66.50**	**-58.80**	0.05
potres 3/5	FC4	N1839	B1686	**27.08**	**-11.34**	**-32.06**	**41.92**	**58.90**	-0.04
potres 6/2	FC4	N1839	B1686	13.52	-11.14	-28.74	39.83	29.36	**-0.04**
potres 7/1	FC4	N1839	B1686	-13.38	10.96	-13.73	-64.42	-29.27	**0.05**
potres 2/3	FC5	N1841	B1687	**-25.52**	**12.98**	**-39.10**	**-74.40**	**-58.85**	0.05
potres 3/5	FC5	N1841	B1687	**24.77**	**-13.14**	**-1.91**	**48.52**	**57.88**	-0.03
potres 6/2	FC5	N1841	B1687	12.05	-12.25	-9.11	42.41	28.45	**-0.04**
potres 7/1	FC5	N1841	B1687	-12.80	12.09	-31.90	-68.28	-29.43	**0.06**
potres 2/3	FC6	N1811	B1672	**-6.14**	-0.16	**-3.63**	0.00	**0.00**	0.04
potres 3/5	FC6	N1811	B1672	**6.16**	0.17	**-26.24**	0.00	**0.00**	-0.04
potres 7/1	FC6	N1811	B1672	-3.12	**-0.36**	-9.07	**0.00**	0.00	**0.07**
potres 6/2	FC6	N1811	B1672	3.14	**0.37**	-20.79	**0.00**	0.00	**-0.06**
potres 2/3	FC7	N1819	B1676	**-7.69**	4.55	-16.82	0.00	**0.00**	0.04
potres 3/5	FC7	N1819	B1676	**6.89**	-4.76	-7.76	0.00	**0.00**	-0.03
potres 6/2	FC7	N1819	B1676	3.32	**-8.70**	**-5.57**	**0.00**	0.00	**-0.06**
potres 7/1	FC7	N1819	B1676	-4.12	**8.49**	**-19.02**	**0.00**	0.00	**0.07**

5. AB TEMELJI

Del tega načrta so tudi novi AB temelji, ki so izven območja podpiranja jeklenih stebrov z AB konstrukcjo podhoda

V okviru analize je bi upoštevan vertikalni modul podajnosti tal 45000 kN/m^3.

Vodneprepustni beton
C30/37, PV-II, XC2, XD3-odporen proti solem

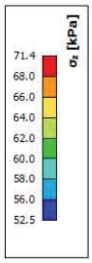
Armatura S500B

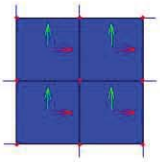
Kontaktne napetosti v temeljnih tleh

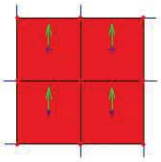
Maksimalne kontaktne napetosti R_d/A potd temelji pri ULS (faktrorirana obtežba) in pri potresnih obtežnih kombinacijah znašajo največ 285 kN/m^2 in ne presegajo maksimalnih dovoljenih napetosti 370 kN/m^2.

Temelji z členkasto priključenimi stebri

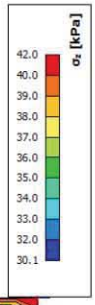
2D contact stresses
Values: σ_z
Nonlinear calculation
Class: ULS
Extreme: Global
Selection: All
Location: In nodes avg.. System: LCS
mesh element

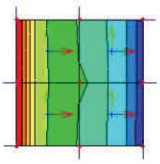


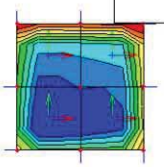




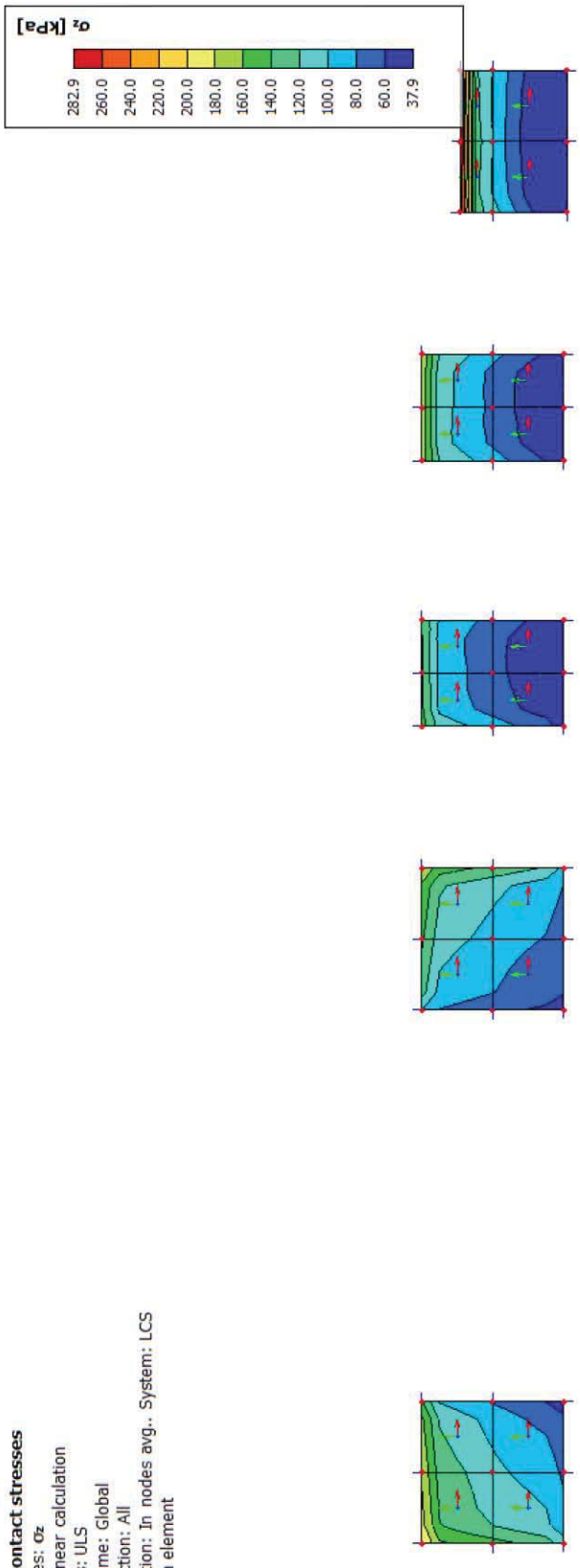
2D contact stresses
Values: σ_z
Linear calculation
Class: ULS-potres
Extreme: Global
Selection: All
Location: In nodes avg.. System: LCS
mesh element

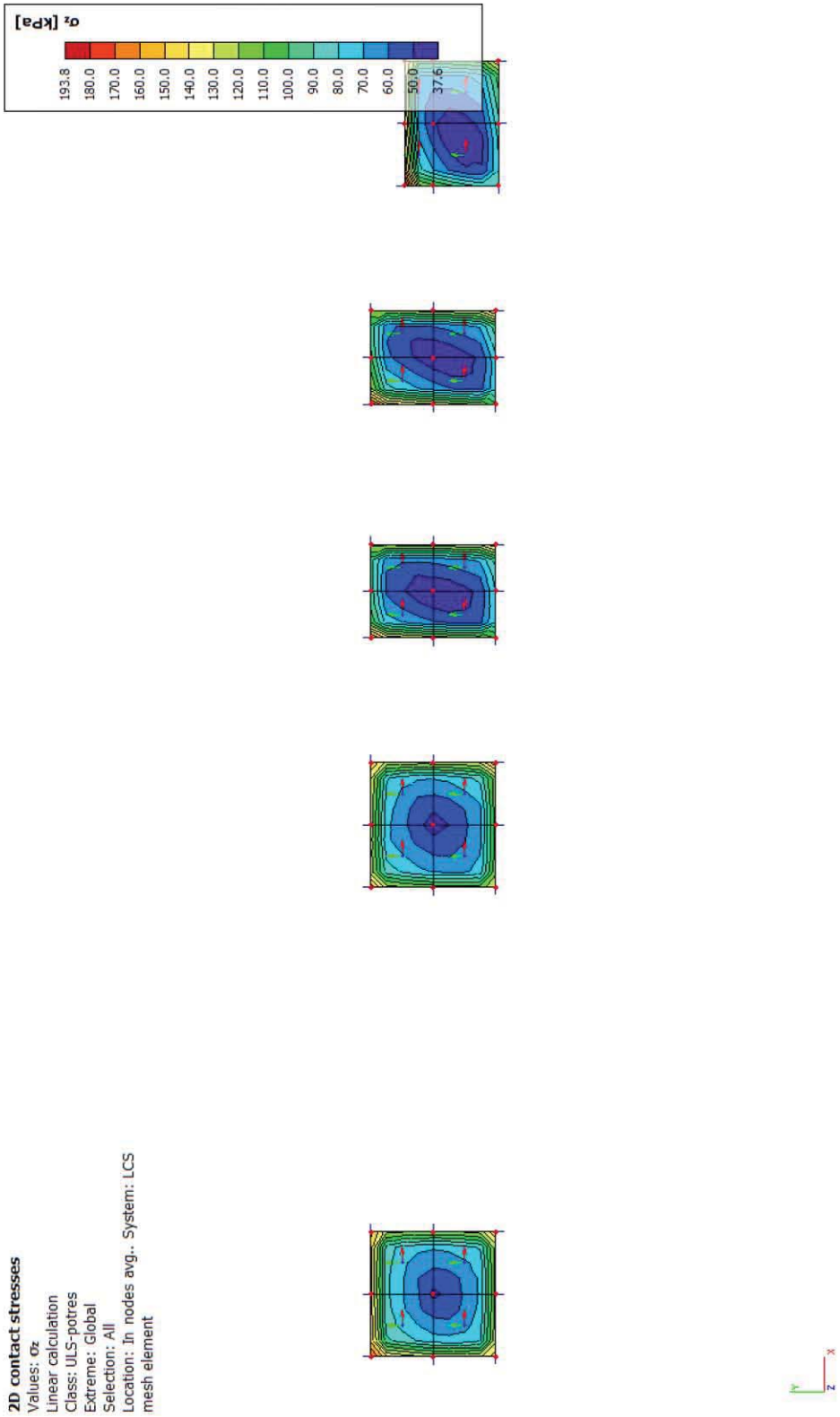






Temelji z vpetimi stebri

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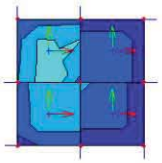
193.8
180.0
170.0
160.0
150.0
140.0
130.0
120.0
110.0
100.0
90.0
80.0
70.0
60.0
50.0
37.6
2D contact stresses
Values: σz
Linear calculation
Class: ULS-potres
Extreme: Global
Selection: All
Location: In nodes avg.. System: LCS
mesh element

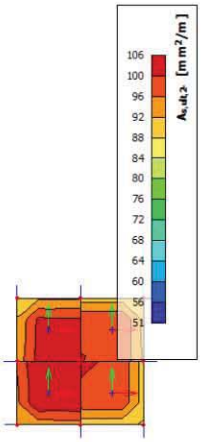
Armatura

Temelji z členkasto priključenimi stebri

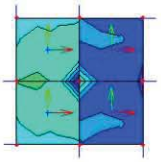
1.5 x 1.5 x 0.8 m

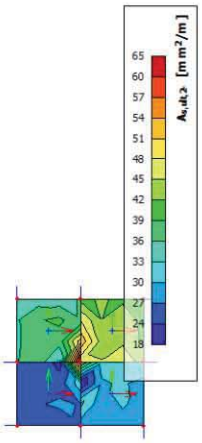
Reinforcement design (ULS+SLS)
Values: $A_{s,ult,2}$-
Nonlinear calculation
Class: ULS
Extreme: Global
Selection: All
Location: In nodes avg. on macro.
System: LCS mesh element



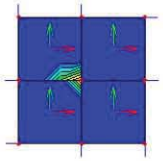


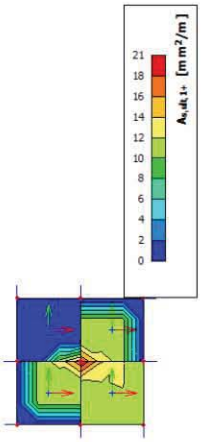
Reinforcement design (ULS+SLS)
Values: $A_{s,ult,2}$-
Linear calculation
Class: ULS-potres
Extreme: Global
Selection: All
Location: In nodes avg. on macro.
System: LCS mesh element



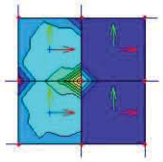


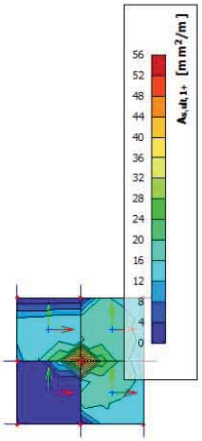
Reinforcement design (ULS+SLS)
Values: $A_{s,ult,1+}$
Nonlinear calculation
Class: ULS
Extreme: Global
Selection: All
Location: In nodes avg. on macro.
System: LCS mesh element



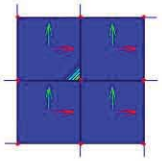


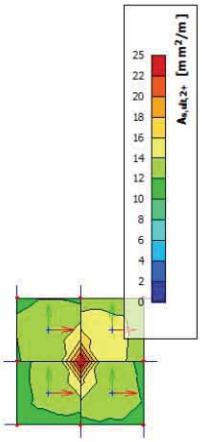
Reinforcement design (ULS+SLS)
Values: $A_{s,ult,1+}$
Linear calculation
Class: ULS-potres
Extreme: Global
Selection: All
Location: In nodes avg. on macro.
System: LCS mesh element



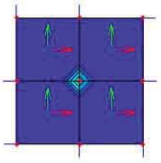


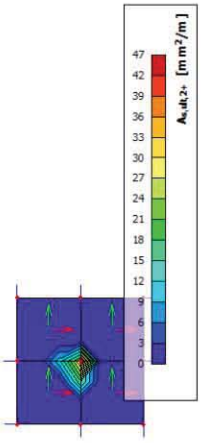
Reinforcement design (ULS+SLS)
Values: $A_{s,ult,2+}$
Nonlinear calculation
Class: ULS
Extreme: Global
Selection: All
Location: In nodes avg. on macro.
System: LCS mesh element





Reinforcement design (ULS+SLS)
Values: $A_{s,ult,2+}$
Linear calculation
Class: ULS-potres
Extreme: Global
Selection: All
Location: In nodes avg. on macro.
System: LCS mesh element





Izberem armaturo zgoraj in spodaj v obeh smereh +/- ϕ14/15cm, $A_{s,dej}$ = 10.2 cm²/m

Temelji z vpetimi stebri

- Temeljna peta

2.4 x 2.4 x 0.5 m KC260
2.4 x 1.8 x 0.5 m KC220

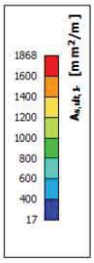
izberem armaturo zgoraj in spodaj v obeh smereh +/- ϕ16/15cm, $A_{s,dej}$ = 13.4 cm^2/m

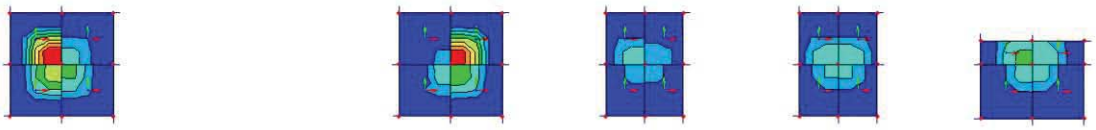
+

lokalno zgoraj in spodaj +/- ϕ14/15cm, $A_{s,dej}$ = 10.2 cm^2/m

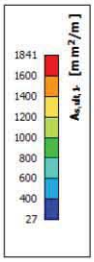
skupaj lokalno $A_{s,dej}$ = 23.6 cm^2/m

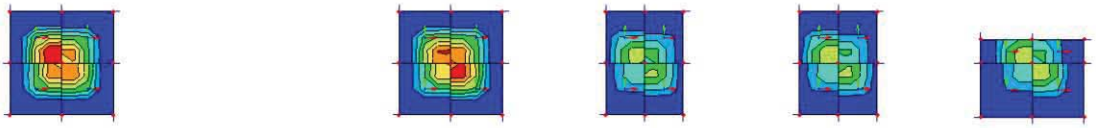
Reinforcement design (ULS+SLS)
Values: $A_{s,ult,1}$-
Nonlinear calculation
Class: ULS
Extreme: Global
Selection: All
Location: In nodes avg. on macro.
System: LCS mesh element



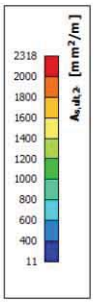


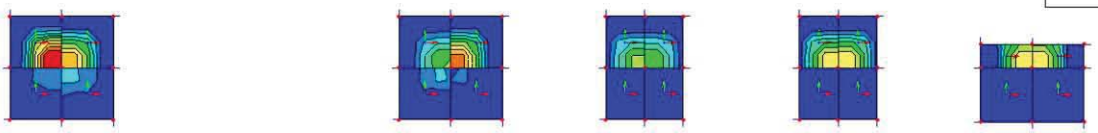
Reinforcement design (ULS+SLS)
Values: $A_{s,ult,1}$-
Linear calculation
Class: ULS-potres
Extreme: Global
Selection: All
Location: In nodes avg. on macro.
System: LCS mesh element



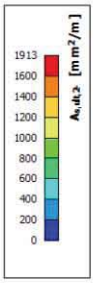


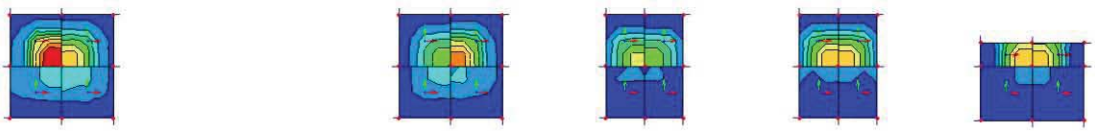
Reinforcement design (ULS+SLS)
Values: $A_{s,ult,2}$-
Nonlinear calculation
Class: ULS
Extreme: Global
Selection: All
Location: In nodes avg. on macro.
System: LCS mesh element



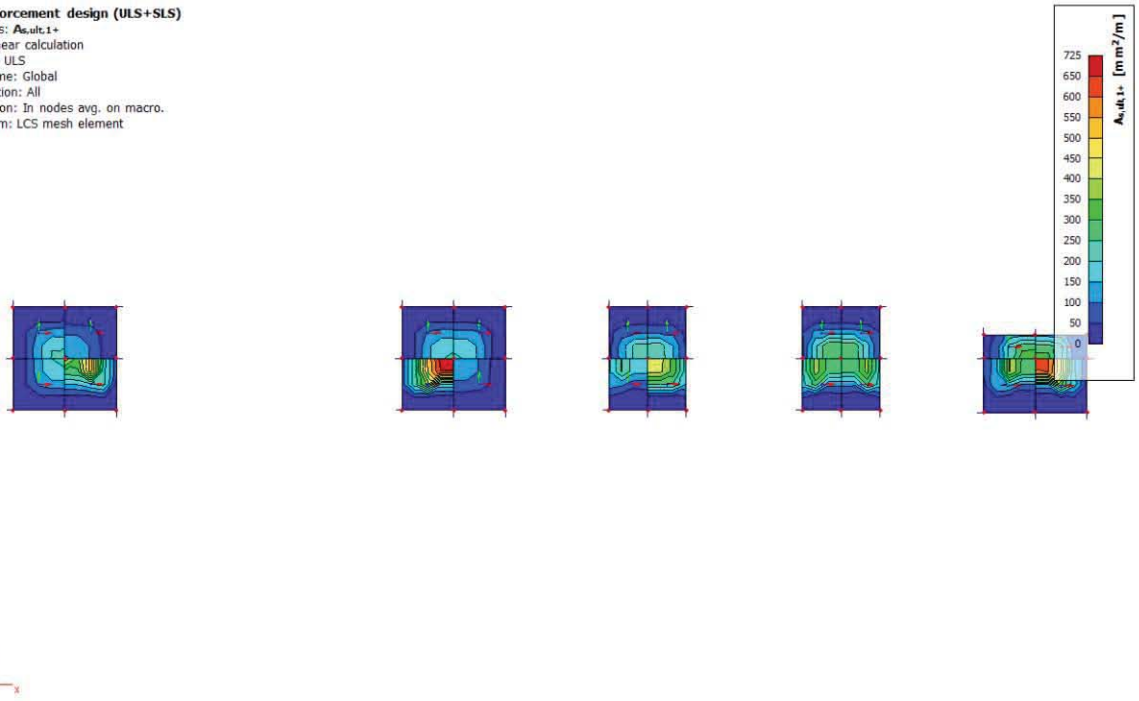


Reinforcement design (ULS+SLS)
Values: $A_{s,ult,2}$-
Linear calculation
Class: ULS-temelji
Extreme: Global
Selection: All
Location: In nodes avg. on macro.
System: LCS mesh element

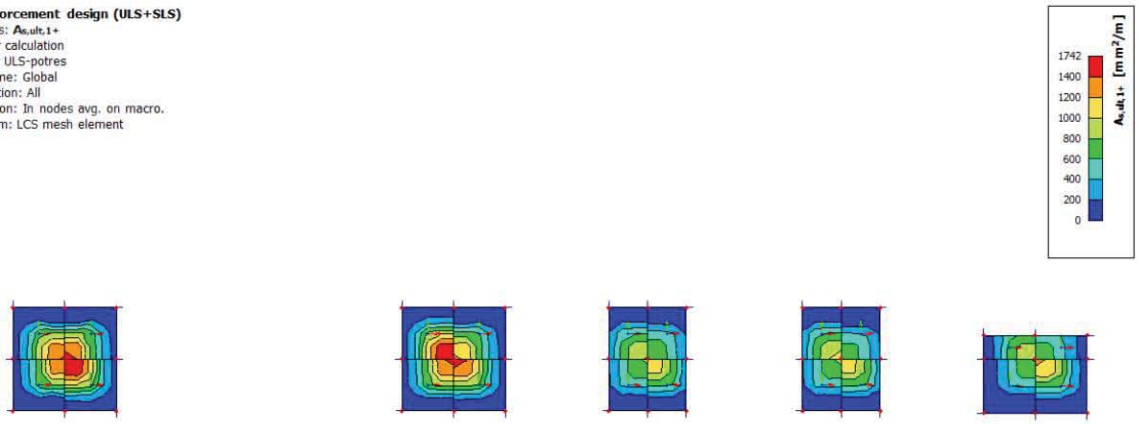




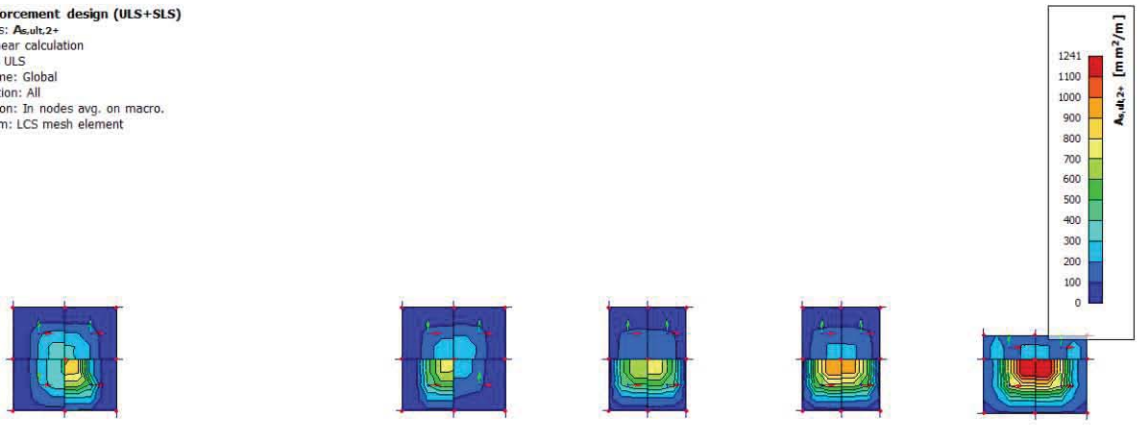
Reinforcement design (ULS+SLS)
Values: $A_{s,ult,1+}$
Nonlinear calculation
Class: ULS
Extreme: Global
Selection: All
Location: In nodes avg. on macro.
System: LCS mesh element



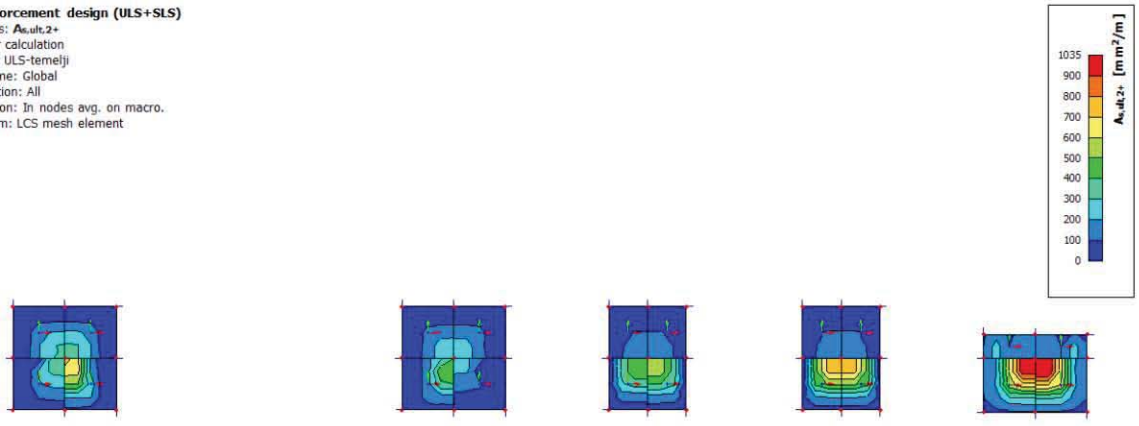
Reinforcement design (ULS+SLS)
Values: $A_{s,ult,1+}$
Linear calculation
Class: ULS-potres
Extreme: Global
Selection: All
Location: In nodes avg. on macro.
System: LCS mesh element



Reinforcement design (ULS+SLS)
Values: $A_{s,ult,2+}$
Nonlinear calculation
Class: ULS
Extreme: Global
Selection: All
Location: In nodes avg. on macro.
System: LCS mesh element

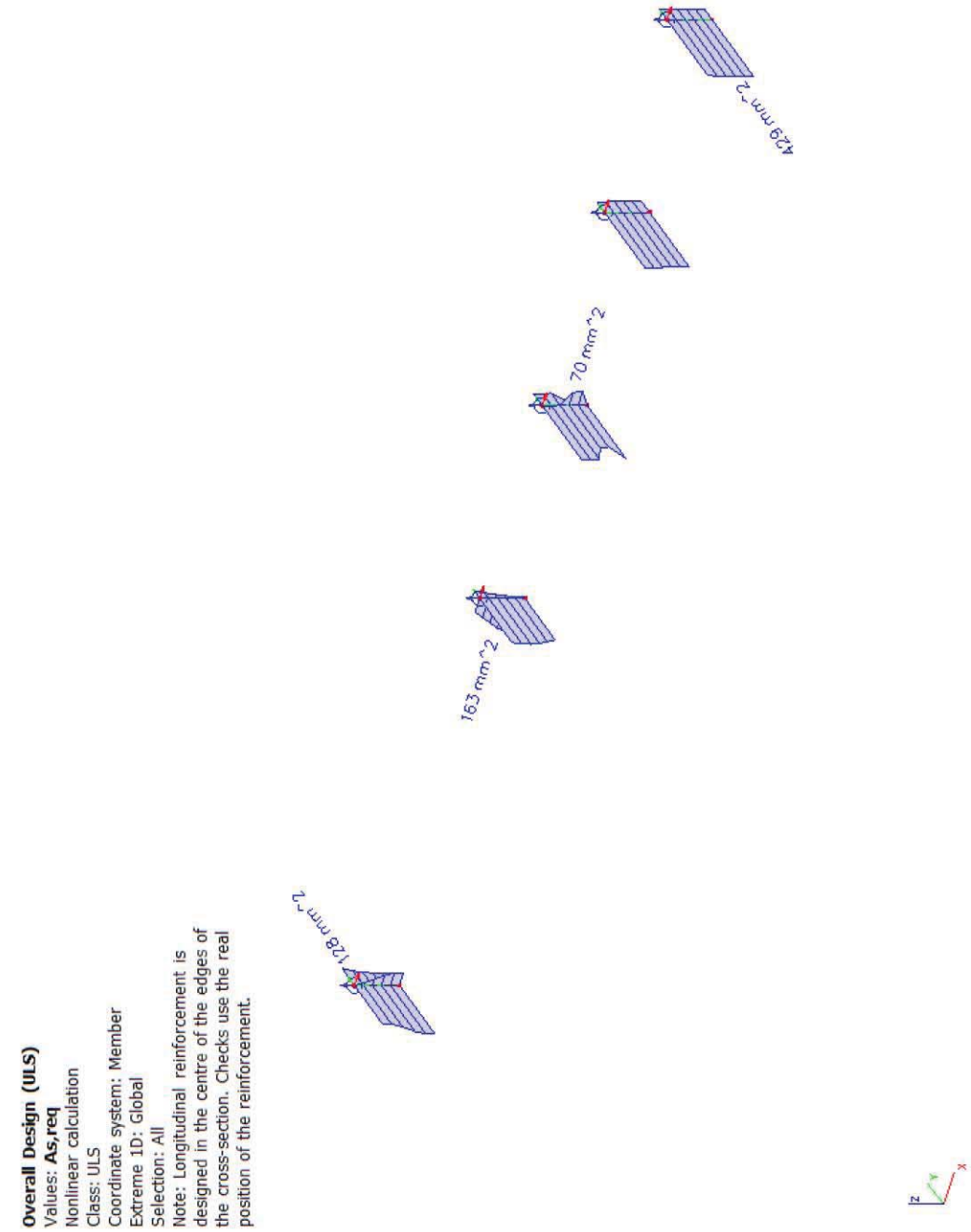


Reinforcement design (ULS+SLS)
Values: $A_{s,ult,2+}$
Linear calculation
Class: ULS-temelji
Extreme: Global
Selection: All
Location: In nodes avg. on macro.
System: LCS mesh element



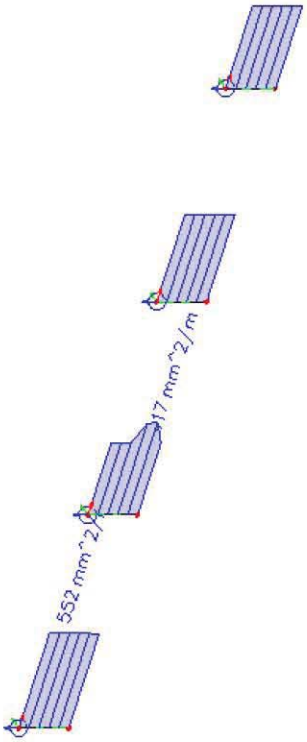
- Temeljni nastavki

60x60x75 cm

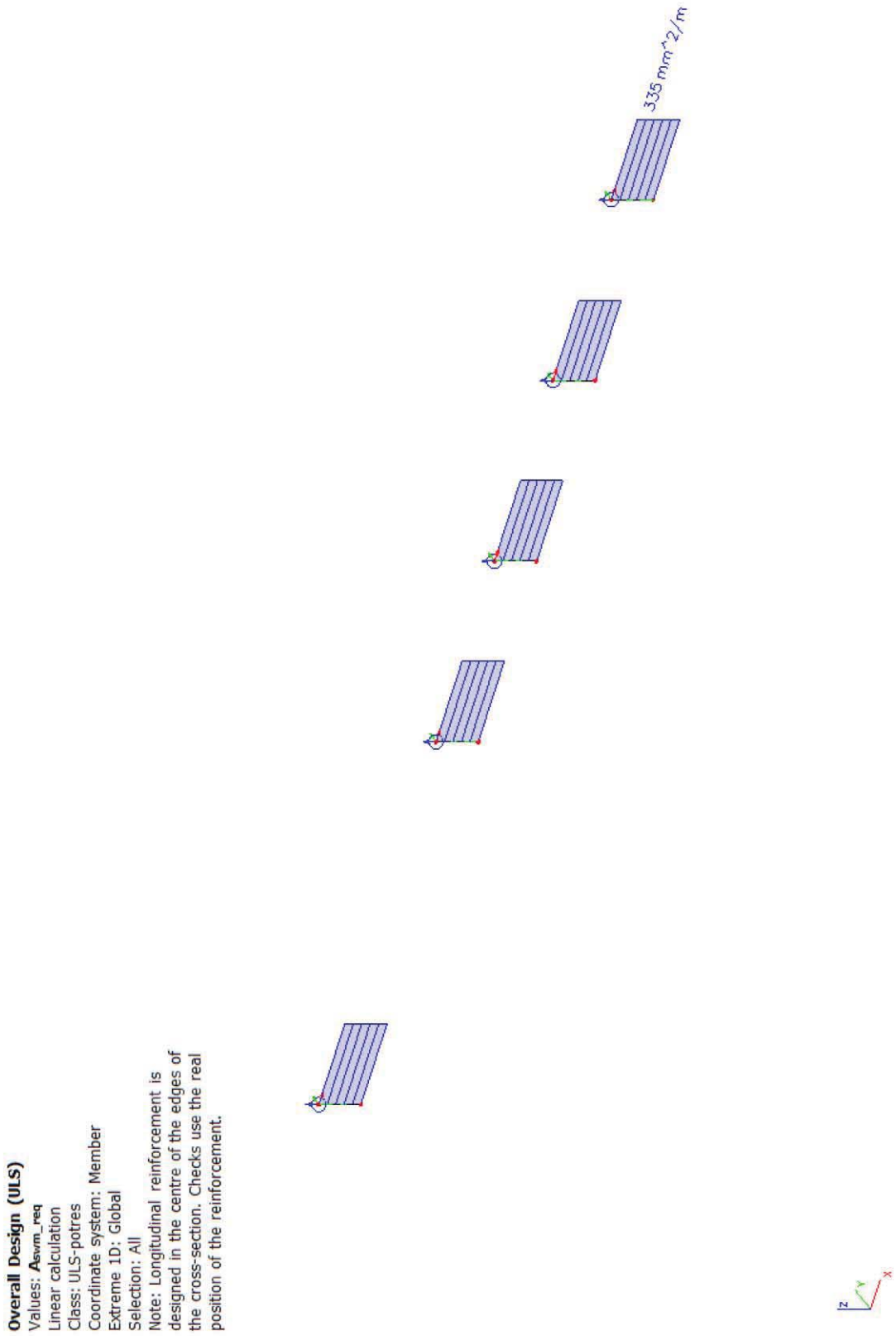


Izberem armaturo na vsaki stranici 16ϕ14 po obodu.

To je na eni stranici 5ϕ14, $A_{s,dej}$ = 7.7 cm^2/eni stranici.



Overall Design (ULS)
Values: A_{swm_req}
Nonlinear calculation
Class: ULS
Coordinate system: Member
Extreme 1D: Global
Selection: All
Note: Longitudinal reinforcement is designed in the centre of the edges of the cross-section. Checks use the real position of the reinforcement.



Izberem dvostrižno streme ϕ12/20, $A_{sw,dej}$ = 11.3 cm^2/m

6. LESENA KRITINA

OSB3 vodoodporna plošča D=25mm

L = cca 1.0 m , nosilec preko dveh ali več polj (2xL, 3xL,...)

$q_{Ed,MSU}$ = 0.55+1.20 = 1.75 kN/m^2

AGEPAN® OSB/3 | TECHNISCHE DATEN

Zulässige Flächenlast q_{max} [kN/m²]
Zweifeldträger beidseitig belastet, Durchbiegungsbeschränkung l/300

	12	15	18	22	25
l (m)			Dicke (in mm)		
0,20	22,01	34,41	47,41	70,85	91,52
0,25	14,06	21,99	30,30	45,30	58,52
0,30	9,74	15,24	21,01	31,42	40,59
0,35	7,14	11,18	15,41	23,05	29,78
0,40	5,45	8,54	11,77	17,61	22,77
0,45	4,22	6,72	9,28	13,89	17,96
0,50	3,06	5,43	7,50	11,23	14,52
0,55	2,28	4,47	6,18	9,25	11,97
0,60	1,74	3,45	5,17	7,76	10,04
0,625	1,53	3,04	4,76	7,14	9,24
0,65	1,35	2,69	4,39	6,59	8,53
0,70	1,07	2,14	3,74	5,66	7,33
0,75	0,86	1,72	3,02	4,92	6,37
0,80	0,69	1,40	2,47	4,30	5,58
0,833	0,60	1,23	2,18	3,96	5,13
0,90	0,46	0,96	1,70	3,17	4,38
0,95	0,38	0,80	1,43	2,68	3,91
1,00	0,32	0,67	1,21	2,28	3,39

Max. zul. Flächenlast q_{max} gemäß Spannungsnachweis/Gebrauchstauglichkeit l = vorh. Unterstützungsabstand

Pri L=1.0m q_{dop} = 3.39 kN/m² pri L/300

Pri obtežbi kopičenja snega so dovoljeni večji upogibki (L/200)

$q_{Ed,MSU,\ kopicenje}$ = 0.55+5 = 5.55 kN/m^2

L/200 $q_{dop,pomiki} = 3.39x(300^4/200^4)$ = 17.1 kN/m²

svetli razmak med nosilci L= 0.86 m q_{dop} = 5.0 kN/m² pri L/300 ≈ **5.55 kN/m^2** ≈ OK
dovoljeni večji upogibki

7. DETAJLI

7.1. Sidranje KC260/12.5 in KC220/12.5

Vpeto na nov točkovni temelj

8xM30 8.8

maksimalne vrednosti

natezna sila na eno sidro

N = 13/8+(9728+11815)/28/3 = 260 kN

prečna sila na eno sidro

Vx = 50/8 = 7 kN
Vy = 50/8 = 7 kN

kontrola tlačnih kontaktnih napetosti betona:

$f_{j,d} = \alpha\beta f_{cd}$ = 1.5×2/3×2.5/1.5 = 1.66 kN/cm^2

upoštevam ugoden vpliv lokalne koncentracije napetosti α = 1.5

σ = 400/(46×46)+(9728+11815)/(46×46^2/6) = 1.52 kN/cm^2 < 1.66 kN/cm^2 ... OK

Detail S1: Control of anchoring rods

KC260/12.5, KC220/12.5, vpeto | SŽ PP Litija | Nadstrešek 1

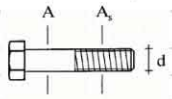
Anchors		d (cm)	d_0 (cm)	A_s (cm^2)	A (cm^2)
	M30	3	3.3	5.61	7.07
grade		8.8			
f_{ub} (kN/cm^2)		80			
f_{yb} (kN/cm^2)		64			
num. of anchors		1	obravnavam eno sidro		

Concrete: f_{ck} (kN/cm^2) = 2.50; C25/30 $f_{ctk\,0,05}$ (kN/cm^2) = 0.18

Anchoring plate: t (cm) = 3.00; S235 f_u (kN/cm^2) = 36.0

k= 1 | k=0,85 carved later | k=1,0 standard manufactured bolts, rods | γ_{M2}= 1.25 | γ_C= 1.5

share plane: 1 | 1 - share plane A_S | 2 - share plane A



factor: 0.6 | 0,6 for shear plane A | 0,6 for ductility anchors (4.6, 5.6, 8.8) - share plane A_S | 0,5 for nonductility anchors (4.8, 5.8, 6.8, 10.9) - share plane A_S

Shear resistance: $F_{v,Rd} = k*0,6(0,5)*f_{ub}*A_s(A)/\gamma_{M2}$ | $F_{v,Ed} / F_{v,Rd} < 1,0$ | $F_{Rv,Ed} = (Fx^2+Fy^2)^{0,5}$

$F_{v,Rd}$ = 215.4 kN

$F_{vb,Rd} = \alpha_b*f_{ub}*A_s/\gamma_{M2}$ | $\alpha_b = 0,44 - 0,0003*f_{yb}$

$F_{vb,Rd}$ = 89.0 kN

min $F_{v,Rd}$ = 89.0 kN

Tension resistance $F_{t,Rd} = k*0,9*f_{ub}*A_s/\gamma_{M2}$ | $F_{t,Ed} / F_{t,Rd} < 1,0$ | $(F_{v,Ed} / F_{v,Rd})+(F_{t,Ed} / (1,4\ F_{t,Rd})) < 1,0$

$F_{t,Rd}$ = 323.1 kN

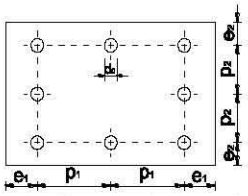
Bearing resistance $F_{b,Rd} = k_1*\alpha_b*f_u*d*t/\gamma_{M2}$ | $F_{b,Ed} / F_{b,Rd} < 1,0$

$F_{b,Rd}$ = 414.7 kN

		usual values		I choose
e_1=2*d_0		e_1 (cm) =	6.60	e_1 (cm) = 5.00
p_1=3*d_0		p_1 (cm) =	9.90	p_1 (cm) = 16.00
e_2=1,5*d_0		e_2 (cm) =	4.95	e_2 (cm) = 5.00
p_2=3*d_0		p_2 (cm) =	9.90	p_2 (cm) = 16.00

		in loading direction			orthogonal to loading direction			
outter anchor	→	α_d=e_1/3d_0	$\alpha_{d,outter}$=	0.51	k_1=min(2,8*e_2/d_0-1,7≤2,5; 1,4*p_2/d_0 -1,7≤2,	$k_{1,outter}$=	2.50	
inner anchor	→	α_d=p_1/3d_0 - 1/4	$\alpha_{d,inner}$=	1.37	k_1=1,4*p_2/d_0-1,7≤ 2,5	$k_{1,inner}$=	2.50	
			α_d=	0.64	α_b=min(α_d ; f_{ub}/f_u ; 1,0)	α_b= 0.64	k_1=	2.50

loading direction ← →



Anchoring length: 2 / 2

$l_{b,req.} = \alpha_1 * F_{t,Ed} / (\pi * d * f_{bd})$ η_1 = 1…good anchoring conditions η_2 = 1 d ≤ 32 mm

η_1 = 1 0,7…poor anchoring conditions $\mu_2 = (132-d)/100$ η_2 = 1.02 d > 32 mm

η_2 = 1

α_1 = 1 α_1 = 0,7...bent rods or additional anchoring plates

1...straight rod

ribbed rebar (threaded rods) … EC2

$f_{bd} = 2,25 * \eta_1 * \eta_2 * f_{ctd}$ f_{bd} (kN/cm^2) = 0.27 $f_{ctd} = \alpha_{ct} * f_{ctk,0,05} / \gamma_c$

α_{ct} = 1.00

plain rods … Tabel 5.3 or Equation 5.1, ENV 1992-1-1, for plain (smooth) rebar

f_{bd} (MPa) = $(0,36 * (f_{ck})^{0,5}) / \gamma_c$ ...(f_{ck} in f_{bd} v MPa) f_{bd} (kN/cm^2) = 0.12

I choose f_{bd} (kN/cm^2) = 0.27 threaded rods with thread along the entire lenght

obremenitve na eno sidro

(+) tension

F_X	F_Y	F_Z	$F_{Rv,Ed}$	$F_{v,Ed}$	$F_{v,Ed}/F_{v,Rd}$	$F_{b,Ed}/F_{b,Rd}$	$F_{t,Ed}$	$F_{t,Ed}/F_{t,Rd}$	inter.	$l_{b,req.}$ (cm)
10.0	10.0	260.0	14.1	14.1	0.16	0.03	260.0	0.80	0.73	102
0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.0	0.00	0.00	0
0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.0	0.00	0.00	0
0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.0	0.00	0.00	0
(kN)				max.	0.16	0.03		0.80	0.73	102

7.2. Sidranje KC220/10 in KC220/8

Členkasti priključek na območju obstoječe konstrukcije podhoda/stopnišča in nova temelja

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Profis Anchor 2.8.8

Company:		Page:	1
Specifier:		Project:	Litija-Nadstreški
Address:		Fastening Point:	
Phone I Fax:	|	Date:	15/04/2021
E-Mail:			

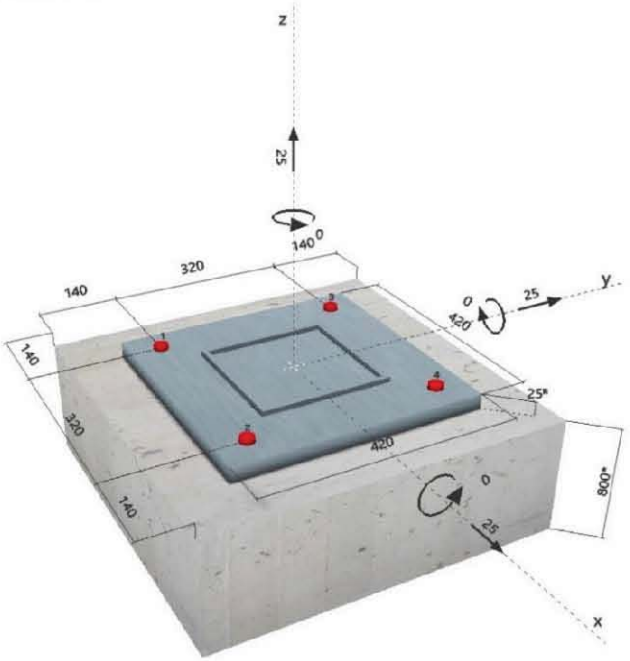
Specifier's comments: Sidranje KC220/220 - clenkast prikljucek - AB konstrukcija podhoda

1 Input data

Anchor type and size:	**HIT-HY 150 MAX + HIT-V (5.8) M24**
Return period (service life in years):	50
Effective embedment depth:	$h_{ef,act}$ = 300 mm ($h_{ef,limit}$ = - mm)
Material:	5.8
Approval No.:	ETA 08/0352
Issued I Valid:	25/06/2018 | -
Proof:	Design method ETAG BOND (EOTA TR 029)
Stand-off installation:	e_b = 0 mm (no stand-off); t = 25 mm
Baseplate:	l_x x l_y x t = 420 mm x 420 mm x 25 mm; (Recommended plate thickness: not calculated
Profile:	Square hollow, 220 x 220 x 8,8; (L x W x T) = 220 mm x 220 mm x 9 mm
Base material:	uncracked concrete, C25/30, $f_{c,cube}$ = 30.00 N/mm²; h = 800 mm, Temp. short/long: 40/24 °C
Installation:	**hammer drilled hole, Installation condition: Dry**
Reinforcement:	Reinforcement spacing < 150 mm (any Ø) or < 100 mm (Ø <= 10 mm) with longitudinal edge reinforcement d >= 12 + close mesh (stirrups, hangers) s <= 100 Reinforcement to control splitting according to EOTA TR 029, 5.2.2.6 present.

R - The anchor calculation is based on a rigid baseplate assumption.

Geometry [mm] & Loading [kN, kNm]



Input data and results must be checked for agreement with the existing conditions and for plausibility!
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Company:		Page:	2
Specifier:		Project:	Litija-Nadstreški
Address:		Fastening Point:	
Phone I Fax:	|	Date:	15/04/2021
E-Mail:			

2 Proof I Utilisation (Governing Cases)

		Design values [kN]		Utilisation	
Loading	Proof	Load	Capacity	β_N / β_V [%]	Status
Tension	Concrete cone failure	25.000	137.479	19 / -	OK
Shear	Concrete edge failure in direction x+	27.951	48.057	- / 59	OK

Loading	β_N	β_V	α	Utilisation $\beta_{N,V}$ [%]	Status
Combined tension and shear loads	0.182	0.582	1.5	53	OK

3 Warnings

- Please consider all details and hints/warnings given in the detailed report!

Fastening meets the design criteria!

4 Remarks; Your Cooperation Duties

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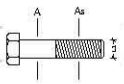
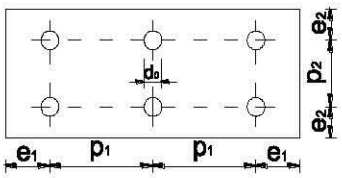
7.3. Spoj stebra KC260/HEB260

8xM30 HV 10.9

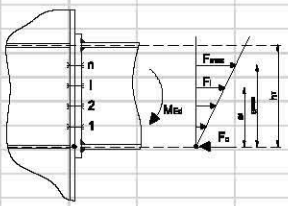
Detail D1.1: Bolted moment resistance joint 1 / 2

KC260/HEB260			SŽ PP Litija			Nadstrešek 1		**Plate**	
Bolts		d(cm)	d_0 (cm)	A_s (cm^2)	A (cm^2)			grade	235
	M30	3.0	3.3	5.61	7.07			s (cm)=	3.0
grade		10.9						f_u(kN/cm^2)=	36
f_{ub}(kN/cm^2)		100							
shear plane		1	1 - share plane A_S					γ_{M0}=	1.00
			2 - share plane A					γ_{M2}=	1.25
factor		0.5	0,6 for shear plane A						
			0,6 for ductility anchors (4.6, 5.6, 8.8) - share plane A_S						
			0,5 for nonductility anchors (4.8, 5.8, 6.8, 10.9) - share plane A_S						
Shear resistance:		$F_{v,Rd} = 0{,}6(0{,}5)*f_{ub}*A_s(A)/\gamma_{M2}$				$F_{v,Ed} / F_{v,Rd} < 1{,}0$			
		$F_{v,Rd}$ =	224.4	kN					
							interaction V - M		
Tension resistance		$F_{t,Rd} = 0{,}9*f_{ub}*A_s/\gamma_{M2}$			$F_{t,Ed} / F_{t,Rd} < 1{,}0$		$(F_{v,Ed} / F_{v,Rd})+(F_{t,Ed} / F_{t,Rd})/1{,}4 < 1{,}0$		
		$F_{t,Rd}$ =	403.9	kN					
Bearing resistance		$F_{b,Rd} = k_1*\alpha_b*f_u*d*t/\gamma_{M2}$			$F_{b,Ed} / F_{b,Rd} < 1{,}0$				
		$F_{b,Rd}$ =	330.5	kN					
		usual values				I choose			
	e_1=2*d_o	e_1 (cm)=	6.60		e_1 (cm)=	5.00			
	p_1=3*d_o	p_1 (cm)=	9.90		p_1 (cm)=	9.00			
	e_2=1,5*d_o	e_2 (cm)=	4.95		e_2 (cm)=	5.00			
	p_2=3*d_o	p_2 (cm)=	9.90		p_2 (cm)=	9.00			
		in loading direction				orthogonal to loading direction			
outter anch	→	α_d=e_1/3d_o		$\alpha_{d,outter}$=	0.51	k_1=min(2,8*e_2/d_o-1,7≤2,5; 1,4*p_2/d_o-1,7≤2,5)		$k_{1,outter}$=	2.50
inner ancho	→	α_d=p_1/3d_o - 1/4		$\alpha_{d,inner}$=	0.66	k_1=1,4*p_2/d_o-1,7≤ 2,5		$k_{1,inner}$=	2.50
				α_d=	0.51	α_b=min(α_d ; f_{ub}/f_u ; 1,0)	α_b= 0.51	k_1=	2.50

load direction ← →



num. of bolts for transfering tension and shear laod					$n_{vij,N,V}$=	8					2 / 2
Connection load					load of maximal loaded bolt						
$M_{Ed,y}$=	16500	kNcm			$F_{t,Ed,M}$=	174.60	kN		check		
N_{Ed} =	50	kN	(+) tension		$F_{t,Ed,N}$=	6.25	kN		$F_{t,Ed\ My+N}/F_{t,Rd}$=	0.448	OK
$V_{Ed,z}$ =	50	kN			$F_{v,Ed}$=	6.25	kN		$F_{v,Ed}/F_{v,Rd}$=	0.028	OK
									interaction =	0.348	OK
									$F_{v,Ed}/F_{b,Rd}$=	0.019	OK
num. of bolts in line		$n_{vij,v\ vrsti}$ =	2	(for 4 bolts in line w e take 3,6 "due to prying force")							
lines	a_i (cm)	a_i^2 (cm^2)									
1	5.50	30.3									
2	20.50	420.3									
3	34.00	1156.0									
4	0.0	0.0									
5	0.0	0.0									
6	0.0	0.0									
7	0.0	0.0									
8	0.0	0.0									
9	0.0	0.0									
10	0.0	0.0									
11	0.0	0.0									
12	0.0	0.0									
Σa_i^2=	1606.5	cm^2									
a_{max}=	34	cm									
Maximum bending load capacity of bolts											
$M_{Rd,vija}$ =	38170	kNcm									
Obojstranski koti zvari				a = 0.6 x t		polnonosilni					
dvosni upogib		M1=	16500								
		1	x	0.448							
		M2=	10500								
		1	x	0.285							
		vsota		0.733	OK						



7.4. Spoj stebra KC220/HEA260

8xM24 HV 10.9

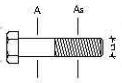
Detail D1.2: Bolted moment resistance joint

1 / 2

KC220/HEA260 | SŽ PP Litija | Nadstrešek 1 in 4 | Plate

Bolts		d(cm)	d_0(cm)	A_s(cm^2)	A(cm^2)
	M24	2.4	2.6	3.53	4.52

grade		10.9	
f_{ub}(kN/cm^2)		100	
shear plane		1	1 - share plane A_S
			2 - share plane A
factor		0.5	0,6 for shear plane A
			0,6 for ductility anchors (4.6, 5.6, 8.8) - share plane A_S
			0,5 for nonductility anchors (4.8, 5.8, 6.8, 10.9) - share plane A_S



grade	235	
s (cm)=	2.5	
f_u(kN/cm^2)=	36	
γ_{M0}=	1.00	
γ_{M2}=	1.25	

Shear resistance: $F_{v,Rd} = 0{,}6(0{,}5)*f_{ub}*A_s(A)/\gamma_{M2}$ $F_{v,Ed} / F_{v,Rd} < 1{,}0$

$F_{v,Rd}$ = 141.2 kN

Tension resistance $F_{t,Rd} = 0{,}9*f_{ub}*A_s/\gamma_{M2}$ $F_{t,Ed} / F_{t,Rd} < 1{,}0$

$F_{t,Rd}$ = 254.2 kN

interaction V - M

$(F_{v,Ed} / F_{v,Rd})+(F_{t,Ed} / F_{t,Rd})/1{,}4 < 1{,}0$

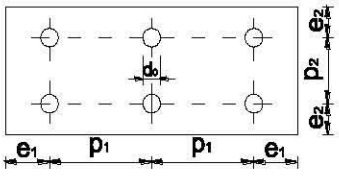
Bearing resistance $F_{b,Rd} = k_1*\alpha_b*f_u*d*t/\gamma_{M2}$ $F_{b,Ed} / F_{b,Rd} < 1{,}0$

$F_{b,Rd}$ = 220.3 kN

		usual values		I choose
$e_1=2*d_0$	e_1(cm)=	5.20	e_1(cm)=	4.00
$p_1=3*d_0$	p_1(cm)=	7.80	p_1(cm)=	8.00
$e_2=1{,}5*d_0$	e_2(cm)=	3.90	e_2(cm)=	4.00
$p_2=3*d_0$	p_2(cm)=	7.80	p_2(cm)=	8.00

		in loading direction			orthogonal to loading direction			
outter anch	→	$\alpha_d=e_1/3d_0$	$\alpha_{d,outter}$=	0.51	$k_1=\min(2{,}8*e_2/d_0-1{,}7\leq 2{,}5;\ 1{,}4*p_2/d_0-1{,}7\leq 2{,}5)$	$k_{1,outter}$=	2.50	
inner ancho	→	$\alpha_d=p_1/3d_0$ - 1/4	$\alpha_{d,inner}$=	0.78	$k_1=1{,}4*p_2/d_0-1{,}7\leq 2{,}5$	$k_{1,inner}$=	2.50	
			α_d=	0.51	$\alpha_b=\min(\alpha_d;\ f_{ub}/f_u;\ 1{,}0)$	α_b=	0.51	k_1= 2.50

load direction ← →



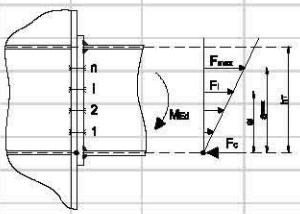
num. of bolts for transfering tension and shear laod $n_{vij,N,V}$= 8 — 2 / 2

Connection load — load of maximal loaded bolt

$M_{Ed,y}$=	13500	kNcm		$F_{t,Ed,M}$=	161.42	kN	check			
N_{Ed} =	40	kN	(+) tension	$F_{t,Ed,N}$=	5.00	kN	$F_{t,Ed\ My+N}/F_{t,Rd}$=	0.655	OK
$V_{Ed,z}$ =	40	kN		$F_{v,Ed}$=	5.00	kN	$F_{v,Ed}/F_{v,Rd}$=	0.035	OK
							interaction =	0.503	OK
							$F_{v,Ed}/F_{b,Rd}$=	0.023	OK

num. of bolts in line $n_{vij\ v\ vrsti}$ = 2 (for 4 bolts in line w e take 3,6 "due to prying force")

lines	a_i (cm)	a_i^2 (cm^2)
1	3.50	12.3
2	18.50	342.3
3	30.00	900.0
4	0.0	0.0
5	0.0	0.0
6	0.0	0.0
7	0.0	0.0
8	0.0	0.0
9	0.0	0.0
10	0.0	0.0
11	0.0	0.0
12	0.0	0.0
Σa_i^2=	1254.5	cm^2
a_{max}=	30	cm



Maximum bending load capacity of bolts

$M_{Rd,vija.}$= 21256 kNcm

Obojstranski koti zvari — a = 0.6 x t — polnonosilni

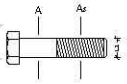
dvosni upogib	M1=	13500			
	1	x	0.655		
	M2=	6500			
	1	x	0.315		
	vsota		**0.970**	OK	

7.5. Montažni spoj nosilca HEA260 ali HEB 260

Detail D1.3: Bolted moment resistance joint

1 / 2

HEA260, HEB260			SŽ PP Litija			Nadstrešek 1 in 4		Plate	
Bolts		d(cm)	d_0(cm)	A_s(cm^2)	A(cm^2)			grade	235
	M27	2.7	3.0	4.59	5.73			s (cm)=	2.5
grade		10.9						f_u(kN/cm^2)=	36
f_{ub}(kN/cm^2)		100							
shear plane		1	1 - share plane A_S					γ_{M0}=	1.00
			2 - share plane A					γ_{M2}=	1.25
factor		0.5	0,6 for shear plane A						
			0,6 for ductility anchors (4.6, 5.6, 8.8) - share plane A_S						
			0,5 for nonductility anchors (4.8, 5.8, 6.8, 10.9) - share plane A_S						

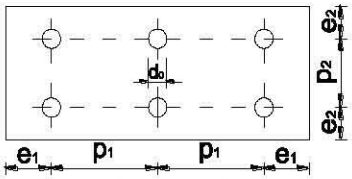


Shear resistance:	$F_{v,Rd} = 0{,}6(0{,}5)*f_{ub}*A_s(A)/\gamma_{M2}$			$F_{v,Ed} / F_{v,Rd} < 1{,}0$	
	$F_{v,Rd}$ =	183.6	kN		
				interaction V - M	
Tension resistance	$F_{t,Rd} = 0{,}9*f_{ub}*A_s/\gamma_{M2}$		$F_{t,Ed} / F_{t,Rd} < 1{,}0$	$(F_{v,Ed} / F_{v,Rd})+(F_{t,Ed} / F_{t,Rd})/1{,}4 < 1{,}0$	
	$F_{t,Rd}$ =	330.5	kN		
Bearing resistance	$F_{b,Rd} = k_1*\alpha_b*f_u*d*t/\gamma_{M2}$		$F_{b,Ed} / F_{b,Rd} < 1{,}0$		
	$F_{b,Rd}$ =	247.9	kN		

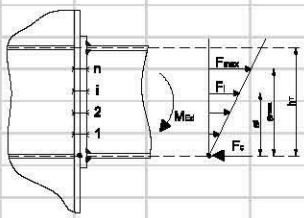
		usual values			I choose
$e_1=2*d_0$	e_1(cm)=	6.00	e_1(cm)=	4.00	
$p_1=3*d_0$	p_1(cm)=	9.00	p_1(cm)=	8.00	
$e_2=1{,}5*d_0$	e_2(cm)=	4.50	e_2(cm)=	4.00	
$p_2=3*d_0$	p_2(cm)=	9.00	p_2(cm)=	8.00	

		in loading direction			orthogonal to loading direction			
outter anch	→	$\alpha_d=e_1/3d_0$	$\alpha_{d,outter}$=	0.44	$k_1=\min(2{,}8*e_2/d_0-1{,}7\le 2{,}5;\ 1{,}4*p_2/d_0-1{,}7\le 2{,}5)$	$k_{1,outter}$=	2.03	
inner ancho	→	$\alpha_d=p_1/3d_0$ - 1/4	$\alpha_{d,inner}$=	0.64	$k_1=1{,}4*p_2/d_0-1{,}7\le 2{,}5$	$k_{1,inner}$=	2.50	
			α_d=	0.51	$\alpha_b=\min(\alpha_d;\ f_{ub}/f_u;\ 1{,}0)$	α_b=	0.51	k_1= 2.50

load direction ← →



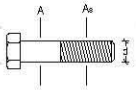
num. of bolts for transfering tension and shear laod						$n_{vij,N,V}$=	8				2 / 2
Connection load					load of maximal loaded bolt						
$M_{Ed,y}$=	20000	kNcm			$F_{t,Ed,M}$=	268.20	kN		check		
N_{Ed} =	40	kN	(+) tension		$F_{t,Ed,N}$=	5.00	kN		$F_{t,Ed\ My+N}/F_{t,Rd}$=	0.827	OK
$V_{Ed,z}$ =	125	kN			$F_{v,Ed}$=	15.63	kN		$F_{v,Ed}/F_{v,Rd}$=	0.085	OK
									interaction =	0.676	OK
									$F_{v,Ed}/F_{b,Rd}$=	0.063	OK
num. of bolts in line		$n_{vij,v\ vrsti}$ =	3.6	(for 4 bolts in line we take 3,6 "due to prying force")							
lines	a_i (cm)	a_i^2 (cm^2)									
1	7.50	56.3									
2	17.50	306.3									
3	0.00	0.0									
4	0.0	0.0									
5	0.0	0.0									
6	0.0	0.0									
7	0.0	0.0									
8	0.0	0.0									
9	0.0	0.0									
10	0.0	0.0									
11	0.0	0.0									
12	0.0	0.0									
Σa_i^2=	362.5	cm^2									
a_{max}=	17.5	cm									
Maximum bending load capacity of bolts											
$M_{Rd,vija.}$ =	24644	kNcm									
Obojstranski koti zvari				a = 0.6 x t		polnonosilni					



7.6. Spoj NPU260

Čelni momentni spoj 4xM20 HV10.9

Detail D1.4: Bolted moment resistance joint 1 / 2

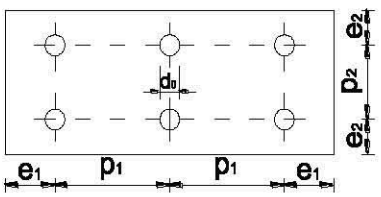
UNP260			SŽ PP Litija			Nadstrešek 1 in 4		**Plate**	
Bolts		d(cm)	d_0 (cm)	$As(cm^2)$	$A(cm^2)$			grade	235
	M20	2.0	2.2	2.45	3.14			s (cm)=	2.5
grade		10.9						$f_u(kN/cm^2)$=	36
$f_{ub}(kN/cm^2)$		100							
shear plane		1	1 - share plane A_S					γ_{M0}=	1.00
			2 - share plane A					γ_{M2}=	1.25
factor		0.5	0,6 for shear plane A						
			0,6 for ductility anchors (4.6, 5.6, 8.8) - share plane A_S						
			0,5 for nonductility anchors (4.8, 5.8, 6.8, 10.9) - share plane A_S						

Shear resistance:	$F_{v,Rd} = 0,6(0,5)*f_{ub}*A_s(A)/\gamma_{M2}$			$F_{v,Ed} / F_{v,Rd} < 1,0$		
	$F_{v,Rd}$ =	98.0	kN			
					interaction V - M	
Tension resistance	$F_{t,Rd} = 0,9*f_{ub}*A_s/\gamma_{M2}$			$F_{t,Ed} / F_{t,Rd} < 1,0$	$(F_{v,Ed} / F_{v,Rd})+(F_{t,Ed} / F_{t,Rd})/1,4 < 1,0$	
	$F_{t,Rd}$ =	176.4	kN			
Bearing resistance	$F_{b,Rd} = k_1*\alpha_b*f_u*d*t/\gamma_{M2}$			$F_{b,Ed} / F_{b,Rd} < 1,0$		
	$F_{b,Rd}$ =	183.6	kN			

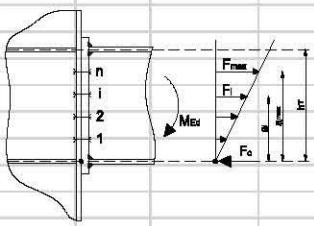
	usual values		I choose
$e_1=2*d_0$	e_1 (cm)=	4.40	e_1 (cm)= 4.00
$p_1=3*d_0$	p_1 (cm)=	6.60	p_1 (cm)= 8.00
$e_2=1,5*d_0$	e_2 (cm)=	3.30	e_2 (cm)= 4.00
$p_2=3*d_0$	p_2 (cm)=	6.60	p_2 (cm)= 8.00

		in loading direction			orthogonal to loading direction			
outter ancho	→	$\alpha_d=e_1/3d_0$	$\alpha_{d,outter}$=	0.61	$k_1=min(2,8*e_2/d_0-1,7\leq 2,5;\ 1,4*p_2/d_0-1,7\leq 2,5)$	$k_{1,outter}$=	2.50	
inner ancho	→	$\alpha_d=p_1/3d_0$ - 1/4	$\alpha_{d,inner}$=	0.96	$k_1=1,4*p_2/d_0-1,7\leq 2,5$	$k_{1,inner}$=	2.50	
			α_d=	0.51	$\alpha_b=min(\alpha_d;\ f_{ub}/f_u;\ 1,0)$	α_b= 0.51	k_1=	2.50

load direction ← →



num. of bolts for transfering tension and shear laod					$n_{vij,N,V}$=	4					2 / 2
Connection load				load of maximal loaded bolt							
$M_{Ed,y}$=	4000	kNcm		$F_{t,Ed,M}$=	91.74	kN		check			
N_{Ed} =	40	kN	(+) tension	$F_{t,Ed,N}$=	10.00	kN		$F_{t,Ed\ My+N}/F_{t,Rd}$=	0.577	OK	
$V_{Ed,z}$ =	40	kN		$F_{v,Ed}$=	10.00	kN		$F_{v,Ed}/F_{v,Rd}$=	0.102	OK	
								interaction =	0.514	OK	
								$F_{v,Ed}/F_{b,Rd}$=	0.054	OK	
num. of bolts in line		$n_{vij,vvrsti}$ =	2	(for 4 bolts in line we take 3,6 "due to prying force")							
lines	a_i (cm)	a_i^2 (cm^2)									
1	6.00	36.0									
2	20.00	400.0									
3	0.00	0.0									
4	0.0	0.0									
5	0.0	0.0									
6	0.0	0.0									
7	0.0	0.0									
8	0.0	0.0									
9	0.0	0.0									
10	0.0	0.0									
11	0.0	0.0									
12	0.0	0.0									
Σa_i^2=	436.0	cm^2									
a_{max}=	20	cm									
Maximum bending load capacity of bolts											
$M_{Rd,vija.}$=	7691	kNcm									
Obojstranski koti zvari				a = 0.6 x t		polnonosilni					



Kontinuirani priključek UNP 260 na HEA260 s čela

Prevzema samo strižne obremenitve
V_{Ed} = 2x40 = 80 kN

4 x M20 8.8 konstruktivno

7.7. Členkasti spoji sekundarnih nosilcev

- **KC140/5**

V_{Ed} = 25 kN
4xM16 8.8

- **KC120/5, PC120/80/4, PC120/60/4**

V_{Ed} = 15 kN
4xM16 8.8

- **KC60/4**

V_{Ed} = 5 kN
2xM16 8.8

Nosilnost enega vijaka M16 8.8

natezna	$F_{t,Rd}$ = 90.4 kN
strižna	$F_{v,Rd}$ = 60.3 kN

H I Š A, NAČRTOVANJE IN SVETOVANJE, d.o.o.
Ukmarjeva ulica 4, 1000 Ljubljana

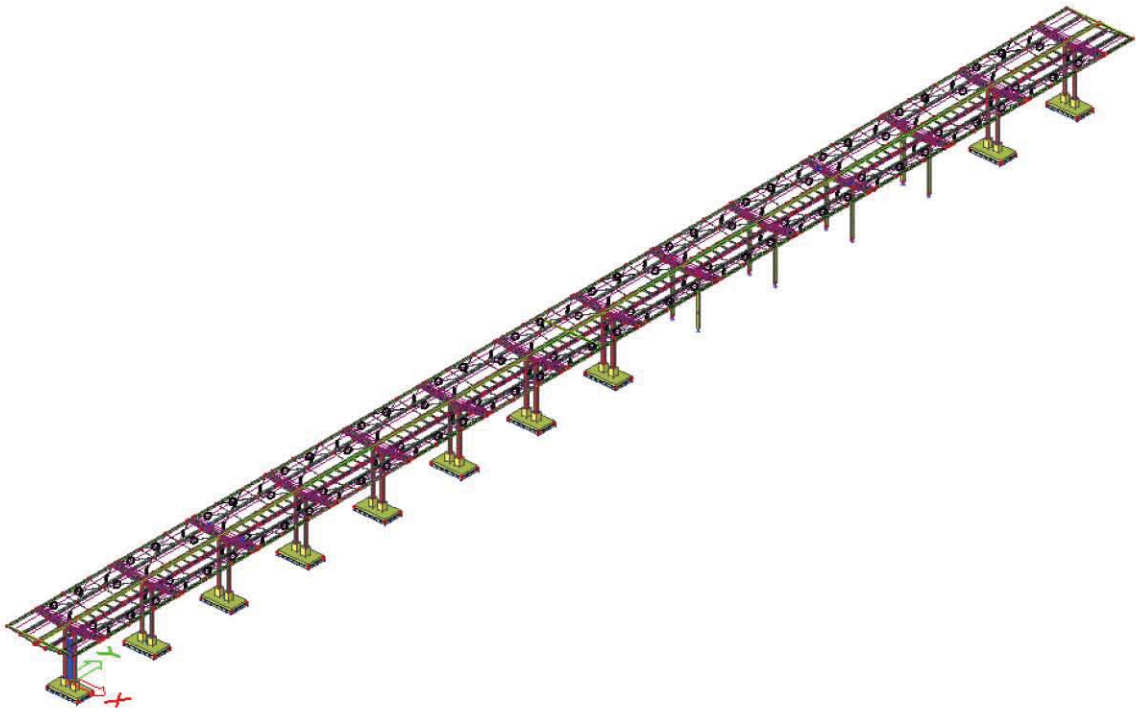
PERONSKI NADSTREŠEK 2

Železniška postaja Litija

ANALIZA KONSTRUKCIJE

Faza: IZN

Revizija:0



April 2021

Računal:
Dr. Leon Hladnik, udig G-0296.

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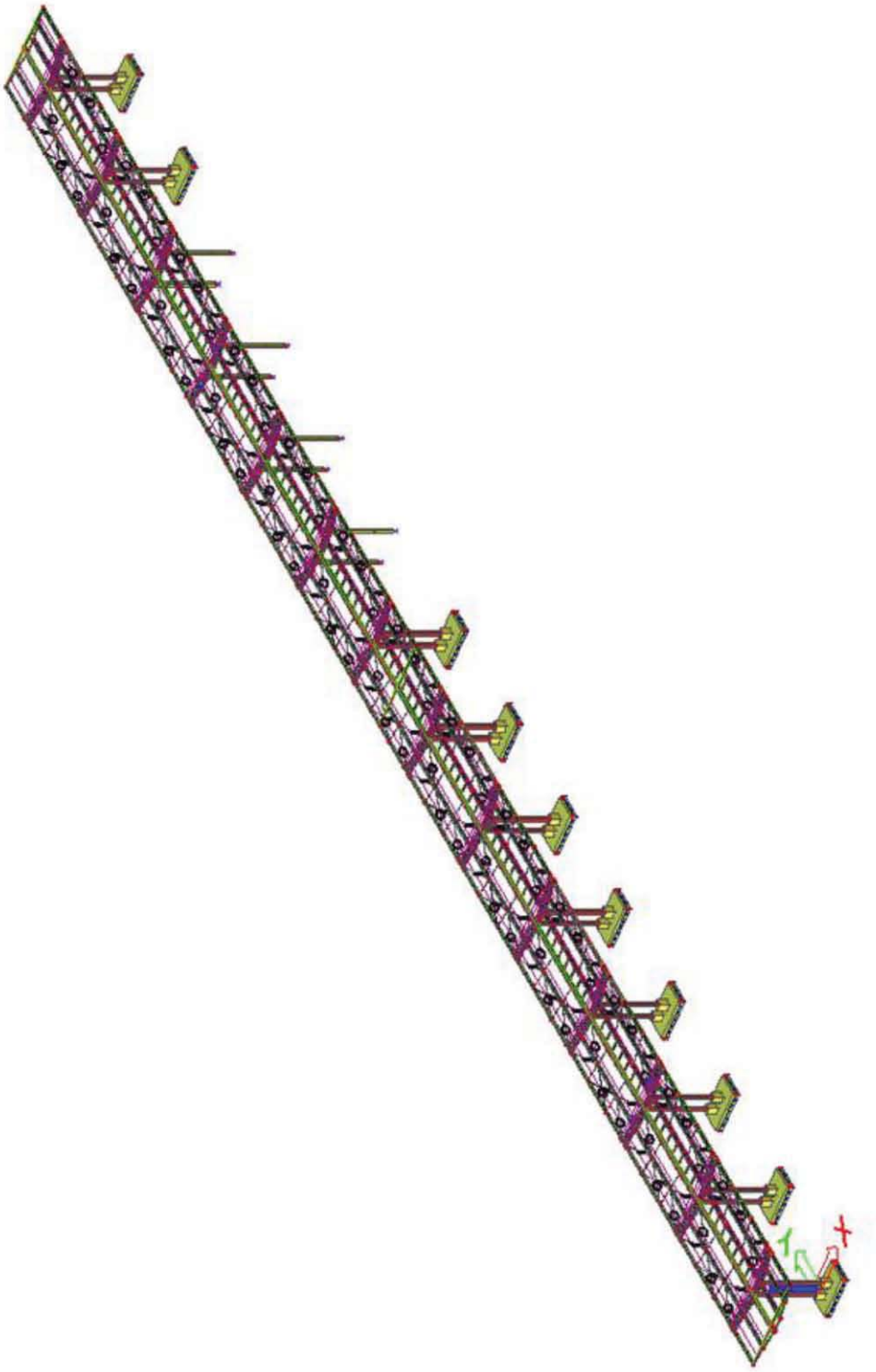
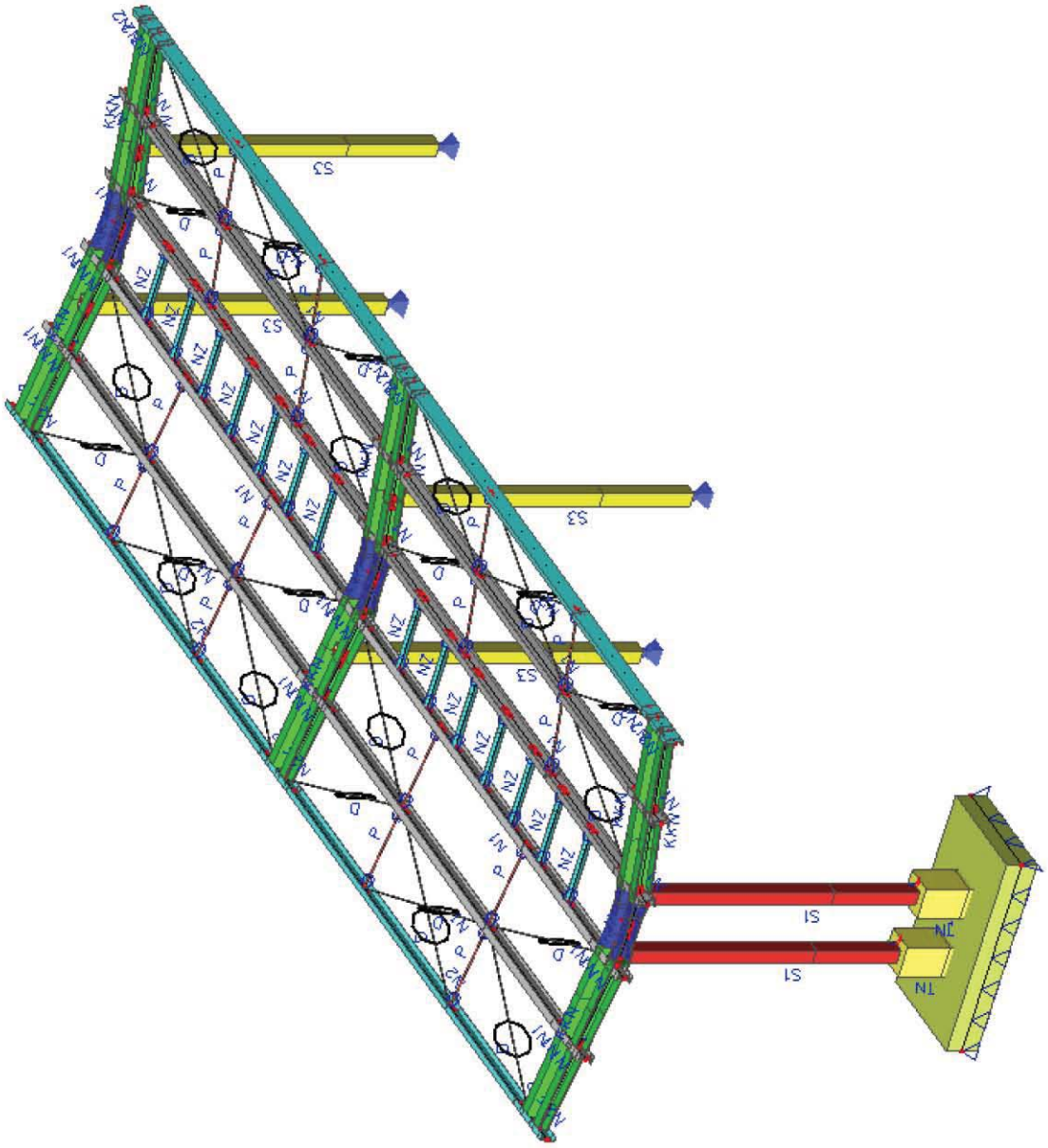
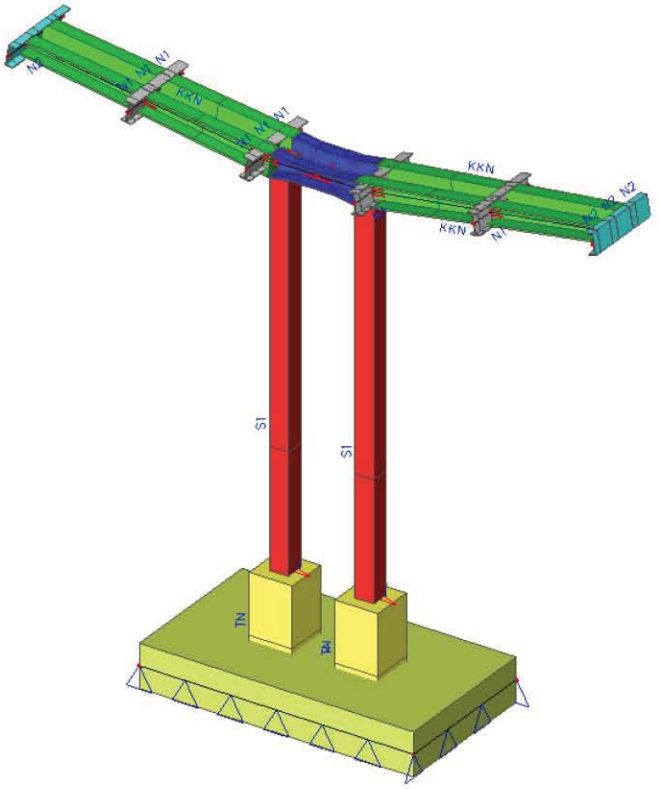
1. RAČUNSKI MODEL

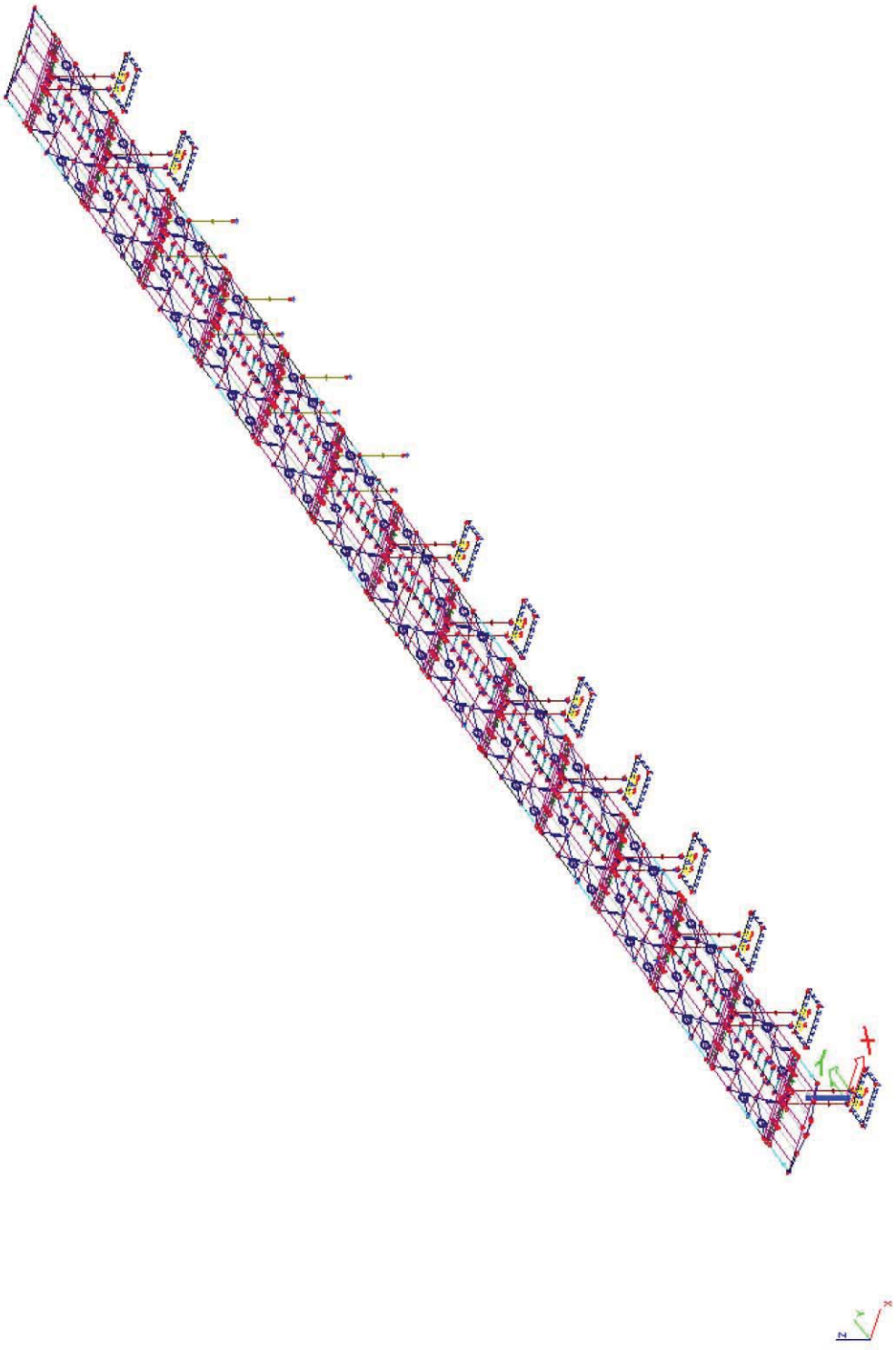
1.1. Statični model

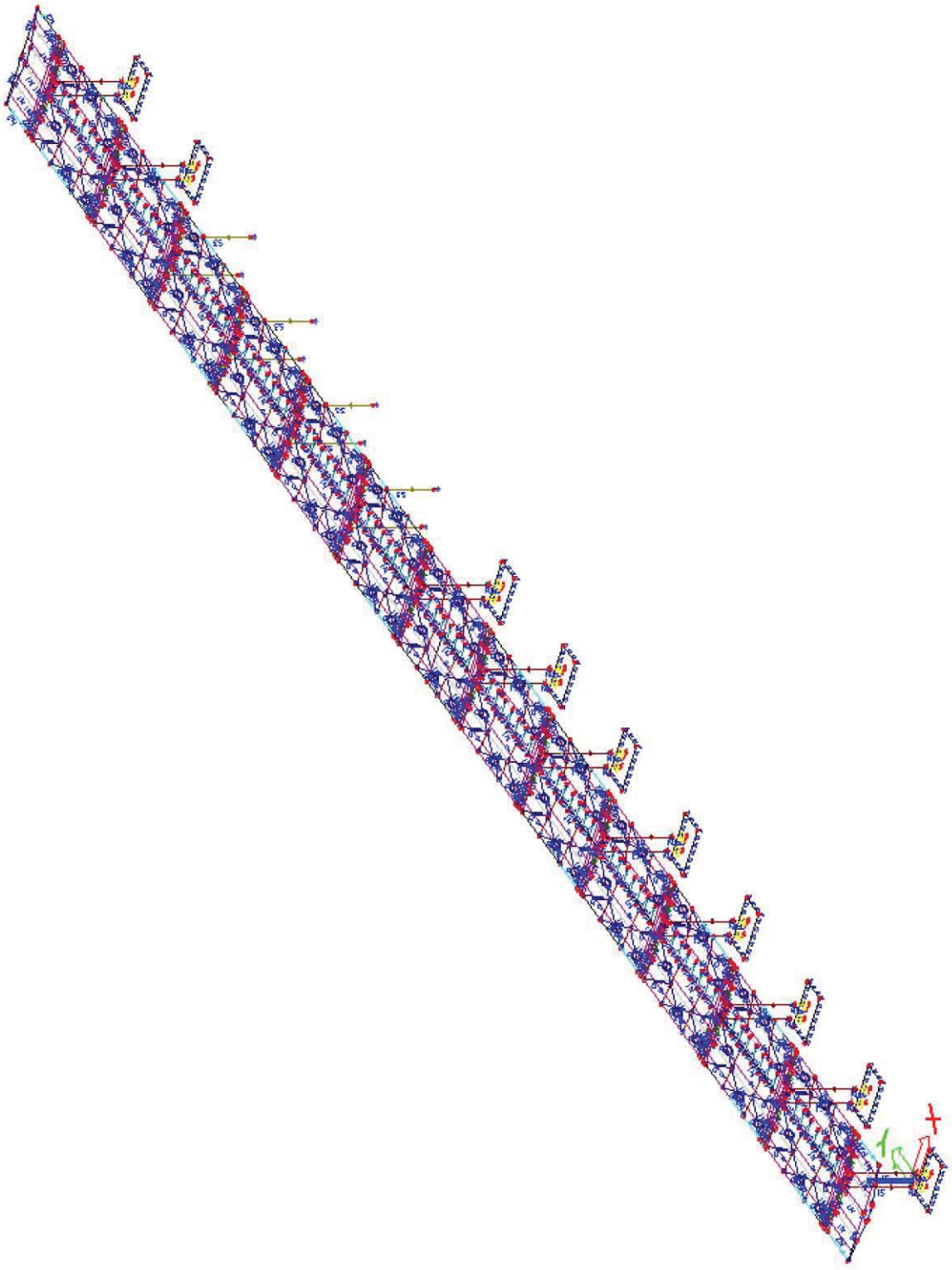


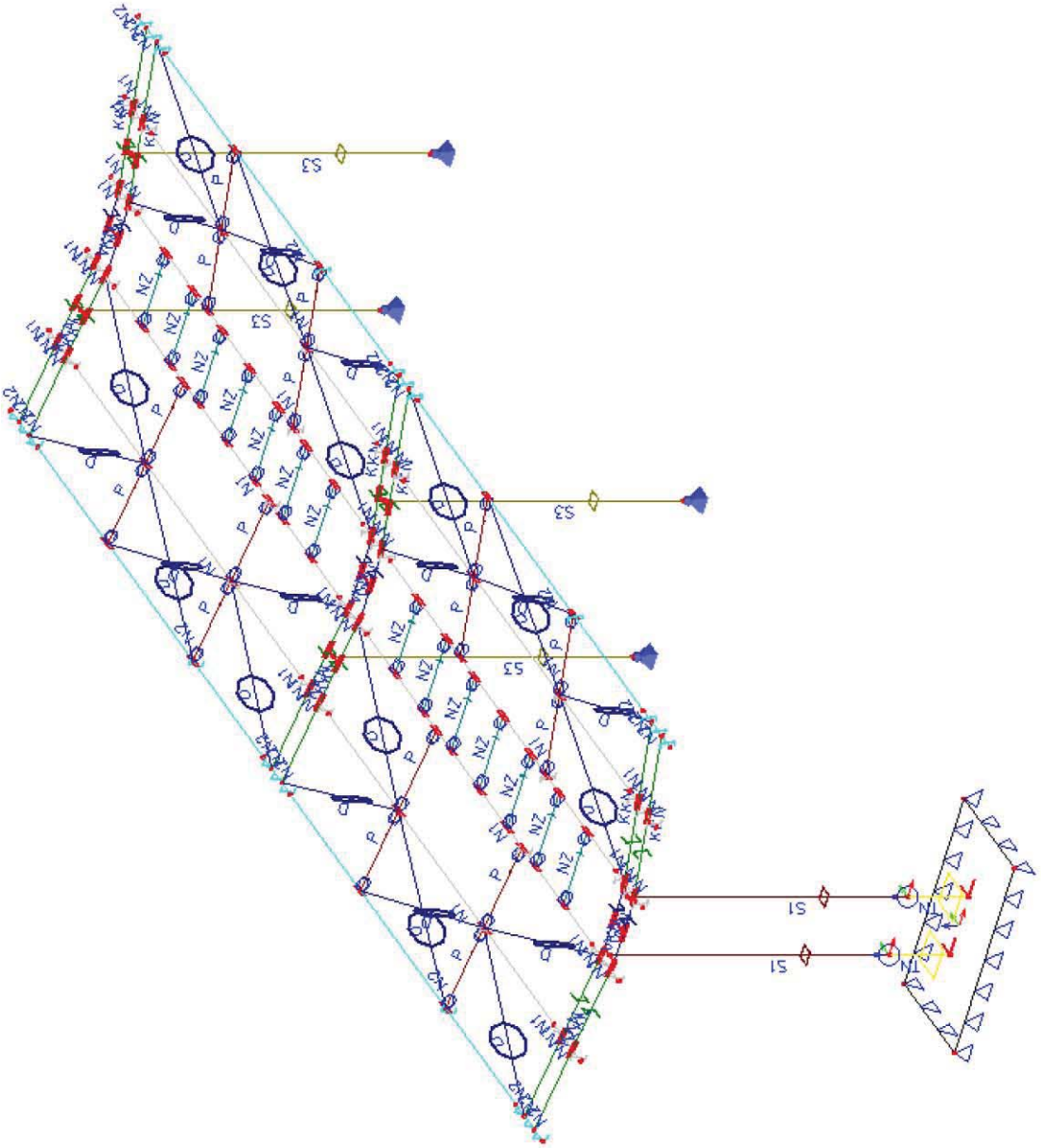

S3
S3
S3
S3
S1
S1
TN
TN


N1
N2
KKN
S1
TN

KKN
S3






S3
S3
S3
S3
S1
S1

1.2. Marterial in profili

1. Bill of material

Selection: All
Type of sorting: Material

Summary

Material	Mass [kg]	Surface [m²]	Volume [m³]
Steel	48404.64	1039.451	6.1662e+00
Concrete	84500.00	97.600	3.3800e+01
Total	132904.64	1137.051	3.9966e+01

Note: Value 'Surface' represents for 1D members the total exposed surface area, while for 2D members it corresponds only to the surface area of the centroidal plane.

Steel (1D)

Material	Density [kg/m³]	Mass [kg]	Surface [m²]	Volume [m³]
S 235	7850.00	48404.64	1039.451	6.1662e+00
Total		48404.64	1039.451	6.1662e+00

Concrete (1D)

Material	Density [kg/m³]	Mass [kg]	Surface [m²]	Volume [m³]
C25/30	2500.00	12500.00	40.000	5.0000e+00
Total		12500.00	40.000	5.0000e+00

Concrete (2D)

Material	Density [kg/m³]	Mass [kg]	Surface [m²]	Volume [m³]
C25/30	2500.00	72000.00	57.600	2.8800e+01
Total		72000.00	57.600	2.8800e+01

2. Materials

Steel EC3

Name	ρ [kg/m³]	E_{mod} [MPa]	μ	Lower limit [mm]	Upper limit [mm]	F_y [kN/cm²]	F_u [kN/cm²]	Colour
		G_{mod} [MPa]	α [m/mK]					
S 235	7850.00	2.1000e+05	0.3	0	100	23.5	36.0	
		8.0769e+04	0.00					

Name	Type	ρ [kg/m³]	Density in fresh state [kg/m³]	E_{mod} [MPa]	μ	α [m/mK]	$f_{c,k,28}$ [MPa]	Colour
C25/30	Concrete	2500.00	2600.00	3.1500e+04	0.2	0.00	25.00	

Explanations of symbols	
Density in fresh state	The value in the density in fresh state property is used only in case a composite deck is input and its self-weight load is taken into account.

3. Cross-sections

Name	Type	Item material	Fabrication	A [m²]	A_y [m²]	I_y [m⁴]	$W_{el,y}$ [m³]	$W_{pl,y}$ [m³]	Colour
	Detailed				A_z [m²]	I_z [m⁴]	$W_{el,z}$ [m³]	$W_{pl,z}$ [m³]	
S1	QRO220X12.5	S 235	rolled	9.9700e-03	4.9826e-03	7.0100e-05	6.3700e-04	7.6500e-04	
					4.9826e-03	7.0100e-05	6.3700e-04	7.6500e-04	
N2	UNP240	S 235	rolled	4.2300e-03	2.1541e-03	3.6000e-05	3.0000e-04	3.5800e-04	
					2.2612e-03	2.4800e-06	3.9600e-05	7.5700e-05	
N1	IPE240	S 235	rolled	3.9100e-03	2.4315e-03	3.8920e-05	3.2400e-04	3.6700e-04	
					1.5295e-03	2.8400e-06	4.7300e-05	7.3900e-05	
D	RD16	S 235	rolled	2.0096e-04	1.7082e-04	3.1496e-09	3.9370e-07	6.7190e-07	
					1.7082e-04	3.1496e-09	3.9370e-07	6.7190e-07	
KKN	U g	S 235	general	7.7300e-03	5.7031e-03	3.9628e-05	4.5813e-04	5.3382e-04	
	173; 160; 20; 10				1.7791e-03	1.9858e-05	2.1375e-04	3.4469e-04	
VKN	U g	S 235	general	7.9500e-03	5.7271e-03	5.2317e-05	5.3658e-04	6.2006e-04	
	195; 160; 20; 10				2.0099e-03	2.0685e-05	2.1861e-04	3.5723e-04	
TN	Rectangle	C25/30	concrete	2.5000e-01	2.0833e-01	5.2083e-03	2.0833e-02	3.1250e-02	
	500; 500				2.0833e-01	5.2083e-03	2.0833e-02	3.1250e-02	
P	RO26.9X3.2	S 235	rolled	2.3800e-04	1.5168e-04	1.7000e-08	1.2700e-06	1.7974e-06	
					1.5168e-04	1.7000e-08	1.2700e-06	1.7974e-06	
NZ	L80X8	S 235	rolled	1.2300e-03	1.0315e-03	1.1500e-06	2.0252e-05	3.2190e-05	
					1.0375e-03	2.9600e-07	9.3703e-06	1.6563e-05	
RN	QRO60X5	S 235	rolled	1.0800e-03	5.3907e-04	5.4100e-07	1.8000e-05	2.2100e-05	
					5.3907e-04	5.4100e-07	1.8000e-05	2.2100e-05	
S3	QRO220X12.5	S 235	rolled	9.9700e-03	4.9826e-03	7.0100e-05	6.3700e-04	7.6500e-04	
					4.9826e-03	7.0100e-05	6.3700e-04	7.6500e-04	

1.3. Vozlišča, elementi, podpore, sprostitve

4. Nodes

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N460	0.500	0.000	0.000
N461	0.500	0.000	4.600
N1	-0.500	0.000	0.000
N462	-0.500	0.000	4.600
N463	3.404	0.177	5.022
N464	0.500	0.177	4.600
N465	-0.500	0.177	4.600

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N466	-3.404	0.177	5.022
N467	3.404	-0.177	5.022
N468	0.500	-0.177	4.600
N469	-0.500	-0.177	4.600
N470	-3.404	-0.177	5.022
N471	-3.404	0.477	5.022
N472	-3.404	-0.477	5.022
N473	-2.019	0.177	4.821
N474	-2.019	0.477	4.821
N475	-2.019	-0.177	4.821
N476	-2.019	-0.477	4.821
N477	-0.633	0.177	4.619
N478	-0.633	0.477	4.619
N479	-0.633	-0.177	4.619
N480	-0.633	-0.477	4.619
N481	0.633	0.177	4.619
N482	0.633	0.477	4.619
N483	0.633	-0.177	4.619
N485	2.019	0.177	4.821
N486	2.019	0.477	4.821
N487	2.019	-0.177	4.821
N488	2.019	-0.477	4.821
N489	3.404	0.477	5.022
N490	3.404	-0.477	5.022
N491	0.000	-0.177	4.600
N492	0.000	0.177	4.600
N493	0.500	0.000	-1.000
N494	-0.500	0.000	-1.000
N499	0.500	9.000	0.000
N500	0.500	9.000	4.600
N501	-0.500	9.000	0.000
N502	-0.500	9.000	4.600
N503	3.404	9.178	5.022
N504	0.500	9.178	4.600
N505	-0.500	9.178	4.600
N506	-3.404	9.178	5.022
N507	3.404	8.822	5.022
N508	0.500	8.822	4.600
N509	-0.500	8.822	4.600
N510	-3.404	8.822	5.022
N511	-3.404	9.477	5.022
N512	-3.404	8.523	5.022
N513	-2.019	9.178	4.821
N514	-2.019	9.477	4.821
N515	-2.019	8.822	4.821
N516	-2.019	8.523	4.821
N517	-0.633	9.178	4.619
N518	-0.633	9.477	4.619
N519	-0.633	8.822	4.619
N520	-0.633	8.523	4.619
N521	0.633	9.178	4.619
N522	0.633	9.477	4.619
N523	0.633	8.822	4.619
N524	0.633	8.523	4.619
N525	2.019	9.178	4.821
N709	2.019	9.477	4.821
N710	2.019	8.822	4.821
N711	2.019	8.523	4.821
N712	3.404	9.477	5.022
N713	3.404	8.523	5.022
N714	0.000	8.822	4.600
N715	0.000	9.178	4.600
N716	0.500	9.000	-1.000
N717	-0.500	9.000	-1.000
N722	3.404	-3.500	5.022
N723	2.019	-3.500	4.821

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N726	-2.019	-3.500	4.821
N727	-3.404	-3.500	5.022
N728	3.404	2.978	5.022
N729	2.019	2.978	4.821
N730	0.633	2.978	4.619
N731	-0.633	2.978	4.619
N732	-2.019	2.978	4.821
N733	-3.404	2.978	5.022
N734	0.633	4.500	4.619
N735	-0.633	4.500	4.619
N736	0.633	5.500	4.619
N737	-0.633	5.500	4.619
N738	0.633	3.500	4.619
N739	-0.633	3.500	4.619
N740	0.633	2.500	4.619
N741	-0.633	2.500	4.619
N742	0.633	1.500	4.619
N743	-0.633	1.500	4.619
N744	0.633	7.500	4.619
N745	-0.633	7.500	4.619
N746	0.633	6.500	4.619
N747	-0.633	6.500	4.619
N748	3.404	6.022	5.022
N749	2.019	6.022	4.821
N750	0.633	6.022	4.619
N751	-0.633	6.022	4.619
N752	-2.019	6.022	4.821
N753	-3.404	6.022	5.022
N755	1.350	72.000	-0.200
N756	3.404	72.178	5.022
N757	0.500	72.178	4.600
N758	-0.500	72.178	4.600
N759	-3.404	72.178	5.022
N760	3.404	71.823	5.022
N761	0.500	71.823	4.600
N762	-0.500	71.823	4.600
N763	-3.404	71.823	5.022
N764	-3.404	72.478	5.022
N765	-3.404	17.523	5.022
N766	-2.019	72.178	4.821
N767	-2.019	72.478	4.821
N768	-2.019	71.823	4.821
N769	-2.019	17.523	4.821
N770	-0.633	72.178	4.619
N771	-0.633	72.478	4.619
N772	-0.633	71.823	4.619
N773	-0.633	17.523	4.619
N774	0.633	72.178	4.619
N775	0.633	72.478	4.619
N776	0.633	71.823	4.619
N777	0.633	17.523	4.619
N778	2.019	72.178	4.821
N779	2.019	72.478	4.821
N780	2.019	71.823	4.821
N781	2.019	17.523	4.821
N782	3.404	72.478	5.022
N783	3.404	17.523	5.022
N784	0.000	71.823	4.600
N785	0.000	72.178	4.600
N787	3.404	11.977	5.022
N788	2.019	11.977	4.821
N789	0.633	11.977	4.619
N790	-0.633	11.977	4.619
N791	-2.019	11.977	4.821
N792	-3.404	11.977	5.022
N793	0.633	13.500	4.619

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N794	-0.633	13.500	4.619
N795	0.633	14.500	4.619
N796	-0.633	14.500	4.619
N797	0.633	12.500	4.619
N798	-0.633	12.500	4.619
N799	0.633	11.500	4.619
N800	-0.633	11.500	4.619
N801	0.633	16.500	4.619
N802	-0.633	16.500	4.619
N803	0.633	15.500	4.619
N804	-0.633	15.500	4.619
N805	3.404	15.023	5.022
N806	2.019	15.023	4.821
N807	0.633	15.023	4.619
N808	-0.633	15.023	4.619
N809	-2.019	15.023	4.821
N810	-3.404	15.023	5.022
N811	1.350	72.000	4.724
N812	1.350	72.178	4.724
N813	1.350	71.823	4.724
N814	-1.350	72.000	4.724
N817	-1.350	72.000	-0.200
N819	0.633	10.500	4.619
N820	-0.633	10.500	4.619
N821	1.350	99.000	-0.200
N822	3.404	99.178	5.022
N823	0.500	99.178	4.600
N824	-0.500	99.178	4.600
N825	-3.404	99.178	5.022
N826	3.404	98.823	5.022
N827	0.500	98.823	4.600
N828	-0.500	98.823	4.600
N829	-3.404	98.823	5.022
N830	-3.404	99.478	5.022
N831	-3.404	80.523	5.022
N832	-2.019	99.178	4.821
N833	-2.019	99.478	4.821
N834	-2.019	98.823	4.821
N835	-2.019	80.523	4.821
N836	-0.633	99.178	4.619
N837	-0.633	99.478	4.619
N838	-0.633	98.823	4.619
N839	-0.633	80.523	4.619
N840	0.633	99.178	4.619
N841	0.633	99.478	4.619
N842	0.633	98.823	4.619
N843	0.633	80.523	4.619
N844	2.019	99.178	4.821
N845	2.019	99.478	4.821
N846	2.019	98.823	4.821
N847	2.019	80.523	4.821
N848	3.404	99.478	5.022
N849	3.404	80.523	5.022
N853	3.404	74.978	5.022
N854	2.019	74.978	4.821
N855	0.633	74.978	4.619
N856	-0.633	74.978	4.619
N857	-2.019	74.978	4.821
N858	-3.404	74.978	5.022
N859	0.633	76.500	4.619
N860	-0.633	76.500	4.619
N861	0.633	77.500	4.619
N862	-0.633	77.500	4.619
N863	0.633	75.500	4.619
N864	-0.633	75.500	4.619
N865	0.633	74.500	4.619

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N866	-0.633	74.500	4.619
N867	0.633	79.500	4.619
N868	-0.633	79.500	4.619
N869	0.633	78.500	4.619
N870	-0.633	78.500	4.619
N871	3.404	78.023	5.022
N872	2.019	78.023	4.821
N873	0.633	78.023	4.619
N874	-0.633	78.023	4.619
N875	-2.019	78.023	4.821
N876	-3.404	78.023	5.022
N877	1.350	99.000	4.724
N880	-1.350	99.000	4.724
N882	-1.350	98.823	4.724
N883	-1.350	99.000	-0.200
N885	0.633	73.500	4.619
N886	-0.633	73.500	4.619
N887	0.500	108.000	0.000
N888	0.500	108.000	4.600
N889	-0.500	108.000	0.000
N890	-0.500	108.000	4.600
N891	3.404	108.178	5.022
N892	0.500	108.178	4.600
N893	-0.500	108.178	4.600
N894	-3.404	108.178	5.022
N895	3.404	107.823	5.022
N896	0.500	107.823	4.600
N897	-0.500	107.823	4.600
N898	-3.404	107.823	5.022
N900	-3.404	107.523	5.022
N901	-2.019	108.178	4.821
N903	-2.019	107.823	4.821
N904	-2.019	107.523	4.821
N905	-0.633	108.178	4.619
N907	-0.633	107.823	4.619
N908	-0.633	107.523	4.619
N909	0.633	108.178	4.619
N911	0.633	107.823	4.619
N912	0.633	107.523	4.619
N913	2.019	108.178	4.821
N915	2.019	107.823	4.821
N916	2.019	107.523	4.821
N918	3.404	107.523	5.022
N919	0.000	107.823	4.600
N920	0.000	108.178	4.600
N921	0.500	108.000	-1.000
N922	-0.500	108.000	-1.000
N925	3.404	101.978	5.022
N926	2.019	101.978	4.821
N927	0.633	101.978	4.619
N928	-0.633	101.978	4.619
N929	-2.019	101.978	4.821
N930	-3.404	101.978	5.022
N931	0.633	103.500	4.619
N932	-0.633	103.500	4.619
N933	0.633	104.500	4.619
N934	-0.633	104.500	4.619
N935	0.633	102.500	4.619
N936	-0.633	102.500	4.619
N937	0.633	101.500	4.619
N938	-0.633	101.500	4.619
N939	0.633	100.500	4.619
N940	-0.633	100.500	4.619
N941	0.633	106.500	4.619
N942	-0.633	106.500	4.619
N943	0.633	105.500	4.619

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N944	-0.633	105.500	4.619
N945	3.404	105.023	5.022
N946	2.019	105.023	4.821
N947	0.633	105.023	4.619
N948	-0.633	105.023	4.619
N949	-2.019	105.023	4.821
N950	-3.404	105.023	5.022
N965	-3.404	108.478	5.022
N968	-2.019	108.478	4.821
N972	-0.633	108.478	4.619
N976	0.633	108.478	4.619
N980	2.019	108.478	4.821
N983	3.404	108.478	5.022
N1019	0.500	117.000	0.000
N1020	0.500	117.000	4.600
N1021	-0.500	117.000	0.000
N1022	-0.500	117.000	4.600
N1023	3.404	117.178	5.022
N1024	0.500	117.178	4.600
N1025	-0.500	117.178	4.600
N1026	-3.404	117.178	5.022
N1027	3.404	116.823	5.022
N1028	0.500	116.823	4.600
N1029	-0.500	116.823	4.600
N1030	-3.404	116.823	5.022
N1032	-3.404	116.523	5.022
N1033	-2.019	117.178	4.821
N1035	-2.019	116.823	4.821
N1036	-2.019	116.523	4.821
N1037	-0.633	117.178	4.619
N1039	-0.633	116.823	4.619
N1040	-0.633	116.523	4.619
N1041	0.633	117.178	4.619
N1043	0.633	116.823	4.619
N1044	0.633	116.523	4.619
N1045	2.019	117.178	4.821
N1047	2.019	116.823	4.821
N1048	2.019	116.523	4.821
N1050	3.404	116.523	5.022
N1051	0.000	116.823	4.600
N1052	0.000	117.178	4.600
N1053	0.500	117.000	-1.000
N1054	-0.500	117.000	-1.000
N1057	3.404	110.978	5.022
N1058	2.019	110.978	4.821
N1059	0.633	110.978	4.619
N1060	-0.633	110.978	4.619
N1061	-2.019	110.978	4.821
N1062	-3.404	110.978	5.022
N1063	0.633	112.500	4.619
N1064	-0.633	112.500	4.619
N1065	0.633	113.500	4.619
N1066	-0.633	113.500	4.619
N1067	0.633	111.500	4.619
N1068	-0.633	111.500	4.619
N1069	0.633	110.500	4.619
N1070	-0.633	110.500	4.619
N1071	0.633	109.500	4.619
N1072	-0.633	109.500	4.619
N1073	0.633	115.500	4.619
N1074	-0.633	115.500	4.619
N1075	0.633	114.500	4.619
N1076	-0.633	114.500	4.619
N1077	3.404	114.023	5.022
N1078	2.019	114.023	4.821
N1079	0.633	114.023	4.619

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N1080	-0.633	114.023	4.619
N1081	-2.019	114.023	4.821
N1082	-3.404	114.023	5.022
N1554	0.633	-3.500	4.619
N1555	-0.633	-3.500	4.619
N1558	-3.404	17.823	5.022
N1559	-0.633	17.823	4.619
N1560	3.404	17.823	5.022
N1561	0.633	17.823	4.619
N1562	-2.019	17.823	4.821
N1563	2.019	17.823	4.821
N1564	0.500	18.000	0.000
N1565	0.500	18.000	4.600
N1566	-0.500	18.000	0.000
N1567	-0.500	18.000	4.600
N1568	3.404	18.177	5.022
N1569	0.500	18.177	4.600
N1570	-0.500	18.177	4.600
N1571	-3.404	18.177	5.022
N1572	-3.404	18.477	5.022
N1573	-2.019	18.177	4.821
N1574	-2.019	18.477	4.821
N1575	-0.633	18.177	4.619
N1576	-0.633	18.477	4.619
N1577	0.633	18.177	4.619
N1578	0.633	18.477	4.619
N1579	2.019	18.177	4.821
N1580	2.019	18.477	4.821
N1581	3.404	18.477	5.022
N1582	0.000	18.177	4.600
N1583	0.500	18.000	-1.000
N1584	-0.500	18.000	-1.000
N1585	-1.600	18.900	-1.000
N1586	1.600	18.900	-1.000
N1587	0.500	27.000	0.000
N1588	0.500	27.000	4.600
N1589	-0.500	27.000	0.000
N1590	-0.500	27.000	4.600
N1591	3.404	27.177	5.022
N1592	0.500	27.177	4.600
N1593	-0.500	27.177	4.600
N1594	-3.404	27.177	5.022
N1595	3.404	26.823	5.022
N1596	0.500	26.823	4.600
N1597	-0.500	26.823	4.600
N1598	-3.404	26.823	5.022
N1599	-3.404	27.477	5.022
N1600	-3.404	26.523	5.022
N1601	-2.019	27.177	4.821
N1602	-2.019	27.477	4.821
N1603	-2.019	26.823	4.821
N1604	-2.019	26.523	4.821
N1605	-0.633	27.177	4.619
N1606	-0.633	27.477	4.619
N1607	-0.633	26.823	4.619
N1608	-0.633	26.523	4.619
N1609	0.633	27.177	4.619
N1610	0.633	27.477	4.619
N1611	0.633	26.823	4.619
N1612	0.633	26.523	4.619
N1613	2.019	27.177	4.821
N1614	2.019	27.477	4.821
N1615	2.019	26.823	4.821
N1616	2.019	26.523	4.821
N1617	3.404	27.477	5.022
N1618	3.404	26.523	5.022

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N1619	0.000	26.823	4.600
N1620	0.000	27.177	4.600
N1621	0.500	27.000	-1.000
N1622	-0.500	27.000	-1.000
N1627	3.404	20.977	5.022
N1628	2.019	20.977	4.821
N1629	0.633	20.977	4.619
N1630	-0.633	20.977	4.619
N1631	-2.019	20.977	4.821
N1632	-3.404	20.977	5.022
N1633	0.633	22.500	4.619
N1634	-0.633	22.500	4.619
N1635	0.633	23.500	4.619
N1636	-0.633	23.500	4.619
N1637	0.633	21.500	4.619
N1638	-0.633	21.500	4.619
N1639	0.633	20.500	4.619
N1640	-0.633	20.500	4.619
N1641	0.633	19.500	4.619
N1642	-0.633	19.500	4.619
N1643	0.633	25.500	4.619
N1644	-0.633	25.500	4.619
N1645	0.633	24.500	4.619
N1646	-0.633	24.500	4.619
N1647	3.404	24.023	5.022
N1648	2.019	24.023	4.821
N1649	0.633	24.023	4.619
N1650	-0.633	24.023	4.619
N1651	-2.019	24.023	4.821
N1652	-3.404	24.023	5.022
N1653	-3.404	35.523	5.022
N1654	-2.019	35.523	4.821
N1655	-0.633	35.523	4.619
N1656	0.633	35.523	4.619
N1657	2.019	35.523	4.821
N1658	3.404	35.523	5.022
N1659	3.404	29.977	5.022
N1660	2.019	29.977	4.821
N1661	0.633	29.977	4.619
N1662	-0.633	29.977	4.619
N1663	-2.019	29.977	4.821
N1664	-3.404	29.977	5.022
N1665	0.633	31.500	4.619
N1666	-0.633	31.500	4.619
N1667	0.633	32.500	4.619
N1668	-0.633	32.500	4.619
N1669	0.633	30.500	4.619
N1670	-0.633	30.500	4.619
N1671	0.633	29.500	4.619
N1672	-0.633	29.500	4.619
N1673	0.633	34.500	4.619
N1674	-0.633	34.500	4.619
N1675	0.633	33.500	4.619
N1676	-0.633	33.500	4.619
N1677	3.404	33.023	5.022
N1678	2.019	33.023	4.821
N1679	0.633	33.023	4.619
N1680	-0.633	33.023	4.619
N1681	-2.019	33.023	4.821
N1682	-3.404	33.023	5.022
N1683	0.633	28.500	4.619
N1684	-0.633	28.500	4.619
N1685	-1.600	17.100	-1.000
N1686	1.600	17.100	-1.000
N1687	0.000	17.823	4.600
N1688	0.500	17.823	4.600

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N1689	-0.500	17.823	4.600
N1697	-3.404	117.478	5.022
N1698	-2.019	117.478	4.821
N1699	-0.633	117.478	4.619
N1700	0.633	117.478	4.619
N1701	2.019	117.478	4.821
N1702	3.404	117.478	5.022
N1703	3.404	120.500	5.022
N1704	2.019	120.500	4.821
N1707	-2.019	120.500	4.821
N1708	-3.404	120.500	5.022
N1710	0.633	120.500	4.619
N1711	-0.633	120.500	4.619
N1716	1.600	0.900	-1.000
N1717	-1.600	0.900	-1.000
N1718	-1.600	-0.900	-1.000
N1719	1.600	-0.900	-1.000
N1724	1.600	108.900	-1.000
N1725	-1.600	108.900	-1.000
N1726	-1.600	107.100	-1.000
N1727	1.600	107.100	-1.000
N1732	1.600	117.900	-1.000
N1733	-1.600	117.900	-1.000
N1734	-1.600	116.100	-1.000
N1735	1.600	116.100	-1.000
N1739	1.600	9.900	-1.000
N1740	-1.600	9.900	-1.000
N1741	-1.600	8.100	-1.000
N1742	1.600	8.100	-1.000
N1746	-0.500	-3.500	4.600
N1747	0.500	-3.500	4.600
N1749	-0.500	120.500	4.600
N1750	0.500	120.500	4.600
N1753	-3.404	58.500	5.022
N1755	3.404	58.500	5.022
N1764	-3.404	80.823	5.022
N1765	-2.019	80.823	4.821
N1766	-0.633	80.823	4.619
N1768	0.633	80.823	4.619
N1769	2.019	80.823	4.821
N1770	3.404	80.823	5.022
N1774	1.350	81.000	-0.200
N1775	-1.350	81.000	-0.200
N1776	1.350	81.000	4.724
N1777	-1.350	81.000	4.724
N1778	0.500	81.178	4.600
N1779	3.404	81.178	5.022
N1780	0.500	80.823	4.600
N1781	-0.500	80.823	4.600
N1782	-0.500	81.178	4.600
N1783	-3.404	81.178	5.022
N1784	-1.350	90.000	-0.200
N1785	1.350	90.000	-0.200
N1786	1.350	90.000	4.724
N1787	-1.350	90.000	4.724
N1788	0.500	90.178	4.600
N1789	3.404	90.178	5.022
N1790	0.500	89.823	4.600
N1791	3.404	89.823	5.022
N1792	-0.500	89.823	4.600
N1793	-0.500	90.178	4.600
N1794	-3.404	89.823	5.022
N1795	-3.404	90.178	5.022
N1796	-3.404	81.478	5.022
N1797	-2.019	81.478	4.821
N1798	-0.633	81.478	4.619

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N1799	0.633	81.478	4.619
N1800	2.019	81.478	4.821
N1801	3.404	81.478	5.022
N1802	-3.404	89.523	5.022
N1803	-2.019	89.523	4.821
N1804	-0.633	89.523	4.619
N1805	0.633	89.523	4.619
N1806	2.019	89.523	4.821
N1807	3.404	89.523	5.022
N1808	3.404	83.978	5.022
N1809	2.019	83.978	4.821
N1810	0.633	83.978	4.619
N1811	-0.633	83.978	4.619
N1812	-2.019	83.978	4.821
N1813	-3.404	83.978	5.022
N1814	0.633	85.500	4.619
N1815	-0.633	85.500	4.619
N1816	0.633	86.500	4.619
N1817	-0.633	86.500	4.619
N1818	0.633	84.500	4.619
N1819	-0.633	84.500	4.619
N1820	0.633	83.500	4.619
N1821	-0.633	83.500	4.619
N1822	0.633	88.500	4.619
N1823	-0.633	88.500	4.619
N1824	0.633	87.500	4.619
N1825	-0.633	87.500	4.619
N1826	3.404	87.023	5.022
N1827	2.019	87.023	4.821
N1828	0.633	87.023	4.619
N1829	-0.633	87.023	4.619
N1830	-2.019	87.023	4.821
N1831	-3.404	87.023	5.022
N1832	0.633	82.500	4.619
N1833	-0.633	82.500	4.619
N1834	-2.019	81.178	4.821
N1835	-0.633	81.178	4.619
N1836	0.633	81.178	4.619
N1837	2.019	81.178	4.821
N1838	-2.019	89.823	4.821
N1839	-0.633	89.823	4.619
N1840	0.633	89.823	4.619
N1841	2.019	89.823	4.821
N1842	-3.404	90.478	5.022
N1843	-2.019	90.478	4.821
N1844	-0.633	90.478	4.619
N1845	0.633	90.478	4.619
N1846	2.019	90.478	4.821
N1847	3.404	90.478	5.022
N1848	-3.404	98.523	5.022
N1849	-2.019	98.523	4.821
N1850	-0.633	98.523	4.619
N1851	0.633	98.523	4.619
N1852	2.019	98.523	4.821
N1853	3.404	98.523	5.022
N1854	3.404	92.978	5.022
N1855	2.019	92.978	4.821
N1856	0.633	92.978	4.619
N1857	-0.633	92.978	4.619
N1858	-2.019	92.978	4.821
N1859	-3.404	92.978	5.022
N1860	0.633	94.500	4.619
N1861	-0.633	94.500	4.619
N1862	0.633	95.500	4.619
N1863	-0.633	95.500	4.619
N1864	0.633	93.500	4.619

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N1865	-0.633	93.500	4.619
N1866	0.633	92.500	4.619
N1867	-0.633	92.500	4.619
N1868	0.633	97.500	4.619
N1869	-0.633	97.500	4.619
N1870	0.633	96.500	4.619
N1871	-0.633	96.500	4.619
N1872	3.404	96.023	5.022
N1873	2.019	96.023	4.821
N1874	0.633	96.023	4.619
N1875	-0.633	96.023	4.619
N1876	-2.019	96.023	4.821
N1877	-3.404	96.023	5.022
N1878	0.633	91.500	4.619
N1879	-0.633	91.500	4.619
N1880	-2.019	90.178	4.821
N1881	-0.633	90.178	4.619
N1882	0.633	90.178	4.619
N1883	2.019	90.178	4.821
N1890	0.000	89.823	4.600
N1891	0.000	90.178	4.600
N1892	0.000	98.823	4.600
N1893	0.000	99.178	4.600
N1894	-1.350	99.178	4.724
N1895	1.350	98.823	4.724
N1896	1.350	99.178	4.724
N1901	0.000	80.823	4.600
N1902	0.000	81.178	4.600
N1903	-1.350	80.823	4.724
N1904	-1.350	81.178	4.724
N1909	-3.404	35.822	5.022
N1910	-0.633	35.822	4.619
N1911	3.404	35.822	5.022
N1912	0.633	35.822	4.619
N1913	-2.019	35.822	4.821
N1914	2.019	35.822	4.821
N1915	0.500	45.000	0.000
N1916	0.500	45.000	4.600
N1917	-0.500	45.000	0.000
N1918	-0.500	45.000	4.600
N1919	3.404	45.178	5.022
N1920	0.500	45.178	4.600
N1921	-0.500	45.178	4.600
N1922	-3.404	45.178	5.022
N1923	3.404	44.822	5.022
N1924	0.500	44.822	4.600
N1925	-0.500	44.822	4.600
N1926	-3.404	44.822	5.022
N1927	-3.404	45.477	5.022
N1928	-3.404	44.523	5.022
N1929	-2.019	45.178	4.821
N1930	-2.019	45.477	4.821
N1931	-2.019	44.822	4.821
N1932	-2.019	44.523	4.821
N1933	-0.633	45.178	4.619
N1934	-0.633	45.477	4.619
N1935	-0.633	44.822	4.619
N1936	-0.633	44.523	4.619
N1937	0.633	45.178	4.619
N1938	0.633	45.477	4.619
N1939	0.633	44.822	4.619
N1940	0.633	44.523	4.619
N1941	2.019	45.178	4.821
N1942	2.019	45.477	4.821
N1943	2.019	44.822	4.821
N1944	2.019	44.523	4.821

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N1945	3.404	45.477	5.022
N1946	3.404	44.523	5.022
N1947	0.000	44.822	4.600
N1948	0.000	45.178	4.600
N1949	0.500	45.000	-1.000
N1950	-0.500	45.000	-1.000
N1951	3.404	38.977	5.022
N1952	2.019	38.977	4.821
N1953	0.633	38.977	4.619
N1954	-0.633	38.977	4.619
N1955	-2.019	38.977	4.821
N1956	-3.404	38.977	5.022
N1957	0.633	40.500	4.619
N1958	-0.633	40.500	4.619
N1959	0.633	41.500	4.619
N1960	-0.633	41.500	4.619
N1961	0.633	39.500	4.619
N1962	-0.633	39.500	4.619
N1963	0.633	38.500	4.619
N1964	-0.633	38.500	4.619
N1965	0.633	43.500	4.619
N1966	-0.633	43.500	4.619
N1967	0.633	42.500	4.619
N1968	-0.633	42.500	4.619
N1969	3.404	42.023	5.022
N1970	2.019	42.023	4.821
N1971	0.633	42.023	4.619
N1972	-0.633	42.023	4.619
N1973	-2.019	42.023	4.821
N1974	-3.404	42.023	5.022
N1975	-3.404	53.523	5.022
N1976	-2.019	53.523	4.821
N1977	-0.633	53.523	4.619
N1978	0.633	53.523	4.619
N1979	2.019	53.523	4.821
N1980	3.404	53.523	5.022
N1981	3.404	47.978	5.022
N1982	2.019	47.978	4.821
N1983	0.633	47.977	4.619
N1984	-0.633	47.977	4.619
N1985	-2.019	47.978	4.821
N1986	-3.404	47.978	5.022
N1987	0.633	49.500	4.619
N1988	-0.633	49.500	4.619
N1989	0.633	50.500	4.619
N1990	-0.633	50.500	4.619
N1991	0.633	48.500	4.619
N1992	-0.633	48.500	4.619
N1993	0.633	47.500	4.619
N1994	-0.633	47.500	4.619
N1995	0.633	52.500	4.619
N1996	-0.633	52.500	4.619
N1997	0.633	51.500	4.619
N1998	-0.633	51.500	4.619
N1999	3.404	51.023	5.022
N2000	2.019	51.023	4.821
N2001	0.633	51.023	4.619
N2002	-0.633	51.023	4.619
N2003	-2.019	51.023	4.821
N2004	-3.404	51.023	5.022
N2005	0.633	46.500	4.619
N2006	-0.633	46.500	4.619
N2007	-3.404	53.823	5.022
N2008	-0.633	53.822	4.619
N2009	3.404	53.823	5.022
N2010	0.633	53.822	4.619

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N2011	-2.019	53.823	4.821
N2012	2.019	53.823	4.821
N2013	0.500	54.000	0.000
N2014	0.500	54.000	4.600
N2015	-0.500	54.000	0.000
N2016	-0.500	54.000	4.600
N2017	3.404	54.178	5.022
N2018	0.500	54.178	4.600
N2019	-0.500	54.178	4.600
N2020	-3.404	54.178	5.022
N2021	-3.404	54.478	5.022
N2022	-2.019	54.178	4.821
N2023	-2.019	54.478	4.821
N2024	-0.633	54.178	4.619
N2025	-0.633	54.477	4.619
N2026	0.633	54.178	4.619
N2027	0.633	54.477	4.619
N2028	2.019	54.178	4.821
N2029	2.019	54.478	4.821
N2030	3.404	54.478	5.022
N2031	0.000	54.178	4.600
N2032	0.500	54.000	-1.000
N2033	-0.500	54.000	-1.000
N2034	-1.600	54.900	-1.000
N2035	1.600	54.900	-1.000
N2036	0.500	63.000	0.000
N2037	0.500	63.000	4.600
N2038	-0.500	63.000	0.000
N2039	-0.500	63.000	4.600
N2040	3.404	63.178	5.022
N2041	0.500	63.178	4.600
N2042	-0.500	63.178	4.600
N2043	-3.404	63.178	5.022
N2044	3.404	62.823	5.022
N2045	0.500	62.823	4.600
N2046	-0.500	62.823	4.600
N2047	-3.404	62.823	5.022
N2048	-3.404	63.478	5.022
N2049	-3.404	62.523	5.022
N2050	-2.019	63.178	4.821
N2051	-2.019	63.478	4.821
N2052	-2.019	62.823	4.821
N2053	-2.019	62.523	4.821
N2054	-0.633	63.178	4.619
N2055	-0.633	63.478	4.619
N2056	-0.633	62.823	4.619
N2057	-0.633	62.523	4.619
N2058	0.633	63.178	4.619
N2059	0.633	63.478	4.619
N2060	0.633	62.823	4.619
N2061	0.633	62.523	4.619
N2062	2.019	63.178	4.821
N2063	2.019	63.478	4.821
N2064	2.019	62.823	4.821
N2065	2.019	62.523	4.821
N2066	3.404	63.478	5.022
N2067	3.404	62.523	5.022
N2068	0.000	62.823	4.600
N2069	0.000	63.178	4.600
N2070	0.500	63.000	-1.000
N2071	-0.500	63.000	-1.000
N2072	3.404	56.978	5.022
N2073	2.019	56.978	4.821
N2074	0.633	56.978	4.619
N2075	-0.633	56.978	4.619
N2076	-2.019	56.978	4.821

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N2077	-3.404	56.978	5.022
N2078	0.633	58.500	4.619
N2079	-0.633	58.500	4.619
N2080	0.633	59.500	4.619
N2081	-0.633	59.500	4.619
N2082	0.633	57.500	4.619
N2083	-0.633	57.500	4.619
N2084	0.633	56.500	4.619
N2085	-0.633	56.500	4.619
N2086	0.633	55.500	4.619
N2087	-0.633	55.500	4.619
N2088	0.633	61.500	4.619
N2089	-0.633	61.500	4.619
N2090	0.633	60.500	4.619
N2091	-0.633	60.500	4.619
N2092	3.404	60.023	5.022
N2093	2.019	60.023	4.821
N2094	0.633	60.023	4.619
N2095	-0.633	60.023	4.619
N2096	-2.019	60.023	4.821
N2097	-3.404	60.023	5.022
N2098	-3.404	71.523	5.022
N2099	-2.019	71.523	4.821
N2100	-0.633	71.523	4.619
N2101	0.633	71.523	4.619
N2102	2.019	71.523	4.821
N2103	3.404	71.523	5.022
N2104	3.404	65.978	5.022
N2105	2.019	65.978	4.821
N2106	0.633	65.978	4.619
N2107	-0.633	65.978	4.619
N2108	-2.019	65.978	4.821
N2109	-3.404	65.978	5.022
N2110	0.633	67.500	4.619
N2111	-0.633	67.500	4.619
N2112	0.633	68.500	4.619
N2113	-0.633	68.500	4.619
N2114	0.633	66.500	4.619
N2115	-0.633	66.500	4.619
N2116	0.633	65.500	4.619
N2117	-0.633	65.500	4.619
N2118	0.633	70.500	4.619
N2119	-0.633	70.500	4.619
N2120	0.633	69.500	4.619
N2121	-0.633	69.500	4.619
N2122	3.404	69.023	5.022
N2123	2.019	69.023	4.821
N2124	0.633	69.023	4.619
N2125	-0.633	69.023	4.619
N2126	-2.019	69.023	4.821
N2127	-3.404	69.023	5.022
N2128	0.633	64.500	4.619
N2129	-0.633	64.500	4.619
N2130	-1.600	53.100	-1.000
N2131	1.600	53.100	-1.000
N2132	0.000	53.822	4.600
N2133	0.500	53.822	4.600
N2134	-0.500	53.822	4.600
N2139	1.600	45.900	-1.000
N2140	-1.600	45.900	-1.000
N2141	-1.600	44.100	-1.000
N2142	1.600	44.100	-1.000
N2143	0.500	36.000	0.000
N2144	0.500	36.000	4.600
N2145	-0.500	36.000	0.000
N2146	-0.500	36.000	4.600

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N2147	3.404	36.178	5.022
N2148	0.500	36.178	4.600
N2149	-0.500	36.178	4.600
N2150	-3.404	36.178	5.022
N2151	-3.404	36.477	5.022
N2152	-2.019	36.178	4.821
N2153	-2.019	36.477	4.821
N2154	-0.633	36.178	4.619
N2155	-0.633	36.477	4.619
N2156	0.633	36.178	4.619
N2157	0.633	36.477	4.619
N2158	2.019	36.178	4.821
N2159	2.019	36.477	4.821
N2160	3.404	36.477	5.022
N2161	0.000	36.178	4.600
N2162	0.500	36.000	-1.000
N2163	-0.500	36.000	-1.000
N2164	1.600	36.900	-1.000
N2165	-1.600	36.900	-1.000
N2166	-1.600	35.100	-1.000
N2167	1.600	35.100	-1.000
N2168	-0.500	35.822	4.600
N2169	0.500	35.822	4.600
N1757	0.000	35.822	4.600
N2171	-1.350	72.178	4.724
N2172	-1.350	71.823	4.724
N2174	1.350	80.823	4.724
N2175	1.350	81.178	4.724
N2177	1.350	89.823	4.724
N2178	1.350	90.178	4.724
N2179	-1.350	89.823	4.724
N2180	-1.350	90.178	4.724
N2186	-1.600	63.900	-1.000
N2187	-1.600	62.100	-1.000
N2188	1.600	62.100	-1.000
N2189	1.600	63.900	-1.000
N2190	-1.600	27.900	-1.000
N2191	-1.600	26.100	-1.000
N2192	1.600	26.100	-1.000
N2193	1.600	27.900	-1.000
N2194	0.000	-3.500	5.022
N2195	0.000	120.500	5.022
N2196	0.000	58.500	5.022
N2197	0.633	37.500	4.619
N2198	-0.633	37.500	4.619
N2199	3.404	0.000	5.022
N2200	0.000	0.000	5.022
N2201	-3.404	0.000	5.022
N2202	0.633	-0.477	4.619
N2203	0.633	-3.500	4.619

5. Members

Name	Cross-section	Material	Length [m]	Beg. node	End node	Type
B542	S1 - QRO220X12.5	S 235	4.600	N460	N461	column (100)
B543	S1 - QRO220X12.5	S 235	4.600	N1	N462	column (100)
B544	VKN - U g (195; 160; 20; 10)	S 235	1.000	N464	N465	beam (80)
B545	KKN - U g (173; 160; 20; 10)	S 235	2.935	N464	N463	beam (80)
B548	KKN - U g (173; 160; 20; 10)	S 235	2.935	N465	N466	beam (80)
B549	KKN - U g (173; 160; 20; 10)	S 235	2.935	N468	N467	beam (80)
B550	VKN - U g (195; 160; 20; 10)	S 235	1.000	N468	N469	beam (80)
B552	KKN - U g (173; 160; 20; 10)	S 235	2.935	N469	N470	beam (80)
B554	N2 - UNP240	S 235	0.300	N466	N471	beam (80)
B555	N2 - UNP240	S 235	0.300	N472	N470	beam (80)
B556	N2 - UNP240	S 235	0.355	N470	N466	beam (80)

Name	Cross-section	Material	Length [m]	Beg. node	End node	Type
B557	N1 - IPE240	S 235	0.300	N473	N474	beam (80)
B558	N1 - IPE240	S 235	0.355	N475	N473	beam (80)
B559	N1 - IPE240	S 235	0.300	N476	N475	beam (80)
B560	N1 - IPE240	S 235	0.300	N477	N478	beam (80)
B561	N1 - IPE240	S 235	0.355	N479	N477	beam (80)
B562	N1 - IPE240	S 235	0.300	N480	N479	beam (80)
B563	N1 - IPE240	S 235	0.300	N481	N482	beam (80)
B564	N1 - IPE240	S 235	0.355	N483	N481	beam (80)
B566	N1 - IPE240	S 235	0.300	N485	N486	beam (80)
B567	N1 - IPE240	S 235	0.355	N487	N485	beam (80)
B568	N1 - IPE240	S 235	0.300	N488	N487	beam (80)
B569	N2 - UNP240	S 235	0.300	N463	N489	beam (80)
B570	N2 - UNP240	S 235	0.300	N490	N467	beam (80)
B571	N2 - UNP240	S 235	0.355	N467	N463	beam (80)
TEM1	TN - Rectangle (500; 500)	C25/30	1.000	N493	N460	column (100)
TEM2	TN - Rectangle (500; 500)	C25/30	1.000	N494	N1	column (100)
B575	S1 - QRO220X12.5	S 235	4.600	N499	N500	column (100)
B576	S1 - QRO220X12.5	S 235	4.600	N501	N502	column (100)
B577	VKN - U g (195; 160; 20; 10)	S 235	1.000	N504	N505	beam (80)
B578	KKN - U g (173; 160; 20; 10)	S 235	2.935	N504	N503	beam (80)
B581	KKN - U g (173; 160; 20; 10)	S 235	2.935	N505	N506	beam (80)
B582	KKN - U g (173; 160; 20; 10)	S 235	2.935	N508	N507	beam (80)
B583	VKN - U g (195; 160; 20; 10)	S 235	1.000	N508	N509	beam (80)
B585	KKN - U g (173; 160; 20; 10)	S 235	2.935	N509	N510	beam (80)
B587	N2 - UNP240	S 235	0.300	N506	N511	beam (80)
B588	N2 - UNP240	S 235	0.300	N512	N510	beam (80)
B589	N2 - UNP240	S 235	0.355	N510	N506	beam (80)
B590	N1 - IPE240	S 235	0.300	N513	N514	beam (80)
B591	N1 - IPE240	S 235	0.355	N515	N513	beam (80)
B592	N1 - IPE240	S 235	0.300	N516	N515	beam (80)
B593	N1 - IPE240	S 235	0.300	N517	N518	beam (80)
B594	N1 - IPE240	S 235	0.355	N519	N517	beam (80)
B595	N1 - IPE240	S 235	0.300	N520	N519	beam (80)
B596	N1 - IPE240	S 235	0.300	N521	N522	beam (80)
B597	N1 - IPE240	S 235	0.355	N523	N521	beam (80)
B598	N1 - IPE240	S 235	0.300	N524	N523	beam (80)
B599	N1 - IPE240	S 235	0.300	N525	N709	beam (80)
B600	N1 - IPE240	S 235	0.355	N710	N525	beam (80)
B601	N1 - IPE240	S 235	0.300	N711	N710	beam (80)
B602	N2 - UNP240	S 235	0.300	N503	N712	beam (80)
B603	N2 - UNP240	S 235	0.300	N713	N507	beam (80)
B604	N2 - UNP240	S 235	0.355	N507	N503	beam (80)
TEM3	TN - Rectangle (500; 500)	C25/30	1.000	N716	N499	column (100)
TEM4	TN - Rectangle (500; 500)	C25/30	1.000	N717	N501	column (100)
B608	N2 - UNP240	S 235	8.045	N489	N713	beam (80)
B609	N1 - IPE240	S 235	8.045	N486	N711	beam (80)
B610	N1 - IPE240	S 235	8.045	N482	N524	beam (80)
B611	N1 - IPE240	S 235	8.045	N478	N520	beam (80)
B612	N1 - IPE240	S 235	8.045	N474	N516	beam (80)
B613	N2 - UNP240	S 235	8.045	N471	N512	beam (80)
B614	N2 - UNP240	S 235	3.022	N722	N490	beam (80)
B615	N1 - IPE240	S 235	3.022	N723	N488	beam (80)
B617	N1 - IPE240	S 235	3.023	N1555	N480	beam (80)
B618	N1 - IPE240	S 235	3.022	N726	N476	beam (80)
B619	N2 - UNP240	S 235	3.022	N727	N472	beam (80)
B620	P - RO26.9X3.2	S 235	1.400	N728	N729	beam (80)
B621	P - RO26.9X3.2	S 235	1.400	N729	N730	beam (80)
B622	P - RO26.9X3.2	S 235	1.400	N731	N732	beam (80)
B623	P - RO26.9X3.2	S 235	1.400	N732	N733	beam (80)
B624	NZ - L80X8	S 235	1.267	N734	N735	purlin (0)
B625	NZ - L80X8	S 235	1.267	N736	N737	purlin (0)
B626	NZ - L80X8	S 235	1.267	N738	N739	purlin (0)
B627	NZ - L80X8	S 235	1.267	N740	N741	purlin (0)
B628	NZ - L80X8	S 235	1.267	N742	N743	purlin (0)
B629	NZ - L80X8	S 235	1.267	N744	N745	purlin (0)
B630	NZ - L80X8	S 235	1.267	N746	N747	purlin (0)

Name	Cross-section	Material	Length [m]	Beg. node	End node	Type
B631	P - RO26.9X3.2	S 235	1.400	N748	N749	beam (80)
B632	P - RO26.9X3.2	S 235	1.400	N749	N750	beam (80)
B633	P - RO26.9X3.2	S 235	1.400	N751	N752	beam (80)
B634	P - RO26.9X3.2	S 235	1.400	N752	N753	beam (80)
B635	D - RD16	S 235	3.130	N466	N732	truss diagonal (90)
B636	D - RD16	S 235	3.130	N477	N732	truss diagonal (90)
B637	D - RD16	S 235	3.351	N732	N753	truss diagonal (90)
B638	D - RD16	S 235	3.351	N733	N752	truss diagonal (90)
B639	D - RD16	S 235	3.130	N752	N510	truss diagonal (90)
B640	D - RD16	S 235	3.130	N752	N519	truss diagonal (90)
B641	D - RD16	S 235	3.130	N463	N729	truss diagonal (90)
B642	D - RD16	S 235	3.130	N481	N729	truss diagonal (90)
B643	D - RD16	S 235	3.351	N729	N748	truss diagonal (90)
B644	D - RD16	S 235	3.351	N728	N749	truss diagonal (90)
B645	D - RD16	S 235	3.130	N749	N507	truss diagonal (90)
B646	D - RD16	S 235	3.130	N749	N523	truss diagonal (90)
B649	S3 - QRO220X12.5	S 235	4.924	N755	N811	column (100)
B650	VKN - U g (195; 160; 20; 10)	S 235	1.000	N757	N758	beam (80)
B651	KKN - U g (173; 160; 20; 10)	S 235	2.935	N757	N756	beam (80)
B653	KKN - U g (173; 160; 20; 10)	S 235	2.935	N758	N759	beam (80)
B654	KKN - U g (173; 160; 20; 10)	S 235	2.935	N761	N760	beam (80)
B655	VKN - U g (195; 160; 20; 10)	S 235	1.000	N761	N762	beam (80)
B657	KKN - U g (173; 160; 20; 10)	S 235	2.935	N762	N763	beam (80)
B658	N2 - UNP240	S 235	0.300	N759	N764	beam (80)
B659	N2 - UNP240	S 235	0.300	N765	N1558	beam (80)
B660	N2 - UNP240	S 235	0.355	N763	N759	beam (80)
B661	N1 - IPE240	S 235	0.300	N766	N767	beam (80)
B662	N1 - IPE240	S 235	0.355	N768	N766	beam (80)
B663	N1 - IPE240	S 235	0.300	N769	N1562	beam (80)
B664	N1 - IPE240	S 235	0.300	N770	N771	beam (80)
B665	N1 - IPE240	S 235	0.355	N772	N770	beam (80)
B666	N1 - IPE240	S 235	0.300	N773	N1559	beam (80)
B667	N1 - IPE240	S 235	0.300	N774	N775	beam (80)
B668	N1 - IPE240	S 235	0.355	N776	N774	beam (80)
B669	N1 - IPE240	S 235	0.300	N777	N1561	beam (80)
B670	N1 - IPE240	S 235	0.300	N778	N779	beam (80)
B671	N1 - IPE240	S 235	0.355	N780	N778	beam (80)
B672	N1 - IPE240	S 235	0.300	N781	N1563	beam (80)
B673	N2 - UNP240	S 235	0.300	N756	N782	beam (80)
B674	N2 - UNP240	S 235	0.300	N783	N1560	beam (80)
B675	N2 - UNP240	S 235	0.355	N760	N756	beam (80)
B678	N2 - UNP240	S 235	8.045	N712	N783	beam (80)
B679	N1 - IPE240	S 235	8.045	N709	N781	beam (80)
B680	N1 - IPE240	S 235	8.045	N522	N777	beam (80)
B681	N1 - IPE240	S 235	8.045	N518	N773	beam (80)
B682	N1 - IPE240	S 235	8.045	N514	N769	beam (80)
B683	N2 - UNP240	S 235	8.045	N511	N765	beam (80)
B684	P - RO26.9X3.2	S 235	1.400	N787	N788	beam (80)
B685	P - RO26.9X3.2	S 235	1.400	N788	N789	beam (80)
B686	P - RO26.9X3.2	S 235	1.400	N790	N791	beam (80)
B687	P - RO26.9X3.2	S 235	1.400	N791	N792	beam (80)
B688	NZ - L80X8	S 235	1.267	N793	N794	purlin (0)
B689	NZ - L80X8	S 235	1.267	N795	N796	purlin (0)
B690	NZ - L80X8	S 235	1.267	N797	N798	purlin (0)
B691	NZ - L80X8	S 235	1.267	N799	N800	purlin (0)
B692	NZ - L80X8	S 235	1.267	N801	N802	purlin (0)
B693	NZ - L80X8	S 235	1.267	N803	N804	purlin (0)
B694	P - RO26.9X3.2	S 235	1.400	N805	N806	beam (80)
B695	P - RO26.9X3.2	S 235	1.400	N806	N807	beam (80)
B696	P - RO26.9X3.2	S 235	1.400	N808	N809	beam (80)
B697	P - RO26.9X3.2	S 235	1.400	N809	N810	beam (80)
B698	D - RD16	S 235	3.130	N506	N791	truss diagonal (90)
B699	D - RD16	S 235	3.130	N517	N791	truss diagonal (90)
B700	D - RD16	S 235	3.351	N791	N810	truss diagonal (90)
B701	D - RD16	S 235	3.351	N792	N809	truss diagonal (90)
B702	D - RD16	S 235	3.130	N809	N1558	truss diagonal (90)

Name	Cross-section	Material	Length [m]	Beg. node	End node	Type
B703	D - RD16	S 235	3.130	N809	N1559	truss diagonal (90)
B704	D - RD16	S 235	3.130	N503	N788	truss diagonal (90)
B705	D - RD16	S 235	3.130	N521	N788	truss diagonal (90)
B706	D - RD16	S 235	3.351	N788	N805	truss diagonal (90)
B707	D - RD16	S 235	3.351	N787	N806	truss diagonal (90)
B708	D - RD16	S 235	3.130	N806	N1560	truss diagonal (90)
B709	D - RD16	S 235	3.130	N806	N1561	truss diagonal (90)
B712	S3 - QRO220X12.5	S 235	4.924	N817	N814	column (100)
B714	NZ - L80X8	S 235	1.267	N819	N820	purlin (0)
B715	S3 - QRO220X12.5	S 235	4.924	N821	N877	column (100)
B716	VKN - U g (195; 160; 20; 10)	S 235	1.000	N823	N824	beam (80)
B717	KKN - U g (173; 160; 20; 10)	S 235	2.935	N823	N822	beam (80)
B719	KKN - U g (173; 160; 20; 10)	S 235	2.935	N824	N825	beam (80)
B720	KKN - U g (173; 160; 20; 10)	S 235	2.935	N827	N826	beam (80)
B721	VKN - U g (195; 160; 20; 10)	S 235	1.000	N827	N828	beam (80)
B723	KKN - U g (173; 160; 20; 10)	S 235	2.935	N828	N829	beam (80)
B724	N2 - UNP240	S 235	0.300	N825	N830	beam (80)
B725	N2 - UNP240	S 235	0.300	N831	N1764	beam (80)
B726	N2 - UNP240	S 235	0.355	N829	N825	beam (80)
B727	N1 - IPE240	S 235	0.300	N832	N833	beam (80)
B728	N1 - IPE240	S 235	0.355	N834	N832	beam (80)
B729	N1 - IPE240	S 235	0.300	N835	N1765	beam (80)
B730	N1 - IPE240	S 235	0.300	N836	N837	beam (80)
B731	N1 - IPE240	S 235	0.355	N838	N836	beam (80)
B732	N1 - IPE240	S 235	0.300	N839	N1766	beam (80)
B733	N1 - IPE240	S 235	0.300	N840	N841	beam (80)
B734	N1 - IPE240	S 235	0.355	N842	N840	beam (80)
B735	N1 - IPE240	S 235	0.300	N843	N1768	beam (80)
B736	N1 - IPE240	S 235	0.300	N844	N845	beam (80)
B737	N1 - IPE240	S 235	0.355	N846	N844	beam (80)
B738	N1 - IPE240	S 235	0.300	N847	N1769	beam (80)
B739	N2 - UNP240	S 235	0.300	N822	N848	beam (80)
B740	N2 - UNP240	S 235	0.300	N849	N1770	beam (80)
B741	N2 - UNP240	S 235	0.355	N826	N822	beam (80)
B744	N2 - UNP240	S 235	8.045	N782	N849	beam (80)
B745	N1 - IPE240	S 235	8.045	N779	N847	beam (80)
B746	N1 - IPE240	S 235	8.045	N775	N843	beam (80)
B747	N1 - IPE240	S 235	8.045	N771	N839	beam (80)
B748	N1 - IPE240	S 235	8.045	N767	N835	beam (80)
B749	N2 - UNP240	S 235	8.045	N764	N831	beam (80)
B750	P - RO26.9X3.2	S 235	1.400	N853	N854	beam (80)
B751	P - RO26.9X3.2	S 235	1.400	N854	N855	beam (80)
B752	P - RO26.9X3.2	S 235	1.400	N856	N857	beam (80)
B753	P - RO26.9X3.2	S 235	1.400	N857	N858	beam (80)
B754	NZ - L80X8	S 235	1.267	N859	N860	purlin (0)
B755	NZ - L80X8	S 235	1.267	N861	N862	purlin (0)
B756	NZ - L80X8	S 235	1.267	N863	N864	purlin (0)
B757	NZ - L80X8	S 235	1.267	N865	N866	purlin (0)
B758	NZ - L80X8	S 235	1.267	N867	N868	purlin (0)
B759	NZ - L80X8	S 235	1.267	N869	N870	purlin (0)
B760	P - RO26.9X3.2	S 235	1.400	N871	N872	beam (80)
B761	P - RO26.9X3.2	S 235	1.400	N872	N873	beam (80)
B762	P - RO26.9X3.2	S 235	1.400	N874	N875	beam (80)
B763	P - RO26.9X3.2	S 235	1.400	N875	N876	beam (80)
B764	D - RD16	S 235	3.130	N759	N857	truss diagonal (90)
B765	D - RD16	S 235	3.130	N770	N857	truss diagonal (90)
B766	D - RD16	S 235	3.351	N857	N876	truss diagonal (90)
B767	D - RD16	S 235	3.351	N858	N875	truss diagonal (90)
B768	D - RD16	S 235	3.130	N875	N1764	truss diagonal (90)
B769	D - RD16	S 235	3.130	N875	N1766	truss diagonal (90)
B770	D - RD16	S 235	3.130	N756	N854	truss diagonal (90)
B771	D - RD16	S 235	3.130	N774	N854	truss diagonal (90)
B772	D - RD16	S 235	3.351	N854	N871	truss diagonal (90)
B773	D - RD16	S 235	3.351	N853	N872	truss diagonal (90)
B774	D - RD16	S 235	3.130	N872	N1770	truss diagonal (90)
B775	D - RD16	S 235	3.130	N872	N1768	truss diagonal (90)

Name	Cross-section	Material	Length [m]	Beg. node	End node	Type
B778	S3 - QRO220X12.5	S 235	4.924	N883	N880	column (100)
B780	NZ - L80X8	S 235	1.267	N885	N886	purlin (0)
B781	S1 - QRO220X12.5	S 235	4.600	N887	N888	column (100)
B782	S1 - QRO220X12.5	S 235	4.600	N889	N890	column (100)
B783	VKN - U g (195; 160; 20; 10)	S 235	1.000	N892	N893	beam (80)
B784	KKN - U g (173; 160; 20; 10)	S 235	2.935	N892	N891	beam (80)
B787	KKN - U g (173; 160; 20; 10)	S 235	2.935	N893	N894	beam (80)
B788	KKN - U g (173; 160; 20; 10)	S 235	2.935	N896	N895	beam (80)
B789	VKN - U g (195; 160; 20; 10)	S 235	1.000	N896	N897	beam (80)
B791	KKN - U g (173; 160; 20; 10)	S 235	2.935	N897	N898	beam (80)
B794	N2 - UNP240	S 235	0.300	N900	N898	beam (80)
B795	N2 - UNP240	S 235	0.355	N898	N894	beam (80)
B797	N1 - IPE240	S 235	0.355	N903	N901	beam (80)
B798	N1 - IPE240	S 235	0.300	N904	N903	beam (80)
B800	N1 - IPE240	S 235	0.355	N907	N905	beam (80)
B801	N1 - IPE240	S 235	0.300	N908	N907	beam (80)
B803	N1 - IPE240	S 235	0.355	N911	N909	beam (80)
B804	N1 - IPE240	S 235	0.300	N912	N911	beam (80)
B806	N1 - IPE240	S 235	0.355	N915	N913	beam (80)
B807	N1 - IPE240	S 235	0.300	N916	N915	beam (80)
B809	N2 - UNP240	S 235	0.300	N918	N895	beam (80)
B810	N2 - UNP240	S 235	0.355	N895	N891	beam (80)
TEM5	TN - Rectangle (500; 500)	C25/30	1.000	N921	N887	column (100)
TEM6	TN - Rectangle (500; 500)	C25/30	1.000	N922	N889	column (100)
B814	N2 - UNP240	S 235	8.045	N848	N918	beam (80)
B815	N1 - IPE240	S 235	8.045	N845	N916	beam (80)
B816	N1 - IPE240	S 235	8.045	N841	N912	beam (80)
B817	N1 - IPE240	S 235	8.045	N837	N908	beam (80)
B818	N1 - IPE240	S 235	8.045	N833	N904	beam (80)
B819	N2 - UNP240	S 235	8.045	N830	N900	beam (80)
B820	P - RO26.9X3.2	S 235	1.400	N925	N926	beam (80)
B821	P - RO26.9X3.2	S 235	1.400	N926	N927	beam (80)
B822	P - RO26.9X3.2	S 235	1.400	N928	N929	beam (80)
B823	P - RO26.9X3.2	S 235	1.400	N929	N930	beam (80)
B824	NZ - L80X8	S 235	1.267	N931	N932	purlin (0)
B825	NZ - L80X8	S 235	1.267	N933	N934	purlin (0)
B826	NZ - L80X8	S 235	1.267	N935	N936	purlin (0)
B827	NZ - L80X8	S 235	1.267	N937	N938	purlin (0)
B828	NZ - L80X8	S 235	1.267	N939	N940	purlin (0)
B829	NZ - L80X8	S 235	1.267	N941	N942	purlin (0)
B830	NZ - L80X8	S 235	1.267	N943	N944	purlin (0)
B831	P - RO26.9X3.2	S 235	1.400	N945	N946	beam (80)
B832	P - RO26.9X3.2	S 235	1.400	N946	N947	beam (80)
B833	P - RO26.9X3.2	S 235	1.400	N948	N949	beam (80)
B834	P - RO26.9X3.2	S 235	1.400	N949	N950	beam (80)
B835	D - RD16	S 235	3.351	N929	N950	truss diagonal (90)
B836	D - RD16	S 235	3.351	N930	N949	truss diagonal (90)
B837	D - RD16	S 235	3.130	N949	N898	truss diagonal (90)
B838	D - RD16	S 235	3.130	N949	N907	truss diagonal (90)
B839	D - RD16	S 235	3.351	N926	N945	truss diagonal (90)
B840	D - RD16	S 235	3.351	N925	N946	truss diagonal (90)
B841	D - RD16	S 235	3.130	N946	N895	truss diagonal (90)
B842	D - RD16	S 235	3.130	N946	N911	truss diagonal (90)
B843	D - RD16	S 235	3.130	N825	N929	truss diagonal (90)
B844	D - RD16	S 235	3.130	N840	N926	truss diagonal (90)
B845	D - RD16	S 235	3.130	N836	N929	truss diagonal (90)
B846	D - RD16	S 235	3.130	N822	N926	truss diagonal (90)
B859	N2 - UNP240	S 235	0.300	N894	N965	beam (80)
B862	N1 - IPE240	S 235	0.300	N901	N968	beam (80)
B865	N1 - IPE240	S 235	0.300	N905	N972	beam (80)
B868	N1 - IPE240	S 235	0.300	N909	N976	beam (80)
B871	N1 - IPE240	S 235	0.300	N913	N980	beam (80)
B874	N2 - UNP240	S 235	0.300	N891	N983	beam (80)
B913	S1 - QRO220X12.5	S 235	4.600	N1019	N1020	column (100)
B914	S1 - QRO220X12.5	S 235	4.600	N1021	N1022	column (100)
B915	VKN - U g (195; 160; 20; 10)	S 235	1.000	N1024	N1025	beam (80)

Name	Cross-section	Material	Length [m]	Beg. node	End node	Type
B916	KKN - U g (173; 160; 20; 10)	S 235	2.935	N1024	N1023	beam (80)
B919	KKN - U g (173; 160; 20; 10)	S 235	2.935	N1025	N1026	beam (80)
B920	KKN - U g (173; 160; 20; 10)	S 235	2.935	N1028	N1027	beam (80)
B921	VKN - U g (195; 160; 20; 10)	S 235	1.000	N1028	N1029	beam (80)
B923	KKN - U g (173; 160; 20; 10)	S 235	2.935	N1029	N1030	beam (80)
B926	N2 - UNP240	S 235	0.300	N1032	N1030	beam (80)
B927	N2 - UNP240	S 235	0.355	N1030	N1026	beam (80)
B929	N1 - IPE240	S 235	0.355	N1035	N1033	beam (80)
B930	N1 - IPE240	S 235	0.300	N1036	N1035	beam (80)
B932	N1 - IPE240	S 235	0.355	N1039	N1037	beam (80)
B933	N1 - IPE240	S 235	0.300	N1040	N1039	beam (80)
B935	N1 - IPE240	S 235	0.355	N1043	N1041	beam (80)
B936	N1 - IPE240	S 235	0.300	N1044	N1043	beam (80)
B938	N1 - IPE240	S 235	0.355	N1047	N1045	beam (80)
B939	N1 - IPE240	S 235	0.300	N1048	N1047	beam (80)
B941	N2 - UNP240	S 235	0.300	N1050	N1027	beam (80)
B942	N2 - UNP240	S 235	0.355	N1027	N1023	beam (80)
TEM9	TN - Rectangle (500; 500)	C25/30	1.000	N1053	N1019	column (100)
TEM10	TN - Rectangle (500; 500)	C25/30	1.000	N1054	N1021	column (100)
B946	N2 - UNP240	S 235	8.045	N983	N1050	beam (80)
B947	N1 - IPE240	S 235	8.045	N980	N1048	beam (80)
B948	N1 - IPE240	S 235	8.045	N976	N1044	beam (80)
B949	N1 - IPE240	S 235	8.045	N972	N1040	beam (80)
B950	N1 - IPE240	S 235	8.045	N968	N1036	beam (80)
B951	N2 - UNP240	S 235	8.045	N965	N1032	beam (80)
B952	P - RO26.9X3.2	S 235	1.400	N1057	N1058	beam (80)
B953	P - RO26.9X3.2	S 235	1.400	N1058	N1059	beam (80)
B954	P - RO26.9X3.2	S 235	1.400	N1060	N1061	beam (80)
B955	P - RO26.9X3.2	S 235	1.400	N1061	N1062	beam (80)
B956	NZ - L80X8	S 235	1.267	N1063	N1064	purlin (0)
B957	NZ - L80X8	S 235	1.267	N1065	N1066	purlin (0)
B958	NZ - L80X8	S 235	1.267	N1067	N1068	purlin (0)
B959	NZ - L80X8	S 235	1.267	N1069	N1070	purlin (0)
B960	NZ - L80X8	S 235	1.267	N1071	N1072	purlin (0)
B961	NZ - L80X8	S 235	1.267	N1073	N1074	purlin (0)
B962	NZ - L80X8	S 235	1.267	N1075	N1076	purlin (0)
B963	P - RO26.9X3.2	S 235	1.400	N1077	N1078	beam (80)
B964	P - RO26.9X3.2	S 235	1.400	N1078	N1079	beam (80)
B965	P - RO26.9X3.2	S 235	1.400	N1080	N1081	beam (80)
B966	P - RO26.9X3.2	S 235	1.400	N1081	N1082	beam (80)
B967	D - RD16	S 235	3.351	N1061	N1082	truss diagonal (90)
B968	D - RD16	S 235	3.351	N1062	N1081	truss diagonal (90)
B969	D - RD16	S 235	3.130	N1081	N1030	truss diagonal (90)
B970	D - RD16	S 235	3.130	N1081	N1039	truss diagonal (90)
B971	D - RD16	S 235	3.351	N1058	N1077	truss diagonal (90)
B972	D - RD16	S 235	3.351	N1057	N1078	truss diagonal (90)
B973	D - RD16	S 235	3.130	N1078	N1027	truss diagonal (90)
B974	D - RD16	S 235	3.130	N1078	N1043	truss diagonal (90)
B975	D - RD16	S 235	3.130	N894	N1061	truss diagonal (90)
B976	D - RD16	S 235	3.130	N909	N1058	truss diagonal (90)
B977	D - RD16	S 235	3.130	N905	N1061	truss diagonal (90)
B978	D - RD16	S 235	3.130	N891	N1058	truss diagonal (90)
B1449	VKN - U g (195; 160; 20; 10)	S 235	1.000	N1569	N1570	beam (80)
B1450	KKN - U g (173; 160; 20; 10)	S 235	2.935	N1569	N1568	beam (80)
B1453	KKN - U g (173; 160; 20; 10)	S 235	2.935	N1570	N1571	beam (80)
B1454	N2 - UNP240	S 235	0.300	N1571	N1572	beam (80)
B1455	N2 - UNP240	S 235	0.355	N1558	N1571	beam (80)
B1456	N1 - IPE240	S 235	0.300	N1573	N1574	beam (80)
B1457	N1 - IPE240	S 235	0.355	N1562	N1573	beam (80)
B1458	N1 - IPE240	S 235	0.300	N1575	N1576	beam (80)
B1459	N1 - IPE240	S 235	0.355	N1559	N1575	beam (80)
B1460	N1 - IPE240	S 235	0.300	N1577	N1578	beam (80)
B1461	N1 - IPE240	S 235	0.355	N1561	N1577	beam (80)
B1462	N1 - IPE240	S 235	0.300	N1579	N1580	beam (80)
B1463	N1 - IPE240	S 235	0.355	N1563	N1579	beam (80)
B1464	N2 - UNP240	S 235	0.300	N1568	N1581	beam (80)

Name	Cross-section	Material	Length [m]	Beg. node	End node	Type
B1465	N2 - UNP240	S 235	0.355	N1560	N1568	beam (80)
B1467	S1 - QRO220X12.5	S 235	4.600	N1587	N1588	column (100)
B1468	S1 - QRO220X12.5	S 235	4.600	N1589	N1590	column (100)
B1469	VKN - U g (195; 160; 20; 10)	S 235	1.000	N1592	N1593	beam (80)
B1470	KKN - U g (173; 160; 20; 10)	S 235	2.935	N1592	N1591	beam (80)
B1473	KKN - U g (173; 160; 20; 10)	S 235	2.935	N1593	N1594	beam (80)
B1474	KKN - U g (173; 160; 20; 10)	S 235	2.935	N1596	N1595	beam (80)
B1475	VKN - U g (195; 160; 20; 10)	S 235	1.000	N1596	N1597	beam (80)
B1477	KKN - U g (173; 160; 20; 10)	S 235	2.935	N1597	N1598	beam (80)
B1479	N2 - UNP240	S 235	0.300	N1594	N1599	beam (80)
B1480	N2 - UNP240	S 235	0.300	N1600	N1598	beam (80)
B1481	N2 - UNP240	S 235	0.355	N1598	N1594	beam (80)
B1482	N1 - IPE240	S 235	0.300	N1601	N1602	beam (80)
B1483	N1 - IPE240	S 235	0.355	N1603	N1601	beam (80)
B1484	N1 - IPE240	S 235	0.300	N1604	N1603	beam (80)
B1485	N1 - IPE240	S 235	0.300	N1605	N1606	beam (80)
B1486	N1 - IPE240	S 235	0.355	N1607	N1605	beam (80)
B1487	N1 - IPE240	S 235	0.300	N1608	N1607	beam (80)
B1488	N1 - IPE240	S 235	0.300	N1609	N1610	beam (80)
B1489	N1 - IPE240	S 235	0.355	N1611	N1609	beam (80)
B1490	N1 - IPE240	S 235	0.300	N1612	N1611	beam (80)
B1491	N1 - IPE240	S 235	0.300	N1613	N1614	beam (80)
B1492	N1 - IPE240	S 235	0.355	N1615	N1613	beam (80)
B1493	N1 - IPE240	S 235	0.300	N1616	N1615	beam (80)
B1494	N2 - UNP240	S 235	0.300	N1591	N1617	beam (80)
B1495	N2 - UNP240	S 235	0.300	N1618	N1595	beam (80)
B1496	N2 - UNP240	S 235	0.355	N1595	N1591	beam (80)
TEM11	TN - Rectangle (500; 500)	C25/30	1.000	N1621	N1587	column (100)
TEM12	TN - Rectangle (500; 500)	C25/30	1.000	N1622	N1589	column (100)
B1500	N2 - UNP240	S 235	8.045	N1581	N1618	beam (80)
B1501	N1 - IPE240	S 235	8.045	N1580	N1616	beam (80)
B1502	N1 - IPE240	S 235	8.045	N1578	N1612	beam (80)
B1503	N1 - IPE240	S 235	8.045	N1576	N1608	beam (80)
B1504	N1 - IPE240	S 235	8.045	N1574	N1604	beam (80)
B1505	N2 - UNP240	S 235	8.045	N1572	N1600	beam (80)
B1506	P - RO26.9X3.2	S 235	1.400	N1627	N1628	beam (80)
B1507	P - RO26.9X3.2	S 235	1.400	N1628	N1629	beam (80)
B1508	P - RO26.9X3.2	S 235	1.400	N1630	N1631	beam (80)
B1509	P - RO26.9X3.2	S 235	1.400	N1631	N1632	beam (80)
B1510	NZ - L80X8	S 235	1.267	N1633	N1634	purlin (0)
B1511	NZ - L80X8	S 235	1.267	N1635	N1636	purlin (0)
B1512	NZ - L80X8	S 235	1.267	N1637	N1638	purlin (0)
B1513	NZ - L80X8	S 235	1.267	N1639	N1640	purlin (0)
B1514	NZ - L80X8	S 235	1.267	N1641	N1642	purlin (0)
B1515	NZ - L80X8	S 235	1.267	N1643	N1644	purlin (0)
B1516	NZ - L80X8	S 235	1.267	N1645	N1646	purlin (0)
B1517	P - RO26.9X3.2	S 235	1.400	N1647	N1648	beam (80)
B1518	P - RO26.9X3.2	S 235	1.400	N1648	N1649	beam (80)
B1519	P - RO26.9X3.2	S 235	1.400	N1650	N1651	beam (80)
B1520	P - RO26.9X3.2	S 235	1.400	N1651	N1652	beam (80)
B1521	D - RD16	S 235	3.130	N1571	N1631	truss diagonal (90)
B1522	D - RD16	S 235	3.130	N1575	N1631	truss diagonal (90)
B1523	D - RD16	S 235	3.351	N1631	N1652	truss diagonal (90)
B1524	D - RD16	S 235	3.351	N1632	N1651	truss diagonal (90)
B1525	D - RD16	S 235	3.130	N1651	N1598	truss diagonal (90)
B1526	D - RD16	S 235	3.130	N1651	N1607	truss diagonal (90)
B1527	D - RD16	S 235	3.130	N1568	N1628	truss diagonal (90)
B1528	D - RD16	S 235	3.130	N1577	N1628	truss diagonal (90)
B1529	D - RD16	S 235	3.351	N1628	N1647	truss diagonal (90)
B1530	D - RD16	S 235	3.351	N1627	N1648	truss diagonal (90)
B1531	D - RD16	S 235	3.130	N1648	N1595	truss diagonal (90)
B1532	D - RD16	S 235	3.130	N1648	N1611	truss diagonal (90)
B1533	N2 - UNP240	S 235	0.300	N1653	N1909	beam (80)
B1534	N1 - IPE240	S 235	0.300	N1654	N1913	beam (80)
B1535	N1 - IPE240	S 235	0.300	N1655	N1910	beam (80)
B1536	N1 - IPE240	S 235	0.300	N1656	N1912	beam (80)

Name	Cross-section	Material	Length [m]	Beg. node	End node	Type
B1537	N1 - IPE240	S 235	0.300	N1657	N1914	beam (80)
B1538	N2 - UNP240	S 235	0.300	N1658	N1911	beam (80)
B1539	N2 - UNP240	S 235	8.045	N1617	N1658	beam (80)
B1540	N1 - IPE240	S 235	8.045	N1614	N1657	beam (80)
B1541	N1 - IPE240	S 235	8.045	N1610	N1656	beam (80)
B1542	N1 - IPE240	S 235	8.045	N1606	N1655	beam (80)
B1543	N1 - IPE240	S 235	8.045	N1602	N1654	beam (80)
B1544	N2 - UNP240	S 235	8.045	N1599	N1653	beam (80)
B1545	P - RO26.9X3.2	S 235	1.400	N1659	N1660	beam (80)
B1546	P - RO26.9X3.2	S 235	1.400	N1660	N1661	beam (80)
B1547	P - RO26.9X3.2	S 235	1.400	N1662	N1663	beam (80)
B1548	P - RO26.9X3.2	S 235	1.400	N1663	N1664	beam (80)
B1549	NZ - L80X8	S 235	1.267	N1665	N1666	purlin (0)
B1550	NZ - L80X8	S 235	1.267	N1667	N1668	purlin (0)
B1551	NZ - L80X8	S 235	1.267	N1669	N1670	purlin (0)
B1552	NZ - L80X8	S 235	1.267	N1671	N1672	purlin (0)
B1553	NZ - L80X8	S 235	1.267	N1673	N1674	purlin (0)
B1554	NZ - L80X8	S 235	1.267	N1675	N1676	purlin (0)
B1555	P - RO26.9X3.2	S 235	1.400	N1677	N1678	beam (80)
B1556	P - RO26.9X3.2	S 235	1.400	N1678	N1679	beam (80)
B1557	P - RO26.9X3.2	S 235	1.400	N1680	N1681	beam (80)
B1558	P - RO26.9X3.2	S 235	1.400	N1681	N1682	beam (80)
B1559	D - RD16	S 235	3.130	N1594	N1663	truss diagonal (90)
B1560	D - RD16	S 235	3.130	N1605	N1663	truss diagonal (90)
B1561	D - RD16	S 235	3.351	N1663	N1682	truss diagonal (90)
B1562	D - RD16	S 235	3.351	N1664	N1681	truss diagonal (90)
B1563	D - RD16	S 235	3.130	N1681	N1909	truss diagonal (90)
B1564	D - RD16	S 235	3.130	N1681	N1910	truss diagonal (90)
B1565	D - RD16	S 235	3.130	N1591	N1660	truss diagonal (90)
B1566	D - RD16	S 235	3.130	N1609	N1660	truss diagonal (90)
B1567	D - RD16	S 235	3.351	N1660	N1677	truss diagonal (90)
B1568	D - RD16	S 235	3.351	N1659	N1678	truss diagonal (90)
B1569	D - RD16	S 235	3.130	N1678	N1911	truss diagonal (90)
B1570	D - RD16	S 235	3.130	N1678	N1912	truss diagonal (90)
B1571	NZ - L80X8	S 235	1.267	N1683	N1684	purlin (0)
B1572	KKN - U g (173; 160; 20; 10)	S 235	2.935	N1688	N1560	beam (80)
B1573	KKN - U g (173; 160; 20; 10)	S 235	2.935	N1689	N1558	beam (80)
B1574	S1 - QRO220X12.5	S 235	4.600	N1564	N1565	column (100)
B1575	S1 - QRO220X12.5	S 235	4.600	N1566	N1567	column (100)
B1576	VKN - U g (195; 160; 20; 10)	S 235	1.000	N1688	N1689	beam (80)
TEM13	TN - Rectangle (500; 500)	C25/30	1.000	N1583	N1564	column (100)
TEM14	TN - Rectangle (500; 500)	C25/30	1.000	N1584	N1566	column (100)
B1586	N2 - UNP240	S 235	0.300	N1026	N1697	beam (80)
B1587	N1 - IPE240	S 235	0.300	N1033	N1698	beam (80)
B1588	N1 - IPE240	S 235	0.300	N1037	N1699	beam (80)
B1589	N1 - IPE240	S 235	0.300	N1041	N1700	beam (80)
B1590	N1 - IPE240	S 235	0.300	N1045	N1701	beam (80)
B1591	N2 - UNP240	S 235	0.300	N1023	N1702	beam (80)
B1592	N2 - UNP240	S 235	3.022	N1703	N1702	beam (80)
B1593	N1 - IPE240	S 235	3.022	N1704	N1701	beam (80)
B1594	N1 - IPE240	S 235	3.022	N1710	N1700	beam (80)
B1595	N1 - IPE240	S 235	3.022	N1711	N1699	beam (80)
B1596	N1 - IPE240	S 235	3.022	N1707	N1698	beam (80)
B1597	N2 - UNP240	S 235	3.022	N1708	N1697	beam (80)
B1603	RN - QRO60X5	S 235	2.935	N1746	N727	beam (80)
B1604	RN - QRO60X5	S 235	2.935	N722	N1747	beam (80)
B1605	RN - QRO60X5	S 235	1.000	N1747	N1746	beam (80)
B1606	RN - QRO60X5	S 235	2.935	N1749	N1708	beam (80)
B1607	RN - QRO60X5	S 235	1.000	N1750	N1749	beam (80)
B1608	RN - QRO60X5	S 235	2.935	N1703	N1750	beam (80)
B1609	S3 - QRO220X12.5	S 235	4.924	N1774	N1776	column (100)
B1610	S3 - QRO220X12.5	S 235	4.924	N1775	N1777	column (100)
B1611	KKN - U g (173; 160; 20; 10)	S 235	2.935	N1778	N1779	beam (80)
B1612	KKN - U g (173; 160; 20; 10)	S 235	2.935	N1780	N1770	beam (80)
B1613	VKN - U g (195; 160; 20; 10)	S 235	1.000	N1780	N1781	beam (80)
B1614	VKN - U g (195; 160; 20; 10)	S 235	1.000	N1778	N1782	beam (80)

Name	Cross-section	Material	Length [m]	Beg. node	End node	Type
B1615	KKN - U g (173; 160; 20; 10)	S 235	2.935	N1781	N1764	beam (80)
B1616	KKN - U g (173; 160; 20; 10)	S 235	2.935	N1782	N1783	beam (80)
B1617	N2 - UNP240	S 235	0.355	N1770	N1779	beam (80)
B1618	N2 - UNP240	S 235	0.355	N1764	N1783	beam (80)
B1619	S3 - QRO220X12.5	S 235	4.924	N1785	N1786	column (100)
B1620	S3 - QRO220X12.5	S 235	4.924	N1784	N1787	column (100)
B1621	KKN - U g (173; 160; 20; 10)	S 235	2.935	N1788	N1789	beam (80)
B1622	KKN - U g (173; 160; 20; 10)	S 235	2.935	N1790	N1791	beam (80)
B1623	VKN - U g (195; 160; 20; 10)	S 235	1.000	N1790	N1792	beam (80)
B1624	VKN - U g (195; 160; 20; 10)	S 235	1.000	N1788	N1793	beam (80)
B1625	KKN - U g (173; 160; 20; 10)	S 235	2.935	N1792	N1794	beam (80)
B1626	KKN - U g (173; 160; 20; 10)	S 235	2.935	N1793	N1795	beam (80)
B1627	N2 - UNP240	S 235	0.355	N1791	N1789	beam (80)
B1628	N2 - UNP240	S 235	0.355	N1794	N1795	beam (80)
B1629	N2 - UNP240	S 235	8.045	N1801	N1807	beam (80)
B1630	N1 - IPE240	S 235	8.045	N1800	N1806	beam (80)
B1631	N1 - IPE240	S 235	8.045	N1799	N1805	beam (80)
B1632	N1 - IPE240	S 235	8.045	N1798	N1804	beam (80)
B1633	N1 - IPE240	S 235	8.045	N1797	N1803	beam (80)
B1634	N2 - UNP240	S 235	8.045	N1796	N1802	beam (80)
B1635	P - RO26.9X3.2	S 235	1.400	N1808	N1809	beam (80)
B1636	P - RO26.9X3.2	S 235	1.400	N1809	N1810	beam (80)
B1637	P - RO26.9X3.2	S 235	1.400	N1811	N1812	beam (80)
B1638	P - RO26.9X3.2	S 235	1.400	N1812	N1813	beam (80)
B1639	NZ - L80X8	S 235	1.267	N1814	N1815	purlin (0)
B1640	NZ - L80X8	S 235	1.267	N1816	N1817	purlin (0)
B1641	NZ - L80X8	S 235	1.267	N1818	N1819	purlin (0)
B1642	NZ - L80X8	S 235	1.267	N1820	N1821	purlin (0)
B1643	NZ - L80X8	S 235	1.267	N1822	N1823	purlin (0)
B1644	NZ - L80X8	S 235	1.267	N1824	N1825	purlin (0)
B1645	P - RO26.9X3.2	S 235	1.400	N1826	N1827	beam (80)
B1646	P - RO26.9X3.2	S 235	1.400	N1827	N1828	beam (80)
B1647	P - RO26.9X3.2	S 235	1.400	N1829	N1830	beam (80)
B1648	P - RO26.9X3.2	S 235	1.400	N1830	N1831	beam (80)
B1649	D - RD16	S 235	3.351	N1812	N1831	truss diagonal (90)
B1650	D - RD16	S 235	3.351	N1813	N1830	truss diagonal (90)
B1651	D - RD16	S 235	3.351	N1809	N1826	truss diagonal (90)
B1652	D - RD16	S 235	3.351	N1808	N1827	truss diagonal (90)
B1653	NZ - L80X8	S 235	1.267	N1832	N1833	purlin (0)
B1654	N2 - UNP240	S 235	0.300	N1783	N1796	beam (80)
B1655	N1 - IPE240	S 235	0.300	N1834	N1797	beam (80)
B1656	N1 - IPE240	S 235	0.300	N1835	N1798	beam (80)
B1657	N1 - IPE240	S 235	0.300	N1836	N1799	beam (80)
B1658	N1 - IPE240	S 235	0.300	N1837	N1800	beam (80)
B1659	N2 - UNP240	S 235	0.300	N1779	N1801	beam (80)
B1660	N2 - UNP240	S 235	0.300	N1802	N1794	beam (80)
B1661	N1 - IPE240	S 235	0.300	N1803	N1838	beam (80)
B1662	N1 - IPE240	S 235	0.300	N1804	N1839	beam (80)
B1663	N1 - IPE240	S 235	0.300	N1805	N1840	beam (80)
B1664	N1 - IPE240	S 235	0.300	N1806	N1841	beam (80)
B1665	N2 - UNP240	S 235	0.300	N1807	N1791	beam (80)
B1666	D - RD16	S 235	3.130	N1783	N1812	truss diagonal (90)
B1667	D - RD16	S 235	3.130	N1835	N1812	truss diagonal (90)
B1668	D - RD16	S 235	3.130	N1830	N1794	truss diagonal (90)
B1669	D - RD16	S 235	3.130	N1830	N1839	truss diagonal (90)
B1670	D - RD16	S 235	3.130	N1779	N1809	truss diagonal (90)
B1671	D - RD16	S 235	3.130	N1836	N1809	truss diagonal (90)
B1672	D - RD16	S 235	3.130	N1827	N1791	truss diagonal (90)
B1673	D - RD16	S 235	3.130	N1827	N1840	truss diagonal (90)
B1674	N2 - UNP240	S 235	8.045	N1847	N1853	beam (80)
B1675	N1 - IPE240	S 235	8.045	N1846	N1852	beam (80)
B1676	N1 - IPE240	S 235	8.045	N1845	N1851	beam (80)
B1677	N1 - IPE240	S 235	8.045	N1844	N1850	beam (80)
B1678	N1 - IPE240	S 235	8.045	N1843	N1849	beam (80)
B1679	N2 - UNP240	S 235	8.045	N1842	N1848	beam (80)
B1680	P - RO26.9X3.2	S 235	1.400	N1854	N1855	beam (80)

Name	Cross-section	Material	Length [m]	Beg. node	End node	Type
B1681	P - RO26.9X3.2	S 235	1.400	N1855	N1856	beam (80)
B1682	P - RO26.9X3.2	S 235	1.400	N1857	N1858	beam (80)
B1683	P - RO26.9X3.2	S 235	1.400	N1858	N1859	beam (80)
B1684	NZ - L80X8	S 235	1.267	N1860	N1861	purlin (0)
B1685	NZ - L80X8	S 235	1.267	N1862	N1863	purlin (0)
B1686	NZ - L80X8	S 235	1.267	N1864	N1865	purlin (0)
B1687	NZ - L80X8	S 235	1.267	N1866	N1867	purlin (0)
B1688	NZ - L80X8	S 235	1.267	N1868	N1869	purlin (0)
B1689	NZ - L80X8	S 235	1.267	N1870	N1871	purlin (0)
B1690	P - RO26.9X3.2	S 235	1.400	N1872	N1873	beam (80)
B1691	P - RO26.9X3.2	S 235	1.400	N1873	N1874	beam (80)
B1692	P - RO26.9X3.2	S 235	1.400	N1875	N1876	beam (80)
B1693	P - RO26.9X3.2	S 235	1.400	N1876	N1877	beam (80)
B1694	D - RD16	S 235	3.351	N1858	N1877	truss diagonal (90)
B1695	D - RD16	S 235	3.351	N1859	N1876	truss diagonal (90)
B1696	D - RD16	S 235	3.351	N1855	N1872	truss diagonal (90)
B1697	D - RD16	S 235	3.351	N1854	N1873	truss diagonal (90)
B1698	NZ - L80X8	S 235	1.267	N1878	N1879	purlin (0)
B1699	N2 - UNP240	S 235	0.300	N1795	N1842	beam (80)
B1700	N1 - IPE240	S 235	0.300	N1880	N1843	beam (80)
B1701	N1 - IPE240	S 235	0.300	N1881	N1844	beam (80)
B1702	N1 - IPE240	S 235	0.300	N1882	N1845	beam (80)
B1703	N1 - IPE240	S 235	0.300	N1883	N1846	beam (80)
B1704	N2 - UNP240	S 235	0.300	N1789	N1847	beam (80)
B1705	N2 - UNP240	S 235	0.300	N1848	N829	beam (80)
B1706	N1 - IPE240	S 235	0.300	N1849	N834	beam (80)
B1707	N1 - IPE240	S 235	0.300	N1850	N838	beam (80)
B1708	N1 - IPE240	S 235	0.300	N1851	N842	beam (80)
B1709	N1 - IPE240	S 235	0.300	N1852	N846	beam (80)
B1710	N2 - UNP240	S 235	0.300	N1853	N826	beam (80)
B1711	D - RD16	S 235	3.130	N1795	N1858	truss diagonal (90)
B1712	D - RD16	S 235	3.130	N1881	N1858	truss diagonal (90)
B1713	D - RD16	S 235	3.130	N1876	N829	truss diagonal (90)
B1714	D - RD16	S 235	3.130	N1876	N838	truss diagonal (90)
B1715	D - RD16	S 235	3.130	N1789	N1855	truss diagonal (90)
B1716	D - RD16	S 235	3.130	N1882	N1855	truss diagonal (90)
B1717	D - RD16	S 235	3.130	N1873	N826	truss diagonal (90)
B1718	D - RD16	S 235	3.130	N1873	N842	truss diagonal (90)
B1719	S1 - QRO220X12.5	S 235	4.600	N1915	N1916	column (100)
B1720	S1 - QRO220X12.5	S 235	4.600	N1917	N1918	column (100)
B1721	VKN - U g (195; 160; 20; 10)	S 235	1.000	N1920	N1921	beam (80)
B1722	KKN - U g (173; 160; 20; 10)	S 235	2.935	N1920	N1919	beam (80)
B1723	KKN - U g (173; 160; 20; 10)	S 235	2.935	N1921	N1922	beam (80)
B1724	KKN - U g (173; 160; 20; 10)	S 235	2.935	N1924	N1923	beam (80)
B1725	VKN - U g (195; 160; 20; 10)	S 235	1.000	N1924	N1925	beam (80)
B1726	KKN - U g (173; 160; 20; 10)	S 235	2.935	N1925	N1926	beam (80)
B1727	N2 - UNP240	S 235	0.300	N1922	N1927	beam (80)
B1728	N2 - UNP240	S 235	0.300	N1928	N1926	beam (80)
B1729	N2 - UNP240	S 235	0.355	N1926	N1922	beam (80)
B1730	N1 - IPE240	S 235	0.300	N1929	N1930	beam (80)
B1731	N1 - IPE240	S 235	0.355	N1931	N1929	beam (80)
B1732	N1 - IPE240	S 235	0.300	N1932	N1931	beam (80)
B1733	N1 - IPE240	S 235	0.300	N1933	N1934	beam (80)
B1734	N1 - IPE240	S 235	0.355	N1935	N1933	beam (80)
B1735	N1 - IPE240	S 235	0.300	N1936	N1935	beam (80)
B1736	N1 - IPE240	S 235	0.300	N1937	N1938	beam (80)
B1737	N1 - IPE240	S 235	0.355	N1939	N1937	beam (80)
B1738	N1 - IPE240	S 235	0.300	N1940	N1939	beam (80)
B1739	N1 - IPE240	S 235	0.300	N1941	N1942	beam (80)
B1740	N1 - IPE240	S 235	0.355	N1943	N1941	beam (80)
B1741	N1 - IPE240	S 235	0.300	N1944	N1943	beam (80)
B1742	N2 - UNP240	S 235	0.300	N1919	N1945	beam (80)
B1743	N2 - UNP240	S 235	0.300	N1946	N1923	beam (80)
B1744	N2 - UNP240	S 235	0.355	N1923	N1919	beam (80)
TEM15	TN - Rectangle (500; 500)	C25/30	1.000	N1949	N1915	column (100)
TEM16	TN - Rectangle (500; 500)	C25/30	1.000	N1950	N1917	column (100)

Name	Cross-section	Material	Length [m]	Beg. node	End node	Type
B1745	N2 - UNP240	S 235	8.045	N2160	N1946	beam (80)
B1746	N1 - IPE240	S 235	8.045	N2159	N1944	beam (80)
B1747	N1 - IPE240	S 235	8.045	N2157	N1940	beam (80)
B1748	N1 - IPE240	S 235	8.045	N2155	N1936	beam (80)
B1749	N1 - IPE240	S 235	8.045	N2153	N1932	beam (80)
B1750	N2 - UNP240	S 235	8.045	N2151	N1928	beam (80)
B1751	P - RO26.9X3.2	S 235	1.400	N1951	N1952	beam (80)
B1752	P - RO26.9X3.2	S 235	1.400	N1952	N1953	beam (80)
B1753	P - RO26.9X3.2	S 235	1.400	N1954	N1955	beam (80)
B1754	P - RO26.9X3.2	S 235	1.400	N1955	N1956	beam (80)
B1755	NZ - L80X8	S 235	1.267	N1957	N1958	purlin (0)
B1756	NZ - L80X8	S 235	1.267	N1959	N1960	purlin (0)
B1757	NZ - L80X8	S 235	1.267	N1961	N1962	purlin (0)
B1758	NZ - L80X8	S 235	1.267	N1963	N1964	purlin (0)
B1759	NZ - L80X8	S 235	1.267	N1965	N1966	purlin (0)
B1760	NZ - L80X8	S 235	1.267	N1967	N1968	purlin (0)
B1761	P - RO26.9X3.2	S 235	1.400	N1969	N1970	beam (80)
B1762	P - RO26.9X3.2	S 235	1.400	N1970	N1971	beam (80)
B1763	P - RO26.9X3.2	S 235	1.400	N1972	N1973	beam (80)
B1764	P - RO26.9X3.2	S 235	1.400	N1973	N1974	beam (80)
B1765	D - RD16	S 235	3.130	N2150	N1955	truss diagonal (90)
B1766	D - RD16	S 235	3.130	N2154	N1955	truss diagonal (90)
B1767	D - RD16	S 235	3.351	N1955	N1974	truss diagonal (90)
B1768	D - RD16	S 235	3.351	N1956	N1973	truss diagonal (90)
B1769	D - RD16	S 235	3.130	N1973	N1926	truss diagonal (90)
B1770	D - RD16	S 235	3.130	N1973	N1935	truss diagonal (90)
B1771	D - RD16	S 235	3.130	N2147	N1952	truss diagonal (90)
B1772	D - RD16	S 235	3.130	N2156	N1952	truss diagonal (90)
B1773	D - RD16	S 235	3.351	N1952	N1969	truss diagonal (90)
B1774	D - RD16	S 235	3.351	N1951	N1970	truss diagonal (90)
B1775	D - RD16	S 235	3.130	N1970	N1923	truss diagonal (90)
B1776	D - RD16	S 235	3.130	N1970	N1939	truss diagonal (90)
B1777	N2 - UNP240	S 235	0.300	N1975	N2007	beam (80)
B1778	N1 - IPE240	S 235	0.300	N1976	N2011	beam (80)
B1779	N1 - IPE240	S 235	0.300	N1977	N2008	beam (80)
B1780	N1 - IPE240	S 235	0.300	N1978	N2010	beam (80)
B1781	N1 - IPE240	S 235	0.300	N1979	N2012	beam (80)
B1782	N2 - UNP240	S 235	0.300	N1980	N2009	beam (80)
B1783	N2 - UNP240	S 235	8.045	N1945	N1980	beam (80)
B1784	N1 - IPE240	S 235	8.045	N1942	N1979	beam (80)
B1785	N1 - IPE240	S 235	8.045	N1938	N1978	beam (80)
B1786	N1 - IPE240	S 235	8.045	N1934	N1977	beam (80)
B1787	N1 - IPE240	S 235	8.045	N1930	N1976	beam (80)
B1788	N2 - UNP240	S 235	8.045	N1927	N1975	beam (80)
B1789	P - RO26.9X3.2	S 235	1.400	N1981	N1982	beam (80)
B1790	P - RO26.9X3.2	S 235	1.400	N1982	N1983	beam (80)
B1791	P - RO26.9X3.2	S 235	1.400	N1984	N1985	beam (80)
B1792	P - RO26.9X3.2	S 235	1.400	N1985	N1986	beam (80)
B1793	NZ - L80X8	S 235	1.267	N1987	N1988	purlin (0)
B1794	NZ - L80X8	S 235	1.267	N1989	N1990	purlin (0)
B1795	NZ - L80X8	S 235	1.267	N1991	N1992	purlin (0)
B1796	NZ - L80X8	S 235	1.267	N1993	N1994	purlin (0)
B1797	NZ - L80X8	S 235	1.267	N1995	N1996	purlin (0)
B1798	NZ - L80X8	S 235	1.267	N1997	N1998	purlin (0)
B1799	P - RO26.9X3.2	S 235	1.400	N1999	N2000	beam (80)
B1800	P - RO26.9X3.2	S 235	1.400	N2000	N2001	beam (80)
B1801	P - RO26.9X3.2	S 235	1.400	N2002	N2003	beam (80)
B1802	P - RO26.9X3.2	S 235	1.400	N2003	N2004	beam (80)
B1803	D - RD16	S 235	3.130	N1922	N1985	truss diagonal (90)
B1804	D - RD16	S 235	3.130	N1933	N1985	truss diagonal (90)
B1805	D - RD16	S 235	3.351	N1985	N2004	truss diagonal (90)
B1806	D - RD16	S 235	3.351	N1986	N2003	truss diagonal (90)
B1807	D - RD16	S 235	3.130	N2003	N2007	truss diagonal (90)
B1808	D - RD16	S 235	3.130	N2003	N2008	truss diagonal (90)
B1809	D - RD16	S 235	3.130	N1919	N1982	truss diagonal (90)
B1810	D - RD16	S 235	3.130	N1937	N1982	truss diagonal (90)

Name	Cross-section	Material	Length [m]	Beg. node	End node	Type
B1811	D - RD16	S 235	3.351	N1982	N1999	truss diagonal (90)
B1812	D - RD16	S 235	3.351	N1981	N2000	truss diagonal (90)
B1813	D - RD16	S 235	3.130	N2000	N2009	truss diagonal (90)
B1814	D - RD16	S 235	3.130	N2000	N2010	truss diagonal (90)
B1815	NZ - L80X8	S 235	1.267	N2005	N2006	purlin (0)
B1816	VKN - U g (195; 160; 20; 10)	S 235	1.000	N2018	N2019	beam (80)
B1817	KKN - U g (173; 160; 20; 10)	S 235	2.935	N2018	N2017	beam (80)
B1818	KKN - U g (173; 160; 20; 10)	S 235	2.935	N2019	N2020	beam (80)
B1819	N2 - UNP240	S 235	0.300	N2020	N2021	beam (80)
B1820	N2 - UNP240	S 235	0.355	N2007	N2020	beam (80)
B1821	N1 - IPE240	S 235	0.300	N2022	N2023	beam (80)
B1822	N1 - IPE240	S 235	0.355	N2011	N2022	beam (80)
B1823	N1 - IPE240	S 235	0.300	N2024	N2025	beam (80)
B1824	N1 - IPE240	S 235	0.355	N2008	N2024	beam (80)
B1825	N1 - IPE240	S 235	0.300	N2026	N2027	beam (80)
B1826	N1 - IPE240	S 235	0.355	N2010	N2026	beam (80)
B1827	N1 - IPE240	S 235	0.300	N2028	N2029	beam (80)
B1828	N1 - IPE240	S 235	0.355	N2012	N2028	beam (80)
B1829	N2 - UNP240	S 235	0.300	N2017	N2030	beam (80)
B1830	N2 - UNP240	S 235	0.355	N2009	N2017	beam (80)
B1831	S1 - QRO220X12.5	S 235	4.600	N2036	N2037	column (100)
B1832	S1 - QRO220X12.5	S 235	4.600	N2038	N2039	column (100)
B1833	VKN - U g (195; 160; 20; 10)	S 235	1.000	N2041	N2042	beam (80)
B1834	KKN - U g (173; 160; 20; 10)	S 235	2.935	N2041	N2040	beam (80)
B1835	KKN - U g (173; 160; 20; 10)	S 235	2.935	N2042	N2043	beam (80)
B1836	KKN - U g (173; 160; 20; 10)	S 235	2.935	N2045	N2044	beam (80)
B1837	VKN - U g (195; 160; 20; 10)	S 235	1.000	N2045	N2046	beam (80)
B1838	KKN - U g (173; 160; 20; 10)	S 235	2.935	N2046	N2047	beam (80)
B1839	N2 - UNP240	S 235	0.300	N2043	N2048	beam (80)
B1840	N2 - UNP240	S 235	0.300	N2049	N2047	beam (80)
B1841	N2 - UNP240	S 235	0.355	N2047	N2043	beam (80)
B1842	N1 - IPE240	S 235	0.300	N2050	N2051	beam (80)
B1843	N1 - IPE240	S 235	0.355	N2052	N2050	beam (80)
B1844	N1 - IPE240	S 235	0.300	N2053	N2052	beam (80)
B1845	N1 - IPE240	S 235	0.300	N2054	N2055	beam (80)
B1846	N1 - IPE240	S 235	0.355	N2056	N2054	beam (80)
B1847	N1 - IPE240	S 235	0.300	N2057	N2056	beam (80)
B1848	N1 - IPE240	S 235	0.300	N2058	N2059	beam (80)
B1849	N1 - IPE240	S 235	0.355	N2060	N2058	beam (80)
B1850	N1 - IPE240	S 235	0.300	N2061	N2060	beam (80)
B1851	N1 - IPE240	S 235	0.300	N2062	N2063	beam (80)
B1852	N1 - IPE240	S 235	0.355	N2064	N2062	beam (80)
B1853	N1 - IPE240	S 235	0.300	N2065	N2064	beam (80)
B1854	N2 - UNP240	S 235	0.300	N2040	N2066	beam (80)
B1855	N2 - UNP240	S 235	0.300	N2067	N2044	beam (80)
B1856	N2 - UNP240	S 235	0.355	N2044	N2040	beam (80)
TEM17	TN - Rectangle (500; 500)	C25/30	1.000	N2070	N2036	column (100)
TEM18	TN - Rectangle (500; 500)	C25/30	1.000	N2071	N2038	column (100)
B1857	N2 - UNP240	S 235	8.045	N2030	N2067	beam (80)
B1858	N1 - IPE240	S 235	8.045	N2029	N2065	beam (80)
B1859	N1 - IPE240	S 235	8.045	N2027	N2061	beam (80)
B1860	N1 - IPE240	S 235	8.045	N2025	N2057	beam (80)
B1861	N1 - IPE240	S 235	8.045	N2023	N2053	beam (80)
B1862	N2 - UNP240	S 235	8.045	N2021	N2049	beam (80)
B1863	P - RO26.9X3.2	S 235	1.400	N2072	N2073	beam (80)
B1864	P - RO26.9X3.2	S 235	1.400	N2073	N2074	beam (80)
B1865	P - RO26.9X3.2	S 235	1.400	N2075	N2076	beam (80)
B1866	P - RO26.9X3.2	S 235	1.400	N2076	N2077	beam (80)
B1867	NZ - L80X8	S 235	1.267	N2078	N2079	purlin (0)
B1868	NZ - L80X8	S 235	1.267	N2080	N2081	purlin (0)
B1869	NZ - L80X8	S 235	1.267	N2082	N2083	purlin (0)
B1870	NZ - L80X8	S 235	1.267	N2084	N2085	purlin (0)
B1871	NZ - L80X8	S 235	1.267	N2086	N2087	purlin (0)
B1872	NZ - L80X8	S 235	1.267	N2088	N2089	purlin (0)
B1873	NZ - L80X8	S 235	1.267	N2090	N2091	purlin (0)
B1874	P - RO26.9X3.2	S 235	1.400	N2092	N2093	beam (80)

Name	Cross-section	Material	Length [m]	Beg. node	End node	Type
B1875	P - RO26.9X3.2	S 235	1.400	N2093	N2094	beam (80)
B1876	P - RO26.9X3.2	S 235	1.400	N2095	N2096	beam (80)
B1877	P - RO26.9X3.2	S 235	1.400	N2096	N2097	beam (80)
B1878	D - RD16	S 235	3.130	N2020	N2076	truss diagonal (90)
B1879	D - RD16	S 235	3.130	N2024	N2076	truss diagonal (90)
B1880	D - RD16	S 235	3.351	N2076	N2097	truss diagonal (90)
B1881	D - RD16	S 235	3.351	N2077	N2096	truss diagonal (90)
B1882	D - RD16	S 235	3.130	N2096	N2047	truss diagonal (90)
B1883	D - RD16	S 235	3.130	N2096	N2056	truss diagonal (90)
B1884	D - RD16	S 235	3.130	N2017	N2073	truss diagonal (90)
B1885	D - RD16	S 235	3.130	N2026	N2073	truss diagonal (90)
B1886	D - RD16	S 235	3.351	N2073	N2092	truss diagonal (90)
B1887	D - RD16	S 235	3.351	N2072	N2093	truss diagonal (90)
B1888	D - RD16	S 235	3.130	N2093	N2044	truss diagonal (90)
B1889	D - RD16	S 235	3.130	N2093	N2060	truss diagonal (90)
B1890	N2 - UNP240	S 235	0.300	N2098	N763	beam (80)
B1891	N1 - IPE240	S 235	0.300	N2099	N768	beam (80)
B1892	N1 - IPE240	S 235	0.300	N2100	N772	beam (80)
B1893	N1 - IPE240	S 235	0.300	N2101	N776	beam (80)
B1894	N1 - IPE240	S 235	0.300	N2102	N780	beam (80)
B1895	N2 - UNP240	S 235	0.300	N2103	N760	beam (80)
B1896	N2 - UNP240	S 235	8.045	N2066	N2103	beam (80)
B1897	N1 - IPE240	S 235	8.045	N2063	N2102	beam (80)
B1898	N1 - IPE240	S 235	8.045	N2059	N2101	beam (80)
B1899	N1 - IPE240	S 235	8.045	N2055	N2100	beam (80)
B1900	N1 - IPE240	S 235	8.045	N2051	N2099	beam (80)
B1901	N2 - UNP240	S 235	8.045	N2048	N2098	beam (80)
B1902	P - RO26.9X3.2	S 235	1.400	N2104	N2105	beam (80)
B1903	P - RO26.9X3.2	S 235	1.400	N2105	N2106	beam (80)
B1904	P - RO26.9X3.2	S 235	1.400	N2107	N2108	beam (80)
B1905	P - RO26.9X3.2	S 235	1.400	N2108	N2109	beam (80)
B1906	NZ - L80X8	S 235	1.267	N2110	N2111	purlin (0)
B1907	NZ - L80X8	S 235	1.267	N2112	N2113	purlin (0)
B1908	NZ - L80X8	S 235	1.267	N2114	N2115	purlin (0)
B1909	NZ - L80X8	S 235	1.267	N2116	N2117	purlin (0)
B1910	NZ - L80X8	S 235	1.267	N2118	N2119	purlin (0)
B1911	NZ - L80X8	S 235	1.267	N2120	N2121	purlin (0)
B1912	P - RO26.9X3.2	S 235	1.400	N2122	N2123	beam (80)
B1913	P - RO26.9X3.2	S 235	1.400	N2123	N2124	beam (80)
B1914	P - RO26.9X3.2	S 235	1.400	N2125	N2126	beam (80)
B1915	P - RO26.9X3.2	S 235	1.400	N2126	N2127	beam (80)
B1916	D - RD16	S 235	3.130	N2043	N2108	truss diagonal (90)
B1917	D - RD16	S 235	3.130	N2054	N2108	truss diagonal (90)
B1918	D - RD16	S 235	3.351	N2108	N2127	truss diagonal (90)
B1919	D - RD16	S 235	3.351	N2109	N2126	truss diagonal (90)
B1920	D - RD16	S 235	3.130	N2126	N763	truss diagonal (90)
B1921	D - RD16	S 235	3.130	N2126	N772	truss diagonal (90)
B1922	D - RD16	S 235	3.130	N2040	N2105	truss diagonal (90)
B1923	D - RD16	S 235	3.130	N2058	N2105	truss diagonal (90)
B1924	D - RD16	S 235	3.351	N2105	N2122	truss diagonal (90)
B1925	D - RD16	S 235	3.351	N2104	N2123	truss diagonal (90)
B1926	D - RD16	S 235	3.130	N2123	N760	truss diagonal (90)
B1927	D - RD16	S 235	3.130	N2123	N776	truss diagonal (90)
B1928	NZ - L80X8	S 235	1.267	N2128	N2129	purlin (0)
B1929	KKN - U g (173; 160; 20; 10)	S 235	2.935	N2133	N2009	beam (80)
B1930	KKN - U g (173; 160; 20; 10)	S 235	2.935	N2134	N2007	beam (80)
B1931	S1 - QRO220X12.5	S 235	4.600	N2013	N2014	column (100)
B1932	S1 - QRO220X12.5	S 235	4.600	N2015	N2016	column (100)
B1933	VKN - U g (195; 160; 20; 10)	S 235	1.000	N2133	N2134	beam (80)
TEM19	TN - Rectangle (500; 500)	C25/30	1.000	N2032	N2013	column (100)
TEM20	TN - Rectangle (500; 500)	C25/30	1.000	N2033	N2015	column (100)
B1934	S1 - QRO220X12.5	S 235	4.600	N2143	N2144	column (100)
B1935	S1 - QRO220X12.5	S 235	4.600	N2145	N2146	column (100)
B1936	VKN - U g (195; 160; 20; 10)	S 235	1.000	N2148	N2149	beam (80)
B1937	KKN - U g (173; 160; 20; 10)	S 235	2.935	N2148	N2147	beam (80)
B1938	KKN - U g (173; 160; 20; 10)	S 235	2.935	N2149	N2150	beam (80)

Name	Cross-section	Material	Length [m]	Beg. node	End node	Type
B1939	N2 - UNP240	S 235	0.300	N2150	N2151	beam (80)
B1940	N2 - UNP240	S 235	0.355	N1909	N2150	beam (80)
B1941	N1 - IPE240	S 235	0.300	N2152	N2153	beam (80)
B1942	N1 - IPE240	S 235	0.355	N1913	N2152	beam (80)
B1943	N1 - IPE240	S 235	0.300	N2154	N2155	beam (80)
B1944	N1 - IPE240	S 235	0.355	N1910	N2154	beam (80)
B1945	N1 - IPE240	S 235	0.300	N2156	N2157	beam (80)
B1946	N1 - IPE240	S 235	0.355	N1912	N2156	beam (80)
B1947	N1 - IPE240	S 235	0.300	N2158	N2159	beam (80)
B1948	N1 - IPE240	S 235	0.355	N1914	N2158	beam (80)
B1949	N2 - UNP240	S 235	0.300	N2147	N2160	beam (80)
B1950	N2 - UNP240	S 235	0.355	N1911	N2147	beam (80)
TEM21	TN - Rectangle (500; 500)	C25/30	1.000	N2162	N2143	column (100)
TEM22	TN - Rectangle (500; 500)	C25/30	1.000	N2163	N2145	column (100)
B1951	KKN - U g (173; 160; 20; 10)	S 235	2.935	N2168	N1909	beam (80)
B1952	VKN - U g (195; 160; 20; 10)	S 235	1.000	N2169	N2168	beam (80)
B1953	KKN - U g (173; 160; 20; 10)	S 235	2.935	N2169	N1911	beam (80)
B1955	N1 - IPE240	S 235	0.355	N1766	N1835	beam (80)
B1956	N1 - IPE240	S 235	0.355	N1768	N1836	beam (80)
B1957	N1 - IPE240	S 235	0.355	N1839	N1881	beam (80)
B1958	N1 - IPE240	S 235	0.355	N1841	N1883	beam (80)
B1959	N1 - IPE240	S 235	0.355	N1840	N1882	beam (80)
B1960	N1 - IPE240	S 235	0.355	N1769	N1837	beam (80)
B1961	N1 - IPE240	S 235	0.355	N1765	N1834	beam (80)
B1962	N1 - IPE240	S 235	0.355	N1838	N1880	beam (80)
B1965	NZ - L80X8	S 235	1.267	N2197	N2198	purlin (0)
B1966	N1 - IPE240	S 235	0.300	N2202	N483	beam (80)
B1967	N1 - IPE240	S 235	3.022	N2203	N2202	beam (80)

6. 2D members

Name	Layer	Type	Element type	Material	Thickness type	Th. [mm]
S48	Layer1	plate (90)	Standard	C25/30	constant	500
S51	Layer1	plate (90)	Standard	C25/30	constant	500
S53	Layer1	plate (90)	Standard	C25/30	constant	500
S55	Layer1	plate (90)	Standard	C25/30	constant	500
S56	Layer1	plate (90)	Standard	C25/30	constant	500
S57	Layer1	plate (90)	Standard	C25/30	constant	500
S59	Layer1	plate (90)	Standard	C25/30	constant	500
S60	Layer1	plate (90)	Standard	C25/30	constant	500
S61	Layer1	plate (90)	Standard	C25/30	constant	500
S63	Layer1	plate (90)	Standard	C25/30	constant	500

7. Hinges

Name	Member	Position	ux	uy	uz	fix	fiy	fiz
H325	B625	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H326	B624	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H327	B620	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H328	B621	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H329	B622	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H330	B623	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H331	B626	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H332	B627	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H333	B628	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H335	B629	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H336	B630	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H337	B631	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H338	B632	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H339	B633	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H340	B634	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H343	B684	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H344	B685	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H345	B686	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H346	B687	Both	Rigid	Rigid	Rigid	Rigid	Free	Free

Name	Member	Position	ux	uy	uz	fix	fiy	fiz
H347	B688	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H348	B689	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H349	B690	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H350	B691	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H351	B692	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H352	B693	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H353	B694	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H354	B695	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H355	B696	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H356	B697	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H357	B714	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H358	B750	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H359	B751	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H360	B752	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H361	B753	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H362	B754	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H363	B755	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H364	B756	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H365	B757	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H366	B758	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H367	B759	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H368	B760	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H369	B761	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H370	B762	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H371	B763	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H372	B780	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H373	B820	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H374	B821	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H375	B822	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H376	B823	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H377	B824	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H378	B825	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H379	B826	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H380	B827	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H381	B828	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H382	B829	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H383	B830	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H384	B831	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H385	B832	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H386	B833	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H387	B834	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H403	B952	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H404	B953	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H405	B954	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H406	B955	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H407	B956	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H408	B957	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H409	B958	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H410	B959	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H411	B960	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H412	B961	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H413	B962	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H414	B963	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H415	B964	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H416	B965	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H417	B966	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H524	B615	Begin	Rigid	Rigid	Rigid	Rigid	Free	Free
H525	B618	Begin	Rigid	Rigid	Rigid	Rigid	Free	Free
H533	B1506	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H534	B1507	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H535	B1508	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H536	B1509	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H537	B1510	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H538	B1511	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H539	B1512	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H540	B1513	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H541	B1514	Both	Rigid	Rigid	Rigid	Rigid	Free	Free

Name	Member	Position	ux	uy	uz	fix	fiy	fiz
H542	B1515	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H543	B1516	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H544	B1517	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H545	B1518	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H546	B1519	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H547	B1520	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H548	B1545	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H549	B1546	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H550	B1547	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H551	B1548	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H552	B1549	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H553	B1550	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H554	B1551	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H555	B1552	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H556	B1553	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H557	B1554	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H558	B1555	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H559	B1556	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H560	B1557	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H561	B1558	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H562	B1571	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H563	B1593	Begin	Rigid	Rigid	Rigid	Rigid	Free	Free
H564	B1596	Begin	Rigid	Rigid	Rigid	Rigid	Free	Free
H567	B1603	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H237	B1604	Begin	Rigid	Rigid	Rigid	Rigid	Free	Free
H568	B1606	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H569	B1608	Begin	Rigid	Rigid	Rigid	Rigid	Free	Free
H570	B617	Begin	Rigid	Rigid	Rigid	Rigid	Free	Free
H572	B1595	Begin	Rigid	Rigid	Rigid	Rigid	Free	Free
H573	B1594	Begin	Rigid	Rigid	Rigid	Rigid	Free	Free
H574	B1635	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H575	B1636	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H576	B1637	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H577	B1638	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H578	B1639	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H579	B1640	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H580	B1641	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H581	B1642	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H582	B1643	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H583	B1644	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H584	B1645	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H585	B1646	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H586	B1647	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H587	B1648	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H588	B1653	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H589	B1680	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H590	B1681	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H591	B1682	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H592	B1683	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H593	B1684	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H594	B1685	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H595	B1686	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H596	B1687	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H597	B1688	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H598	B1689	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H599	B1690	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H600	B1691	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H601	B1692	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H602	B1693	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H603	B1698	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H604	B1751	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H605	B1752	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H606	B1753	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H607	B1754	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H608	B1755	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H609	B1756	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H610	B1757	Both	Rigid	Rigid	Rigid	Rigid	Free	Free

Name	Member	Position	ux	uy	uz	fix	fiy	fiz
H611	B1758	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H612	B1759	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H613	B1760	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H614	B1761	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H615	B1762	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H616	B1763	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H617	B1764	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H618	B1789	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H619	B1790	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H620	B1791	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H621	B1792	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H622	B1793	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H623	B1794	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H624	B1795	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H625	B1796	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H626	B1797	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H627	B1798	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H628	B1799	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H629	B1800	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H630	B1801	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H631	B1802	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H632	B1815	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H633	B1863	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H634	B1864	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H635	B1865	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H636	B1866	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H637	B1867	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H638	B1868	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H639	B1869	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H640	B1870	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H641	B1871	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H642	B1872	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H643	B1873	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H644	B1874	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H645	B1875	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H646	B1876	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H647	B1877	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H648	B1902	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H649	B1903	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H650	B1904	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H651	B1905	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H652	B1906	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H653	B1907	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H654	B1908	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H655	B1909	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H656	B1910	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H657	B1911	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H658	B1912	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H659	B1913	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H660	B1914	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H661	B1915	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H662	B1928	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H663	B1965	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H664	B1967	Begin	Rigid	Rigid	Rigid	Rigid	Free	Free

8. Rigid arms

Name	Master	Slave	Hinge on master	Hinge on slave
RA1	N462	N465	No	No
RA2	N462	N469	No	No
RA3	N461	N464	No	No
RA4	N461	N468	No	No
RA5	N502	N505	No	No
RA6	N502	N509	No	No
RA7	N500	N504	No	No
RA8	N500	N508	No	No
RA9	N1567	N1689	No	No

Name	Master	Slave	Hinge on master	Hinge on slave
RA10	N1567	N1570	No	No
RA11	N1565	N1688	No	No
RA12	N1565	N1569	No	No
RA13	N1590	N1593	No	No
RA14	N1590	N1597	No	No
RA17	N811	N812	No	No
RA18	N811	N813	No	No
RA21	N890	N897	No	No
RA22	N890	N893	No	No
RA23	N888	N896	No	No
RA24	N888	N892	No	No
RA29	N1022	N1025	No	No
RA30	N1022	N1029	No	No
RA31	N1020	N1024	No	No
RA32	N1020	N1028	No	No
RA33	N491	N492	No	No
RA34	N714	N715	No	No
RA35	N1687	N1582	No	No
RA36	N1619	N1620	No	No
RA37	N1588	N1596	No	No
RA38	N1588	N1592	No	No
RA41	N919	N920	No	No
RA43	N1051	N1052	No	No
RA46	N784	N785	No	No
RA47	N1777	N1903	No	No
RA48	N1777	N1904	No	No
RA51	N1901	N1902	No	No
RA52	N1890	N1891	No	No
RA57	N1892	N1893	No	No
RA58	N880	N1894	No	No
RA59	N880	N882	No	No
RA60	N877	N1895	No	No
RA61	N877	N1896	No	No
RA62	N2146	N2149	No	No
RA63	N2144	N2148	No	No
RA64	N1918	N1921	No	No
RA65	N1918	N1925	No	No
RA66	N1916	N1920	No	No
RA67	N1916	N1924	No	No
RA68	N2016	N2134	No	No
RA69	N2016	N2019	No	No
RA70	N2014	N2133	No	No
RA71	N2014	N2018	No	No
RA72	N2039	N2042	No	No
RA73	N2039	N2046	No	No
RA74	N1947	N1948	No	No
RA75	N2132	N2031	No	No
RA76	N2068	N2069	No	No
RA77	N2037	N2045	No	No
RA78	N2037	N2041	No	No
RA79	N2146	N2168	No	No
RA80	N2144	N2169	No	No
RA81	N1757	N2161	No	No
RA82	N814	N2171	No	No
RA83	N814	N2172	No	No
RA84	N1776	N2175	No	No
RA85	N1776	N2174	No	No
RA86	N1787	N2180	No	No
RA87	N1787	N2179	No	No
RA88	N1786	N2178	No	No
RA89	N1786	N2177	No	No

9. Nodal supports

Name	Node	System	Type	X	Y	Z	Rx	Ry	Rz
Sn19	N817	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn41	N755	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free

Name	Node	System	Type	X	Y	Z	Rx	Ry	Rz
Sn42	N883	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn43	N821	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn44	N1774	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn45	N1775	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn46	N1784	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn47	N1785	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free

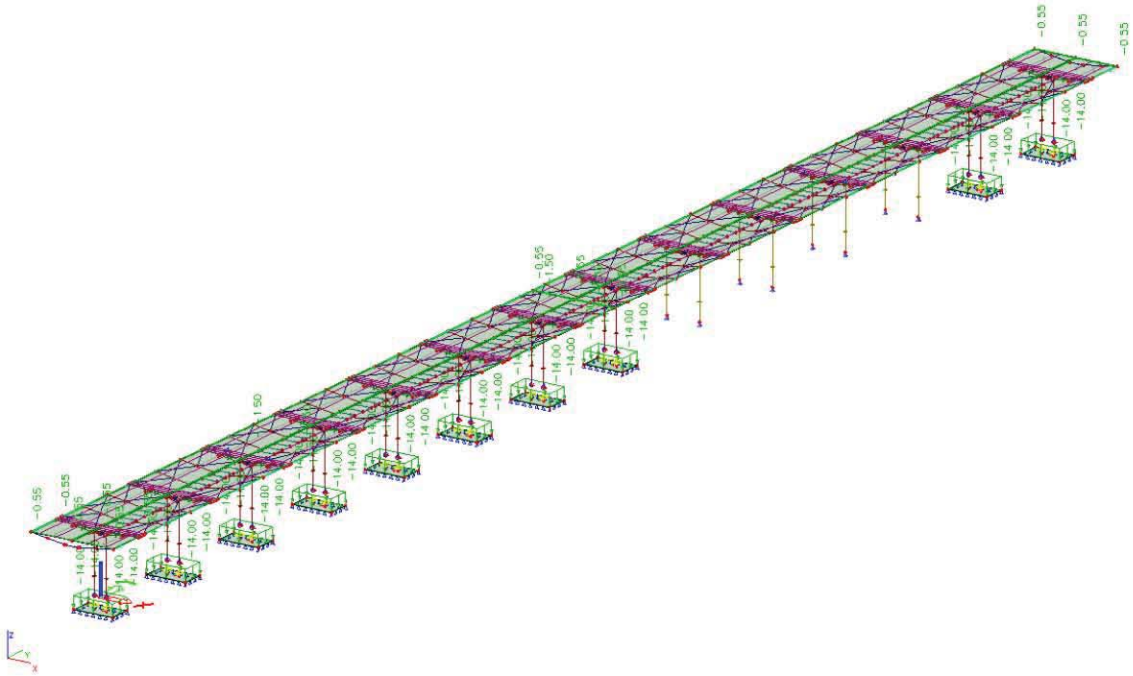
2. OBTEŽBE IN OBTEŽNE KOMBINACIJE

2.1. Obtežbe

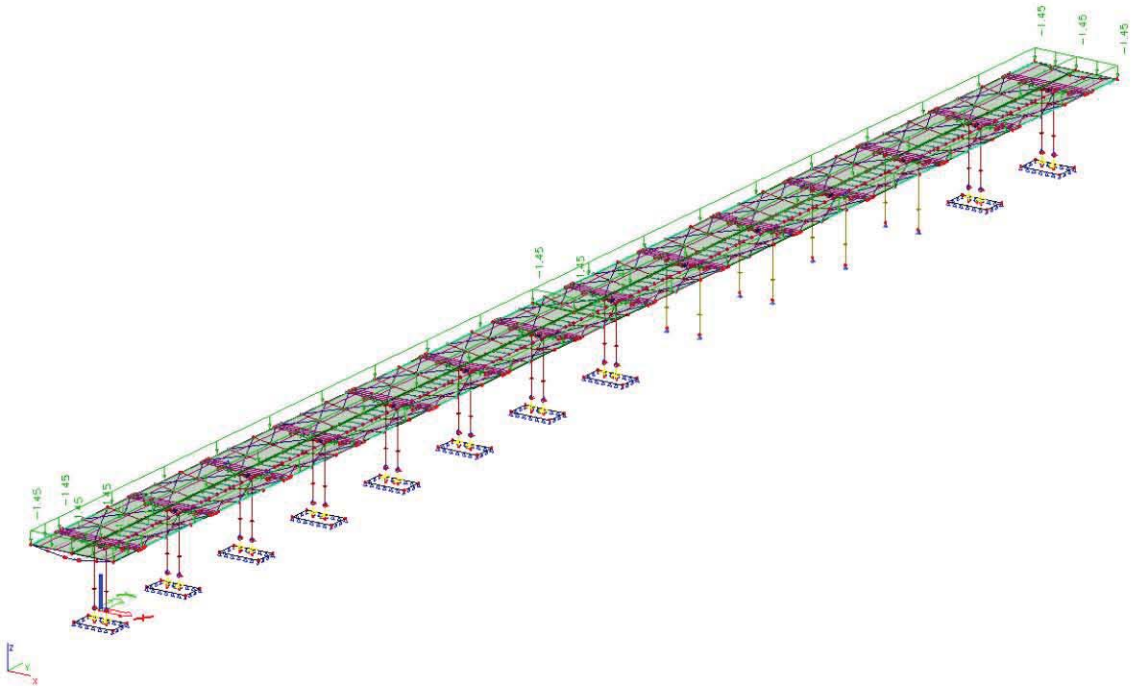
10. Load cases

Name	Description	Action type	Load group	Direction	Duration	Master load case
	Spec	Load type				
lastna		Permanent Self weight	L	-Z		
stalna		Permanent Standard	L			
sneg		Variable	S		Short	None
	Standard	Static				
horiz. ograja		Variable	HO		Short	None
	Standard	Static				
W x		Variable	Wxy		Short	None
	Standard	Static				
W -x		Variable	Wxy		Short	None
	Standard	Static				
W y		Variable	Wxy		Short	None
	Standard	Static				
W -y		Variable	Wxy		Short	None
	Standard	Static				
potres X		Variable	Ex			None
	Seismicity	Dynamic				
potres Y		Variable	Ey			None
	Seismicity	Dynamic				
W pritisk streha		Variable	Wps		Short	None
	Standard	Static				
W srk streha		Variable	Wps		Short	None
	Standard	Static				
Aeropri-1		Variable	aer		Short	None
	Standard	Static				
Aeropri-2		Variable	aer		Short	None
	Standard	Static				
sneg-s1		Variable	S		Short	None
	Standard	Static				
sneg-s2		Variable	S		Short	None
	Standard	Static				

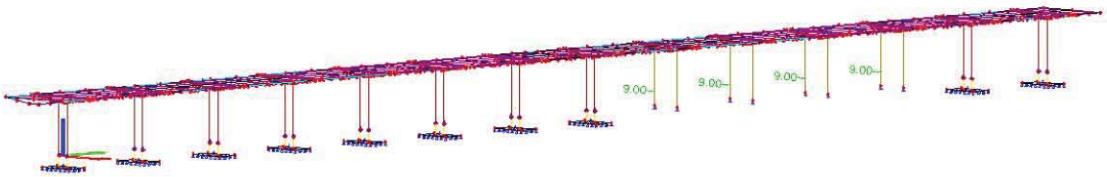
stalna



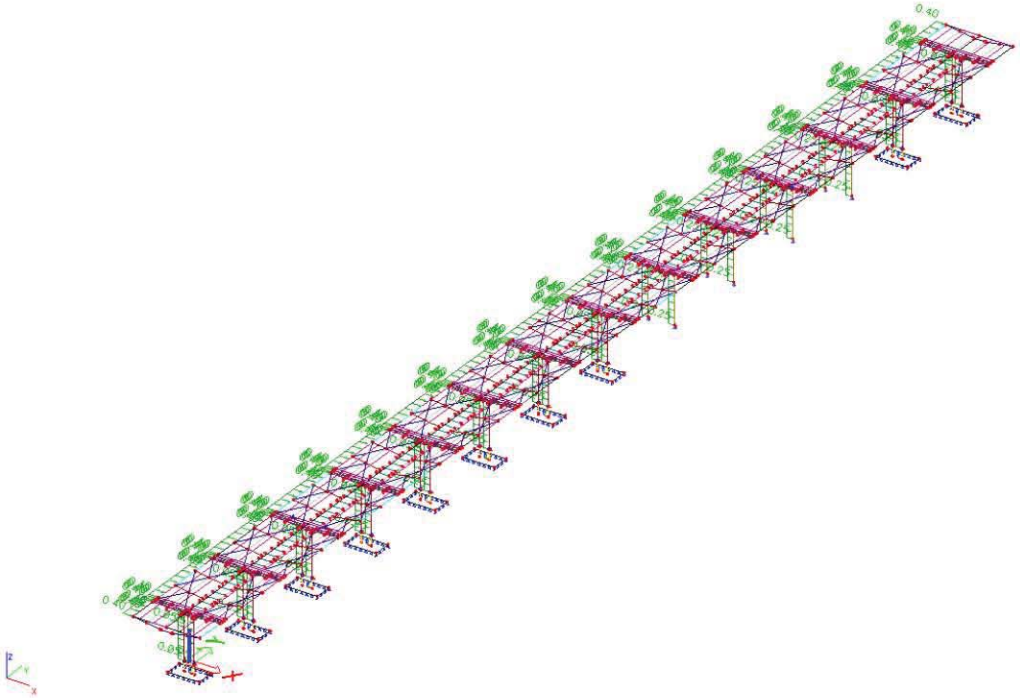
sneg



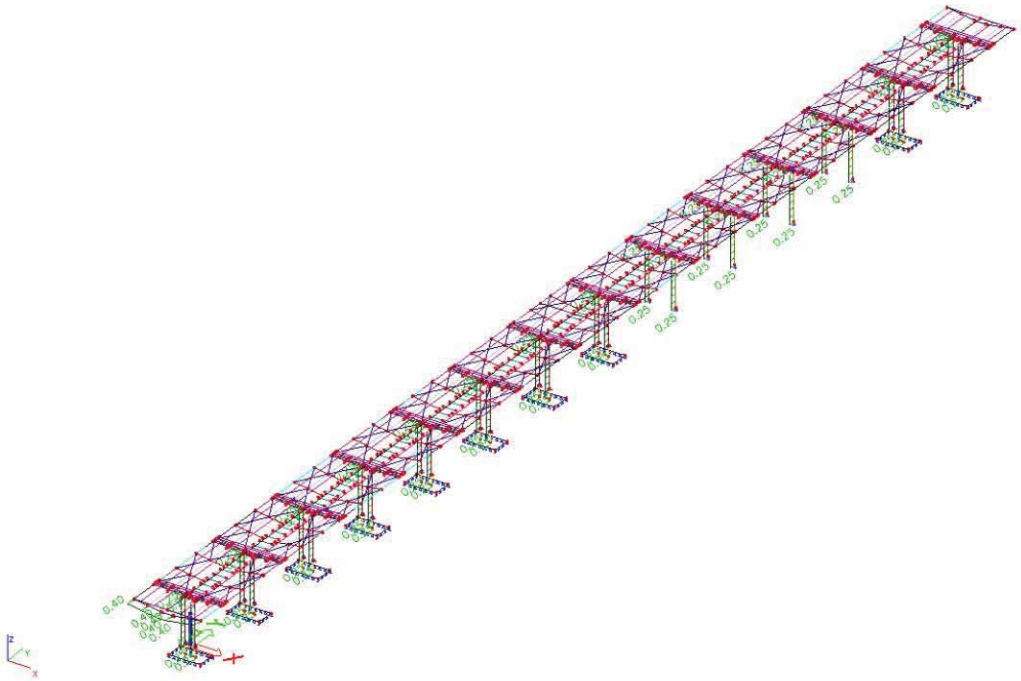
horzontalna ograja



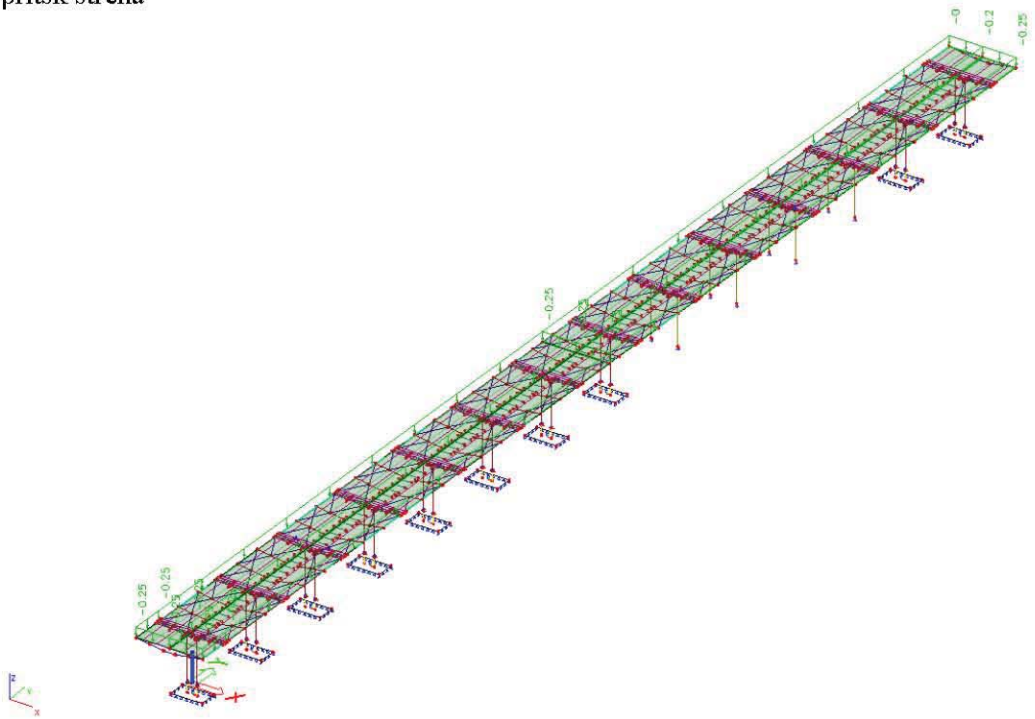
Wx



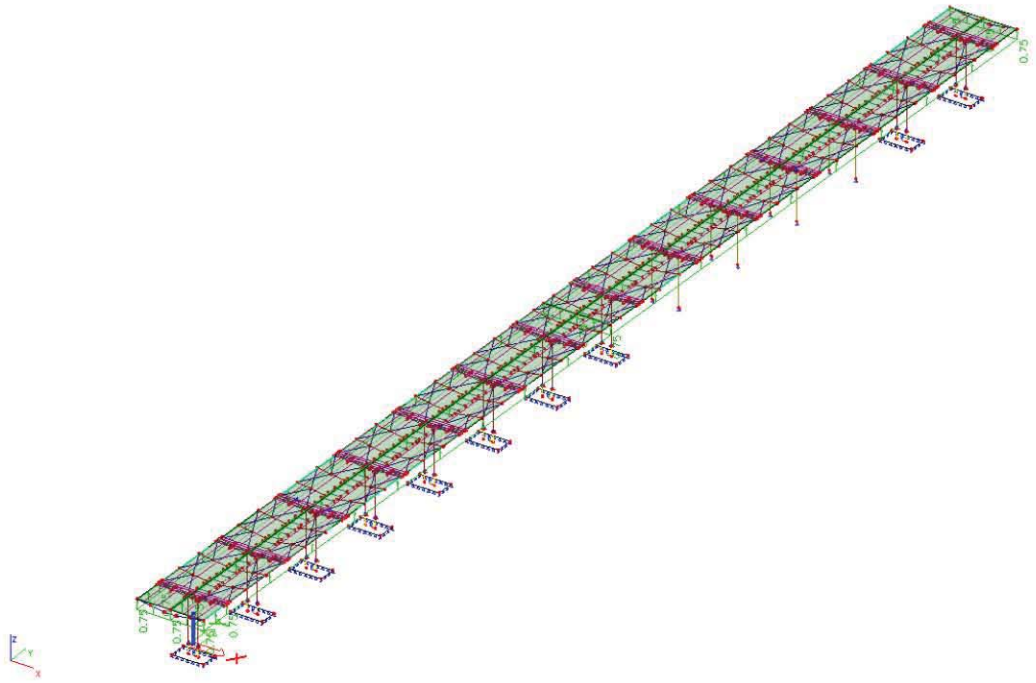
Wy



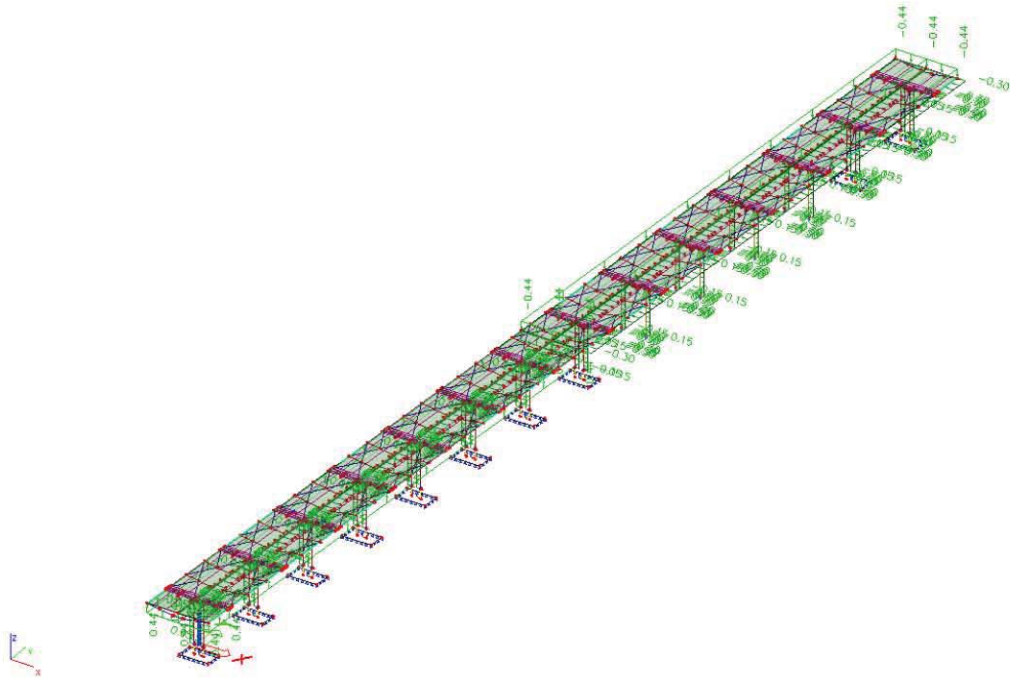
Wpritsk streha



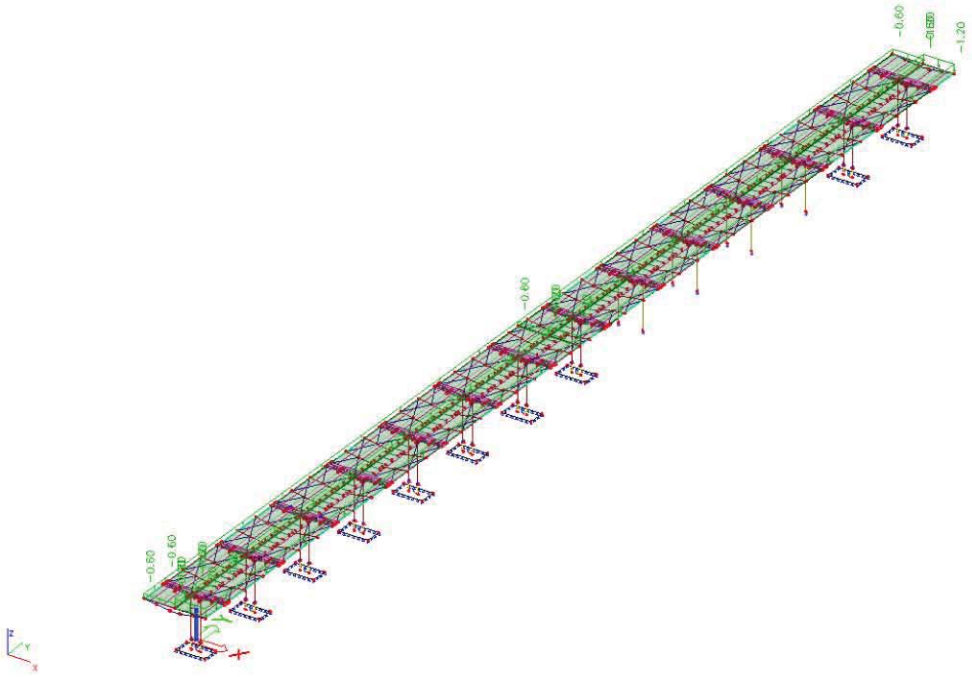
W srk streha



aeroprit-1



sneg-s1



11. Combinations

Name	Description	Type	Load cases	Coeff. [-]
potres 1		Linear - ultimate	lastna	1.00
			stalna	1.00
			potres X	1.00
			potres Y	0.30
potres 2		Linear - ultimate	lastna	1.00
			stalna	1.00
			potres X	1.00
			potres Y	-0.30
potres 3		Linear - ultimate	lastna	1.00
			stalna	1.00
			potres X	-1.00
			potres Y	0.30
potres 4		Linear - ultimate	lastna	1.00
			stalna	1.00
			potres X	-1.00
			potres Y	-0.30
potres 5		Linear - ultimate	lastna	1.00
			stalna	1.00
			potres X	0.30
			potres Y	1.00
potres 6		Linear - ultimate	lastna	1.00
			stalna	1.00
			potres X	-0.30
			potres Y	1.00
potres 7		Linear - ultimate	lastna	1.00
			stalna	1.00
			potres X	0.30
			potres Y	-1.00
potres 8		Linear - ultimate	lastna	1.00
			stalna	1.00
			potres X	-0.30
			potres Y	-1.00
MSN-temelj-1-1		Envelope - ultimate	lastna	1.35
			stalna	1.35
			sneg	1.50
			horiz. ograja	0.90
			W x	0.90
			W -x	0.90
			W y	0.90
			W -y	0.90
			W pritisk streha	0.90
			W srk streha	0.90
			Aeropri-1	0.90
			Aeropri-2	0.90
MSN-temelj-1-2		Envelope - ultimate	lastna	1.00
			stalna	1.00
			sneg	1.50
			horiz. ograja	0.90
			W x	0.90
			W -x	0.90
			W y	0.90
			W -y	0.90
			W pritisk streha	0.90
			W srk streha	0.90
			Aeropri-1	0.90
			Aeropri-2	0.90
MSN-temelj-2-1		Envelope - ultimate	lastna	1.35
			stalna	1.35
			sneg	0.90
			horiz. ograja	1.50
			W x	0.90
			W -x	0.90
			W y	0.90

Name	Description	Type	Load cases	Coeff. [-]
			W -y	0.90
			W pritisk streha	0.90
			W srk streha	0.90
			Aeropri-1	0.90
			Aeropri-2	0.90
MSN-temelj-2-2		Envelope - ultimate	lastna	1.00
			stalna	1.00
			sneg	0.90
			horiz. ograja	1.50
			W x	0.90
			W -x	0.90
			W y	0.90
			W -y	0.90
			W pritisk streha	0.90
			W srk streha	0.90
			Aeropri-1	0.90
			Aeropri-2	0.90
MSN-temelj-3-1		Envelope - ultimate	lastna	1.35
			stalna	1.35
			sneg	0.90
			horiz. ograja	0.90
			W x	1.50
			W -x	1.50
			W y	1.50
			W -y	1.50
			W pritisk streha	0.90
			W srk streha	0.90
			Aeropri-1	0.90
			Aeropri-2	0.90
MSN-temelj-3-2		Envelope - ultimate	lastna	1.00
			stalna	1.00
			sneg	0.90
			horiz. ograja	0.90
			W x	1.50
			W -x	1.50
			W y	1.50
			W -y	1.50
			W pritisk streha	0.90
			W srk streha	0.90
			Aeropri-1	0.90
			Aeropri-2	0.90
MSN-temelj-4-1		Envelope - ultimate	lastna	1.35
			stalna	1.35
			sneg	0.90
			horiz. ograja	0.90
			W x	0.90
			W -x	0.90
			W y	0.90
			W -y	0.90
			W pritisk streha	1.50
			W srk streha	0.90
			Aeropri-1	0.90
			Aeropri-2	0.90
MSN-temelj-4-2		Envelope - ultimate	lastna	1.00
			stalna	1.00
			sneg	0.90
			horiz. ograja	0.90
			W x	0.90
			W -x	0.90
			W y	0.90
			W -y	0.90
			W pritisk streha	1.50
			W srk streha	0.90
			Aeropri-1	0.90
			Aeropri-2	0.90
MSN-temelj-5-1		Envelope - ultimate	lastna	1.35

Name	Description	Type	Load cases	Coeff. [-]
			stalna	1.35
			sneg	0.90
			horiz. ograja	0.90
			W x	0.90
			W -x	0.90
			W y	0.90
			W -y	0.90
			W pritisk streha	0.90
			W srk streha	1.50
			Aeropri-1	0.90
			Aeropri-2	0.90
MSN-temelj-5-2		Envelope - ultimate	lastna	1.00
			stalna	1.00
			sneg	0.90
			horiz. ograja	0.90
			W x	0.90
			W -x	0.90
			W y	0.90
			W -y	0.90
			W pritisk streha	0.90
			W srk streha	1.50
			Aeropri-1	0.90
			Aeropri-2	0.90
MSN-temelj-6-1		Envelope - ultimate	lastna	1.35
			stalna	1.35
			sneg	0.90
			horiz. ograja	0.90
			W x	0.90
			W -x	0.90
			W y	0.90
			W -y	0.90
			W pritisk streha	0.90
			W srk streha	0.90
			Aeropri-1	1.50
			Aeropri-2	1.50
MSN-temelj-6-2		Envelope - ultimate	lastna	1.00
			stalna	1.00
			sneg	0.90
			horiz. ograja	0.90
			W x	0.90
			W -x	0.90
			W y	0.90
			W -y	0.90
			W pritisk streha	0.90
			W srk streha	0.90
			Aeropri-1	1.50
			Aeropri-2	1.50
MSN-temelj-7		Linear - ultimate	lastna	1.35
			stalna	1.35
			W x	0.90
			sneg-s1	1.50
MSN-temelj-8		Linear - ultimate	lastna	1.35
			stalna	1.35
			W -x	0.90
			sneg-s2	1.50

12. Nonlinear combinations

Name	Type	Load cases	Coeff. [-]
NC1	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	1.50
		W pritisk streha	1.50
NC2	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	1.50
		W x	1.50
		W pritisk streha	1.50
NC3	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	1.50
		W -x	1.50
		W pritisk streha	1.50
NC4	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	1.50
		W y	1.50
		W pritisk streha	1.50
NC5	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	1.50
		W -y	1.50
		W pritisk streha	1.50
NC6	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W x	1.50
		W srk streha	1.50
NC7	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W -x	1.50
		W srk streha	1.50
NC8	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W y	1.50
		W srk streha	1.50
NC9	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W -y	1.50
		W srk streha	1.50
NC10	Serviceability	lastna	1.00
		stalna	1.00
		sneg	1.00
		horiz. ograja	1.00
		W x	1.00
		W pritisk streha	1.00
NC11	Serviceability	lastna	1.00
		stalna	1.00
		sneg	1.00
		horiz. ograja	1.00
		W -x	1.00
		W pritisk streha	1.00
NC12	Serviceability	lastna	1.00
		stalna	1.00

Name	Type	Load cases	Coeff. [-]
		sneg	1.00
		horiz. ograja	1.00
		W y	1.00
		W pritisk streha	1.00
NC13	Serviceability	lastna	1.00
		stalna	1.00
		sneg	1.00
		horiz. ograja	1.00
		W -y	1.00
		W pritisk streha	1.00
NC14	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W pritisk streha	1.50
		Aeropri-1	0.90
NC15	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W x	1.50
		W pritisk streha	1.50
		Aeropri-1	0.90
NC16	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W -x	1.50
		W pritisk streha	1.50
		Aeropri-1	0.90
NC17	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W y	1.50
		W pritisk streha	1.50
		Aeropri-1	0.90
NC18	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W -y	1.50
		W pritisk streha	1.50
		Aeropri-1	0.90
NC19	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W x	1.50
		W srk streha	1.50
		Aeropri-1	0.90
NC20	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W -x	1.50
		W srk streha	1.50
		Aeropri-1	0.90
NC21	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W y	1.50
		W srk streha	1.50
		Aeropri-1	0.90
NC22	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W -y	1.50

Name	Type	Load cases	Coeff. [-]
		W srk streha	1.50
		Aeropri-1	0.90
NC23	Ultimate	lastna	1.35
		stalna	1.35
		sneg	0.90
		horiz. ograja	1.50
		W pritisk streha	1.50
		Aeropri-2	0.90
NC24	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W x	1.50
		W pritisk streha	1.50
		Aeropri-2	0.90
NC25	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W -x	1.50
		W pritisk streha	1.50
		Aeropri-2	0.90
NC26	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W y	1.50
		W pritisk streha	1.50
		Aeropri-2	0.90
NC27	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W -y	1.50
		W pritisk streha	1.50
		Aeropri-2	0.90
NC28	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W x	1.50
		W srk streha	1.50
		Aeropri-2	0.90
NC29	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W -x	1.50
		W srk streha	1.50
		Aeropri-2	0.90
NC30	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W y	1.50
		W srk streha	1.50
		Aeropri-2	0.90
NC31	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W -y	1.50
		W srk streha	1.50
		Aeropri-2	0.90
NC32	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W pritisk streha	0.90
		Aeropri-1	1.50

Name	Type	Load cases	Coeff. [-]
NC33	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W x	0.90
		W pritisk streha	0.90
		Aeropri-1	1.50
NC34	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W -x	0.90
		W pritisk streha	0.90
		Aeropri-1	1.50
NC35	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W y	0.90
		W pritisk streha	0.90
		Aeropri-1	1.50
NC36	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W -y	0.90
		W pritisk streha	0.90
		Aeropri-1	1.50
NC37	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W x	0.90
		W srk streha	0.90
		Aeropri-1	1.50
NC38	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W -x	0.90
		W srk streha	0.90
		Aeropri-1	1.50
NC39	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W y	0.90
		W srk streha	0.90
		Aeropri-1	1.50
NC40	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W -y	0.90
		W srk streha	0.90
		Aeropri-1	1.50
NC41	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W pritisk streha	0.90
		Aeropri-2	1.50
NC42	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W x	0.90
		W pritisk streha	0.90
		Aeropri-2	1.50
NC43	Ultimate	lastna	1.35

Name	Type	Load cases	Coeff. [-]
		stalna	1.35
		sneg	0.90
		horiz. ograja	1.50
		W -x	0.90
		W pritisk streha	0.90
		Aeropri-2	1.50
NC44	Ultimate	lastna	1.35
		stalna	1.35
		sneg	0.90
		horiz. ograja	1.50
		W y	0.90
		W pritisk streha	0.90
		Aeropri-2	1.50
NC45	Ultimate	lastna	1.35
		stalna	1.35
		sneg	0.90
		horiz. ograja	1.50
		W -y	0.90
		W pritisk streha	0.90
		Aeropri-2	1.50
NC46	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W x	0.90
		W srk streha	0.90
		Aeropri-2	1.50
NC47	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W -x	0.90
		W srk streha	0.90
		Aeropri-2	1.50
NC48	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W y	0.90
		W srk streha	0.90
		Aeropri-2	1.50
NC49	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W -y	0.90
		W srk streha	0.90
		Aeropri-2	1.50
NC50-s1	Ultimate	lastna	1.35
		stalna	1.35
		W x	0.90
		sneg-s1	1.50
NC51-s2	Ultimate	lastna	1.35
		stalna	1.35
		W -x	0.90
		sneg-s2	1.50

13. Mass groups

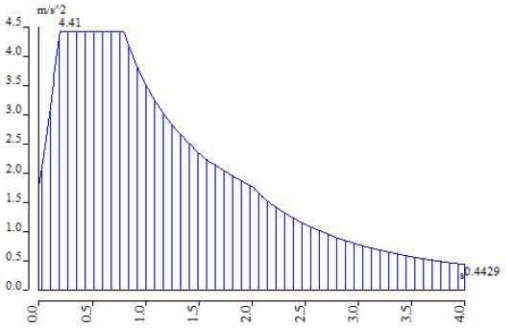
Name	Load case	Description
MG1	lastna	lastna
MG2	stalna	stalna

14. Combination of mass groups

Name	Mass group	Coeff. [-]
CM1	MG1 - lastna	1.00
	MG2 - stalna	1.00
CM1/1 - 2.00		
CM1/2 - 2.10		
CM1/3 - 2.58		
CM1/4 - 2.66		
CM1/5 - 2.93		
CM1/6 - 3.30		
CM1/7 - 3.70		
CM1/8 - 4.10		
CM1/9 - 4.49		
CM1/10 - 4.95		
CM1/11 - 5.10		
CM1/12 - 5.16		
CM1/13 - 5.25		
CM1/14 - 5.28		
CM1/15 - 5.57		
CM1/16 - 5.86		
CM1/17 - 5.93		
CM1/18 - 5.95		
CM1/19 - 6.01		
CM1/20 - 6.07		
CM1/21 - 6.39		
CM1/22 - 6.44		
CM1/23 - 6.46		
CM1/24 - 6.56		
CM1/25 - 6.83		
CM1/26 - 6.86		
CM1/27 - 6.90		
CM1/28 - 6.90		
CM1/29 - 6.95		
CM1/30 - 7.00		
CM1/31 - 7.00		
CM1/32 - 7.06		
CM1/33 - 7.09		
CM1/34 - 7.15		
CM1/35 - 7.16		
CM1/36 - 7.28		
CM1/37 - 7.30		
CM1/38 - 7.30		
CM1/39 - 7.41		
CM1/40 - 7.41		
CM1/41 - 7.47		
CM1/42 - 7.47		
CM1/43 - 7.53		
CM1/44 - 7.63		
CM1/45 - 7.67		
CM1/46 - 7.68		
CM1/47 - 7.77		
CM1/48 - 7.82		
CM1/49 - 8.03		
CM1/50 - 8.06		
CM1/51 - 8.06		
CM1/52 - 8.24		
CM1/53 - 8.38		

Name	Mass group	Coeff. [-]
CM1/54 - 8.41		
CM1/55 - 8.42		
CM1/56 - 8.48		
CM1/57 - 8.48		
CM1/58 - 8.52		
CM1/59 - 8.67		
CM1/60 - 8.73		
CM1/61 - 8.78		
CM1/62 - 8.80		
CM1/63 - 8.83		
CM1/64 - 8.87		
CM1/65 - 8.88		
CM1/66 - 8.89		
CM1/67 - 8.90		
CM1/68 - 8.92		
CM1/69 - 8.92		
CM1/70 - 8.95		
CM1/71 - 8.95		
CM1/72 - 9.03		
CM1/73 - 9.04		
CM1/74 - 9.05		
CM1/75 - 9.05		
CM1/76 - 9.06		
CM1/77 - 9.06		
CM1/78 - 9.06		
CM1/79 - 9.06		
CM1/80 - 9.06		
CM1/81 - 9.07		
CM1/82 - 9.07		
CM1/83 - 9.09		
CM1/84 - 9.09		
CM1/85 - 9.09		
CM1/86 - 9.10		
CM1/87 - 9.10		
CM1/88 - 9.13		
CM1/89 - 9.15		
CM1/90 - 9.19		
CM1/91 - 9.22		
CM1/92 - 9.24		
CM1/93 - 9.27		
CM1/94 - 9.31		
CM1/95 - 9.36		
CM1/96 - 9.41		
CM1/97 - 9.44		
CM1/98 - 9.47		
CM1/99 - 9.50		
CM1/100 - 9.54		

15. Seismic spectrums

Name	Type drawing	Info	Drawing
UniqueID			
EC 8, class D, q = 1.5, ag=0.20	Period	Type code - Eurocode Subsoil type - D Direction - Horizontal Spectrum type - type 1 coeff accel. ag - 0.2 ag - design acceleration - 1.962 beta - 0.2 q - behaviour factor - 1.5	

2.2. Ovojnice

16. Result classes

Name	Description	List
ULS-potres	linearno	potres 2 - Linear - ultimate
		potres 3 - Linear - ultimate
		potres 4 - Linear - ultimate
		potres 5 - Linear - ultimate
		potres 6 - Linear - ultimate
		potres 7 - Linear - ultimate
		potres 8 - Linear - ultimate
		potres 1 - Linear - ultimate
ULS	nelinearno	NC1
		NC2
		NC3
		NC4
		NC5
		NC6
		NC7
		NC8
		NC9
		NC14
		NC15
		NC16
		NC17
		NC18
		NC19
		NC20
		NC21
		NC22
		NC23
		NC24
		NC25
		NC26
		NC27
		NC28
		NC29
		NC30
		NC31
		NC32
		NC33
		NC34
		NC35
		NC36
		NC37
		NC38
		NC39
		NC40
		NC41
		NC42
		NC43
		NC44
		NC45
		NC46
		NC47
		NC48
		NC49
		NC50-s1
		NC51-s2
SLS	linearno	NC10
		NC11
		NC12
		NC13
ULS-temelji	linearno	MSN-temelj-1-1 - Envelope - ultimate
		MSN-temelj-1-2 - Envelope - ultimate

Name	Description	List
		MSN-temelj-2-1 - Envelope - ultimate
		MSN-temelj-2-2 - Envelope - ultimate
		MSN-temelj-3-1 - Envelope - ultimate
		MSN-temelj-3-2 - Envelope - ultimate
		MSN-temelj-4-1 - Envelope - ultimate
		MSN-temelj-4-2 - Envelope - ultimate
		MSN-temelj-5-1 - Envelope - ultimate
		MSN-temelj-5-2 - Envelope - ultimate
		MSN-temelj-6-1 - Envelope - ultimate
		MSN-temelj-6-2 - Envelope - ultimate
		MSN-temelj-7 - Linear - ultimate
		MSN-temelj-8 - Linear - ultimate

2.3. Računski protokoli

17. Calculation protocol

Linear calculation

Number of 2D elements	660
Number of 1D elements	6473
Number of mesh nodes	6826
Number of equations	40956
Bending theory	Mindlin
Load cases	lastna, stalna, sneg, horiz. ograja, W x, W -x, W y, W -y, W pritisk streha, W srk streha, Aeropri-1, Aeropri-2, sneg-s1, sneg-s2
Start of calculation	18.04.2021 07:45
End of calculation	18.04.2021 07:45

Sum of loads and reactions

Load case	Value	X [kN]	Y [kN]	Z [kN]
lastna	loads	0.00	0.00	-1303.80
	reaction in nodes	0.00	0.00	139.07
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	0.00	0.00	1164.72
stalna	loads	0.00	0.00	-1276.72
	reaction in nodes	0.00	0.03	135.36
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	0.00	-0.03	1141.36
sneg	loads	0.00	0.00	-1013.06
	reaction in nodes	0.00	-0.01	295.31
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	0.00	0.01	717.75
horiz. ograja	loads	36.00	0.00	0.00
	reaction in nodes	-30.25	0.00	-0.02
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	-5.75	0.00	0.02
W x	loads	82.45	0.00	0.00
	reaction in nodes	-17.71	0.00	-0.01
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	-64.73	0.00	0.01
W -x	loads	-82.45	0.00	0.00
	reaction in nodes	17.71	0.00	-0.01
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	64.73	0.00	0.01
W y	loads	0.00	35.60	0.00
	reaction in nodes	0.00	-6.18	0.01
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	0.00	-29.42	-0.01
W -y	loads	0.00	-35.60	0.00
	reaction in nodes	0.00	6.20	-0.01
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	0.00	29.39	0.01

Load case	Value	X [kN]	Y [kN]	Z [kN]
W pritisk streha	loads	0.00	0.00	-211.05
	reaction in nodes	0.00	0.00	61.52
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	0.00	0.00	149.53
W srk streha	loads	0.00	0.00	633.16
	reaction in nodes	0.00	0.01	-184.57
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	0.00	-0.01	-448.59
Aeropri-1	loads	-0.39	0.00	0.00
	reaction in nodes	11.34	-0.19	109.02
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	-10.95	0.19	-109.02
Aeropri-2	loads	0.39	0.00	0.00
	reaction in nodes	-11.34	0.19	-109.02
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	10.95	-0.19	109.02
sneg-s1	loads	0.00	0.00	-759.80
	reaction in nodes	-0.93	-0.01	221.49
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	0.93	0.01	538.31
sneg-s2	loads	0.00	0.00	-759.80
	reaction in nodes	0.93	-0.01	221.49
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	-0.93	0.01	538.31

The following dynamic load cases are detailed separately (see below):potres X, potres Y

Dynamic load case 15 : potres X

Mode	Freq. [Hz]	Damp ratio	Damp coef.	Sax [m/s^2]	Say [m/s^2]	Saz [m/s^2]	G(j) [-]	Fx [kN]	Fy [kN]	Mx [kNm]	My [kNm]
1	2.00	0.05	1	4.415	0.000	0.000	-6.30	224.70	0.00	0.00	-1011.56
2	2.10	0.05	1	4.415	0.000	0.000	0.00	0.00	0.00	0.00	0.00
3	2.58	0.05	1	4.415	0.000	0.000	2.18	73.78	0.00	0.00	-310.68
4	2.66	0.05	1	4.415	0.000	0.000	-2.31	93.77	0.00	0.00	-390.25
5	2.93	0.05	1	4.415	0.000	0.000	-1.50	57.92	0.00	0.00	-231.63
6	3.30	0.05	1	4.415	0.000	0.000	0.06	0.16	0.00	0.00	-0.65
7	3.70	0.05	1	4.415	0.000	0.000	0.09	0.55	0.00	0.00	-1.88
8	4.10	0.05	1	4.415	0.000	0.000	-0.26	6.88	0.00	0.00	-22.28
9	4.49	0.05	1	4.415	0.000	0.000	0.02	0.05	0.00	0.00	-0.15
10	4.95	0.05	1	4.404	0.000	0.000	0.07	1.04	0.00	0.00	-2.84
11	5.10	0.05	1	4.351	0.000	0.000	0.00	0.00	0.00	0.00	0.00
12	5.16	0.05	1	4.331	0.000	0.000	0.00	0.00	0.00	0.00	-0.01
13	5.25	0.05	1	4.289	0.000	0.000	0.00	0.00	0.00	0.00	0.00
14	5.28	0.05	1	4.277	0.000	0.000	0.00	0.00	0.00	0.00	0.00
15	5.57	0.05	1	4.144	0.000	0.000	0.01	0.01	0.00	0.00	-0.03
16	5.86	0.05	1	4.027	0.000	0.000	-0.02	0.10	0.00	0.00	-0.27
17	5.93	0.05	1	4.002	0.000	0.000	0.02	0.18	0.00	0.00	-0.44
18	5.95	0.05	1	3.994	0.000	0.000	0.00	0.00	0.00	0.00	0.00
19	6.01	0.05	1	3.972	0.000	0.000	-0.02	0.18	0.00	0.00	-0.33
20	6.07	0.05	1	3.949	0.000	0.000	0.00	0.00	0.00	0.00	0.00
21	6.39	0.05	1	3.841	0.000	0.000	0.02	0.16	0.00	0.00	-0.22
22	6.44	0.05	1	3.824	0.000	0.000	-0.03	0.54	0.00	0.00	-1.01
23	6.46	0.05	1	3.816	0.000	0.000	0.00	0.00	0.00	0.00	0.00
24	6.56	0.05	1	3.784	0.000	0.000	0.00	0.00	0.00	0.00	0.00
25	6.83	0.05	1	3.708	0.000	0.000	0.08	6.28	0.00	0.00	-8.12
26	6.86	0.05	1	3.699	0.000	0.000	0.00	0.00	0.00	0.00	0.00
27	6.90	0.05	1	3.688	0.000	0.000	-0.07	4.47	0.00	0.00	-5.26

Mode	Freq. [Hz]	Damp ratio	Damp coef.	Sax [m/s^2]	Say [m/s^2]	Saz [m/s^2]	G(j) [-]	Fx [kN]	Fy [kN]	Mx [kNm]	My [kNm]
28	6.90	0.05	1	3.686	0.000	0.000	0.00	0.00	0.00	0.00	0.00
29	6.95	0.05	1	3.671	0.000	0.000	0.00	0.00	0.00	0.00	0.00
30	7.00	0.05	1	3.659	0.000	0.000	0.09	8.99	0.00	0.00	-10.05
31	7.00	0.05	1	3.657	0.000	0.000	0.00	0.00	0.00	0.00	0.00
32	7.06	0.05	1	3.644	0.000	0.000	0.00	0.00	0.00	0.00	0.00
33	7.09	0.05	1	3.636	0.000	0.000	0.12	16.58	0.00	0.00	-17.48
34	7.15	0.05	1	3.620	0.000	0.000	0.00	0.00	0.00	0.00	0.00
35	7.16	0.05	1	3.617	0.000	0.000	0.00	0.00	0.00	0.00	0.00
36	7.28	0.05	1	3.588	0.000	0.000	0.00	0.00	0.00	0.00	0.00
37	7.30	0.05	1	3.583	0.000	0.000	0.00	0.00	0.00	0.00	0.00
38	7.30	0.05	1	3.582	0.000	0.000	0.04	1.61	0.00	0.00	-1.12
39	7.41	0.05	1	3.554	0.000	0.000	0.13	22.31	0.00	0.00	-14.30
40	7.41	0.05	1	3.554	0.000	0.000	0.00	0.00	0.00	0.00	0.00
41	7.47	0.05	1	3.540	0.000	0.000	-0.01	0.10	0.00	0.00	-0.08
42	7.47	0.05	1	3.540	0.000	0.000	0.00	0.00	0.00	0.00	0.00
43	7.53	0.05	1	3.524	0.000	0.000	0.00	0.00	0.00	0.00	0.00
44	7.63	0.05	1	3.503	0.000	0.000	0.00	0.00	0.00	0.00	0.00
45	7.67	0.05	1	3.495	0.000	0.000	-0.01	0.05	0.00	0.00	-0.02
46	7.68	0.05	1	3.493	0.000	0.000	0.00	0.00	0.00	0.00	0.00
47	7.77	0.05	1	3.474	0.000	0.000	0.02	0.81	0.00	0.00	-0.36
48	7.82	0.05	1	3.463	0.000	0.000	-0.03	1.78	0.00	0.00	-0.83
49	8.03	0.05	1	3.417	0.000	0.000	0.02	0.68	0.00	0.00	-0.09
50	8.06	0.05	1	3.410	0.000	0.000	0.01	0.16	0.00	0.00	-0.03
51	8.06	0.05	1	3.409	0.000	0.000	0.00	0.00	0.00	0.00	0.00
52	8.24	0.05	1	3.374	0.000	0.000	0.00	0.00	0.00	0.00	0.00
53	8.38	0.05	1	3.348	0.000	0.000	0.00	0.00	0.00	0.00	0.00
54	8.41	0.05	1	3.343	0.000	0.000	0.00	0.00	0.00	0.00	0.00
55	8.42	0.05	1	3.342	0.000	0.000	-0.02	1.22	0.00	0.00	0.62
56	8.48	0.05	1	3.331	0.000	0.000	0.00	0.00	0.00	0.00	0.00
57	8.48	0.05	1	3.330	0.000	0.000	-0.03	2.42	0.00	0.00	1.82
58	8.52	0.05	1	3.323	0.000	0.000	0.00	0.00	0.00	0.00	0.00
59	8.67	0.05	1	3.295	0.000	0.000	0.00	0.00	0.00	0.00	0.00
60	8.73	0.05	1	3.284	0.000	0.000	0.01	0.21	0.00	0.00	0.15
61	8.78	0.05	1	3.275	0.000	0.000	0.00	0.00	0.00	0.00	0.00
62	8.80	0.05	1	3.272	0.000	0.000	0.00	0.00	0.00	0.00	0.00
63	8.83	0.05	1	3.265	0.000	0.000	0.01	0.19	0.00	0.00	0.18
64	8.87	0.05	1	3.260	0.000	0.000	0.00	0.02	0.00	0.00	0.02
65	8.88	0.05	1	3.258	0.000	0.000	0.00	0.00	0.00	0.00	0.00
66	8.89	0.05	1	3.256	0.000	0.000	0.00	0.00	0.00	0.00	0.00
67	8.90	0.05	1	3.255	0.000	0.000	0.04	3.89	0.00	0.00	4.13
68	8.92	0.05	1	3.252	0.000	0.000	0.00	0.00	0.00	0.00	0.00
69	8.92	0.05	1	3.252	0.000	0.000	0.00	0.00	0.00	0.00	0.00
70	8.95	0.05	1	3.248	0.000	0.000	0.00	0.00	0.00	0.00	0.00
71	8.95	0.05	1	3.247	0.000	0.000	0.00	0.00	0.00	0.00	0.00
72	9.03	0.05	1	3.234	0.000	0.000	-0.01	0.09	0.00	0.00	0.11
73	9.04	0.05	1	3.233	0.000	0.000	0.00	0.03	0.00	0.00	0.04
74	9.05	0.05	1	3.231	0.000	0.000	0.00	0.03	0.00	0.00	0.03
75	9.05	0.05	1	3.231	0.000	0.000	0.00	0.03	0.00	0.00	0.04
76	9.06	0.05	1	3.230	0.000	0.000	0.01	0.18	0.00	0.00	0.23
77	9.06	0.05	1	3.230	0.000	0.000	0.02	1.45	0.00	0.00	1.84
78	9.06	0.05	1	3.230	0.000	0.000	0.00	0.05	0.00	0.00	0.06
79	9.06	0.05	1	3.230	0.000	0.000	0.00	0.03	0.00	0.00	0.04
80	9.06	0.05	1	3.230	0.000	0.000	0.00	0.01	0.00	0.00	0.02
81	9.07	0.05	1	3.229	0.000	0.000	-0.03	3.19	0.00	0.00	4.07
82	9.07	0.05	1	3.228	0.000	0.000	0.00	0.00	0.00	0.00	0.00
83	9.09	0.05	1	3.226	0.000	0.000	0.11	39.42	0.00	0.00	51.28
84	9.09	0.05	1	3.225	0.000	0.000	0.05	8.41	0.00	0.00	11.05
85	9.09	0.05	1	3.225	0.000	0.000	0.00	0.00	0.00	0.00	0.00
86	9.10	0.05	1	3.224	0.000	0.000	-0.10	30.28	0.00	0.00	39.83
87	9.10	0.05	1	3.224	0.000	0.000	-0.27	250.16	0.00	0.00	330.67
88	9.13	0.05	1	3.219	0.000	0.000	-0.07	14.53	0.00	0.00	19.22
89	9.15	0.05	1	3.217	0.000	0.000	-0.16	84.90	0.00	0.00	116.68
90	9.19	0.05	1	3.210	0.000	0.000	0.00	0.00	0.00	0.00	0.00
91	9.22	0.05	1	3.206	0.000	0.000	0.04	5.71	0.00	0.00	7.82
92	9.24	0.05	1	3.201	0.000	0.000	0.00	0.00	0.00	0.00	0.00
93	9.27	0.05	1	3.197	0.000	0.000	0.00	0.00	0.00	0.00	0.00

Mode	Freq. [Hz]	Damp ratio	Damp coef.	Sax [m/s^2]	Say [m/s^2]	Saz [m/s^2]	G(j) [-]	Fx [kN]	Fy [kN]	Mx [kNm]	My [kNm]
94	9.31	0.05	1	3.191	0.000	0.000	0.03	4.33	0.00	0.00	7.15
95	9.36	0.05	1	3.184	0.000	0.000	0.01	0.55	0.00	0.00	1.02
96	9.41	0.05	1	3.176	0.000	0.000	0.00	0.00	0.00	0.00	0.00
97	9.44	0.05	1	3.170	0.000	0.000	0.00	0.00	0.00	0.00	0.00
98	9.47	0.05	1	3.166	0.000	0.000	0.01	0.16	0.00	0.00	0.26
99	9.50	0.05	1	3.162	0.000	0.000	0.00	0.03	0.00	0.00	0.06
100	9.54	0.05	1	3.155	0.000	0.000	0.00	0.00	0.00	0.00	0.00
Level=	0.00							376.40	0.00	0.00	1206.13

Dynamic load case 16 : potres Y

Mode	Freq. [Hz]	Damp ratio	Damp coef.	Sax [m/s^2]	Say [m/s^2]	Saz [m/s^2]	G(j) [-]	Fx [kN]	Fy [kN]	Mx [kNm]	My [kNm]
1	2.00	0.05	1	0.000	4.415	0.000	0.00	0.00	0.00	0.00	0.00
2	2.10	0.05	1	0.000	4.415	0.000	8.17	0.00	455.82	-2001.70	0.00
3	2.58	0.05	1	0.000	4.415	0.000	0.00	0.00	0.00	0.00	0.00
4	2.66	0.05	1	0.000	4.415	0.000	0.00	0.00	0.00	0.00	0.00
5	2.93	0.05	1	0.000	4.415	0.000	0.00	0.00	0.00	0.00	0.00
6	3.30	0.05	1	0.000	4.415	0.000	0.00	0.00	0.00	0.00	0.00
7	3.70	0.05	1	0.000	4.415	0.000	0.00	0.00	0.00	0.00	0.00
8	4.10	0.05	1	0.000	4.415	0.000	0.00	0.00	0.00	0.00	0.00
9	4.49	0.05	1	0.000	4.415	0.000	0.00	0.00	0.00	0.00	0.00
10	4.95	0.05	1	0.000	4.404	0.000	0.00	0.00	0.00	0.00	0.00
11	5.10	0.05	1	0.000	4.351	0.000	0.00	0.00	0.00	0.00	0.00
12	5.16	0.05	1	0.000	4.331	0.000	0.00	0.00	0.00	0.00	0.00
13	5.25	0.05	1	0.000	4.289	0.000	-0.03	0.00	0.18	-0.46	0.00
14	5.28	0.05	1	0.000	4.277	0.000	0.03	0.00	0.21	-0.57	0.00
15	5.57	0.05	1	0.000	4.144	0.000	0.00	0.00	0.00	0.00	0.00
16	5.86	0.05	1	0.000	4.027	0.000	0.00	0.00	0.00	0.00	0.00
17	5.93	0.05	1	0.000	4.002	0.000	0.00	0.00	0.00	0.00	0.00
18	5.95	0.05	1	0.000	3.994	0.000	0.00	0.00	0.00	0.00	0.00
19	6.01	0.05	1	0.000	3.972	0.000	0.00	0.00	0.00	0.00	0.00
20	6.07	0.05	1	0.000	3.949	0.000	0.00	0.00	0.00	0.00	0.00
21	6.39	0.05	1	0.000	3.841	0.000	0.00	0.00	0.00	0.00	0.00
22	6.44	0.05	1	0.000	3.824	0.000	0.00	0.00	0.00	0.00	0.00
23	6.46	0.05	1	0.000	3.816	0.000	0.00	0.00	0.00	-0.01	0.00
24	6.56	0.05	1	0.000	3.784	0.000	0.00	0.00	0.01	0.00	0.00
25	6.83	0.05	1	0.000	3.708	0.000	0.00	0.00	0.00	0.00	0.00
26	6.86	0.05	1	0.000	3.699	0.000	0.00	0.00	0.01	0.01	0.00
27	6.90	0.05	1	0.000	3.688	0.000	0.00	0.00	0.00	0.00	0.00
28	6.90	0.05	1	0.000	3.686	0.000	-0.02	0.00	0.24	-0.18	0.00
29	6.95	0.05	1	0.000	3.671	0.000	-0.03	0.00	0.65	-0.86	0.00
30	7.00	0.05	1	0.000	3.659	0.000	0.00	0.00	0.00	0.00	0.00
31	7.00	0.05	1	0.000	3.657	0.000	0.03	0.00	0.71	-0.83	0.00
32	7.06	0.05	1	0.000	3.644	0.000	-0.01	0.00	0.17	-0.22	0.00
33	7.09	0.05	1	0.000	3.636	0.000	0.00	0.00	0.00	0.00	0.00
34	7.15	0.05	1	0.000	3.620	0.000	0.00	0.00	0.00	0.00	0.00
35	7.16	0.05	1	0.000	3.617	0.000	-0.02	0.00	0.44	-0.20	0.00
36	7.28	0.05	1	0.000	3.588	0.000	0.00	0.00	0.00	0.00	0.00
37	7.30	0.05	1	0.000	3.583	0.000	0.00	0.00	0.00	0.00	0.00
38	7.30	0.05	1	0.000	3.582	0.000	0.00	0.00	0.00	0.00	0.00
39	7.41	0.05	1	0.000	3.554	0.000	0.00	0.00	0.00	0.00	0.00
40	7.41	0.05	1	0.000	3.554	0.000	0.03	0.00	1.13	-0.87	0.00
41	7.47	0.05	1	0.000	3.540	0.000	0.00	0.00	0.00	0.00	0.00
42	7.47	0.05	1	0.000	3.540	0.000	0.01	0.00	0.07	-0.03	0.00
43	7.53	0.05	1	0.000	3.524	0.000	0.00	0.00	0.03	-0.01	0.00
44	7.63	0.05	1	0.000	3.503	0.000	0.00	0.00	0.01	0.01	0.00
45	7.67	0.05	1	0.000	3.495	0.000	0.00	0.00	0.00	0.00	0.00
46	7.68	0.05	1	0.000	3.493	0.000	0.00	0.00	0.03	0.00	0.00
47	7.77	0.05	1	0.000	3.474	0.000	0.00	0.00	0.00	0.00	0.00
48	7.82	0.05	1	0.000	3.463	0.000	0.00	0.00	0.00	0.00	0.00
49	8.03	0.05	1	0.000	3.417	0.000	0.00	0.00	0.00	0.00	0.00
50	8.06	0.05	1	0.000	3.410	0.000	0.00	0.00	0.00	0.00	0.00
51	8.06	0.05	1	0.000	3.409	0.000	-0.05	0.00	5.43	1.82	0.00
52	8.24	0.05	1	0.000	3.374	0.000	0.03	0.00	2.12	1.14	0.00

Mode	Freq. [Hz]	Damp ratio	Damp coef.	Sax [m/s^2]	Say [m/s^2]	Saz [m/s^2]	G(j) [-]	Fx [kN]	Fy [kN]	Mx [kNm]	My [kNm]
53	8.38	0.05	1	0.000	3.348	0.000	0.01	0.00	0.40	0.19	0.00
54	8.41	0.05	1	0.000	3.343	0.000	-0.01	0.00	0.09	0.01	0.00
55	8.42	0.05	1	0.000	3.342	0.000	0.00	0.00	0.00	0.00	0.00
56	8.48	0.05	1	0.000	3.331	0.000	0.02	0.00	0.88	0.69	0.00
57	8.48	0.05	1	0.000	3.330	0.000	0.00	0.00	0.00	0.00	0.00
58	8.52	0.05	1	0.000	3.323	0.000	-0.02	0.00	0.57	0.46	0.00
59	8.67	0.05	1	0.000	3.295	0.000	-0.01	0.00	0.08	0.07	0.00
60	8.73	0.05	1	0.000	3.284	0.000	0.00	0.00	0.00	0.00	0.00
61	8.78	0.05	1	0.000	3.275	0.000	0.08	0.00	18.61	17.35	0.00
62	8.80	0.05	1	0.000	3.272	0.000	0.05	0.00	7.70	7.32	0.00
63	8.83	0.05	1	0.000	3.265	0.000	0.00	0.00	0.00	0.00	0.00
64	8.87	0.05	1	0.000	3.260	0.000	0.00	0.00	0.00	0.00	0.00
65	8.88	0.05	1	0.000	3.258	0.000	-0.05	0.00	6.98	7.49	0.00
66	8.89	0.05	1	0.000	3.256	0.000	0.05	0.00	6.37	6.80	0.00
67	8.90	0.05	1	0.000	3.255	0.000	0.00	0.00	0.00	0.00	0.00
68	8.92	0.05	1	0.000	3.252	0.000	-0.09	0.00	27.11	29.74	0.00
69	8.92	0.05	1	0.000	3.252	0.000	0.09	0.00	26.10	29.05	0.00
70	8.95	0.05	1	0.000	3.248	0.000	-0.11	0.00	36.79	41.40	0.00
71	8.95	0.05	1	0.000	3.247	0.000	0.33	0.00	345.52	390.95	0.00
72	9.03	0.05	1	0.000	3.234	0.000	0.00	0.00	0.00	0.00	0.00
73	9.04	0.05	1	0.000	3.233	0.000	0.00	0.00	0.00	0.00	0.00
74	9.05	0.05	1	0.000	3.231	0.000	0.00	0.00	0.00	0.00	0.00
75	9.05	0.05	1	0.000	3.231	0.000	0.00	0.00	0.00	0.00	0.00
76	9.06	0.05	1	0.000	3.230	0.000	0.00	0.00	0.00	0.00	0.00
77	9.06	0.05	1	0.000	3.230	0.000	0.00	0.00	0.00	0.00	0.00
78	9.06	0.05	1	0.000	3.230	0.000	0.00	0.00	0.00	0.00	0.00
79	9.06	0.05	1	0.000	3.230	0.000	0.00	0.00	0.00	0.00	0.00
80	9.06	0.05	1	0.000	3.230	0.000	0.00	0.00	0.00	0.00	0.00
81	9.07	0.05	1	0.000	3.229	0.000	0.00	0.00	0.00	0.00	0.00
82	9.07	0.05	1	0.000	3.228	0.000	0.00	0.00	0.00	0.00	0.00
83	9.09	0.05	1	0.000	3.226	0.000	0.00	0.00	0.00	0.00	0.00
84	9.09	0.05	1	0.000	3.225	0.000	0.00	0.00	0.00	0.00	0.00
85	9.09	0.05	1	0.000	3.225	0.000	0.00	0.00	0.00	0.00	0.00
86	9.10	0.05	1	0.000	3.224	0.000	0.00	0.00	0.00	0.00	0.00
87	9.10	0.05	1	0.000	3.224	0.000	0.00	0.00	0.00	0.00	0.00
88	9.13	0.05	1	0.000	3.219	0.000	0.00	0.00	0.00	0.00	0.00
89	9.15	0.05	1	0.000	3.217	0.000	0.00	0.00	0.00	0.00	0.00
90	9.19	0.05	1	0.000	3.210	0.000	-0.07	0.00	18.20	25.80	0.00
91	9.22	0.05	1	0.000	3.206	0.000	0.00	0.00	0.00	0.00	0.00
92	9.24	0.05	1	0.000	3.201	0.000	-0.03	0.00	3.18	4.71	0.00
93	9.27	0.05	1	0.000	3.197	0.000	-0.01	0.00	0.25	0.38	0.00
94	9.31	0.05	1	0.000	3.191	0.000	0.00	0.00	0.00	0.00	0.00
95	9.36	0.05	1	0.000	3.184	0.000	0.00	0.00	0.00	0.00	0.00
96	9.41	0.05	1	0.000	3.176	0.000	0.02	0.00	0.91	1.44	0.00
97	9.44	0.05	1	0.000	3.170	0.000	-0.01	0.00	0.43	0.80	0.00
98	9.47	0.05	1	0.000	3.166	0.000	0.00	0.00	0.00	0.00	0.00
99	9.50	0.05	1	0.000	3.162	0.000	0.00	0.00	0.00	0.00	0.00
100	9.54	0.05	1	0.000	3.155	0.000	0.00	0.00	0.00	0.00	0.00
Level=	0.00							0.00	575.15	2040.64	0.00

18. Calculation protocol

Solution of Free vibration

Number of 2D elements	660
Number of 1D elements	6473
Number of mesh nodes	6826
Number of equations	40956
Combination of mass groups	MC1 CM1
Number of frequencies	100
Method	Lanczos
Bending theory	Mindlin
Type of analysis model	Standard
Start of calculation	18.04.2021 07:44
End of calculation	18.04.2021 07:45

Sum of masses

	X [kg]	Y [kg]	Z [kg]
1	262741.18	262741.18	262741.18
1	263049.46	263049.46	263049.46

Relative modal masses

Mode	Omega [rad/s]	Period [s]	Freq. [Hz]	W_{xi}/W_{xtot}	W_{yi}/W_{ytot}	W_{zi}/W_{ztot}	W_{xi_R}/W_{xtot_R}	W_{yi_R}/W_{ytot_R}	W_{zi_R}/W_{ztot_R}
1	12.5723	0.50	2.00	0.1937	0.0000	0.0000	0.0000	0.2734	0.1595
2	13.1732	0.48	2.10	0.0000	0.3930	0.0000	0.0037	0.0000	0.0000
3	16.1849	0.39	2.58	0.0636	0.0000	0.0000	0.0000	0.0880	0.1849
4	16.6883	0.38	2.66	0.0808	0.0000	0.0000	0.0000	0.1074	0.0103
5	18.3794	0.34	2.93	0.0499	0.0000	0.0000	0.0000	0.0679	0.0069
6	20.7279	0.30	3.30	0.0001	0.0000	0.0000	0.0000	0.0004	0.0044
7	23.2447	0.27	3.70	0.0005	0.0000	0.0000	0.0000	0.0006	0.0086
8	25.7603	0.24	4.10	0.0059	0.0000	0.0000	0.0000	0.0097	0.0008
9	28.1914	0.22	4.49	0.0000	0.0000	0.0000	0.0000	0.0001	0.0077
10	31.0842	0.20	4.95	0.0009	0.0000	0.0000	0.0000	0.0008	0.0001
11	32.0458	0.20	5.10	0.0000	0.0000	0.0000	0.0000	0.0000	0.0003
12	32.4069	0.19	5.16	0.0000	0.0000	0.0000	0.0000	0.0002	0.0000
13	33.0028	0.19	5.25	0.0000	0.0002	0.0002	0.0001	0.0000	0.0000
14	33.1544	0.19	5.28	0.0000	0.0002	0.0002	0.0004	0.0000	0.0000
15	35.0097	0.18	5.57	0.0000	0.0000	0.0000	0.0000	0.0000	0.0003
16	36.818	0.17	5.86	0.0001	0.0000	0.0000	0.0000	0.0012	0.0000
17	37.2414	0.17	5.93	0.0002	0.0000	0.0000	0.0000	0.0011	0.0000
18	37.3754	0.17	5.95	0.0000	0.0000	0.0019	0.0001	0.0000	0.0000
19	37.7397	0.17	6.01	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000
20	38.1288	0.16	6.07	0.0000	0.0000	0.0002	0.0005	0.0000	0.0000
21	40.1418	0.16	6.39	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000
22	40.4621	0.16	6.44	0.0005	0.0000	0.0000	0.0000	0.0015	0.0003
23	40.6	0.15	6.46	0.0000	0.0000	0.0001	0.0004	0.0000	0.0000
24	41.2486	0.15	6.56	0.0000	0.0000	0.0043	0.0007	0.0000	0.0000
25	42.8971	0.15	6.83	0.0064	0.0000	0.0000	0.0000	0.0120	0.0049
26	43.0803	0.15	6.86	0.0000	0.0000	0.0027	0.0001	0.0000	0.0000
27	43.3232	0.15	6.90	0.0046	0.0000	0.0000	0.0000	0.0069	0.0001
28	43.3717	0.14	6.90	0.0000	0.0003	0.0037	0.0018	0.0000	0.0000
29	43.6947	0.14	6.95	0.0000	0.0007	0.0005	0.0003	0.0000	0.0000
30	43.9672	0.14	7.00	0.0094	0.0000	0.0000	0.0000	0.0153	0.0000
31	44.0056	0.14	7.00	0.0000	0.0007	0.0008	0.0002	0.0000	0.0000
32	44.3371	0.14	7.06	0.0000	0.0002	0.0007	0.0068	0.0000	0.0000
33	44.5416	0.14	7.09	0.0174	0.0000	0.0000	0.0000	0.0327	0.0063
34	44.9176	0.14	7.15	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001
35	45.0162	0.14	7.16	0.0000	0.0005	0.0019	0.0043	0.0000	0.0000
36	45.7316	0.14	7.28	0.0000	0.0000	0.0000	0.0000	0.0000	0.0199
37	45.8462	0.14	7.30	0.0000	0.0000	0.0784	0.0047	0.0000	0.0000
38	45.8641	0.14	7.30	0.0017	0.0000	0.0000	0.0000	0.0015	0.0285
39	46.5562	0.13	7.41	0.0239	0.0000	0.0000	0.0000	0.0272	0.0003
40	46.5712	0.13	7.41	0.0000	0.0012	0.0000	0.0025	0.0000	0.0000
41	46.9202	0.13	7.47	0.0001	0.0000	0.0000	0.0000	0.0004	0.0007
42	46.924	0.13	7.47	0.0000	0.0001	0.0103	0.0351	0.0000	0.0000
43	47.3421	0.13	7.53	0.0000	0.0000	0.0342	0.0781	0.0000	0.0000
44	47.9433	0.13	7.63	0.0000	0.0000	0.0144	0.0000	0.0000	0.0000
45	48.176	0.13	7.67	0.0001	0.0000	0.0000	0.0000	0.0000	0.0178
46	48.2494	0.13	7.68	0.0000	0.0000	0.0282	0.0404	0.0000	0.0000

Mode	Omega [rad/s]	Period [s]	Freq. [Hz]	W_{xi}/W_{xtot}	W_{yi}/W_{ytot}	W_{zi}/W_{ztot}	W_{xi_R}/W_{xtot_R}	W_{yi_R}/W_{ytot_R}	W_{zi_R}/W_{ztot_R}
47	48.7913	0.13	7.77	0.0009	0.0000	0.0000	0.0000	0.0023	0.0010
48	49.1173	0.13	7.82	0.0020	0.0000	0.0000	0.0000	0.0073	0.0013
49	50.4247	0.12	8.03	0.0008	0.0000	0.0000	0.0000	0.0004	0.0002
50	50.6367	0.12	8.06	0.0002	0.0000	0.0000	0.0000	0.0001	0.0001
51	50.6734	0.12	8.06	0.0000	0.0061	0.0007	0.0019	0.0000	0.0000
52	51.7954	0.12	8.24	0.0000	0.0024	0.0012	0.0003	0.0000	0.0000
53	52.6669	0.12	8.38	0.0000	0.0005	0.0001	0.0035	0.0000	0.0000
54	52.8386	0.12	8.41	0.0000	0.0001	0.0000	0.0020	0.0000	0.0000
55	52.8792	0.12	8.42	0.0014	0.0000	0.0000	0.0000	0.0012	0.0009
56	53.2508	0.12	8.48	0.0000	0.0010	0.0000	0.0002	0.0000	0.0000
57	53.2797	0.12	8.48	0.0028	0.0000	0.0000	0.0000	0.0012	0.0007
58	53.5209	0.12	8.52	0.0000	0.0007	0.0003	0.0007	0.0000	0.0000
59	54.4904	0.12	8.67	0.0000	0.0001	0.0001	0.0003	0.0000	0.0000
60	54.8609	0.11	8.73	0.0002	0.0000	0.0000	0.0000	0.0001	0.0020
61	55.1575	0.11	8.78	0.0000	0.0216	0.0000	0.0000	0.0000	0.0000
62	55.2756	0.11	8.80	0.0000	0.0090	0.0006	0.0004	0.0000	0.0000
63	55.4988	0.11	8.83	0.0002	0.0000	0.0000	0.0000	0.0002	0.0042
64	55.7194	0.11	8.87	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002
65	55.7976	0.11	8.88	0.0000	0.0082	0.0004	0.0007	0.0000	0.0000
66	55.869	0.11	8.89	0.0000	0.0075	0.0009	0.0005	0.0000	0.0000
67	55.9292	0.11	8.90	0.0045	0.0000	0.0000	0.0000	0.0028	0.0013
68	56.0303	0.11	8.92	0.0000	0.0317	0.0003	0.0001	0.0000	0.0000
69	56.0479	0.11	8.92	0.0000	0.0305	0.0000	0.0003	0.0000	0.0000
70	56.2072	0.11	8.95	0.0000	0.0431	0.0248	0.0172	0.0000	0.0000
71	56.2396	0.11	8.95	0.0000	0.4050	0.0042	0.0090	0.0000	0.0000
72	56.749	0.11	9.03	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000
73	56.8053	0.11	9.04	0.0000	0.0000	0.0000	0.0000	0.0000	0.0003
74	56.8718	0.11	9.05	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001
75	56.875	0.11	9.05	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
76	56.9105	0.11	9.06	0.0002	0.0000	0.0000	0.0000	0.0001	0.0003
77	56.92	0.11	9.06	0.0017	0.0000	0.0000	0.0000	0.0009	0.0000
78	56.935	0.11	9.06	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000
79	56.9439	0.11	9.06	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002
80	56.9448	0.11	9.06	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001
81	56.9589	0.11	9.07	0.0038	0.0000	0.0000	0.0000	0.0019	0.0002
82	57.0163	0.11	9.07	0.0000	0.0000	0.0000	0.0000	0.0000	0.0107
83	57.0916	0.11	9.09	0.0465	0.0000	0.0000	0.0000	0.0237	0.0105
84	57.1263	0.11	9.09	0.0099	0.0000	0.0000	0.0000	0.0048	0.0140
85	57.143	0.11	9.09	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
86	57.1705	0.11	9.10	0.0357	0.0000	0.0000	0.0000	0.0180	0.0674
87	57.1911	0.11	9.10	0.2954	0.0000	0.0000	0.0000	0.1472	0.0443
88	57.3577	0.11	9.13	0.0172	0.0000	0.0000	0.0000	0.0103	0.2964
89	57.4704	0.11	9.15	0.1005	0.0000	0.0000	0.0000	0.0504	0.0214
90	57.7304	0.11	9.19	0.0000	0.0216	0.0004	0.0000	0.0000	0.0000
91	57.9075	0.11	9.22	0.0068	0.0000	0.0000	0.0000	0.0052	0.0515
92	58.0857	0.11	9.24	0.0000	0.0038	0.0000	0.0000	0.0000	0.0000
93	58.275	0.11	9.27	0.0000	0.0003	0.0002	0.0002	0.0000	0.0000
94	58.502	0.11	9.31	0.0052	0.0000	0.0000	0.0000	0.0017	0.0034
95	58.789	0.11	9.36	0.0007	0.0000	0.0000	0.0000	0.0000	0.0000
96	59.1108	0.11	9.41	0.0000	0.0011	0.0000	0.0000	0.0000	0.0000
97	59.3435	0.11	9.44	0.0000	0.0005	0.0001	0.0001	0.0000	0.0000
98	59.5099	0.11	9.47	0.0002	0.0000	0.0000	0.0000	0.0002	0.0014
99	59.7024	0.11	9.50	0.0000	0.0000	0.0000	0.0000	0.0001	0.0002
100	59.9705	0.10	9.54	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001
				0.9973	0.9916	0.2170	0.2176	0.9288	0.9976

3. REZULTATI ANALIZE KONSTRUKCIJE

3.1. Notranje sile

19. Internal forces on member

Nonlinear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS
Cross-section : S1 - QRO220X12.5

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B782	S1 - QRO220X12.5	0.000	NC34	**-159.48**	0.88	-1.02	-0.14	2.18	5.53
B782	S1 - QRO220X12.5	4.600	NC28	**53.27**	6.04	-0.06	-0.15	-0.09	13.97
B781	S1 - QRO220X12.5	0.000	NC16	-88.77	**-17.57**	-0.99	-0.10	2.14	31.30
B782	S1 - QRO220X12.5	0.000	NC24	-57.53	**17.56**	0.47	-0.15	-1.68	-32.92
B1932	S1 - QRO220X12.5	0.000	NC18	-104.33	7.77	**-3.52**	0.03	6.75	-10.47
B1831	S1 - QRO220X12.5	0.000	NC26	-115.05	-4.04	**3.69**	-0.02	-6.95	2.76
B781	S1 - QRO220X12.5	4.600	NC24	-136.28	1.38	0.37	**-0.17**	0.23	-2.36
B781	S1 - QRO220X12.5	4.600	NC45	-82.07	-0.03	-1.23	**0.14**	-3.50	-4.01
B913	S1 - QRO220X12.5	0.000	NC17	-108.24	-9.06	3.47	0.06	**-6.99**	13.13
B781	S1 - QRO220X12.5	0.000	NC27	-110.92	-4.22	-3.41	0.12	**6.86**	3.35
B781	S1 - QRO220X12.5	4.600	NC16	-84.05	-14.99	-0.96	-0.09	-2.38	**-44.38**
B782	S1 - QRO220X12.5	4.600	NC24	-52.80	15.09	0.45	-0.14	0.44	**42.67**

20. Internal forces on member

Linear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS-potres
Cross-section : S1 - QRO220X12.5

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B782	S1 - QRO220X12.5	0.000	potres 2/1	**-130.51**	**20.63**	-5.72	-0.03	10.99	-29.93
B781	S1 - QRO220X12.5	4.600	potres 3/2	**67.11**	-20.69	5.50	0.03	-11.29	19.46
B781	S1 - QRO220X12.5	3.680	potres 3/2	66.40	**-20.69**	5.50	0.03	-16.34	38.50
B782	S1 - QRO220X12.5	3.680	potres 3/2	-14.20	-6.62	**-44.24**	-0.02	-23.24	7.77
B782	S1 - QRO220X12.5	3.680	potres 2/1	-47.09	11.17	**44.00**	0.01	22.61	2.78
B914	S1 - QRO220X12.5	0.000	potres 6/3	-50.45	1.70	-12.11	**-0.19**	-2.10	-3.97
B913	S1 - QRO220X12.5	0.000	potres 7/4	-11.52	-1.52	12.37	**0.19**	-7.15	3.69
B576	S1 - QRO220X12.5	0.000	potres 6/3	-56.14	6.08	20.35	-0.01	**-53.17**	-12.03
B576	S1 - QRO220X12.5	0.000	potres 7/4	-11.62	-1.44	-20.32	0.01	**53.16**	5.70
B781	S1 - QRO220X12.5	3.680	potres 2/1	-127.70	16.14	-5.74	-0.02	15.71	**-49.04**
B782	S1 - QRO220X12.5	3.680	potres 2/1	-127.66	20.03	-5.55	-0.03	-9.82	**45.02**

21. Internal forces on member

Nonlinear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS
Cross-section : N2 - UNP240

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1634	N2 - UNP240	5.545	NC24	**-23.46**	-1.25	3.28	0.00	-4.83	0.58
B1617	N2 - UNP240	0.118	NC24	**28.77**	-1.83	0.05	0.00	-12.82	0.14
B795	N2 - UNP240	0.000	NC24	2.71	**-5.86**	-0.45	0.00	11.52	1.16
B1841	N2 - UNP240	0.355	NC45	1.57	**5.60**	1.25	0.00	9.19	1.03
B724	N2 - UNP240	0.000	NC34	6.91	-0.81	**-12.59**	0.01	19.11	0.61

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1890	N2 - UNP240	0.300	NC34	8.68	0.80	**12.82**	-0.01	**19.36**	0.61
B1592	N2 - UNP240	2.418	NC34	0.01	1.69	6.52	**-0.02**	8.04	0.38
B614	N2 - UNP240	2.418	NC25	0.01	1.76	-6.29	**0.02**	-7.76	0.40
B675	N2 - UNP240	0.355	NC33	8.94	-0.47	-0.59	0.01	**-18.87**	0.02
B1591	N2 - UNP240	0.000	NC46	-0.01	1.16	-0.45	0.00	0.74	**-1.20**
B570	N2 - UNP240	0.300	NC25	-0.01	2.95	-8.60	0.00	-14.49	**2.52**

22. Internal forces on member

Linear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS-potres
Cross-section : N2 - UNP240

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B810	N2 - UNP240	0.237	potres 2/1	**-96.61**	-19.37	2.45	0.02	28.42	57.60
B810	N2 - UNP240	0.237	potres 3/2	**97.62**	19.21	-2.27	-0.03	-35.80	-57.55
B1783	N2 - UNP240	2.500	potres 3/2	20.37	**-21.50**	44.12	0.01	-10.33	2.51
B1782	N2 - UNP240	0.300	potres 3/2	20.32	**21.52**	-46.17	-0.01	-18.46	3.67
B946	N2 - UNP240	6.045	potres 7/4	-22.78	9.35	**-102.65**	-0.93	13.58	-3.09
B1896	N2 - UNP240	0.500	potres 6/3	21.52	-10.22	**103.51**	**0.94**	-27.65	4.42
B946	N2 - UNP240	5.545	potres 7/4	-22.78	9.29	-102.30	**-0.93**	27.82	-4.21
B810	N2 - UNP240	0.237	potres 6/3	35.63	8.62	-16.07	-0.06	**-73.85**	-7.00
B810	N2 - UNP240	0.237	potres 7/4	-34.62	-8.77	16.25	0.06	**66.47**	7.04
B810	N2 - UNP240	0.237	potres 4/5	93.67	17.30	7.92	0.01	4.11	**-64.31**
B810	N2 - UNP240	0.237	potres 1/6	-92.66	-17.45	-7.74	-0.01	-11.49	**64.36**

23. Internal forces on member

Nonlinear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS
Cross-section : N1 - IPE240

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B665	N1 - IPE240	0.355	NC18	**-9.60**	-0.32	-3.01	0.00	-29.89	-0.19
B1897	N1 - IPE240	1.000	NC2	**7.66**	0.05	-13.08	0.00	4.78	0.30
B1843	N1 - IPE240	0.355	NC45	-3.53	**-5.52**	2.40	0.00	-15.90	-0.99
B797	N1 - IPE240	0.000	NC24	-5.88	**5.65**	-0.19	0.00	-22.51	-1.00
B1484	N1 - IPE240	0.300	NC42	0.40	-1.25	**-23.21**	0.00	-32.44	-0.75
B1493	N1 - IPE240	0.300	NC42	-1.09	-1.24	**23.22**	0.00	32.47	-0.70
B1594	N1 - IPE240	2.418	NC34	0.01	1.25	12.49	**-0.03**	15.93	0.54
B1967	N1 - IPE240	2.418	NC25	0.00	-1.24	12.07	**0.03**	15.36	-0.58
B1891	N1 - IPE240	0.300	NC35	-0.55	-1.35	-22.80	-0.01	**-33.37**	-0.85
B1894	N1 - IPE240	0.300	NC35	0.12	-1.39	22.78	0.00	**33.36**	-0.91
B568	N1 - IPE240	0.300	NC25	0.03	-2.02	16.40	-0.01	27.31	**-2.03**
B1593	N1 - IPE240	3.022	NC16	0.03	1.76	14.88	-0.01	22.49	**1.46**

24. Internal forces on member

Linear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS-potres
Cross-section : N1 - IPE240

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B734	N1 - IPE240	0.000	potres 2/1	**-107.58**	20.42	10.37	-0.01	16.81	**-75.89**
B737	N1 - IPE240	0.000	potres 3/2	**105.82**	20.36	10.71	-0.01	-20.66	-51.65
B1748	N1 - IPE240	2.918	potres 6/3	-29.10	**-35.51**	-97.39	-0.96	15.59	0.45
B1748	N1 - IPE240	2.814	potres 7/4	29.37	**35.94**	99.92	0.96	-22.94	-5.19
B1748	N1 - IPE240	7.022	potres 7/4	29.37	-0.31	**-108.07**	-0.96	10.76	3.92
B1860	N1 - IPE240	2.605	potres 7/4	-26.79	11.37	**104.08**	0.95	-23.37	-3.98

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1748	N1 - IPE240	6.823	potres 7/4	29.37	-0.27	-107.87	**-0.96**	25.43	3.93
B1748	N1 - IPE240	6.823	potres 6/3	-29.10	0.05	101.87	**0.96**	-26.62	-3.91
B1675	N1 - IPE240	5.545	potres 5/7	16.32	6.72	-17.64	-0.01	**-76.00**	2.50
B734	N1 - IPE240	0.000	potres 8/8	26.61	-9.68	19.40	-0.02	**83.58**	8.14
B734	N1 - IPE240	0.000	potres 3/2	104.46	-20.16	-9.86	0.01	-3.50	**75.77**

25. Internal forces on member

Nonlinear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS
Cross-section : D - RD16

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1917	D - RD16	0.000	NC24	**-14.16**	0.00	0.00	0.00	0.00	0.00
B1916	D - RD16	0.000	NC2	**10.98**	0.00	0.00	0.00	0.00	0.00

26. Internal forces on member

Linear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS-potres
Cross-section : D - RD16

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B703	D - RD16	3.130	potres 2/1	**-44.18**	0.00	0.00	0.00	0.00	0.00
B702	D - RD16	3.131	potres 3/2	**44.15**	0.00	0.00	0.00	0.00	0.00
B1880	D - RD16	0.258	potres 6/3	5.80	**-13.84**	84.49	-0.01	5.87	-0.98
B1880	D - RD16	0.258	potres 7/4	-6.02	**13.84**	-84.49	0.01	-5.87	0.98
B1650	D - RD16	0.258	potres 7/4	-23.93	-7.25	**-101.77**	**-0.94**	25.46	0.17
B1650	D - RD16	0.258	potres 6/3	23.88	7.25	**101.77**	**0.94**	-25.46	-0.17
B1559	D - RD16	2.870	potres 2/1	-12.70	0.92	33.33	0.09	**-36.93**	0.95
B1559	D - RD16	2.870	potres 3/2	15.65	-0.92	-33.33	-0.09	**36.93**	-0.95
B703	D - RD16	2.870	potres 2/1	-44.18	-9.76	1.53	0.00	8.24	**-50.35**
B703	D - RD16	2.870	potres 3/2	41.01	9.76	-1.53	0.00	-8.24	**50.35**

27. Internal forces on member

Nonlinear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS
Cross-section : KKN - U g (173; 160; 20; 10)

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B791	KKN - U g	0.000	NC24	**-25.26**	8.00	45.54	0.37	-59.00	0.25
B788	KKN - U g	0.135	NC28	**16.56**	-6.08	7.71	0.09	-7.78	-0.76
B1834	KKN - U g	0.135	NC28	16.08	**-6.69**	-9.80	-0.09	7.32	-0.59
B1835	KKN - U g	0.000	NC24	-24.02	**8.75**	-35.30	-0.28	56.67	-0.11
B787	KKN - U g	0.000	NC18	-10.36	2.80	**-72.07**	**-0.60**	81.01	0.05
B784	KKN - U g	0.000	NC18	-9.09	2.33	**71.94**	0.59	-80.40	0.02
B1930	KKN - U g	0.000	NC26	-5.50	1.89	71.62	**0.60**	-79.17	0.12
B1477	KKN - U g	0.000	NC41	-10.02	3.52	65.60	0.54	**-82.11**	0.00
B787	KKN - U g	0.000	NC36	-11.54	3.22	-70.83	-0.58	**82.46**	0.00
B919	KKN - U g	1.535	NC24	1.40	3.30	-10.23	0.05	13.51	**-2.17**
B919	KKN - U g	2.935	NC24	1.57	3.30	-9.09	0.03	0.00	**2.44**

28. Internal forces on member

Linear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS-potres
Cross-section : KKN - U g (173; 160; 20; 10)

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1572	KKN - U g	0.704	potres 3/2	**-75.99**	0.75	-7.62	0.01	11.29	-0.49
B1615	KKN - U g	0.859	potres 2/1	**75.82**	-0.58	-6.75	-0.02	-7.48	0.52
B719	KKN - U g	2.230	potres 2/1	-52.31	**-21.53**	32.00	0.30	-9.41	0.53
B719	KKN - U g	2.230	potres 3/2	50.42	**21.83**	-39.52	-0.32	14.40	-0.49
B582	KKN - U g	0.000	potres 6/3	19.68	9.53	**-120.79**	**-1.09**	48.40	-0.68
B578	KKN - U g	0.000	potres 7/4	17.67	13.00	**118.60**	**1.05**	-46.65	1.16
B920	KKN - U g	1.414	potres 6/3	-17.26	2.86	11.38	-0.01	**-47.49**	-6.59
B920	KKN - U g	0.822	potres 7/4	14.97	2.86	-29.07	-0.01	**63.68**	-6.61
B920	KKN - U g	0.822	potres 2/1	50.39	9.14	-15.26	0.00	27.11	**-21.67**
B920	KKN - U g	1.414	potres 2/1	50.45	-9.06	-14.89	-0.02	21.87	**21.73**

29. Internal forces on member

Nonlinear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS
Cross-section : VKN - U g (195; 160; 20; 10)

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B721	VKN - U g	0.500	NC2	**-10.91**	3.45	6.45	0.11	-17.82	-1.43
B1837	VKN - U g	1.000	NC42	**12.90**	**-5.23**	15.06	0.00	-37.65	-1.46
B1833	VKN - U g	0.000	NC42	7.67	**5.23**	-15.93	0.00	53.15	-1.40
B1833	VKN - U g	0.000	NC50-s1	4.17	1.29	**-24.83**	0.00	55.03	-0.34
B1833	VKN - U g	1.000	NC51-s2	2.83	-0.97	**24.90**	0.00	55.06	-0.25
B721	VKN - U g	0.000	NC34	-8.27	-2.11	-6.13	**-0.14**	-16.69	0.14
B655	VKN - U g	1.000	NC34	-1.29	2.27	-5.93	**0.13**	-22.89	-0.03
B789	VKN - U g	1.000	NC34	4.70	-2.60	-16.91	-0.01	**-71.36**	-0.67
B783	VKN - U g	1.000	NC34	3.17	2.60	16.78	-0.01	**71.32**	0.67
B655	VKN - U g	0.500	NC24	-7.48	-4.23	7.01	-0.10	-15.39	**-1.81**
B655	VKN - U g	0.500	NC28	5.96	-3.79	6.11	-0.03	1.37	**1.50**

30. Internal forces on member

Linear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS-potres
Cross-section : VKN - U g (195; 160; 20; 10)

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1614	VKN - U g	0.150	potres 3/2	**-73.81**	0.89	-1.41	0.03	6.84	-0.78
B1614	VKN - U g	0.150	potres 2/1	**75.79**	-0.89	0.98	0.02	3.22	0.66
B721	VKN - U g	0.625	potres 2/1	-52.07	**-21.69**	-35.84	-0.28	6.64	0.49
B721	VKN - U g	0.625	potres 3/2	50.65	**21.67**	35.68	0.34	-17.17	-0.53
B716	VKN - U g	0.625	potres 6/3	-29.47	-8.03	**-103.91**	**-1.01**	-23.48	0.90
B716	VKN - U g	0.750	potres 7/4	32.90	8.01	**104.12**	0.96	20.04	1.96
B716	VKN - U g	0.625	potres 7/4	32.90	8.01	104.05	**0.96**	33.87	-1.07
B921	VKN - U g	0.375	potres 7/4	23.08	12.66	101.20	0.93	**-40.82**	-0.71
B915	VKN - U g	0.800	potres 7/4	23.55	12.45	-100.36	-0.93	**40.68**	-0.75
B716	VKN - U g	0.625	potres 3/2	-17.35	12.91	52.17	-0.02	31.61	**-3.63**
B721	VKN - U g	0.625	potres 3/2	17.82	-12.93	52.25	0.03	-31.74	**3.53**

31. Internal forces on member

Nonlinear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS
Cross-section : TN - Rectangle (500; 500)

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
TEM6	TN - Rectangle	0.000	NC34	**-167.76**	0.84	-1.06	-0.14	3.22	4.66
TEM6	TN - Rectangle	1.000	NC28	**49.75**	8.43	-0.04	-0.15	0.13	-19.09

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
TEM5	TN - Rectangle	0.000	NC16	-97.05	**-17.59**	-1.03	-0.10	3.15	**48.88**
TEM6	TN - Rectangle	0.000	NC24	-65.81	**17.59**	0.51	-0.15	-2.16	**-50.50**
TEM20	TN - Rectangle	0.000	NC18	-112.60	7.72	**-3.56**	0.03	**10.29**	-18.22
TEM17	TN - Rectangle	0.000	NC26	-123.33	-4.00	**3.72**	-0.02	**-10.66**	6.77
TEM5	TN - Rectangle	1.000	NC24	-141.04	3.45	0.37	**-0.17**	-1.50	-13.67
TEM5	TN - Rectangle	1.000	NC45	-86.83	0.86	-2.28	**0.13**	4.65	-5.93

32. Internal forces on member

Linear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS-potres
Cross-section : TN - Rectangle (500; 500)

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
TEM6	TN - Rectangle	0.000	potres 2/1	**-136.71**	**20.83**	5.53	-0.03	20.75	**-63.95**
TEM5	TN - Rectangle	1.000	potres 3/2	**63.64**	-20.86	-5.79	0.03	-20.38	61.67
TEM5	TN - Rectangle	0.800	potres 3/2	62.42	**-20.86**	-5.79	0.03	-21.47	**65.84**
TEM10	TN - Rectangle	0.200	potres 3/2	-40.55	5.42	**-24.44**	-0.01	-12.73	-5.44
TEM10	TN - Rectangle	0.200	potres 2/1	-31.23	-1.23	**24.70**	0.01	12.19	-3.63
TEM10	TN - Rectangle	0.000	potres 6/3	-25.80	-1.17	4.19	**-0.09**	-0.77	-6.34
TEM9	TN - Rectangle	0.000	potres 7/4	-48.44	1.00	-3.95	**0.09**	2.58	4.48
TEM5	TN - Rectangle	0.800	potres 6/3	0.42	-8.03	-17.54	0.06	**-67.73**	22.66
TEM5	TN - Rectangle	0.800	potres 7/4	-69.82	3.48	17.30	-0.06	**68.03**	-15.53

33. Internal forces on member

Nonlinear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS
Cross-section : P - RO26.9X3.2

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1905	P - RO26.9X3.2	0.000	NC24	**-5.10**	0.00	**0.02**	0.00	0.00	0.00
B1902	P - RO26.9X3.2	0.000	NC46	**3.65**	0.00	0.01	0.00	0.00	0.00
B1507	P - RO26.9X3.2	1.400	NC26	1.99	**0.00**	-0.02	0.00	0.00	0.00
B964	P - RO26.9X3.2	1.400	NC14	1.92	**0.00**	-0.02	0.00	0.00	0.00
B1905	P - RO26.9X3.2	1.400	NC24	-5.09	0.00	**-0.02**	0.00	0.00	0.00
B834	P - RO26.9X3.2	0.840	NC34	0.53	0.00	0.00	**0.00**	0.01	0.00
B831	P - RO26.9X3.2	0.560	NC33	-1.51	0.00	0.00	**0.00**	0.01	0.00
B1863	P - RO26.9X3.2	1.400	NC42	-0.32	0.00	-0.02	0.00	**0.00**	0.00
B1905	P - RO26.9X3.2	0.560	NC24	-5.10	0.00	0.01	0.00	**0.01**	0.00
B1914	P - RO26.9X3.2	0.840	NC34	1.43	0.00	0.00	0.00	0.01	**0.00**
B1865	P - RO26.9X3.2	0.840	NC16	1.65	0.00	0.00	0.00	0.01	**0.00**

34. Internal forces on member

Linear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS-potres
Cross-section : P - RO26.9X3.2

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1754	P - RO26.9X3.2	0.840	potres 2/1	**-93.95**	19.44	-6.17	-0.01	16.44	**-46.09**
B1754	P - RO26.9X3.2	1.120	potres 3/2	**93.33**	-19.44	6.16	0.02	-10.77	28.21
B1761	P - RO26.9X3.2	0.840	potres 3/2	-53.31	**-23.11**	34.99	0.31	11.83	0.51
B1761	P - RO26.9X3.2	0.840	potres 2/1	52.68	**23.11**	-35.00	-0.31	-11.82	-0.51
B1636	P - RO26.9X3.2	0.840	potres 6/3	-24.07	-15.19	**-101.88**	-0.94	12.88	-1.38
B1636	P - RO26.9X3.2	0.560	potres 7/4	25.07	15.19	**101.88**	**0.94**	-26.53	-0.69
B1636	P - RO26.9X3.2	0.560	potres 6/3	-24.07	-15.19	-101.88	**-0.94**	26.54	0.69
B1864	P - RO26.9X3.2	0.840	potres 6/3	-21.11	-3.95	-20.53	-0.02	**-73.98**	13.21
B1864	P - RO26.9X3.2	0.840	potres 7/4	21.99	3.95	20.53	0.02	**73.99**	-13.21

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1754	P - RO26.9X3.2	0.840	potres 3/2	93.33	-19.44	6.17	0.02	-16.43	**46.09**

35. Internal forces on member

Nonlinear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS
Cross-section : NZ - L80X8

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1906	NZ - L80X8	0.507	NC35	**-1.31**	0.01	0.01	0.00	0.02	0.02
B1869	NZ - L80X8	1.267	NC35	**0.94**	-0.06	-0.06	0.00	0.00	0.00
B828	NZ - L80X8	1.267	NC36	-0.85	**-0.06**	-0.06	0.00	0.00	0.00
B828	NZ - L80X8	0.000	NC32	-0.87	**0.06**	0.06	0.00	0.00	0.00
B1910	NZ - L80X8	1.267	NC35	-0.87	-0.06	**-0.06**	0.00	0.00	0.00
B1910	NZ - L80X8	0.000	NC35	-0.87	0.06	**0.06**	0.00	0.00	0.00
B1910	NZ - L80X8	0.253	NC50-s1	-0.56	0.03	0.03	**0.00**	0.01	0.01
B1910	NZ - L80X8	1.013	NC51-s2	-0.56	-0.03	-0.03	**0.00**	0.01	0.01
B959	NZ - L80X8	1.267	NC50-s1	0.18	-0.06	-0.06	0.00	**0.00**	0.00
B1910	NZ - L80X8	0.507	NC35	-0.87	0.01	0.01	0.00	**0.02**	0.02
B962	NZ - L80X8	0.000	NC51-s2	0.13	0.06	0.06	0.00	0.00	**0.00**
B828	NZ - L80X8	0.760	NC32	-0.87	-0.01	-0.01	0.00	0.02	**0.02**

36. Internal forces on member

Linear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS-potres
Cross-section : NZ - L80X8

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B714	NZ - L80X8	0.000	potres 2/1	**-106.12**	-19.73	10.79	0.01	-24.37	48.10
B714	NZ - L80X8	0.000	potres 3/2	**105.79**	19.81	-10.71	-0.01	24.37	-48.10
B1868	NZ - L80X8	1.267	potres 6/3	-21.99	**-81.23**	-62.29	-0.93	9.87	8.26
B1868	NZ - L80X8	1.013	potres 7/4	22.20	**81.16**	62.22	0.93	-18.18	-19.16
B1872	NZ - L80X8	0.507	potres 7/4	21.95	-62.24	**-81.17**	-0.93	8.27	9.88
B1872	NZ - L80X8	0.253	potres 6/3	-22.24	62.27	**81.21**	0.93	-19.16	-18.18
B1643	NZ - L80X8	0.760	potres 6/3	23.70	-66.84	-77.10	**-0.94**	18.95	18.56
B1643	NZ - L80X8	0.760	potres 7/4	-24.11	66.83	77.08	**0.94**	-18.93	-18.53
B714	NZ - L80X8	0.000	potres 5/7	-28.34	9.98	18.87	-0.02	**-48.81**	-27.42
B714	NZ - L80X8	0.000	potres 8/8	28.01	-9.89	-18.78	0.02	**48.81**	27.42
B714	NZ - L80X8	0.000	potres 6/3	34.64	19.22	9.84	-0.03	-27.33	**-49.37**
B714	NZ - L80X8	0.000	potres 7/4	-34.96	-19.13	-9.76	0.03	27.33	**49.37**

37. Internal forces on member

Nonlinear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS
Cross-section : RN - QRO60X5

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1607	RN - QRO60X5	1.000	NC34	**-3.12**	-0.01	-0.14	0.00	-0.23	0.02
B1604	RN - QRO60X5	2.800	NC22	**0.60**	0.00	0.00	0.00	0.00	0.01
B1606	RN - QRO60X5	1.535	NC31	0.09	**-0.51**	0.08	-0.01	-0.03	**0.13**
B1603	RN - QRO60X5	1.535	NC21	0.09	**0.51**	0.08	0.01	-0.03	-0.12
B1603	RN - QRO60X5	0.135	NC25	-3.01	0.00	**-0.61**	0.00	-0.30	-0.02
B1604	RN - QRO60X5	2.800	NC24	-3.03	0.00	**0.55**	0.00	-0.30	-0.03
B1604	RN - QRO60X5	0.560	NC26	-0.81	0.00	0.03	**-0.01**	0.03	0.09
B1603	RN - QRO60X5	2.375	NC26	-0.58	0.00	-0.02	**0.01**	0.03	0.10
B1603	RN - QRO60X5	0.135	NC26	-2.67	-0.38	-0.49	0.01	**-0.34**	-0.11
B1603	RN - QRO60X5	0.135	NC19	0.21	-0.01	0.08	0.00	**0.06**	0.00

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1604	RN - QRO60X5	1.400	NC30	-0.30	0.45	0.03	-0.01	-0.02	**-0.12**

38. Internal forces on member

Linear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS-potres
Cross-section : RN - QRO60X5

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1604	RN - QRO60X5	0.280	potres 3/2	**-74.78**	0.21	-0.93	0.00	-0.76	0.24
B1604	RN - QRO60X5	0.000	potres 2/1	**74.51**	-0.21	0.99	0.00	-0.81	0.24
B1603	RN - QRO60X5	0.135	potres 3/2	-12.36	**-0.94**	0.76	0.00	1.34	-0.39
B1603	RN - QRO60X5	0.135	potres 2/1	11.61	**0.96**	-0.56	0.00	-1.52	0.37
B1605	RN - QRO60X5	0.400	potres 7/4	26.27	0.54	**-2.25**	0.00	-3.00	0.58
B1605	RN - QRO60X5	0.200	potres 6/3	-27.47	-0.54	**2.29**	0.00	1.80	-0.36
B1606	RN - QRO60X5	0.975	potres 7/4	-1.53	-0.01	0.03	**0.00**	-0.03	0.00
B1603	RN - QRO60X5	0.000	potres 6/3	-8.44	-0.47	1.74	**0.00**	2.93	-0.52
B1603	RN - QRO60X5	2.935	potres 6/3	-5.39	0.58	-2.22	0.00	**-5.84**	**1.08**
B1603	RN - QRO60X5	2.935	potres 7/4	5.12	-0.59	2.14	0.00	**5.84**	**-1.08**

39. Internal forces on member

Nonlinear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS
Cross-section : S3 - QRO220X12.5

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B778	S3 - QRO220X12.5	0.000	NC34	**-143.14**	4.81	-0.47	0.00	0.00	0.00
B1620	S3 - QRO220X12.5	4.924	NC28	**31.96**	-0.07	-0.04	0.00	-0.15	16.32
B1619	S3 - QRO220X12.5	0.000	NC16	-109.52	**-8.01**	-0.14	0.00	0.00	0.00
B1620	S3 - QRO220X12.5	0.000	NC2	-97.21	**17.52**	0.23	0.00	0.00	0.00
B778	S3 - QRO220X12.5	0.000	NC18	-131.11	7.69	**-1.68**	0.00	0.00	0.00
B649	S3 - QRO220X12.5	0.000	NC17	-126.22	-3.44	**1.72**	0.00	0.00	0.00
B778	S3 - QRO220X12.5	1.969	NC5	-111.73	-0.80	-0.89	**-0.01**	-2.51	14.82
B778	S3 - QRO220X12.5	1.969	NC4	-108.68	-0.05	0.39	**0.01**	1.52	16.34
B778	S3 - QRO220X12.5	4.267	NC18	-126.66	-0.10	0.04	-0.01	**-3.55**	8.70
B649	S3 - QRO220X12.5	4.267	NC17	-121.81	-2.64	0.00	-0.01	**3.72**	-13.16
B1619	S3 - QRO220X12.5	4.924	NC16	-104.47	-4.85	-0.10	0.00	-0.59	**-32.11**
B1620	S3 - QRO220X12.5	4.924	NC24	-77.27	3.16	0.18	0.00	0.97	**33.29**

40. Internal forces on member

Linear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS-potres
Cross-section : S3 - QRO220X12.5

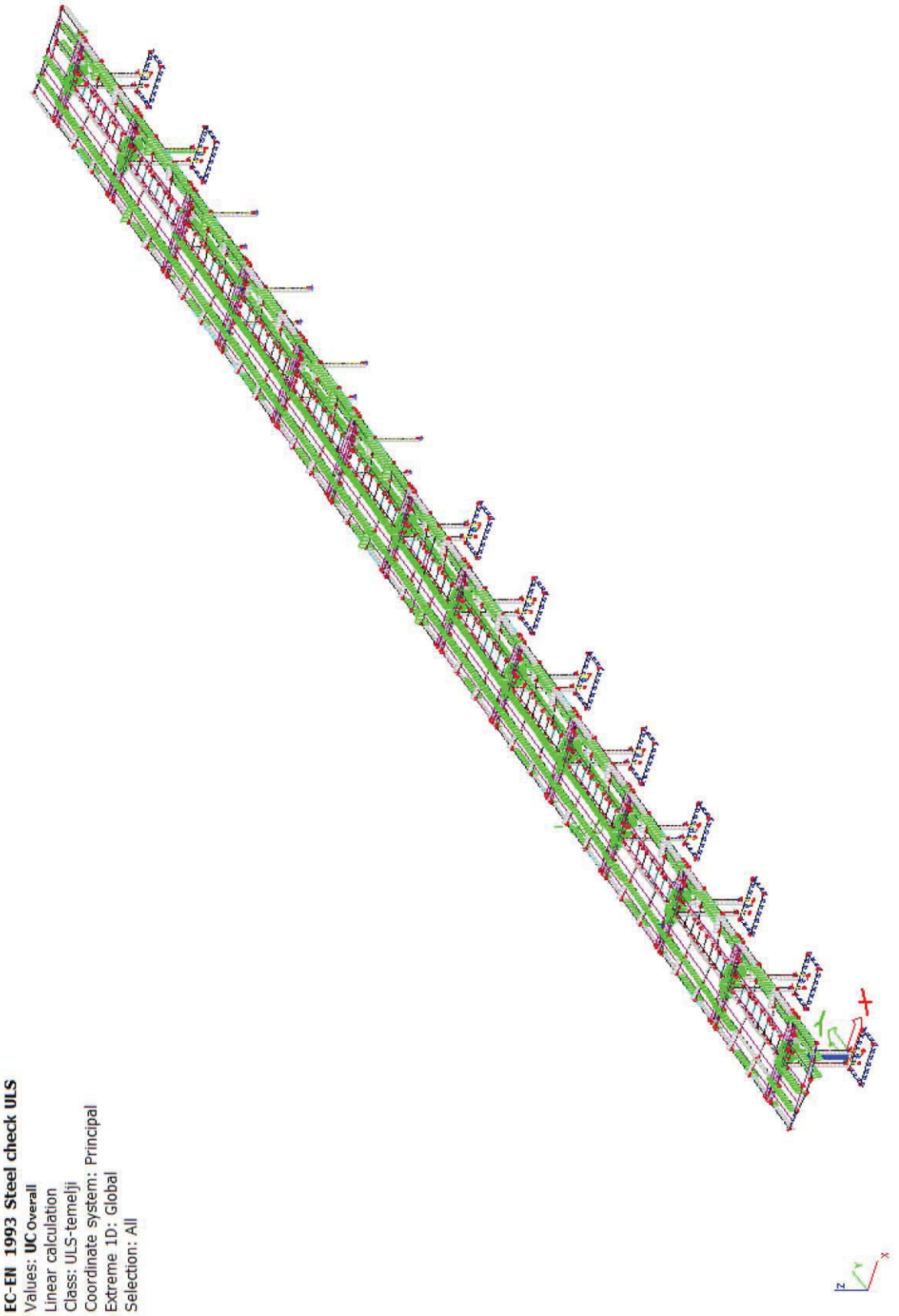
Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B712	S3 - QRO220X12.5	0.985	potres 2/1	**-139.76**	**22.48**	-6.30	-0.01	16.85	**-50.37**
B712	S3 - QRO220X12.5	4.924	potres 3/2	**75.14**	-20.32	6.34	0.01	6.89	-23.21
B712	S3 - QRO220X12.5	0.985	potres 3/2	72.15	**-20.69**	6.45	0.01	-16.71	**52.13**
B715	S3 - QRO220X12.5	0.000	potres 3/2	-53.75	-13.82	**-52.19**	0.00	23.81	-2.91
B715	S3 - QRO220X12.5	0.000	potres 2/1	-15.62	12.02	**52.01**	0.00	-23.81	2.91
B712	S3 - QRO220X12.5	0.985	potres 7/4	-68.61	7.53	-20.41	**-0.03**	**54.31**	-14.70
B712	S3 - QRO220X12.5	0.985	potres 6/3	0.99	-5.74	20.56	**0.03**	**-54.16**	16.47

3.2. Izkoriščenost jeklenih elementov

41. EC-EN 1993 Steel check ULS

Linear calculation
Class: ULS-temelji
Coordinate system: Principal
Extreme 1D: Cross-section
Selection: All
Overall Unity Check

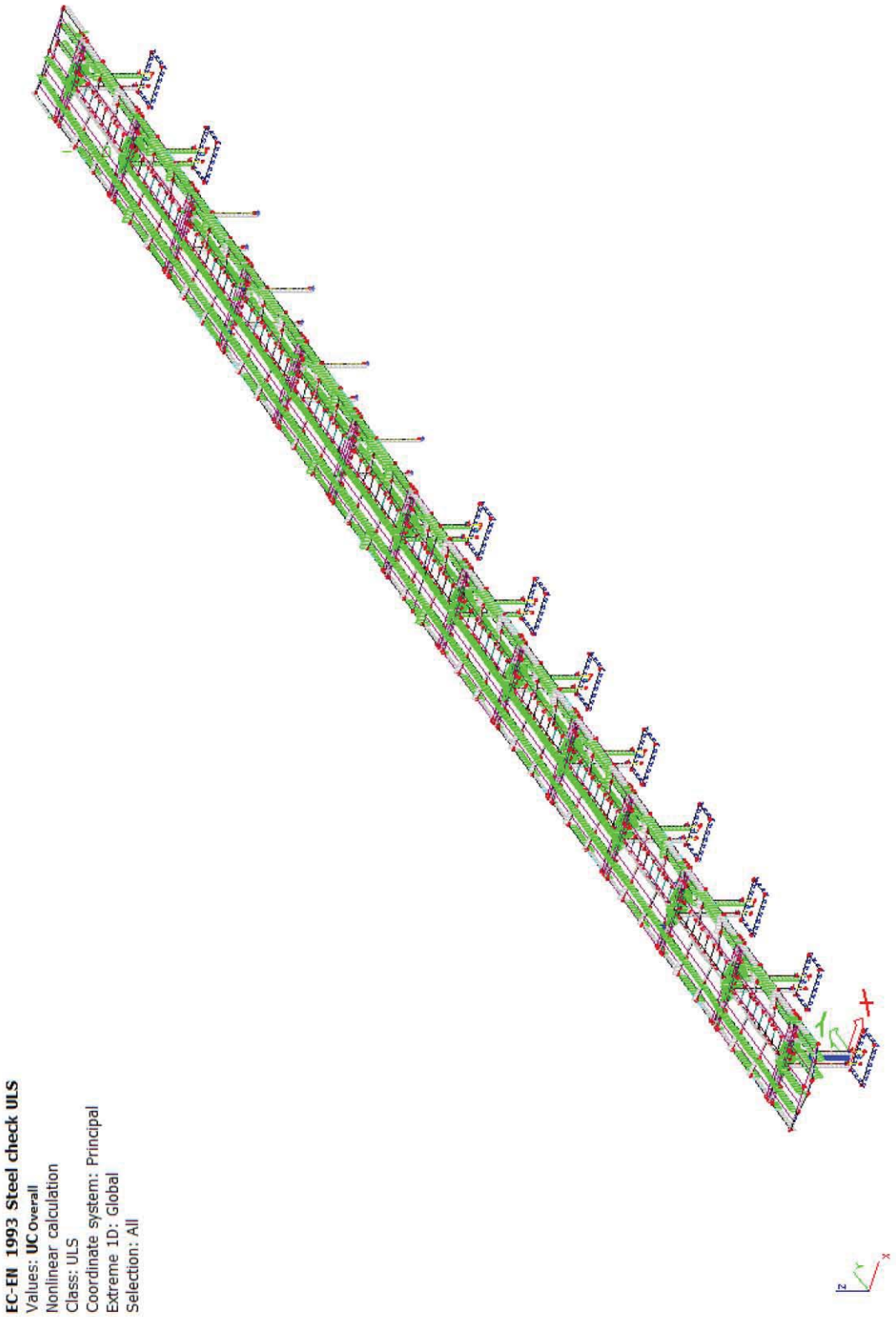
Name	dx [m]	Case	Cross-section	Material	$UC_{Overall}$ [-]	UC_{Sec} [-]	UC_{Stab} [-]
B781	0.000	MSN-temelj-1-1/1	S1 - QRO220X12.5	S 235	**0.26**	0.14	0.26
B1475	0.750-	MSN-temelj-1-1/2	VKN - U g (195; 160; 20; 10)	S 235	**0.50**	0.50	0.00
B1453	0.000	MSN-temelj-1-1/3	KKN - U g (173; 160; 20; 10)	S 235	**0.41**	0.41	0.41
B744	4.022	MSN-temelj-1-1/1	N2 - UNP240	S 235	**0.42**	0.14	0.42
B1501	4.023-	MSN-temelj-1-1/4	N1 - IPE240	S 235	**0.49**	0.22	0.49
B1902	1.400	MSN-temelj-3-1/5	P - RO26.9X3.2	S 235	**0.32**	0.09	0.32
B956	0.507-	MSN-temelj-1-1/6	NZ - L80X8	S 235	**0.01**	0.01	0.01
B1619	0.000	MSN-temelj-6-1/8	S3 - QRO220X12.5	S 235	**0.20**	0.04	0.20
B1603	0.000	MSN-temelj-1-1/4	RN - QRO60X5	S 235	**0.08**	0.04	0.08


EC-EN 1993 Steel check ULS
Values: UC Overall
Linear calculation
Class: ULS-temelji
Coordinate system: Principal
Extreme 1D: Global
Selection: All

42. EC-EN 1993 Steel check ULS

Nonlinear calculation
Class: ULS
Coordinate system: Principal
Extreme 1D: Cross-section
Selection: All
Overall Unity Check

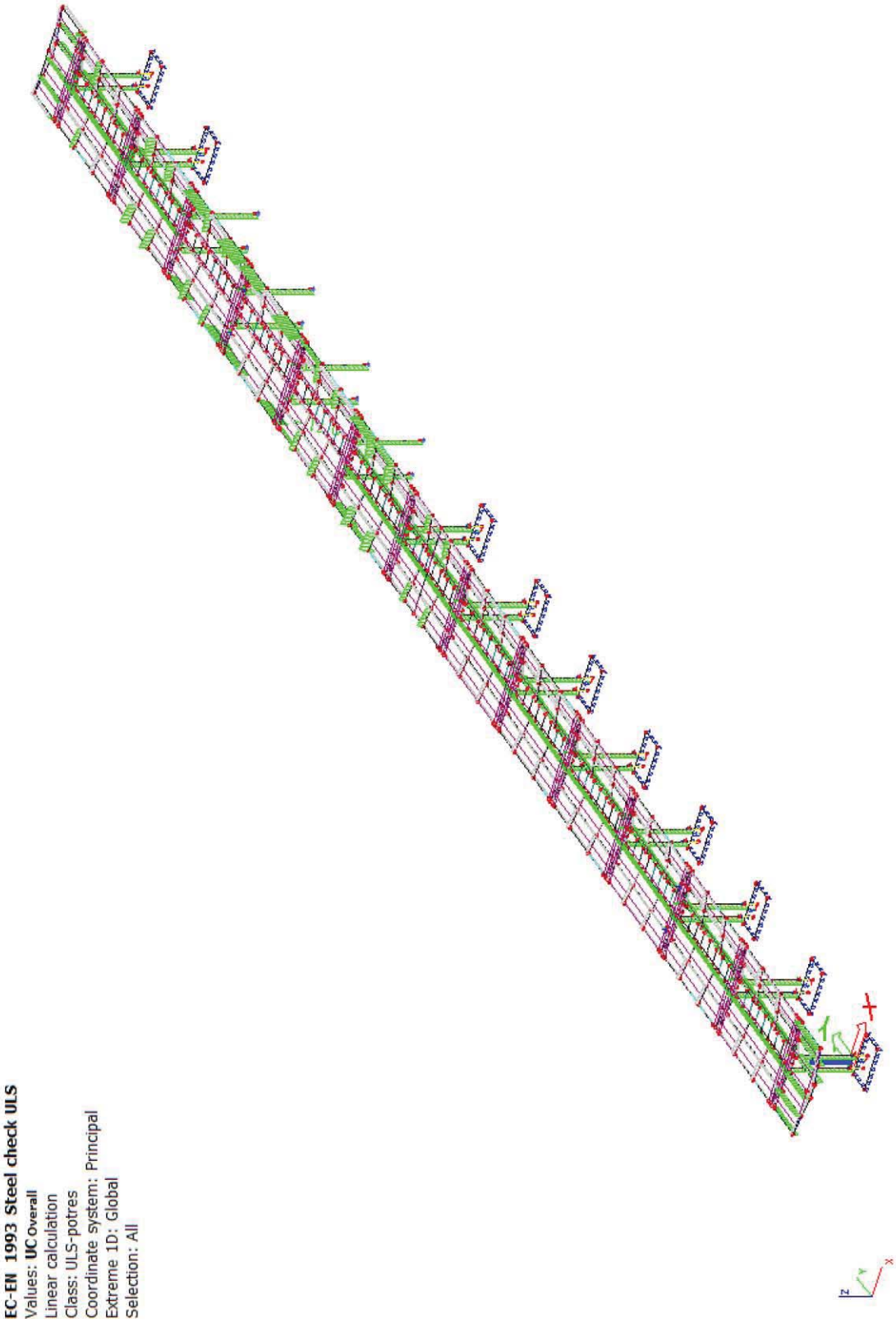
Name	dx [m]	Case	Cross-section	Material	$UC_{Overall}$ [-]	UC_{Sec} [-]	UC_{Stab} [-]
B781	0.000	NC34	S1 - QRO220X12.5	S 235	**0.29**	0.17	0.29
B789	0.750-	NC34	VKN - U g (195; 160; 20; 10)	S 235	**0.54**	0.54	0.00
B787	0.000	NC36	KKN - U g (173; 160; 20; 10)	S 235	**0.44**	0.44	0.43
B744	4.022	NC34	N2 - UNP240	S 235	**0.45**	0.15	0.45
B1501	4.023-	NC41	N1 - IPE240	S 235	**0.52**	0.23	0.52
B1905	0.000	NC24	P - RO26.9X3.2	S 235	**0.35**	0.09	0.35
B1906	0.507-	NC35	NZ - L80X8	S 235	**0.01**	0.01	0.01
B1619	0.000	NC16	S3 - QRO220X12.5	S 235	**0.23**	0.05	0.23
B1603	0.000	NC26	RN - QRO60X5	S 235	**0.09**	0.05	0.09


EC-EN 1993 Steel check ULS
Values: UCOverall
Nonlinear calculation
Class: ULS
Coordinate system: Principal
Extreme 1D: Global
Selection: All

43. EC-EN 1993 Steel check ULS

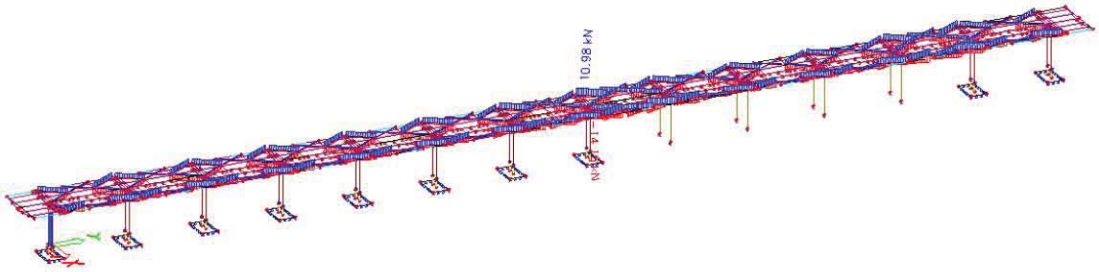
Linear calculation
Class: ULS-potres
Coordinate system: Principal
Extreme 1D: Cross-section
Selection: All
Overall Unity Check

Name	dx [m]	Case	Cross-section	Material	$UC_{Overall}$ [-]	UC_{Sec} [-]	UC_{Stab} [-]
B782	0.000	potres 2/1	S1 - QRO220X12.5	S 235	**0.46**	0.30	0.46
B783	0.000	potres 2/1	VKN - U g (195; 160; 20; 10)	S 235	**0.30**	0.30	0.00
B1818	0.000	potres 6/2	KKN - U g (173; 160; 20; 10)	S 235	**0.42**	0.42	0.24
B1654	0.000	potres 3/3	N2 - UNP240	S 235	**0.71**	0.14	0.71
B1966	0.300	potres 4/4	N1 - IPE240	S 235	**0.41**	0.36	0.41
B1905	0.000	potres 3/3	P - RO26.9X3.2	S 235	**0.53**	0.15	0.53
B962	0.507-	potres 6/2	NZ - L80X8	S 235	**0.01**	0.01	0.00
B1619	0.000	potres 2/1	S3 - QRO220X12.5	S 235	**0.46**	0.04	0.46
B1604	2.935	potres 7/5	RN - QRO60X5	S 235	**0.16**	0.14	0.16

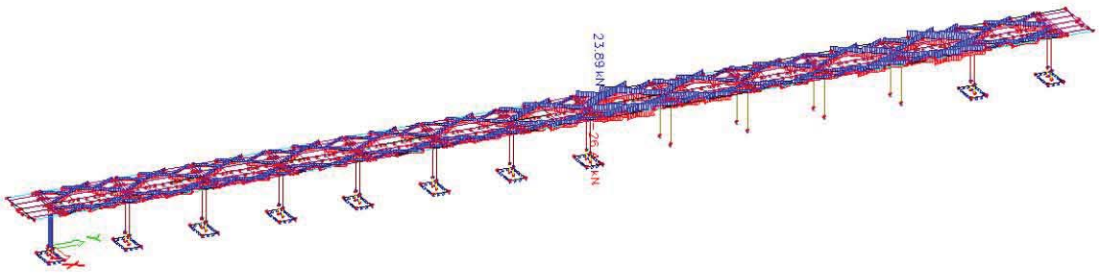

EC-EN 1993 Steel check ULS
Values: UC Overall
Linear calculation
Class: ULS-potres
Coordinate system: Principal
Extreme 1D: Global
Selection: All

Natezna diagonala M16

1D internal forces
Values: **N**
Nonlinear calculation
Class: ULS
Coordinate system: Principal
Extreme 1D: Global
Selection: All
Filter: Cross-section = D - RD16



1D internal forces
Values: **N**
Linear calculation
Class: ULS-potres
Coordinate system: Principal
Extreme 1D: Global
Selection: All
Filter: Cross-section = D - RD16



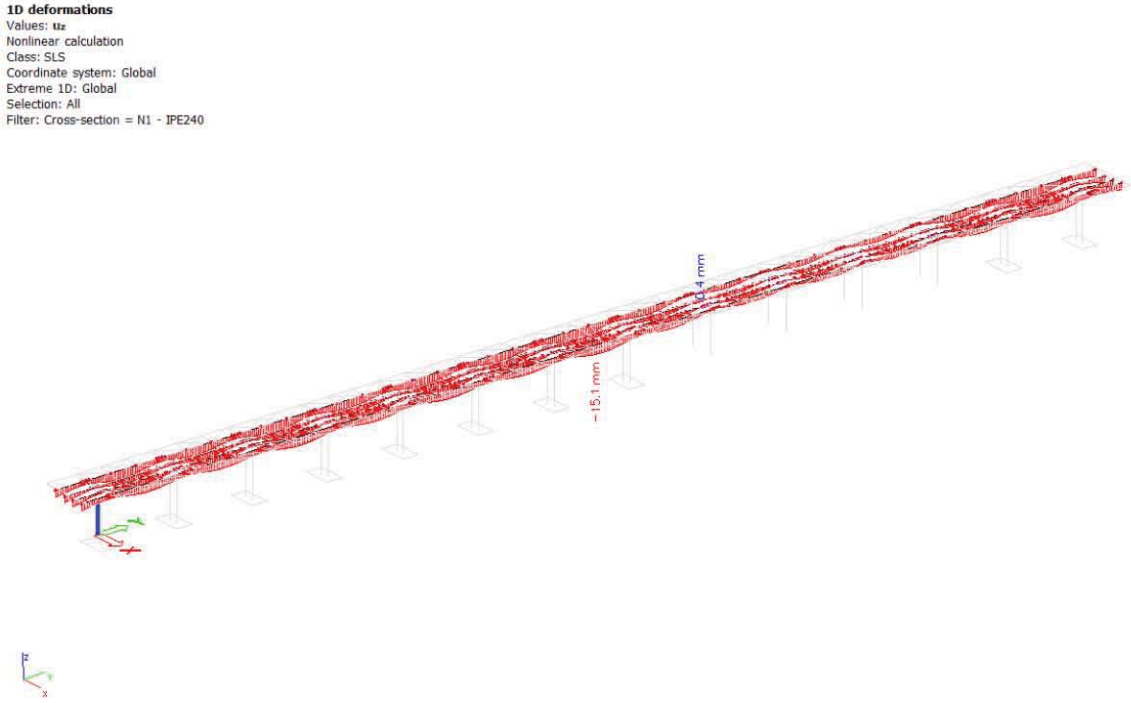
Ker imamo le natezne diagonale upoštevamo dvojno silo v diagonali

M16, S235 z napenjalko

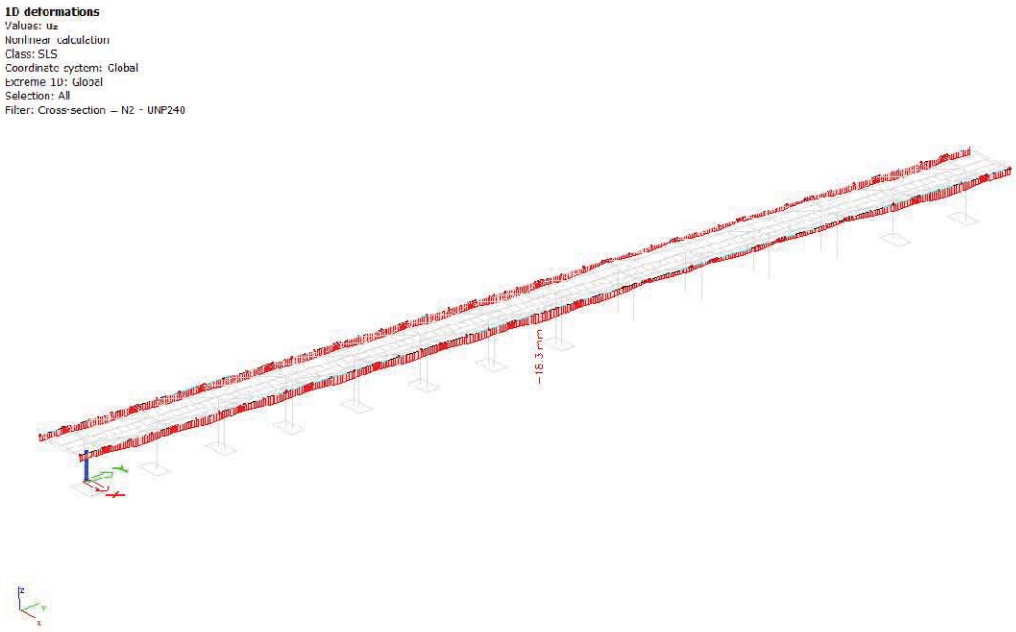
$F_{t,Ed,max} = 2x23 = 46\ kN \approx F_{t,Rd} = 45.2\ kN$

3.3. Pomiki

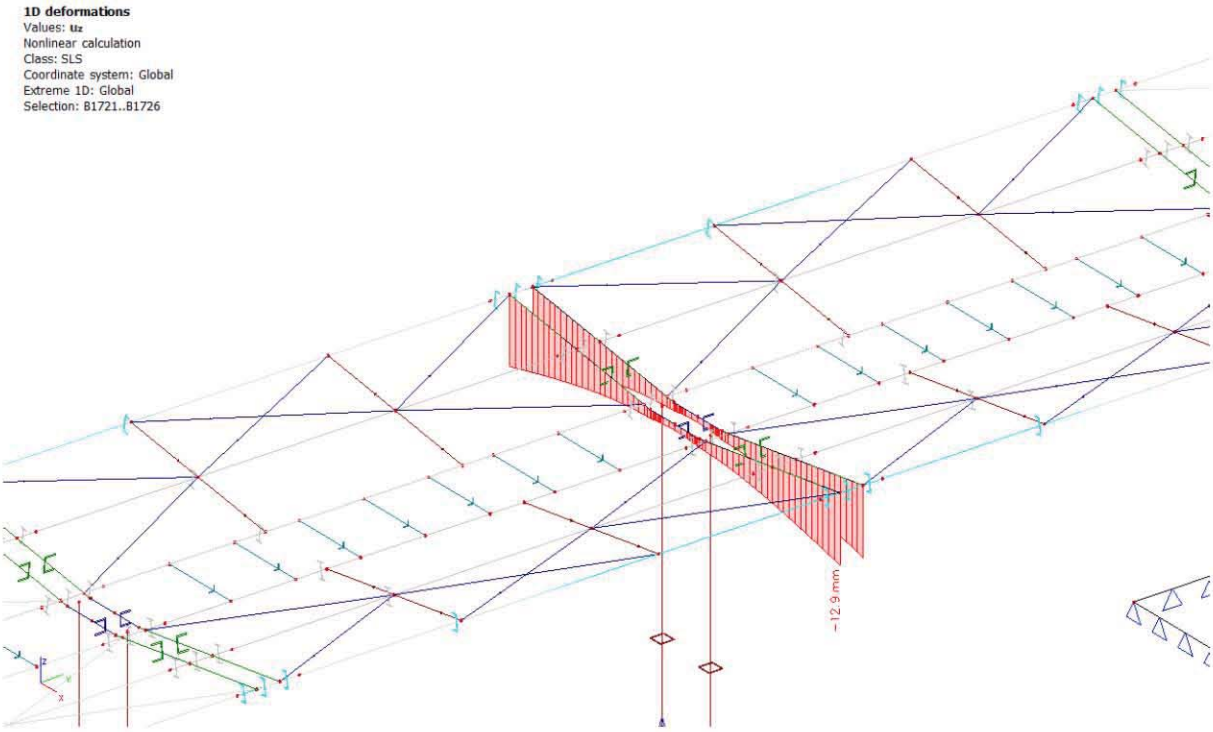
MSU – vertikalni pomiki



$$w_{vert,max,Q} = 15.1 \text{ mm} \leq w_{vert,dov,Q} = L/250 = 9000/250 = 36 \text{ mm}$$



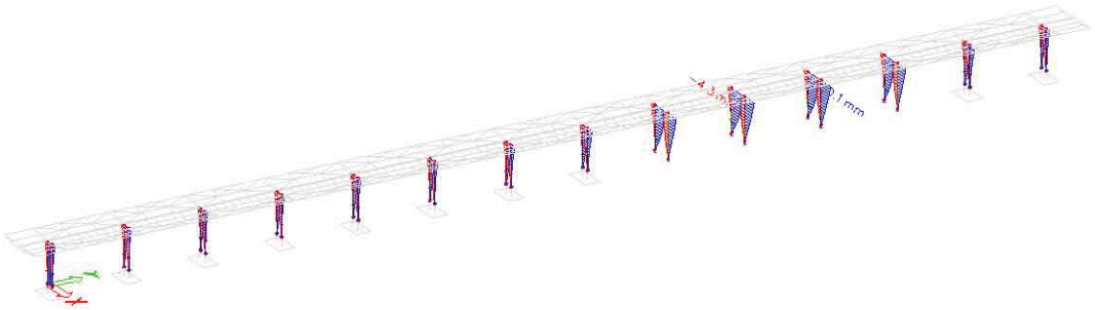
$$w_{vert,max,Q} = 18.3 \text{ mm} \leq w_{vert,dov,Q} = L/250 = 9000/250 = 36 \text{ mm}$$



$w_{vert,max,Q} = 12.9 \text{ mm} \leq w_{vert,dov,Q} = 2xL/250 = 2x2935/250 = 23 \text{ mm}$

MSU – horizontalni pomiki

1D deformations
Values: u_x
Nonlinear calculation
Class: SLS
Coordinate system: Global
Extreme 1D: Global
Selection: All

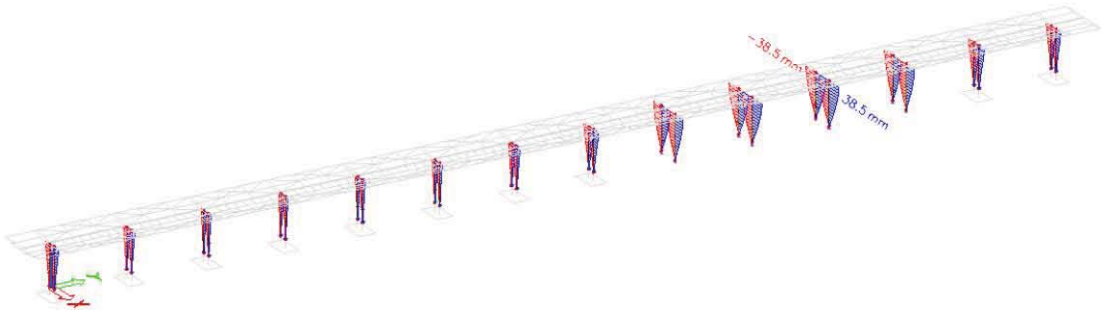


1D deformations
Values: u_y
Nonlinear calculation
Class: SLS
Coordinate system: Global
Extreme 1D: Global
Selection: All

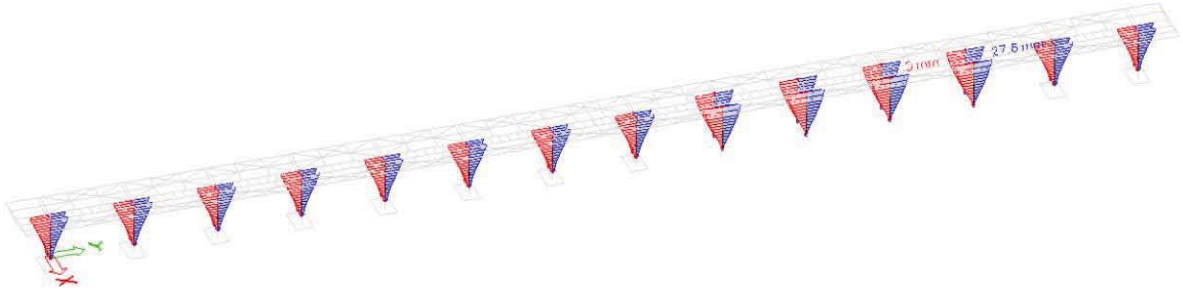
$$u_{hor,max,W} = 10 \text{ mm} \leq u_{hor,dov,W} = h/150 = 4600/150 = 30 \text{ mm}$$

Potresna kombinacija

1D deformations
Values: ux
Linear calculation
Class: ULS-potres
Coordinate system: Global
Extreme 1D: Global
Selection: All

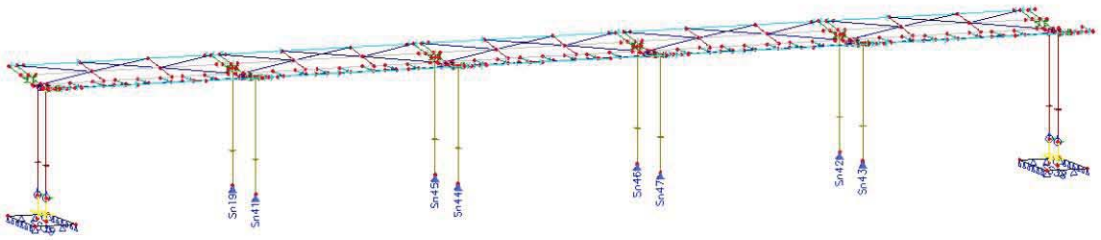


1D deformations
Values: uy
Linear calculation
Class: ULS-potres
Coordinate system: Global
Extreme 1D: Global
Selection: All



$U_{hor,max,E} = 1.5x39x0.5 = 30 \text{ mm} \leq U_{hor,dov,E} = 0.010xh = 0.010x4600 = 46 \text{ mm}$

4. REAKCIJE



48. Reactions

Nonlinear calculation, Extreme : Global
Selection : All
Class : ULS

Support	Case	Rx [kN]	Ry [kN]	Rz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
Sn46/N1784	NC2	**-16.45**	0.28	97.40	0.00	0.00	0.00
Sn47/N1785	NC16	**6.99**	-0.44	109.59	0.00	0.00	0.00
Sn45/N1775	NC30	-8.02	**-1.26**	-17.93	0.00	0.00	0.00
Sn19/N817	NC31	-7.42	**1.32**	-17.66	0.00	0.00	0.00
Sn46/N1784	NC28	-11.62	-0.12	**-28.17**	0.00	0.00	0.00
Sn42/N883	NC34	-5.73	-0.29	**143.11**	0.00	0.00	0.00
Sn19/N817	NC1	-12.73	0.15	110.75	**0.00**	**0.00**	**0.00**

49. Reactions

Nonlinear calculation, Extreme : Node
Selection : All
Class : ULS

Support	Case	Rx [kN]	Ry [kN]	Rz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
Sn19/N817	NC2	**-15.83**	0.12	101.13	0.00	0.00	0.00
Sn19/N817	NC51-s2	**-0.55**	-0.66	114.61	0.00	0.00	0.00
Sn19/N817	NC30	-7.53	**-1.21**	-17.22	0.00	0.00	0.00
Sn19/N817	NC31	-7.42	**1.32**	-17.66	0.00	0.00	0.00
Sn19/N817	NC28	-10.72	-0.06	**-26.51**	0.00	0.00	0.00
Sn19/N817	NC34	-6.05	-0.88	**142.47**	0.00	0.00	0.00

Support	Case	Rx [kN]	Ry [kN]	Rz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
Sn19/N817	NC1	-12.73	0.15	110.75	**0.00**	**0.00**	**0.00**
Sn41/N755	NC28	**-5.24**	0.06	0.48	0.00	0.00	0.00
Sn41/N755	NC16	**6.58**	-0.67	113.24	0.00	0.00	0.00
Sn41/N755	NC21	0.75	**-1.20**	10.41	0.00	0.00	0.00
Sn41/N755	NC31	-2.07	**1.29**	-8.47	0.00	0.00	0.00
Sn41/N755	NC29	1.08	0.18	**-17.62**	0.00	0.00	0.00
Sn41/N755	NC15	0.95	0.20	**135.78**	0.00	0.00	0.00
Sn41/N755	NC1	2.22	0.19	117.51	**0.00**	**0.00**	**0.00**
Sn42/N883	NC2	**-15.83**	0.56	101.19	0.00	0.00	0.00
Sn42/N883	NC51-s2	**-0.57**	-0.20	114.71	0.00	0.00	0.00
Sn42/N883	NC30	-7.75	**-1.24**	-17.43	0.00	0.00	0.00
Sn42/N883	NC31	-7.64	**1.29**	-17.66	0.00	0.00	0.00
Sn42/N883	NC28	-10.93	-0.13	**-26.56**	0.00	0.00	0.00
Sn42/N883	NC34	-5.73	-0.29	**143.11**	0.00	0.00	0.00
Sn42/N883	NC1	-12.74	0.62	110.78	**0.00**	**0.00**	**0.00**
Sn43/N821	NC28	**-5.38**	0.04	1.67	0.00	0.00	0.00
Sn43/N821	NC16	**6.74**	-0.17	112.36	0.00	0.00	0.00
Sn43/N821	NC30	-2.24	**-1.17**	-7.57	0.00	0.00	0.00
Sn43/N821	NC31	-2.25	**1.25**	-7.10	0.00	0.00	0.00
Sn43/N821	NC29	0.89	0.11	**-16.33**	0.00	0.00	0.00
Sn43/N821	NC15	1.10	0.74	**134.74**	0.00	0.00	0.00
Sn43/N821	NC1	2.22	0.64	117.57	**0.00**	**0.00**	**0.00**
Sn44/N1774	NC28	**-5.95**	0.03	3.16	0.00	0.00	0.00
Sn44/N1774	NC16	**6.93**	-0.35	109.71	0.00	0.00	0.00
Sn44/N1774	NC30	-2.48	**-1.18**	-6.82	0.00	0.00	0.00
Sn44/N1774	NC31	-2.49	**1.21**	-6.44	0.00	0.00	0.00
Sn44/N1774	NC29	1.00	0.10	**-16.40**	0.00	0.00	0.00
Sn44/N1774	NC15	0.46	0.55	**134.09**	0.00	0.00	0.00
Sn44/N1774	NC1	1.77	0.46	116.72	**0.00**	**0.00**	**0.00**
Sn45/N1775	NC2	**-16.44**	0.35	97.41	0.00	0.00	0.00
Sn45/N1775	NC51-s2	**-0.25**	-0.39	112.92	0.00	0.00	0.00
Sn45/N1775	NC30	-8.02	**-1.26**	-17.93	0.00	0.00	0.00
Sn45/N1775	NC31	-7.92	**1.25**	-18.27	0.00	0.00	0.00
Sn45/N1775	NC28	-11.56	-0.16	**-27.88**	0.00	0.00	0.00
Sn45/N1775	NC34	-5.40	-0.49	**140.97**	0.00	0.00	0.00
Sn45/N1775	NC1	-12.99	0.41	107.84	**0.00**	**0.00**	**0.00**
Sn46/N1784	NC2	**-16.45**	0.28	97.40	0.00	0.00	0.00
Sn46/N1784	NC51-s2	**-0.26**	-0.49	112.89	0.00	0.00	0.00
Sn46/N1784	NC30	-8.07	**-1.24**	-18.21	0.00	0.00	0.00
Sn46/N1784	NC31	-7.97	**1.28**	-18.59	0.00	0.00	0.00
Sn46/N1784	NC28	-11.62	-0.12	**-28.17**	0.00	0.00	0.00
Sn46/N1784	NC34	-5.32	-0.63	**141.40**	0.00	0.00	0.00
Sn46/N1784	NC1	-12.99	0.32	107.82	**0.00**	**0.00**	**0.00**
Sn47/N1785	NC28	**-6.01**	0.01	3.23	0.00	0.00	0.00
Sn47/N1785	NC16	**6.99**	-0.44	109.59	0.00	0.00	0.00
Sn47/N1785	NC30	-2.54	**-1.18**	-6.73	0.00	0.00	0.00
Sn47/N1785	NC31	-2.56	**1.21**	-6.38	0.00	0.00	0.00
Sn47/N1785	NC29	0.93	0.11	**-16.32**	0.00	0.00	0.00
Sn47/N1785	NC15	0.51	0.42	**134.00**	0.00	0.00	0.00
Sn47/N1785	NC1	1.77	0.36	116.72	**0.00**	**0.00**	**0.00**

50. Reactions

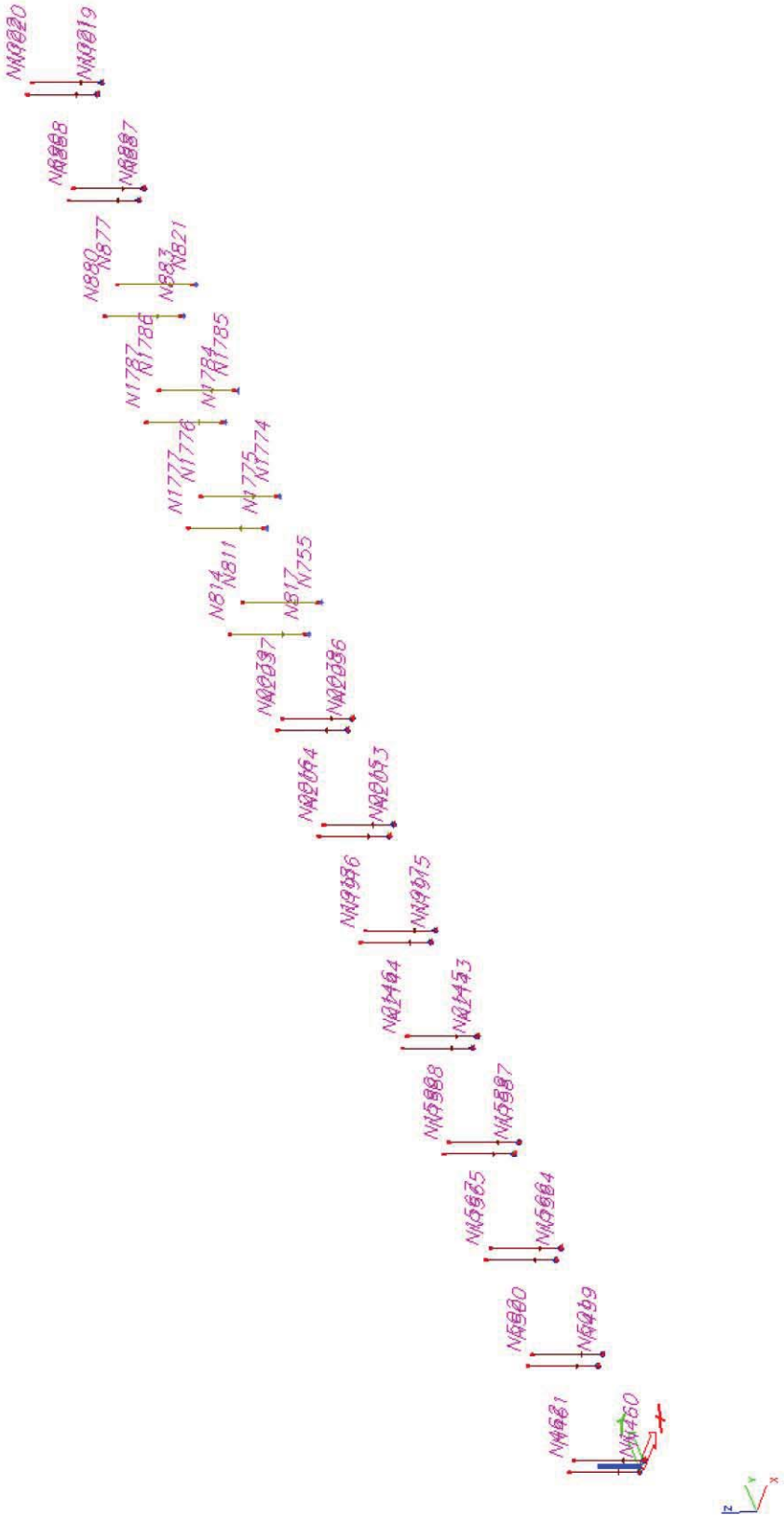
Linear calculation
Class: ULS-potres
System: Global
Extreme: Global
Selection: All
Nodal reactions

Name	Case	R_x [kN]	R_y [kN]	R_z [kN]	M_x [kNm]	M_y [kNm]	M_z [kNm]	e_x [mm]	e_y [mm]
Sn46/N1784	potres 2/1	**-13.90**	-1.77	82.75	0.00	0.00	0.00	0.0	0.0
Sn47/N1785	potres 2/1	**13.90**	-1.77	82.75	**0.00**	**0.00**	**0.00**	0.0	0.0
Sn41/N755	potres 6/2	-2.70	**-5.51**	16.91	0.00	0.00	0.00	0.0	0.0
Sn43/N821	potres 7/3	4.57	**5.51**	50.28	0.00	0.00	0.00	0.0	0.0
Sn44/N1774	potres 3/4	-12.12	1.76	**-15.41**	0.00	0.00	0.00	0.0	0.0
Sn44/N1774	potres 2/1	13.84	-1.74	**83.40**	0.00	0.00	0.00	0.0	0.0

51. Reactions

Linear calculation
Class: ULS-potres
System: Global
Extreme: Mesh
Selection: All
Nodal reactions

Name	Case	R_x [kN]	R_y [kN]	R_z [kN]	M_x [kNm]	M_y [kNm]	M_z [kNm]	e_x [mm]	e_y [mm]
Sn19/N817	potres 6/1	2.70	**-5.51**	16.91	0.00	0.00	0.00	0.0	0.0
Sn19/N817	potres 7/2	-4.49	**5.36**	52.21	**0.00**	**0.00**	**0.00**	0.0	0.0
Sn19/N817	potres 3/3	**9.70**	-1.87	**-7.85**	0.00	0.00	0.00	0.0	0.0
Sn19/N817	potres 2/4	**-11.49**	1.72	**76.98**	0.00	0.00	**0.00**	0.0	0.0
Sn41/N755	potres 6/1	-2.70	**-5.51**	16.91	0.00	0.00	0.00	0.0	0.0
Sn41/N755	potres 7/2	4.49	**5.36**	52.21	**0.00**	**0.00**	**0.00**	0.0	0.0
Sn41/N755	potres 2/4	**11.49**	1.72	**76.98**	0.00	0.00	0.00	0.0	0.0
Sn41/N755	potres 3/3	**-9.70**	-1.87	**-7.85**	0.00	0.00	**0.00**	0.0	0.0
Sn42/N883	potres 6/1	2.78	**-5.33**	19.10	0.00	0.00	0.00	0.0	0.0
Sn42/N883	potres 7/2	-4.57	**5.51**	50.28	**0.00**	**0.00**	**0.00**	0.0	0.0
Sn42/N883	potres 3/3	**9.94**	-1.73	**-7.91**	0.00	0.00	0.00	0.0	0.0
Sn42/N883	potres 2/4	**-11.74**	1.92	**77.29**	0.00	0.00	**0.00**	0.0	0.0
Sn43/N821	potres 6/1	-2.78	**-5.33**	19.10	0.00	0.00	0.00	0.0	0.0
Sn43/N821	potres 7/2	4.57	**5.51**	50.28	**0.00**	**0.00**	**0.00**	0.0	0.0
Sn43/N821	potres 2/4	**11.74**	1.92	**77.29**	0.00	0.00	0.00	0.0	0.0
Sn43/N821	potres 3/3	**-9.94**	-1.73	**-7.91**	0.00	0.00	**0.00**	0.0	0.0
Sn44/N1774	potres 7/2	5.46	**-5.30**	55.60	0.00	0.00	0.00	0.0	0.0
Sn44/N1774	potres 6/1	-3.73	**5.33**	12.38	**0.00**	**0.00**	**0.00**	0.0	0.0
Sn44/N1774	potres 2/4	**13.84**	-1.74	**83.40**	0.00	0.00	0.00	0.0	0.0
Sn44/N1774	potres 3/3	**-12.12**	1.76	**-15.41**	0.00	0.00	**0.00**	0.0	0.0
Sn45/N1775	potres 7/2	-5.46	**-5.30**	55.60	0.00	0.00	0.00	0.0	0.0
Sn45/N1775	potres 6/1	3.73	**5.33**	12.38	**0.00**	**0.00**	**0.00**	0.0	0.0
Sn45/N1775	potres 3/3	**12.12**	1.76	**-15.41**	0.00	0.00	0.00	0.0	0.0
Sn45/N1775	potres 2/4	**-13.84**	-1.74	**83.40**	0.00	0.00	**0.00**	0.0	0.0
Sn46/N1784	potres 7/2	-5.52	**-5.35**	53.22	0.00	0.00	0.00	0.0	0.0
Sn46/N1784	potres 6/1	3.80	**5.31**	14.72	**0.00**	**0.00**	**0.00**	0.0	0.0
Sn46/N1784	potres 3/3	**12.17**	1.73	**-14.80**	0.00	0.00	0.00	0.0	0.0
Sn46/N1784	potres 2/4	**-13.90**	-1.77	**82.75**	0.00	0.00	**0.00**	0.0	0.0
Sn47/N1785	potres 7/2	5.52	**-5.35**	53.22	0.00	0.00	0.00	0.0	0.0
Sn47/N1785	potres 6/1	-3.80	**5.31**	14.72	**0.00**	**0.00**	**0.00**	0.0	0.0
Sn47/N1785	potres 2/4	**13.90**	-1.77	**82.75**	0.00	0.00	0.00	0.0	0.0
Sn47/N1785	potres 3/3	**-12.17**	1.73	**-14.80**	0.00	0.00	**0.00**	0.0	0.0


N4020
N4019
N4008
N4007
N880
N877
N883
N821
N1787
N1784
N1784
N1785
N1777
N1776
N1775
N1774
N814
N811
N817
N755
N2037
N2036
N2064
N2053
N4036
N4015
N2464
N2453
N4988
N4987
N4665
N4664
N4680
N4499
N4481
N4460

52. Connection forces

Nonlinear calculation, Extreme : Global
Selection : All
Class : ULS

Case	Connection	Node	Beams	Rx [kN]	Ry [kN]	Rz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
NC16	FC5	N887	B781	**-17.57**	-0.99	-88.77	2.14	**-31.30**	0.10
NC24	FC6	N889	B782	**17.56**	0.47	-57.53	-1.68	**32.92**	0.15
NC18	FC18	N2015	B1932	7.77	**-3.52**	-104.33	6.75	10.47	-0.03
NC26	FC19	N2036	B1831	-4.04	**3.69**	-115.05	-6.95	-2.76	0.02
NC34	FC6	N889	B782	0.88	-1.02	**-159.48**	2.18	-5.53	0.14
NC28	FC6	N889	B782	8.43	-0.04	**49.75**	0.13	19.09	0.15
NC17	FC2	N1019	B913	-9.06	3.47	-108.24	**-6.99**	-13.13	-0.06
NC27	FC5	N887	B781	-4.22	-3.41	-110.92	**6.86**	-3.35	-0.12
NC45	FC5	N887	B781	0.86	-2.28	-86.83	4.65	5.93	**-0.13**
NC24	FC5	N887	B781	3.45	0.37	-141.04	-1.50	13.67	**0.17**

53. Connection forces

Linear calculation, Extreme : Global
Selection : All
Class : ULS-potres

Case	Connection	Node	Beams	Rx [kN]	Ry [kN]	Rz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
potres 2/1	FC5	N887	B781	**-20.63**	-5.72	-130.51	10.99	-29.93	-0.03
potres 2/1	FC6	N889	B782	**20.63**	-5.72	**-130.51**	10.99	29.93	0.03
potres 7/4	FC12	N501	B576	-1.44	**-20.32**	-11.62	**53.16**	-5.70	-0.01
potres 6/3	FC12	N501	B576	6.08	**20.35**	-56.14	**-53.17**	12.03	0.01
potres 3/2	FC6	N889	B782	-16.08	5.48	**63.57**	-10.74	-23.72	-0.02
potres 3/2	FC13	N460	B542	-17.97	5.38	-117.19	-15.51	**-40.54**	0.02
potres 3/2	FC14	N1	B543	17.97	5.38	-117.19	-15.51	**40.54**	-0.02
potres 7/4	FC2	N1019	B913	-1.52	12.37	-11.52	-7.15	-3.69	**-0.19**
potres 6/3	FC1	N1021	B914	1.70	-12.11	-50.45	-2.10	3.97	**0.19**

5. AB TEMELJI

Del tega načrta so tudi novi AB temelji, ki so izven območja podpiranja jeklenih stebrov z AB konstrukcjo podhoda

V okviru analize je bi upoštevan vertikalni modul podajnosti tal 45000 kN/m^3.

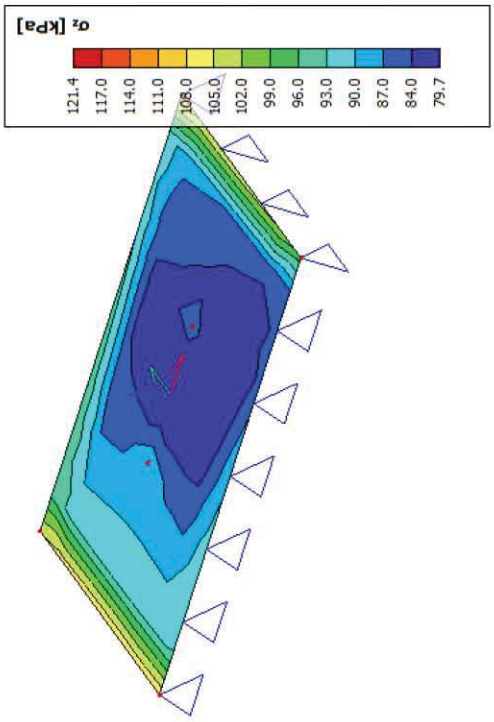
Vodneprepustni beton
C30/37, PV-II, XC2, XD3-odporen proti solem

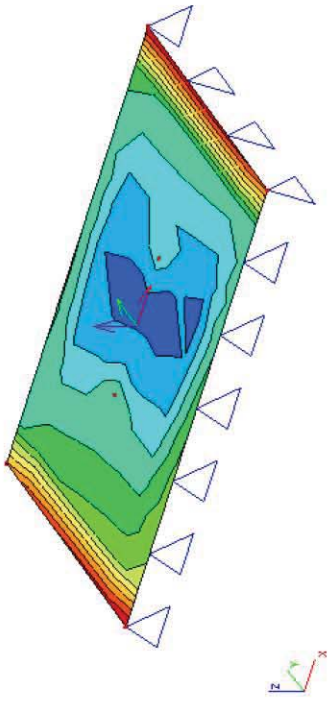
Armatura S500B

Kontaktne napetosti v temeljnih tleh

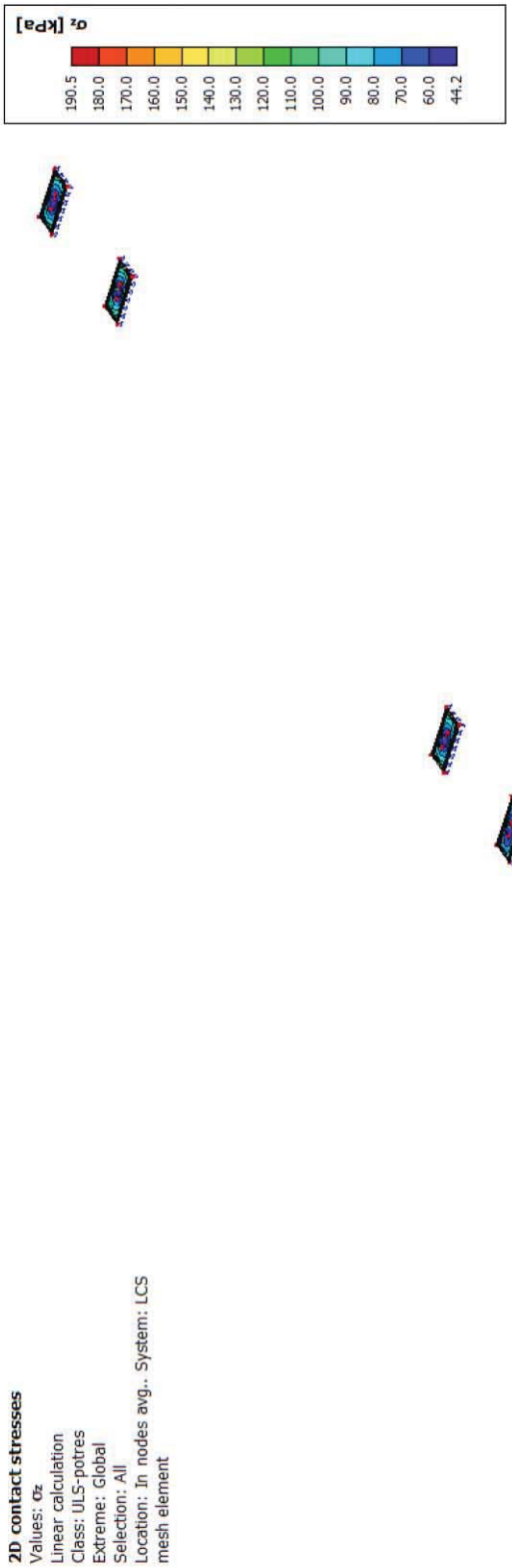
Maksimalne kontaktne napetosti R_d/A potd temelji pri ULS (faktrorirana obtežba) in pri potresnih obtežnih kombinacijah znašajo največ 195 kN/m^2 in ne presegajo maksimalnih dovoljenih napetosti 370 kN/m^2.

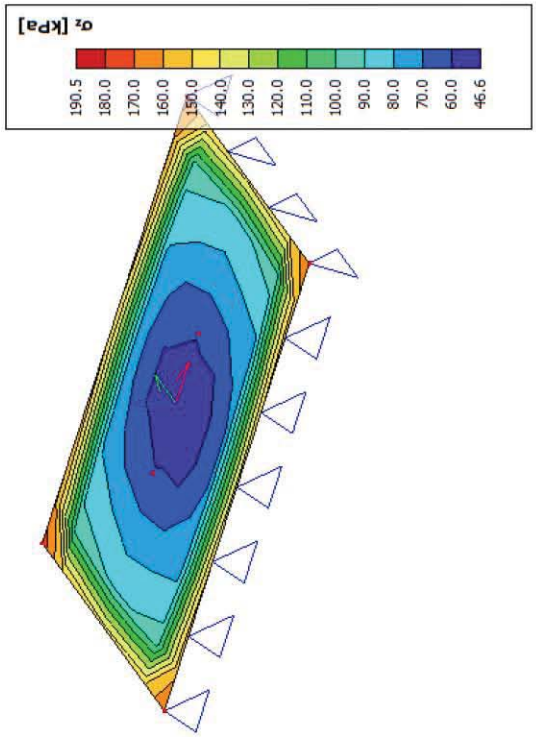
σz [kPa]
121.4
117.0
114.0
111.0
108.0
105.0
102.0
99.0
96.0
93.0
90.0
87.0
84.0
79.7
2D contact stresses
Values: σz
Nonlinear calculation
Class: ULS
Extreme: Global
Selection: All
Location: In nodes avg.. System: LCS
mesh element

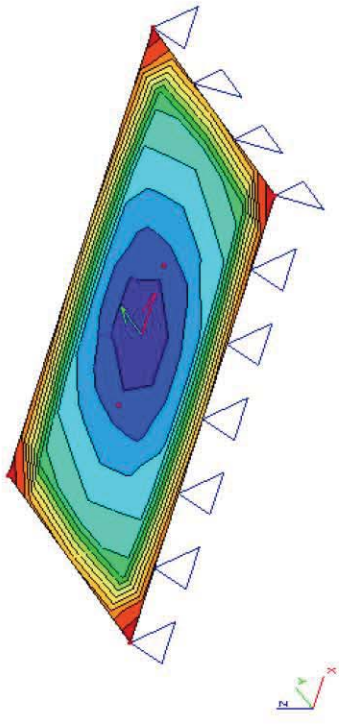




2D contact stresses
Values: σz
Nonlinear calculation
Class: ULS
Extreme: Global
Selection: All
Location: In nodes avg.. System: LCS
mesh element


σz [kPa]
190.5
180.0
170.0
160.0
150.0
140.0
130.0
120.0
110.0
100.0
90.0
80.0
70.0
60.0
44.2
2D contact stresses
Values: σz
Linear calculation
Class: ULS-potres
Extreme: Global
Selection: All
Location: In nodes avg.. System: LCS
mesh element





2D contact stresses
Values: σz
Linear calculation
Class: ULS-potres
Extreme: Global
Selection: All
Location: In nodes avg.. System: LCS
mesh element

Armatura

- Temeljna peta

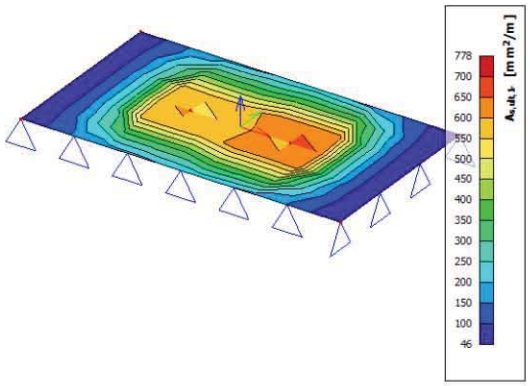
180x320x50 cm

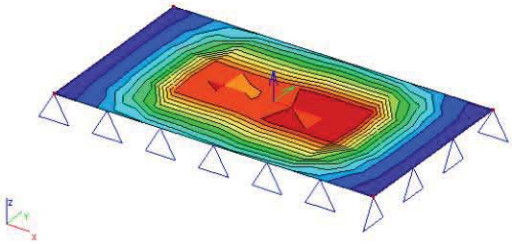
Izberem armaturo zgoraj in spodaj v obeh smereh +/- ϕ16/15cm, $A_{s,dej}$ = 13.4 cm^2/m

+

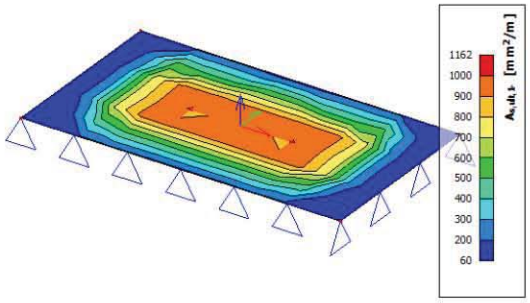
dodatno spodaj ϕ14/15cm, $A_{s,dej,skupno}$ = 10.2+13.4 = 23.6 cm^2/m.

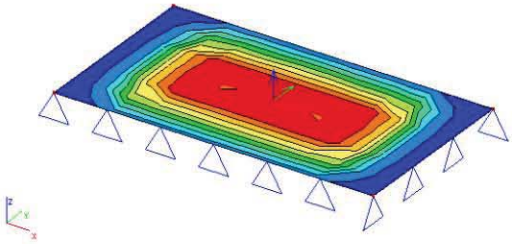
Reinforcement design (ULS+SLS)
Values: $A_{s,ult,1}$-
Nonlinear calculation
Class: ULS
Extreme: Global
Selection: All
Location: In nodes avg. on macro.
System: LCS mesh element



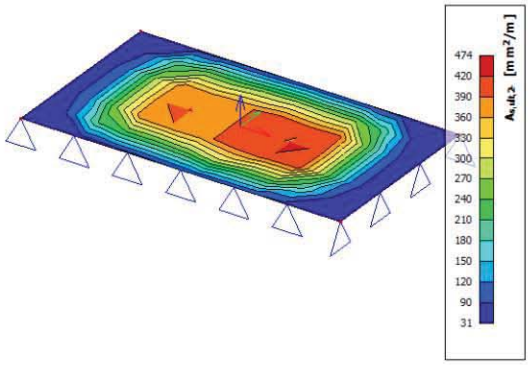


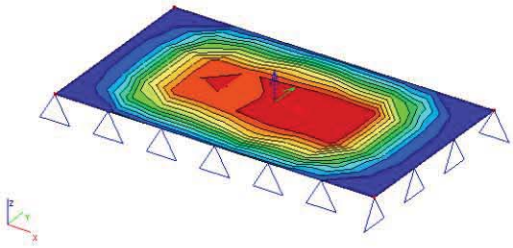
Reinforcement design (ULS+SLS)
Values: $A_{s,ult,1}$-
Linear calculation
Class: ULS-potres
Extreme: Global
Selection: All
Location: In nodes avg. on macro.
System: LCS mesh element



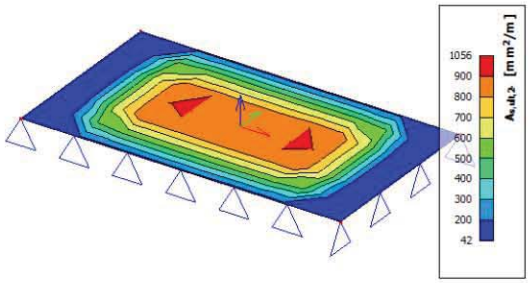


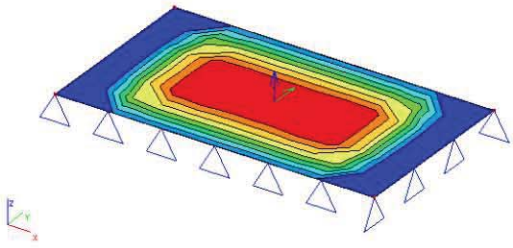
Reinforcement design (ULS+SLS)
Values: $A_{s,ult,2}$-
Nonlinear calculation
Class: ULS
Extreme: Global
Selection: All
Location: In nodes avg. on macro.
System: LCS mesh element



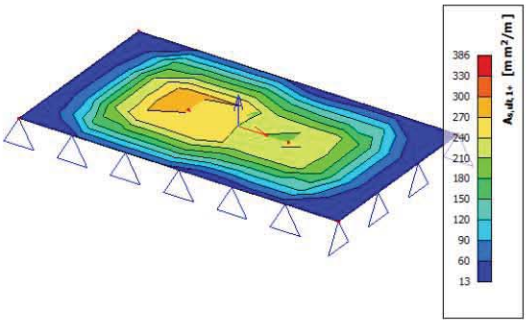


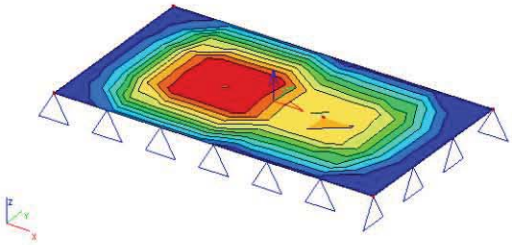
Reinforcement design (ULS+SLS)
Values: $A_{s,ult,2}$-
Linear calculation
Class: ULS-potres
Extreme: Global
Selection: All
Location: In nodes avg. on macro.
System: LCS mesh element



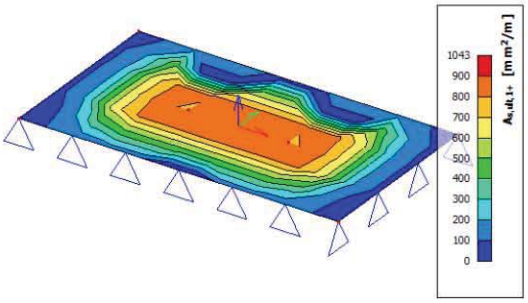


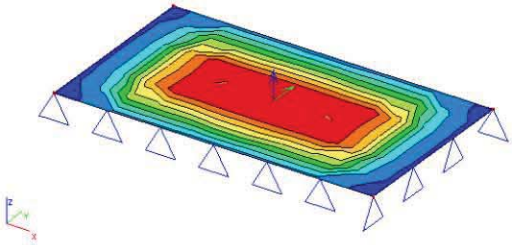
Reinforcement design (ULS+SLS)
Values: $A_{s,ult,1+}$
Nonlinear calculation
Class: ULS
Extreme: Global
Selection: All
Location: In nodes avg. on macro.
System: LCS mesh element



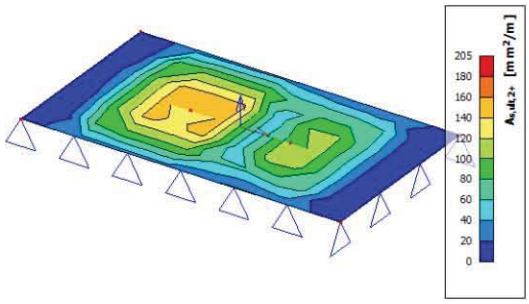


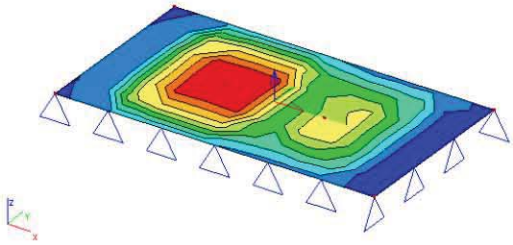
Reinforcement design (ULS+SLS)
Values: $A_{s,ult,1+}$
Linear calculation
Class: ULS-potres
Extreme: Global
Selection: All
Location: In nodes avg. on macro.
System: LCS mesh element



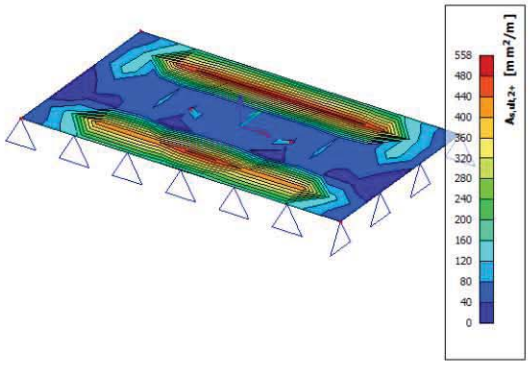


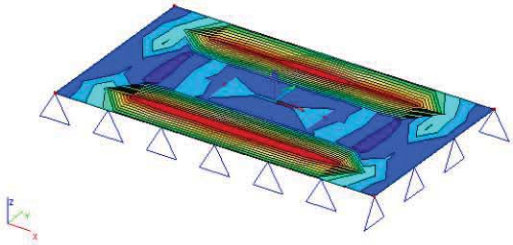
Reinforcement design (ULS+SLS)
Values: $A_{s,ult,2+}$
Nonlinear calculation
Class: ULS
Extreme: Global
Selection: All
Location: In nodes avg. on macro.
System: LCS mesh element





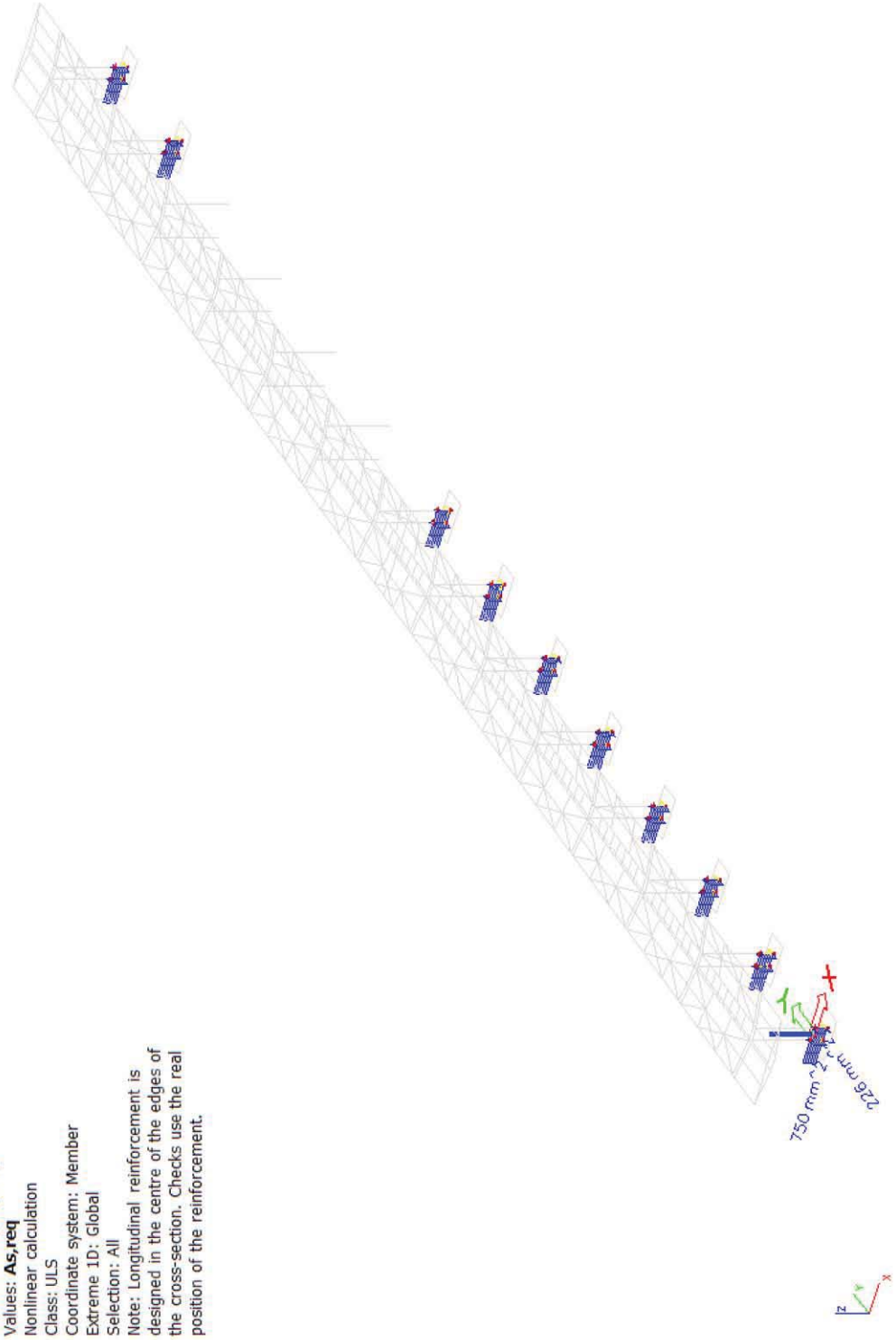
Reinforcement design (ULS+SLS)
Values: $A_{s,ult,2+}$
Linear calculation
Class: ULS-potres
Extreme: Global
Selection: All
Location: In nodes avg. on macro.
System: LCS mesh element

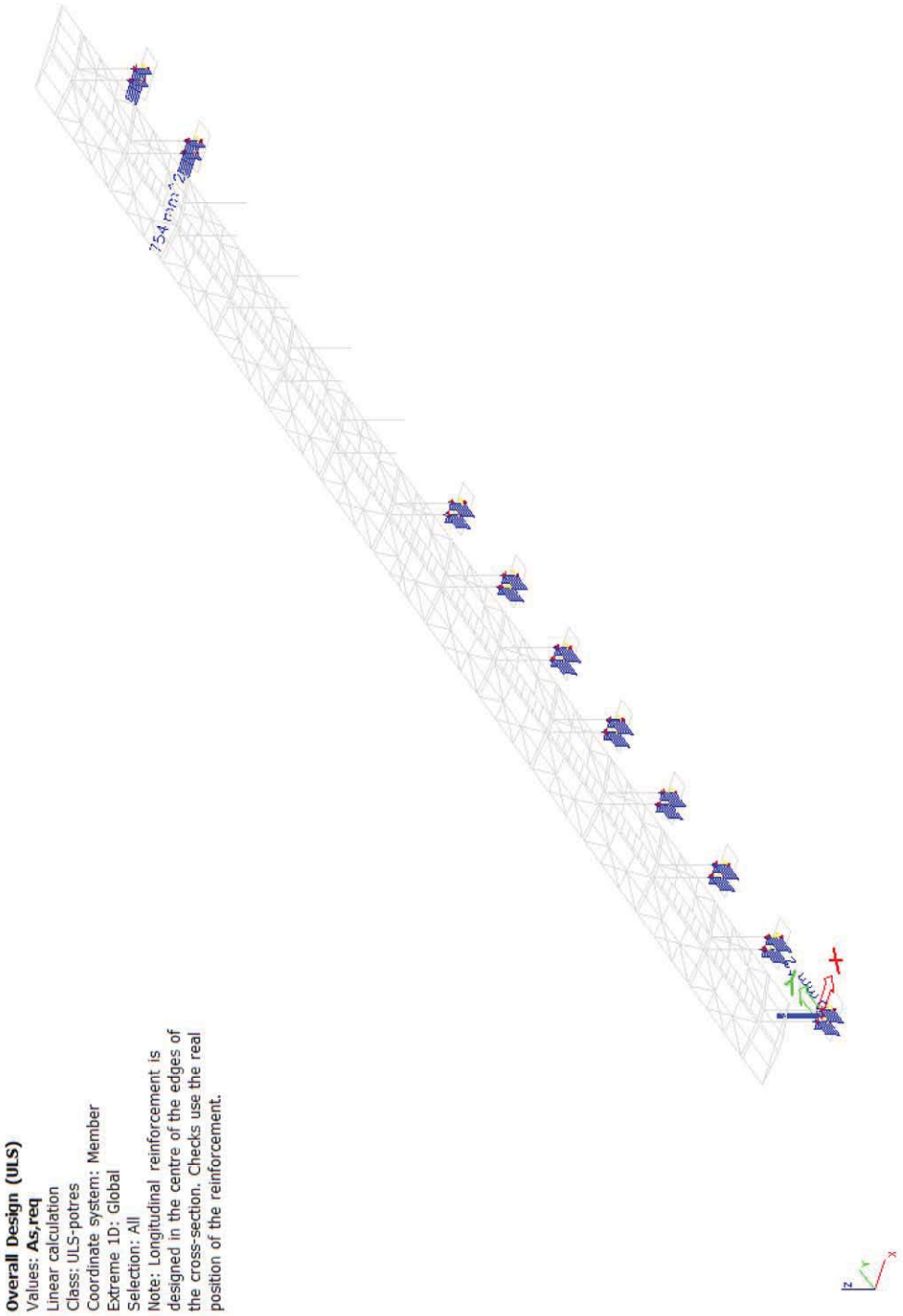




- Temeljni nastavki

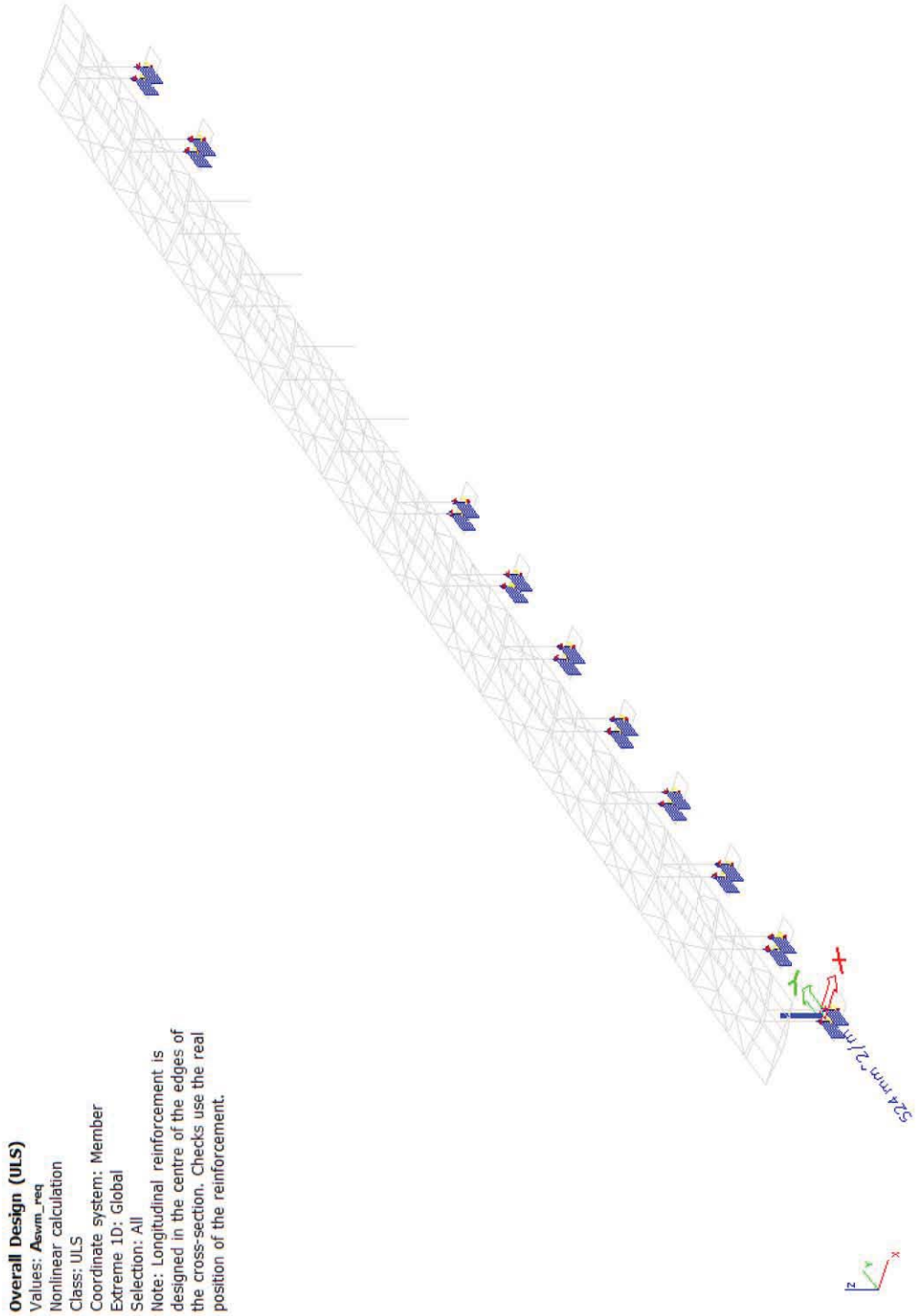
60x60x75 cm

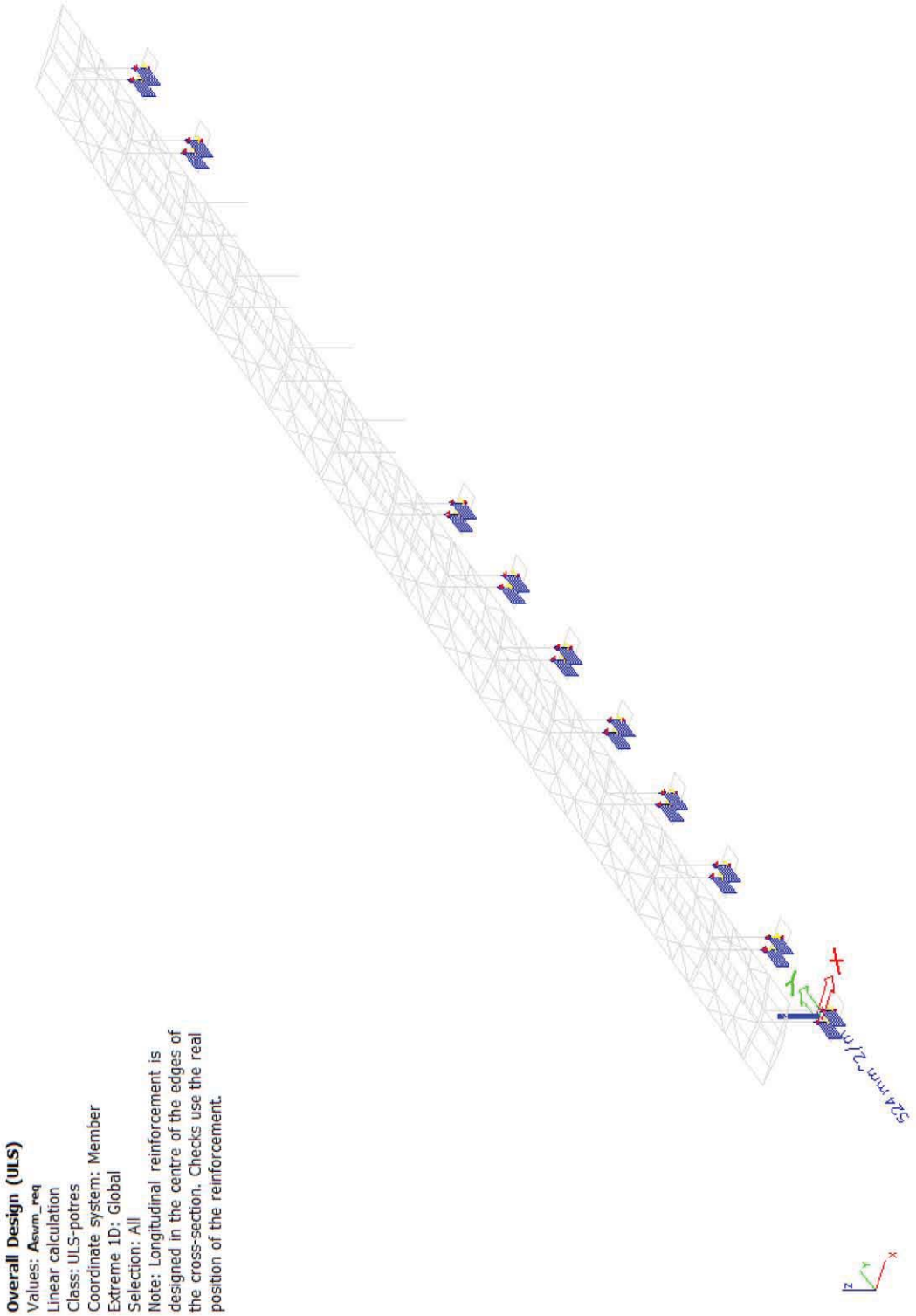




Izberem armaturo na vsaki stranici 16ϕ14 po obodu.

To je na eni stranici 5ϕ14, $A_{s,dej}$ = 7.7 cm^2/eni stranici.


Overall Design (ULS)
Values: Aswm_req
Nonlinear calculation
Class: ULS
Coordinate system: Member
Extreme 1D: Global
Selection: All
Note: Longitudinal reinforcement is designed in the centre of the edges of the cross-section. Checks use the real position of the reinforcement.
524 mm^2/m
Z
X



Izberem dvostrižno streme $\phi 12/20$, $A_{sw,dej}$ = 11.3 cm^2/m

6. TRAPEZNA PLOČEVINA

Obtežba: stalna + sneg (s kopičenjem)

$q = 0.55+1.48 = 2.03\ kN/m^2$

Izberem trapezno pločevino Arcelor Mitall 85/289 debeline 0.75mm, S320 GD+Z275 pozitivno polaganje

prostoležeč nosilec preko enega polja, $w_{dop} = L/300$

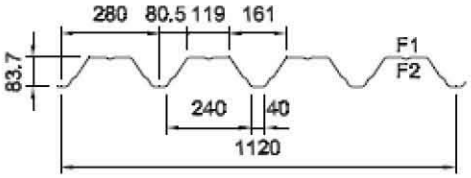
$L_{dej} = 1.4m$

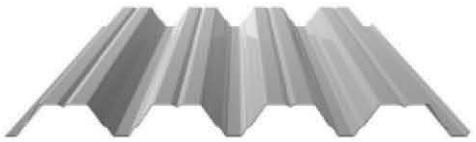
→ dopustna obtežba pri dolžini enega polja L = 2.60m; $q_{dop} = 2.68\ kN/m^2$

85/280

BELASTUNGSTABELLE
Datenblatt

Geometrie:





Technische Parameter:	**Werkstoff:**	S 320 GD + Z275
	Korrosionsschutz:	Zinkauflage gemäß EN 10326 Korrosionsschutzklassen nach DIN 55928, Teil 8 Korrosionsschutzklasse II DU-Beschichtung
	Einlaufbreite:	1500 mm
	Herstellungslänge:	1,8 m - 20 m
	Toleranzen gemäß:	DIN 18807, Teil 1 EN 508, Teil 1 RAL GZ 617
	Längentoleranzen:	< 7 m – 0,003 x L bzw. > 7 m – max. 20 mm
	Anwendungsbereiche:	Als Tragelement für Bitumen und Foliendächer oder zweischalige Dacheindeckungen Innenschale Dach, F2 – Rauminnenseite
	Zubehör:	„P"- Rundlochung im Steg, Profilfüller, Dichtband, Haircosound, Schrauben
Produkt Prüfungen:	**Zulassungen:**	Deutschland, Russland, Ukraine, Kroatien
	Güteschutz:	Fremdüberwachung durch anerkanntes Prüfamt gemäß RAL GZ 617

Statische Kenngrößen:

Blechdicke t (mm)	Eigengewicht g (kN/m²)	Fläche A (cm²/m)	Biegung I+ (cm⁴/m)	Biegung I- (cm⁴/m)	Grenzstützweite Lgr (m)	
					Einfeld	Mehrfeld
0,75	0,0789	9,37	87,63	89,22	3,50	4,38
0,88	0,0925	11,09	106,74	108,73	4,93	6,16
1,00	0,1051	12,67	124,90	125,61	5,63	7,04
1,25	0,1314	15,97	158,32	158,32	7,10	8,88

ArcelorMittal Construction Austria GmbH

Ausgabe 07/2008

85/280

BELASTUNGSTABELLE
Positivlage

EINFELDTRÄGER

Belastung: gleichmäßig verteilte Auflast
Endauflagerbreite: b_A = 40 mm

Dicke (mm)	Gewicht (kN/m²)	Zeile	Zulässige Flächenlast q_{zul} (kN/m²) bei einer Stützweite l in m:																	
			2,60	2,80	3,00	3,20	3,40	3,60	3,80	4,00	4,20	4,40	4,60	4,80	5,00	5,20	5,40	5,60	5,80	6,00
0,75	0,0789	1	3,78	3,26	2,84	2,50	2,21	1,97	1,77	1,60	1,45	1,32	1,21	1,11	1,02	0,94	0,88	0,81	0,76	0,71
		2	3,78	3,26	2,84	2,50	2,21	1,97	1,72	1,47	1,27	1,11	0,97	0,85	0,75	0,67	0,60	0,54	0,48	0,44
		3	3,78	3,22	2,62	2,16	1,80	1,51	1,29	1,10	0,95	0,83	0,73	0,64	0,57	0,50	0,45	0,40	0,36	0,33
		4	2,68	2,15	1,74	1,44	1,20	1,01	0,86	0,74	0,64	0,55	0,48	0,43	0,38	0,34	0,30	0,27	0,24	0,22
0,88	0,0925	1	5,14	4,43	3,86	3,39	3,00	2,68	2,40	2,17	1,97	1,79	1,64	1,51	1,39	1,28	1,19	1,11	1,03	0,96
		2	5,14	4,43	3,86	3,39	2,92	2,46	2,09	1,79	1,55	1,35	1,18	1,04	0,92	0,82	0,73	0,65	0,59	0,53
		3	4,90	3,92	3,19	2,63	2,19	1,84	1,57	1,34	1,16	1,01	0,88	0,78	0,69	0,61	0,55	0,49	0,44	0,40
		4	3,26	2,61	2,12	1,75	1,46	1,23	1,05	0,90	0,77	0,67	0,59	0,52	0,46	0,41	0,36	0,33	0,29	0,27
1,00	0,1051	1	6,31	5,44	4,74	4,17	3,69	3,29	2,95	2,67	2,42	2,20	2,02	1,85	1,71	1,58	1,46	1,36	1,27	1,19
		2	6,31	5,44	4,74	4,10	3,42	2,88	2,45	2,10	1,81	1,58	1,38	1,21	1,07	0,96	0,85	0,76	0,69	0,62
		3	5,73	4,59	3,73	3,07	2,56	2,16	1,84	1,57	1,36	1,18	1,03	0,91	0,81	0,72	0,64	0,57	0,52	0,47
		4	3,82	3,06	2,49	2,05	1,71	1,44	1,22	1,05	0,91	0,79	0,69	0,61	0,54	0,48	0,43	0,38	0,34	0,31
1,25	0,1314	1	8,61	7,42	6,46	5,68	5,03	4,49	4,03	3,64	3,30	3,01	2,75	2,53	2,33	2,15	2,00	1,86	1,73	1,62
		2	8,61	7,42	6,30	5,19	4,33	3,65	3,10	2,66	2,30	2,00	1,75	1,54	1,36	1,21	1,08	0,97	0,87	0,79
		3	7,26	5,82	4,73	3,90	3,25	2,74	2,33	1,99	1,72	1,50	1,31	1,15	1,02	0,91	0,81	0,73	0,65	0,59
		4	4,84	3,88	3,15	2,60	2,17	1,82	1,55	1,33	1,15	1,00	0,87	0,77	0,68	0,61	0,54	0,48	0,44	0,39

ZWEIFELDTRÄGER

Belastung: gleichmäßig verteilte Auflast
Zwischenauflagerbreite: b_Z = 160 mm, **Endauflagerbreite:** b_A = 40 mm

Dicke (mm)	Gewicht (kN/m²)	Zeile	Zulässige Flächenlast q_{zul} (kN/m²) bei einer Stützweite l in m:																	
			2,60	2,80	3,00	3,20	3,40	3,60	3,80	4,00	4,20	4,40	4,60	4,80	5,00	5,20	5,40	5,60	5,80	6,00
0,75	0,0789	1	3,72	3,26	2,84	2,50	2,21	1,97	1,77	1,60	1,45	1,32	1,21	1,11	1,02	0,94	0,88	0,81	0,76	0,71
		2	3,72	3,26	2,84	2,50	2,21	1,97	1,77	1,60	1,45	1,32	1,21	1,11	1,02	0,94	0,88	0,81	0,76	0,71
		3	3,72	3,26	2,84	2,50	2,21	1,97	1,77	1,60	1,45	1,32	1,21	1,11	1,02	0,94	0,88	0,81	0,76	0,71
		4	3,72	3,26	2,84	2,50	2,21	1,97	1,77	1,60	1,45	1,32	1,16	1,02	0,91	0,81	0,72	0,64	0,58	0,52
0,88	0,0925	1	4,78	4,22	3,75	3,36	3,00	2,68	2,40	2,17	1,97	1,79	1,64	1,51	1,39	1,28	1,19	1,11	1,03	0,96
		2	4,78	4,22	3,75	3,36	3,00	2,68	2,40	2,17	1,97	1,79	1,64	1,51	1,39	1,28	1,19	1,11	1,03	0,96
		3	4,78	4,22	3,75	3,36	3,00	2,68	2,40	2,17	1,97	1,79	1,64	1,51	1,39	1,28	1,19	1,11	1,03	0,96
		4	4,78	4,22	3,75	3,36	3,00	2,68	2,40	2,15	1,86	1,62	1,42	1,25	1,10	0,98	0,88	0,79	0,71	0,64
1,00	0,1051	1	5,80	5,11	4,53	4,05	3,64	3,28	2,95	2,67	2,42	2,20	2,02	1,85	1,71	1,58	1,46	1,36	1,27	1,19
		2	5,80	5,11	4,53	4,05	3,64	3,28	2,95	2,67	2,42	2,20	2,02	1,85	1,71	1,58	1,46	1,36	1,27	1,19
		3	5,80	5,11	4,53	4,05	3,64	3,28	2,95	2,67	2,42	2,20	2,02	1,85	1,71	1,58	1,46	1,36	1,24	1,12
		4	5,80	5,11	4,53	4,05	3,64	3,28	2,94	2,52	2,18	1,89	1,66	1,46	1,29	1,15	1,02	0,92	0,83	0,75
1,25	0,1314	1	8,02	7,04	6,23	5,54	4,96	4,47	4,03	3,64	3,30	3,01	2,75	2,53	2,33	2,15	2,00	1,86	1,73	1,62
		2	8,02	7,04	6,23	5,54	4,96	4,47	4,03	3,64	3,30	3,01	2,75	2,53	2,33	2,15	2,00	1,86	1,73	1,62
		3	8,02	7,04	6,23	5,54	4,96	4,47	4,03	3,64	3,30	3,01	2,75	2,53	2,33	2,15	1,95	1,75	1,57	1,42
		4	8,02	7,04	6,23	5,54	4,96	4,38	3,73	3,20	2,76	2,40	2,10	1,85	1,64	1,45	1,30	1,16	1,05	0,95

DREIFELDTRÄGER

Belastung: gleichmäßig verteilte Auflast
Zwischenauflagerbreite: b_Z = 160 mm, **Endauflagerbreite:** b_A = 40 mm

Dicke (mm)	Gewicht (kN/m²)	Zeile	Zulässige Flächenlast q_{zul} (kN/m²) bei einer Stützweite l in m:																	
			2,60	2,80	3,00	3,20	3,40	3,60	3,80	4,00	4,20	4,40	4,60	4,80	5,00	5,20	5,40	5,60	5,80	6,00
0,75	0,0789	1	3,78	3,26	2,84	2,50	2,21	2,01	1,83	1,68	1,54	1,42	1,31	1,21	1,13	1,05	0,98	0,92	0,86	0,81
		2	3,78	3,26	2,84	2,50	2,21	2,01	1,83	1,68	1,54	1,42	1,31	1,21	1,13	1,05	0,98	0,92	0,86	0,81
		3	3,78	3,26	2,84	2,50	2,21	2,01	1,83	1,68	1,54	1,42	1,31	1,21	1,07	0,95	0,85	0,76	0,69	0,62
		4	3,78	3,26	2,84	2,50	2,21	1,91	1,62	1,39	1,20	1,05	0,92	0,81	0,71	0,63	0,57	0,51	0,46	0,41
0,88	0,0925	1	5,14	4,43	3,86	3,39	3,00	2,68	2,40	2,17	1,97	1,79	1,65	1,53	1,42	1,32	1,23	1,15	1,08	1,01
		2	5,14	4,43	3,86	3,39	3,00	2,68	2,40	2,17	1,97	1,79	1,65	1,53	1,42	1,32	1,23	1,15	1,08	1,00
		3	5,14	4,43	3,86	3,39	3,00	2,68	2,40	2,17	1,97	1,79	1,65	1,47	1,30	1,16	1,03	0,93	0,83	0,75
		4	5,14	4,43	3,86	3,31	2,76	2,33	1,98	1,70	1,46	1,27	1,11	0,98	0,87	0,77	0,69	0,62	0,56	0,50
1,00	0,1051	1	6,31	5,44	4,74	4,17	3,69	3,29	2,95	2,67	2,42	2,20	2,02	1,85	1,71	1,58	1,47	1,37	1,28	1,20
		2	6,31	5,44	4,74	4,17	3,69	3,29	2,95	2,67	2,42	2,20	2,02	1,85	1,71	1,58	1,47	1,37	1,28	1,18
		3	6,31	5,44	4,74	4,17	3,69	3,29	2,95	2,67	2,42	2,20	1,96	1,72	1,52	1,35	1,21	1,08	0,98	0,88
		4	6,31	5,44	4,70	3,88	3,23	2,72	2,31	1,98	1,71	1,49	1,30	1,15	1,02	0,90	0,81	0,72	0,65	0,59
1,25	0,1314	1	8,61	7,42	6,46	5,68	5,03	4,49	4,03	3,64	3,30	3,01	2,75	2,53	2,33	2,15	2,00	1,86	1,73	1,62
		2	8,61	7,42	6,46	5,68	5,03	4,49	4,03	3,64	3,30	3,01	2,75	2,53	2,33	2,15	2,00	1,83	1,65	1,49
		3	8,61	7,42	6,46	5,68	5,03	4,49	4,03	3,64	3,26	2,83	2,48	2,18	1,93	1,72	1,53	1,37	1,24	1,12
		4	8,61	7,33	5,96	4,91	4,10	3,45	2,93	2,52	2,17	1,89	1,65	1,46	1,29	1,14	1,02	0,92	0,82	0,75

Zeile 1:
q_{zul} ohne Durchbiegungsbeschränkung

Zeile 2:
q_{zul} mit einer Durchbiegungsbeschränkung von l/150

Zeile 3:
q_{zul} mit einer Durchbiegungsbeschränkung von l/200

Zeile 4:
q_{zul} mit einer Durchbiegungsbeschränkung von l/300

Die Werte gelten für nichttragende Dach- und Deckenkonstruktionen nach der DIN 18807. Der Nachweis für die Grenzstützweiten (= max. Stützweiten bis zu denen das Trapezprofil ohne lastverteilenden Maßnahmen begangen werden darf) wurde erbracht!

ArcelorMittal Construction Austria GmbH

7. DETAJLI

7.1. Sidranje KC220/12.5

Vpeto na nov točkovni temelj

4xM24 8.8

maksimalne vrednosti

natezna sila na eno sidro

N = 76/4+5427/26.5/2 = 122 kN

prečna sila na eno sidro

Vx = 55/4 = 14 kN
Vy = 55/4 = 14 kN

kontrola tlačnih kontaktnih napetosti betona:

$f_{j,d} = \alpha\beta f_{cd}$ = 1.0×2/3×2.5/1.5 = 1.11 kN/cm^2

σ = 159/(42×42)+5427(42×42^2/6) = 0.53 kN/cm^2 < 1.11 kN/cm^2 ... OK

Detail S1: Control of anchoring rods

1 / 2

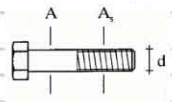
KC220/12.5, vpeto — SŽ PP Litija — Peronski nadstrešek 2

Anchors		d (cm)	d_0 (cm)	A_s (cm^2)	A (cm^2)
	M24	2.4	2.6	3.53	4.52
grade		8.8			
f_{ub} (kN/cm^2)		80			
f_{yb} (kN/cm^2)		64			
num. of anchors		1	obravnavam eno sidro		

Concrete f_{ck} (kN/cm^2) = 2.50
C25/30 $f_{ctk\,0,05}$ (kN/cm^2) = 0.18
Anchoring plate t (cm) = 2.50
S235 f_u (kN/cm^2) = 36.0

k = 1 — k=0,85 carved later — γ_{M2} = 1.25
k=1,0 standard manufactured bolts, rods — γ_c = 1.5

share plane = 1
1 - share plane A_S
2 - share plane A



factor = 0.6
0,6 for shear plane A
0,6 for ductility anchors (4.6, 5.6, 8.8) - share plane A_S
0,5 for nonductility anchors (4.8, 5.8, 6.8, 10.9) - share plane A_S

Shear resistance: $F_{v,Rd} = k*0,6(0,5)*f_{ub}*A_s(A)/\gamma_{M2}$ — $F_{v,Ed} / F_{v,Rd} < 1,0$ — $F_{Rv,Ed} = (Fx^2+Fy^2)^{0,5}$

$F_{v,Rd}$ = 135.6 kN

$F_{vb,Rd} = \alpha_b*f_{ub}*A_s/\gamma_{M2}$ — $\alpha_b = 0,44 - 0,0003*f_{yb}$

$F_{vb,Rd}$ = 56.0 kN

min $F_{v,Rd}$ = 56.0 kN

Tension resistance $F_{t,Rd} = k*0,9*f_{ub}*A_s/\gamma_{M2}$ — $F_{t,Ed} / F_{t,Rd} < 1,0$ — $(F_{v,Ed} / F_{v,Rd})+(F_{t,Ed} / (1,4\ F_{t,Rd})) < 1,0$

$F_{t,Rd}$ = 203.3 kN

Bearing resistance $F_{b,Rd} = k_1*\alpha_b*f_u*d*t/\gamma_{M2}$ — $F_{b,Ed} / F_{b,Rd} < 1,0$

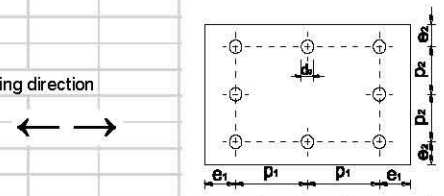
$F_{b,Rd}$ = 289.4 kN

	usual values		I choose	
e_1=2*d_0	e_1 (cm) =	5.20	e_1 (cm) =	4.40
p_1=3*d_0	p_1 (cm) =	7.80	p_1 (cm) =	6.60
e_2=1,5*d_0	e_2 (cm) =	3.90	e_2 (cm) =	3.30
p_2=3*d_0	p_2 (cm) =	7.80	p_2 (cm) =	6.60

		in loading direction			orthogonal to loading direction		
outter anchor	→	α_d=e_1/3d_0	$\alpha_{d,outter}$=	0.56	k_1=min(2,8*e_2/d_0-1,7≤2,5; 1,4*p_2/d_0-1,7≤2,	$k_{1,outter}$=	1.85
inner anchor	→	α_d=p_1/3d_0 - 1/4	$\alpha_{d,inner}$=	0.60	k_1=1,4*p_2/d_0-1,7≤ 2,5	$k_{1,inner}$=	2.50

α_d = 0.67 — α_b=min(α_d ; f_{ub}/f_u ; 1,0) — α_b = 0.67 — k_1 = 2.50

loading direction



Anchoring length:

$l_{b,req.} = \alpha_1 * F_{t,Ed} / (\pi * d * f_{bd})$

η_1 = 1...good anchoring conditions

0,7...poor anchoring conditions

$\mu_2 = (132-d)/100$

η_2 = 1 (d ≤ 32 mm)

η_2 = 1.08 (d > 32 mm)

η_1 = 1

η_2 = 1

α_1 = 1

α_1 = 0,7...bent rods or additional anchoring plates

1...straight rod

ribbed rebar (threaded rods) ... EC2

$f_{bd} = 2{,}25 * \eta_1 * \eta_2 * f_{ctd}$

f_{bd} (kN/cm^2) = 0.27

$f_{ctd} = \alpha_{ct} * f_{ctk,0,05} / \gamma_c$

α_{ct} = 1.00

plain rods ... Tabel 5.3 or Equation 5.1, ENV 1992-1-1, for plain (smooth) rebar

f_{bd} (MPa) = $(0{,}36 * (f_{ck})^{0,5}) / \gamma_c$ ...(f_{ck} in f_{bd} v MPa)

f_{bd} (kN/cm^2) = 0.12

I choose f_{bd} (kN/cm^2) = 0.27 threaded rods with thread along the entire lenght

obremenitve na eno sidro

(+) tension

F_X	F_Y	F_Z	$F_{Rv,Ed}$	$F_{v,Ed}$	$F_{v,Ed}/F_{v,Rd}$	$F_{b,Ed}/F_{b,Rd}$	$F_{t,Ed}$	$F_{t,Ed}/F_{t,Rd}$	inter.	$l_{b,req.}$ (cm)
14.0	14.0	122.0	19.8	19.8	0.35	0.07	122.0	0.60	0.78	60
0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.0	0.00	0.00	0
0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.0	0.00	0.00	0
0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.0	0.00	0.00	0
(kN)				max.	0.35	0.07		0.60	0.78	60

Členkasti priključek na območju obstoječe konstrukcije podhoda/stopnišča

www.hilti.com

Profis Anchor 2.8.8

Company:		Page:	1
Specifier:		Project:	Litija-Nadstreški
Address:		Fastening Point:	
Phone I Fax:	|	Date:	15/04/2021
E Mail:			

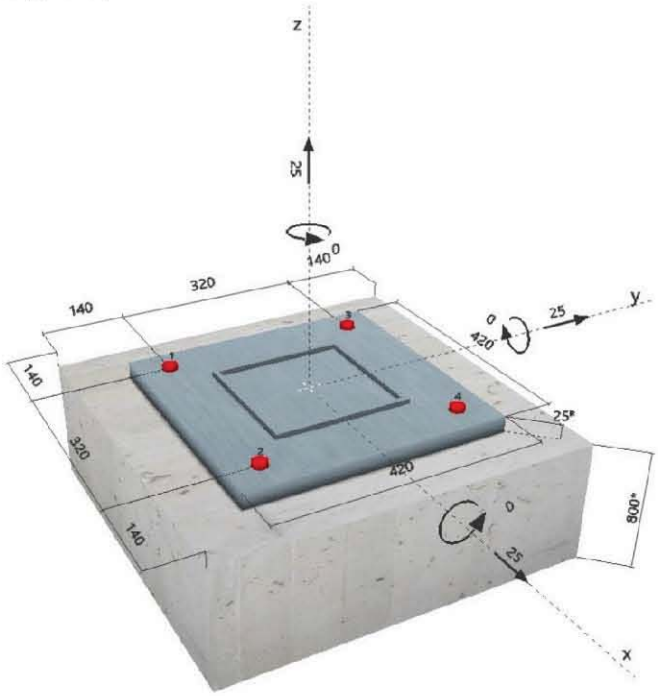
Specifier's comments: Sidranje KC220/220 - clenkast prikljucek - AB konstrukcija podhoda

1 Input data

Anchor type and size:	**HIT-HY 150 MAX + HIT-V (5.8) M24**
Return period (service life in years):	50
Effective embedment depth:	$h_{ef,act}$ = 300 mm ($h_{ef,limit}$ = - mm)
Material:	5.8
Approval No.:	ETA 08/0352
Issued I Valid:	25/06/2018 | -
Proof:	Design method ETAG BOND (EOTA TR 029)
Stand-off installation:	e_b = 0 mm (no stand-off); t = 25 mm
Baseplate:	l_x x l_y x t = 420 mm x 420 mm x 25 mm; (Recommended plate thickness: not calculated
Profile:	Square hollow, 220 x 220 x 8,8; (L x W x T) = 220 mm x 220 mm x 9 mm
Base material:	uncracked concrete, C25/30, $f_{c,cube}$ = 30.00 N/mm²; h = 800 mm, Temp. short/long: 40/24 °C
Installation:	**hammer drilled hole, Installation condition: Dry**
Reinforcement:	Reinforcement spacing < 150 mm (any Ø) or < 100 mm (Ø <= 10 mm) with longitudinal edge reinforcement d >= 12 + close mesh (stirrups, hangers) s <= 100 Reinforcement to control splitting according to EOTA TR 029, 5.2.2.6 present.

[3] - The anchor calculation is based on a rigid baseplate assumption.

Geometry [mm] & Loading [kN, kNm]



Input data and results must be checked for agreement with the existing conditions and for plausibility!
PROFIS Anchor (c) 2003-2009 Hilti AG, FL-9494 Schaan Hilti is a registered Trademark of Hilti AG, Schaan

Company:		Page:	2
Specifier:		Project:	Litija-Nadstrški
Address:		Fastening Point:	
Phone I Fax:	|	Date:	15/04/2021
E-Mail:			

2 Proof I Utilisation (Governing Cases)

		Design values [kN]		Utilisation	
Loading	Proof	Load	Capacity	β_N / β_V [%]	Status
Tension	Concrete cone failure	25.000	137.479	19 / -	OK
Shear	Concrete edge failure in direction x+	27.951	48.057	- / 59	OK

Loading	β_N	β_V	α	Utilisation $\beta_{N,V}$ [%]	Status
Combined tension and shear loads	0.182	0.582	1.5	53	OK

3 Warnings

- Please consider all details and hints/warnings given in the detailed report!

Fastening meets the design criteria!

4 Remarks; Your Cooperation Duties

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7.2. Montažni spoj IPE240 in UNP240

Detail D1.1: Bolted moment resistance joint

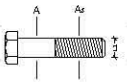
1 / 2

IPE240, U240 | SŽ PP Litija | Peronski nadstrešek 2

Bolts		d(cm)	d_0(cm)	A_s(cm^2)	A(cm^2)
	M24	2.4	2.6	3.53	4.52
grade		10.9			
f_{ub}(kN/cm^2)		100			

Plate

grade	235
s (cm)=	2.5
f_u(kN/cm^2)=	36
γ_{M0}=	1.00
γ_{M2}=	1.25



shear plane: 1 — 1 - share plane A_S; 2 - share plane A

factor: 0.5 — 0,6 for shear plane A; 0,6 for ductility anchors (4.6, 5.6, 8.8) - share plane A_S; 0,5 for nonductility anchors (4.8, 5.8, 6.8, 10.9) - share plane A_S

Shear resistance: $F_{v,Rd} = 0{,}6(0{,}5)*f_{ub}*A_s(A)/\gamma_{M2}$ — $F_{v,Ed} / F_{v,Rd} < 1{,}0$

$F_{v,Rd}$ = 141.2 kN

interaction V - M: $(F_{v,Ed} / F_{v,Rd})+(F_{t,Ed} / F_{t,Rd})/1{,}4 < 1{,}0$

Tension resistance $F_{t,Rd} = 0{,}9*f_{ub}*A_s/\gamma_{M2}$ — $F_{t,Ed} / F_{t,Rd} < 1{,}0$

$F_{t,Rd}$ = 254.2 kN

Bearing resistance $F_{b,Rd} = k_1*\alpha_b*f_u*d*t/\gamma_{M2}$ — $F_{b,Ed} / F_{b,Rd} < 1{,}0$

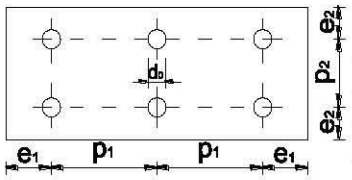
$F_{b,Rd}$ = 289.4 kN

	usual values		I choose
$e_1=2*d_0$	e_1(cm)=	5.20	e_1(cm)= 4.40
$p_1=3*d_0$	p_1(cm)=	7.80	p_1(cm)= 6.60
$e_2=1{,}5*d_0$	e_2(cm)=	3.90	e_2(cm)= 3.30
$p_2=3*d_0$	p_2(cm)=	7.80	p_2(cm)= 6.60

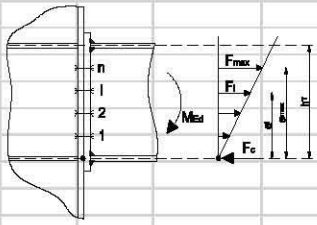
	in loading direction		orthogonal to loading direction			
outter anch →	$\alpha_d=e_1/3d_0$	$\alpha_{d,outter}$= 0.56	$k_1=\min(2{,}8*e_2/d_0-1{,}7\le 2{,}5;\ 1{,}4*p_2/d_0-1{,}7\le 2{,}5)$	$k_{1,outter}$=	1.85
inner ancho →	$\alpha_d=p_1/3d_0$ - 1/4	$\alpha_{d,inner}$= 0.60	$k_1=1{,}4*p_2/d_0-1{,}7\le 2{,}5$	$k_{1,inner}$=	2.50

α_d= 0.67 — $\alpha_b=\min(\alpha_d;\ f_{ub}/f_u;\ 1{,}0)$ = 0.67 — k_1= 2.50

load direction ← →



num. of bolts for transfering tension and shear laod					$n_{vij,N,V}$=	4					2 / 2
Connection load					load of maximal loaded bolt						
$M_{Ed,y}$=	8414	kNcm			$F_{t,Ed,M}$=	207.08	kN		check		
N_{Ed} =	106	kN	(+) tension		$F_{t,Ed,N}$=	26.50	kN		$F_{t,Ed\ My+N}/F_{t,Rd}$=	0.919	OK
$V_{Ed,z}$ =	108	kN			$F_{v,Ed}$=	27.00	kN		$F_{v,Ed}/F_{v,Rd}$=	0.191	OK
									interaction =	0.848	OK
									$F_{v,Ed}/F_{b,Rd}$=	0.093	OK
num. of bolts in line		$n_{vij.v.vrsti}$ =	2	(for 4 bolts in line we take 3,6 "due to prying force")							
lines	a_i (cm)	a_i^2 (cm^2)									
1	5.00	25.0									
2	19.00	361.0									
3	0.00	0.0									
4	0.0	0.0									
5	0.0	0.0									
6	0.0	0.0									
7	0.0	0.0									
8	0.0	0.0									
9	0.0	0.0									
10	0.0	0.0									
11	0.0	0.0									
12	0.0	0.0									
Σa_i^2=	386.0	cm^2									
a_{max}=	19	cm									
Maximum bending load capacity of bolts											
$M_{Rd,vija.}$=	10327	kNcm									
Obojstranski koti zvari				a = 0.6 x t		polnonosilni					



7.3. Montažni spoj U zvarjenca (Konzole)

Detail D1.2: Bolted moment resistance joint

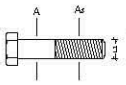
1 / 2

U zvarjenec - konzola | SŽ PP Litija | Peronski nadstrešek 2

Bolts		d(cm)	d_0(cm)	A_s(cm^2)	A(cm^2)
	M30	3.0	3.3	5.61	7.07
grade		10.9			
f_{ub}(kN/cm^2)		100			

Plate	
grade	235
s (cm)=	2.5
f_u(kN/cm^2)=	36
γ_{M0}=	1.00
γ_{M2}=	1.25

shear plane: 1 — 1 - share plane A_S; 2 - share plane A



factor: 0.5 — 0,6 for shear plane A; 0,6 for ductility anchors (4.6, 5.6, 8.8) - share plane A_S; 0,5 for nonductility anchors (4.8, 5.8, 6.8, 10.9) - share plane A_S

Shear resistance: $F_{v,Rd} = 0{,}6(0{,}5)*f_{ub}*A_s(A)/\gamma_{M2}$ — $F_{v,Ed} / F_{v,Rd} < 1{,}0$

$F_{v,Rd}$ = 224.4 kN

interaction V - M: $(F_{v,Ed} / F_{v,Rd})+(F_{t,Ed} / F_{t,Rd})/1{,}4 < 1{,}0$

Tension resistance $F_{t,Rd} = 0{,}9*f_{ub}*A_s/\gamma_{M2}$ — $F_{t,Ed} / F_{t,Rd} < 1{,}0$

$F_{t,Rd}$ = 403.9 kN

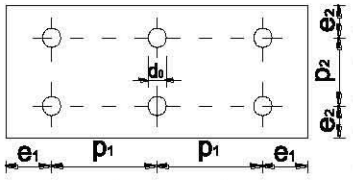
Bearing resistance $F_{b,Rd} = k_1*\alpha_b*f_u*d*t/\gamma_{M2}$ — $F_{b,Ed} / F_{b,Rd} < 1{,}0$

$F_{b,Rd}$ = 286.2 kN

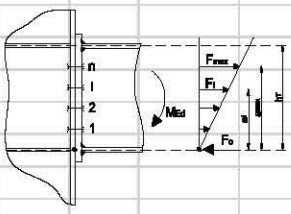
	usual values		I choose
e_1=2*d_0	e_1(cm)=	6.60	e_1(cm)= 5.20
p_1=3*d_0	p_1(cm)=	9.90	p_1(cm)= 7.80
e_2=1,5*d_0	e_2(cm)=	4.95	e_2(cm)= 3.90
p_2=3*d_0	p_2(cm)=	9.90	p_2(cm)= 7.80

	in loading direction		orthogonal to loading direction			
outter anch	→ $\alpha_d=e_1/3d_0$	$\alpha_{d,outter}$= 0.53	$k_1=\min(2{,}8*e_2/d_0-1{,}7\le 2{,}5;\ 1{,}4*p_2/d_0-1{,}7\le 2{,}5)$		$k_{1,outter}$=	1.61
inner ancho	→ $\alpha_d=p_1/3d_0$ - 1/4	$\alpha_{d,inner}$= 0.54	$k_1=1{,}4*p_2/d_0-1{,}7\le 2{,}5$		$k_{1,inner}$=	2.50
		α_d= 0.53	$\alpha_b=\min(\alpha_d;\ f_{ub}/f_u;\ 1{,}0)$	α_b= 0.53	k_1=	2.50

load direction ← →



num. of bolts for transfering tension and shear laod					$n_{vij,N,V}$=	4				2 / 2
Connection load				load of maximal loaded bolt						
$M_{Ed,y}$=	10000	kNcm		$F_{t,Ed,M}$=	231.71	kN		check		
N_{Ed} =	70	kN	(+) tension	$F_{t,Ed,N}$=	17.50	kN		$F_{t,Ed\ My+N}/F_{t,Rd}$=	0.617	OK
$V_{Ed,z}$ =	125	kN		$F_{v,Ed}$=	31.25	kN		$F_{v,Ed}/F_{v,Rd}$=	0.139	OK
								interaction =	0.580	OK
								$F_{v,Ed}/F_{b,Rd}$=	0.109	OK
num. of bolts in line		$n_{vij,v\ vrsti}$ =	2	(for 4 bolts in line we take 3,6 "due to prying force")						
lines	a_i (cm)	a_i^2 (cm^2)								
1	7.00	49.0								
2	19.00	361.0								
3	0.00	0.0								
4	0.0	0.0								
5	0.0	0.0								
6	0.0	0.0								
7	0.0	0.0								
8	0.0	0.0								
9	0.0	0.0								
10	0.0	0.0								
11	0.0	0.0								
12	0.0	0.0								
Σa_i^2=	410.0	cm^2								
a_{max}=	19	cm								
Maximum bending load capacity of bolts										
$M_{Rd,vija}$ =	17432	kNcm								
Obojstranski koti zvari				a = 0.6 x t	polnonosilni					



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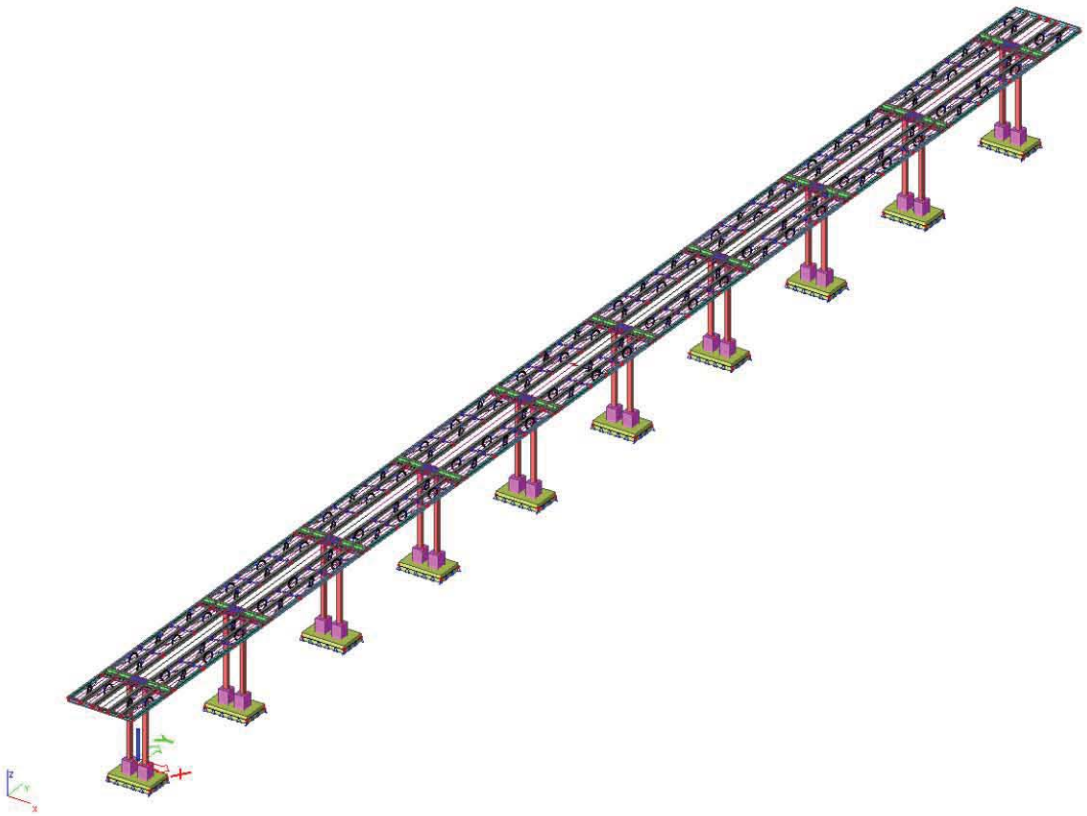
PERONSKI NADSTREŠEK 3

Železniška postaja Litija

ANALIZA KONSTRUKCIJE

Faza: IZN

Revizija:0



April 2021

Računal:
Dr. Leon Hladnik, udig G-0296.

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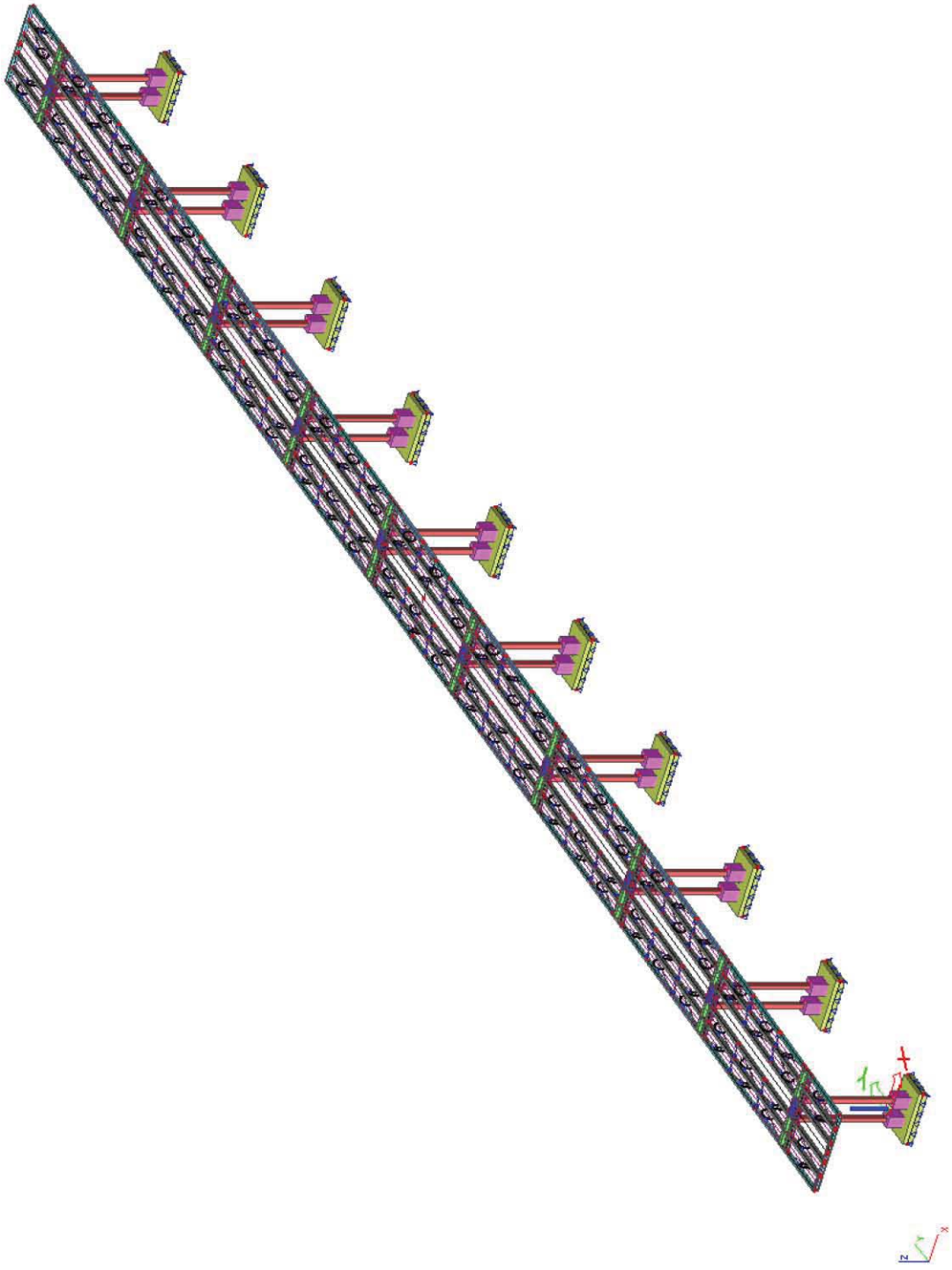
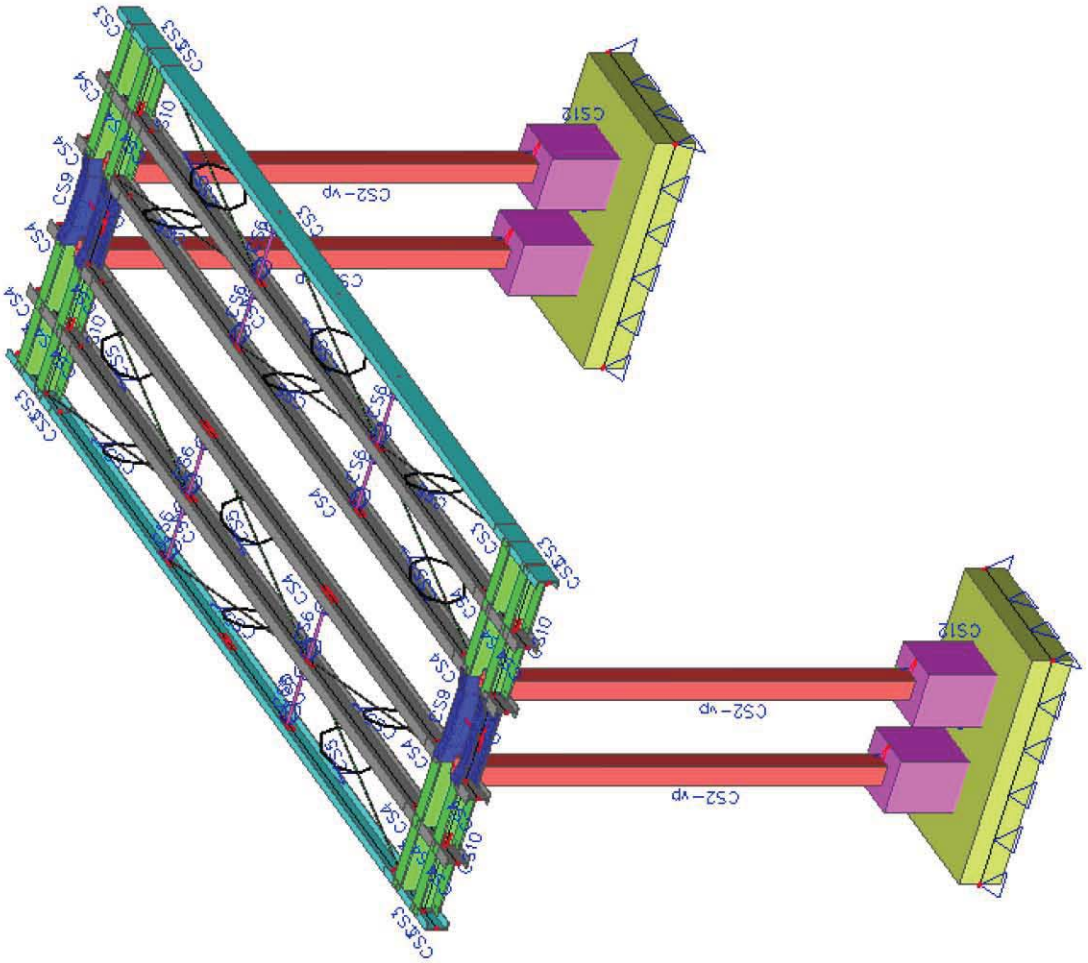
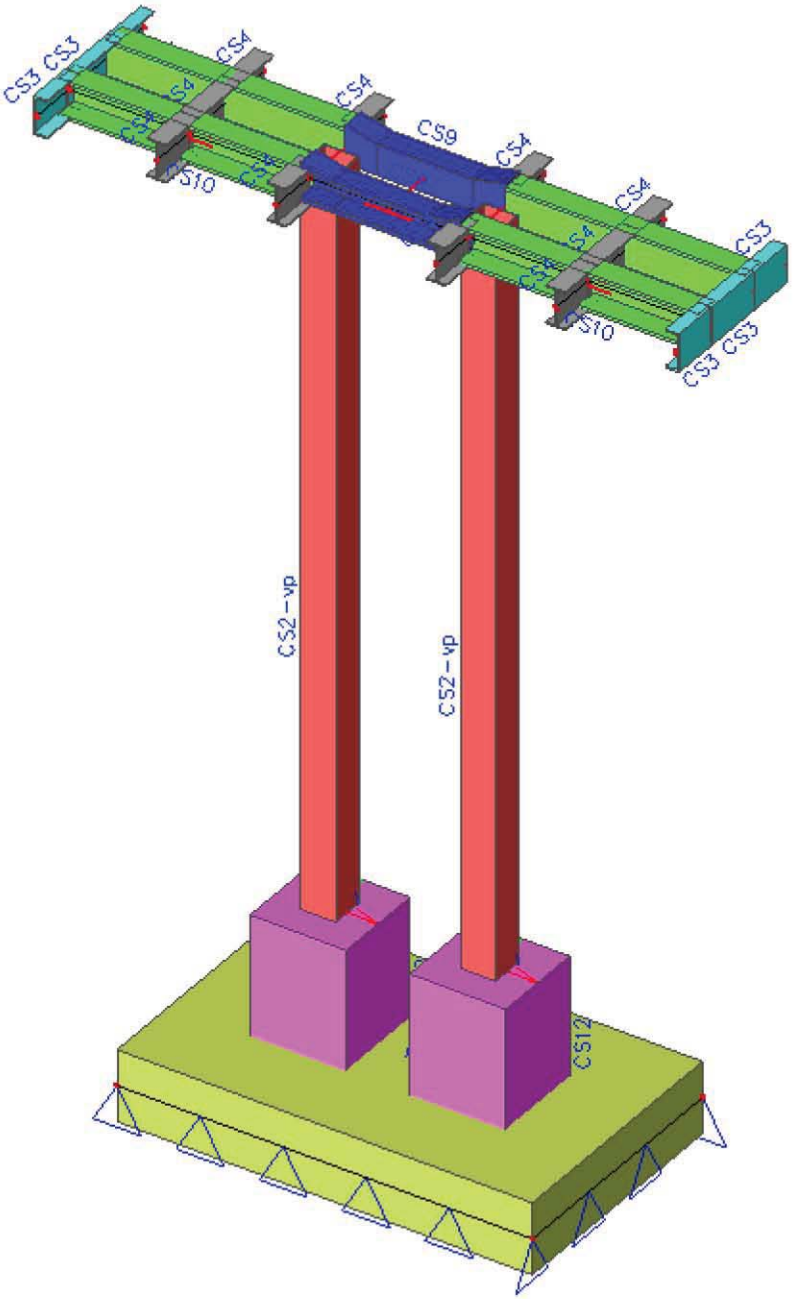
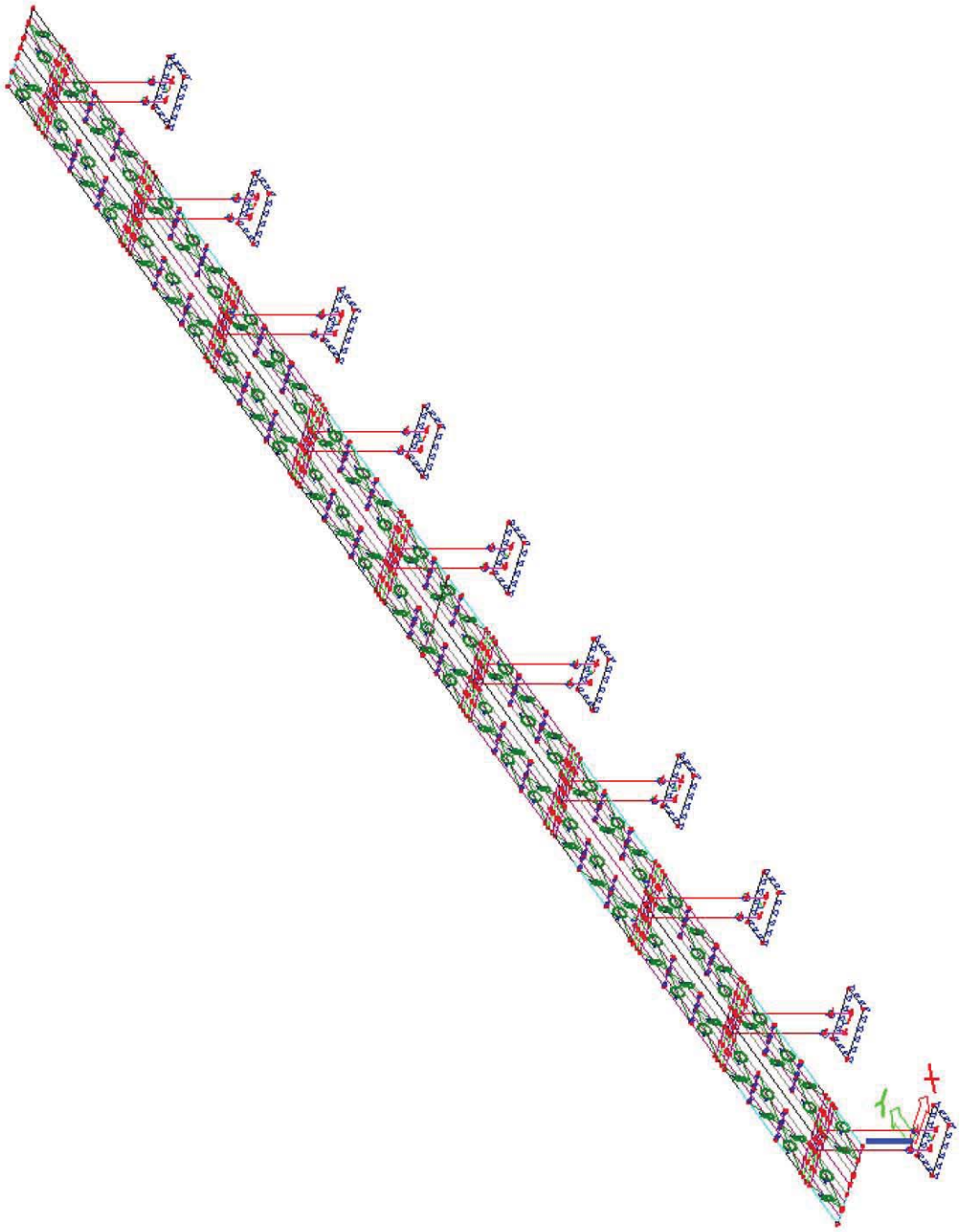
1. RAČUNSKI MODEL

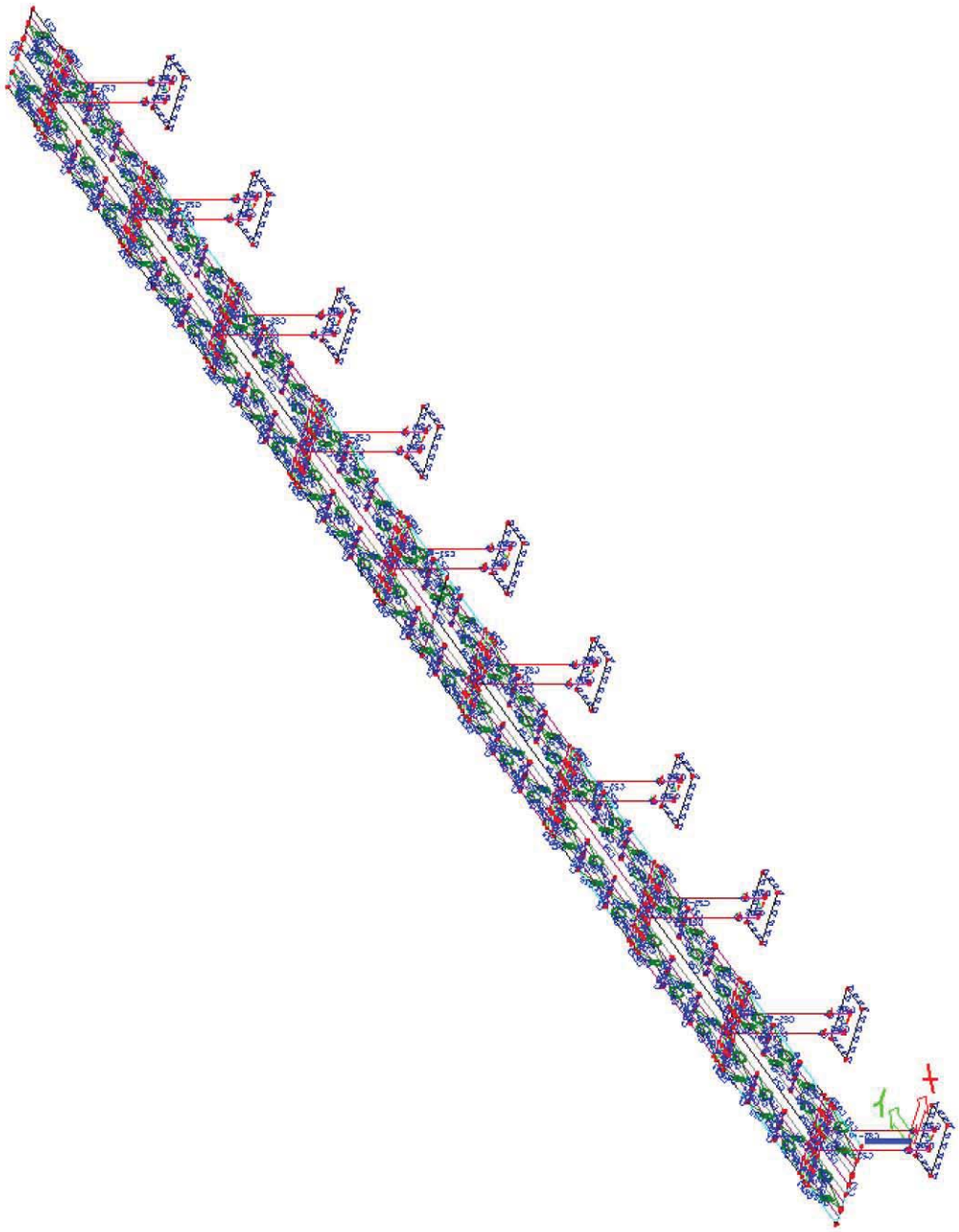
1.1. Statični model

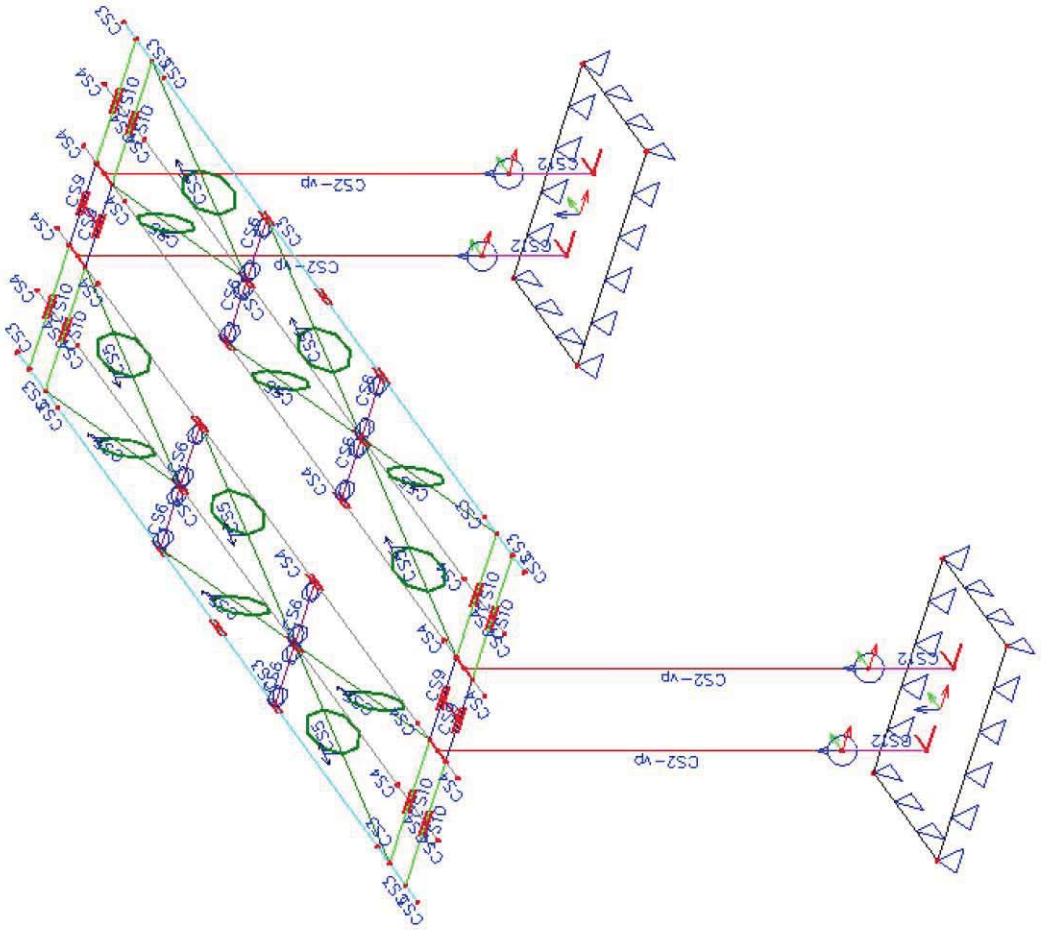



CS12
CS2-vp
CS12
CS2-vp
CS2-vp


CS3 CS3
CS4
CS4
CS9
CS4
CS4
CS3
CS10
CS10
CS3 CS3
CS2 – vp
CS2 – vp
CS12






CS2-vp
CS2-vp
CS2-vp
CS2-vp

1.2. Marterial in profili

1. Bill of material

Selection: All
Type of sorting: Material

Summary

Material	Mass [kg]	Surface [m²]	Volume [m³]
Steel	27323.73	643.747	3.4807e+00
Concrete	64350.00	88.400	2.5740e+01
Total	91673.73	732.147	2.9221e+01

Note: Value 'Surface' represents for 1D members the total exposed surface area, while for 2D members it corresponds only to the surface area of the centroidal plane.

Steel (1D)

Material	Density [kg/m³]	Mass [kg]	Surface [m²]	Volume [m³]
S 235	7850.00	27323.73	643.747	3.4807e+00
Total		27323.73	643.747	3.4807e+00

Concrete (1D)

Material	Density [kg/m³]	Mass [kg]	Surface [m²]	Volume [m³]
C25/30	2500.00	17550.00	46.800	7.0200e+00
Total		17550.00	46.800	7.0200e+00

Concrete (2D)

Material	Density [kg/m³]	Mass [kg]	Surface [m²]	Volume [m³]
C25/30	2500.00	46800.00	41.600	1.8720e+01
Total		46800.00	41.600	1.8720e+01

2. Materials

Steel EC3

Name	ρ [kg/m³]	E_{mod} [MPa]	μ	Lower limit [mm]	Upper limit [mm]	F_y [kN/cm²]	F_u [kN/cm²]	Colour
		G_{mod} [MPa]	α [m/mK]					
S 235	7850.00	2.1000e+05	0.3	0	100	23.5	36.0	
		8.0769e+04	0.00					

Name	Type	ρ [kg/m³]	Density in fresh state [kg/m³]	E_{mod} [MPa]	μ	α [m/mK]	$f_{c,k,28}$ [MPa]	Colour
C25/30	Concrete	2500.00	2600.00	3.1500e+04	0.2	0.00	25.00	

Explanations of symbols	
Density in fresh state	The value in the density in fresh state property is used only in case a composite deck is input and its self-weight load is taken into account.

3. Cross-sections

Name	Type	Item material	Fabrication	A [m²]	A_y [m²]	I_y [m⁴]	$W_{el,y}$ [m³]	$W_{pl,y}$ [m³]	Colour
	Detailed				A_z [m²]	I_z [m⁴]	$W_{el,z}$ [m³]	$W_{pl,z}$ [m³]	
CS2-vp	QRO220X8	S 235	rolled	6.6200e-03	3.3081e-03	4.8900e-05	4.4500e-04	5.2200e-04	
					3.3081e-03	4.8900e-05	4.4500e-04	5.2200e-04	
CS3	UNP240	S 235	rolled	4.2300e-03	2.1541e-03	3.6000e-05	3.0000e-04	3.5800e-04	
					2.2612e-03	2.4800e-06	3.9600e-05	7.5700e-05	
CS4	IPE240	S 235	rolled	3.9100e-03	2.4315e-03	3.8920e-05	3.2400e-04	3.6700e-04	
					1.5295e-03	2.8400e-06	4.7300e-05	7.3900e-05	
CS5	RD16	S 235	rolled	2.0096e-04	1.8060e-04	3.1496e-09	3.9370e-07	6.7190e-07	
					1.8060e-04	3.1496e-09	3.9370e-07	6.7190e-07	
CS6	RO26.9X3.2	S 235	rolled	2.3800e-04	1.5168e-04	1.7000e-08	1.2700e-06	1.7974e-06	
					1.5168e-04	1.7000e-08	1.2700e-06	1.7974e-06	
CS9	U g	S 235	general	8.9500e-03	6.5771e-03	5.7119e-05	5.8583e-04	6.9006e-04	
	195; 150; 25; 10				1.9815e-03	2.0028e-05	2.3197e-04	3.7224e-04	
CS10	Uw	S 235	welded	8.0000e-03	5.2706e-03	7.9467e-05	6.6222e-04	7.6000e-04	
	240; 10; 150; 20; 0				2.4501e-03	1.8617e-05	2.0126e-04	3.4000e-04	
CS12	Rectangle	C25/30	concrete	3.6000e-01	3.0037e-01	1.0800e-02	3.6000e-02	0.0000e+00	
	600; 600				3.0037e-01	1.0800e-02	3.6000e-02	0.0000e+00	

1.3. Vozlišča, elementi, podpore, sprostitve

4. Nodes

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N2196	-0.500	45.000	0.000
N2	-0.500	45.000	4.665
N3	0.500	45.000	0.000
N4	0.500	45.000	4.665
N5	-2.000	45.200	4.665
N6	2.000	45.200	4.665
N7	2.000	44.800	4.665
N8	-2.000	44.800	4.665
N9	0.500	45.200	4.665
N10	0.500	44.800	4.665
N11	-0.500	45.200	4.665
N12	-0.500	44.800	4.665
N13	0.000	45.200	4.665
N14	0.000	44.800	4.665
N15	0.500	44.495	4.665
N16	-0.500	44.495	4.665
N17	2.000	44.495	4.665
N18	1.250	44.800	4.665

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N19	1.250	44.495	4.665
N20	1.250	45.200	4.665
N21	0.500	81.505	4.665
N22	-0.500	81.505	4.665
N23	2.000	81.505	4.665
N24	1.250	81.505	4.665
N25	-2.000	44.495	4.665
N26	-1.250	44.800	4.665
N27	-1.250	44.495	4.665
N28	-1.250	45.200	4.665
N29	-2.000	81.505	4.665
N30	-1.250	81.505	4.665
N31	-1.250	36.200	4.665
N32	-1.250	36.505	4.665
N33	-2.000	36.200	4.665
N34	-2.000	36.505	4.665
N35	-0.500	36.200	4.665
N36	-0.500	36.505	4.665
N37	-1.250	35.800	4.665
N38	-1.250	35.495	4.665
N39	-2.000	35.800	4.665
N40	-2.000	35.495	4.665
N41	-0.500	35.800	4.665
N42	-0.500	35.495	4.665
N43	1.250	36.200	4.665
N44	1.250	36.505	4.665
N45	2.000	36.200	4.665
N46	2.000	36.505	4.665
N47	0.500	36.200	4.665
N48	0.500	36.505	4.665
N49	1.250	35.800	4.665
N50	1.250	35.495	4.665
N51	2.000	35.800	4.665
N52	2.000	35.495	4.665
N53	0.500	35.800	4.665
N54	0.500	35.495	4.665
N55	0.000	36.200	4.665
N56	0.000	35.800	4.665
N57	-1.250	18.200	4.665
N58	-1.250	18.505	4.665
N60	-2.000	18.505	4.665
N61	-0.500	18.200	4.665
N62	-0.500	18.505	4.665
N63	-1.250	17.800	4.665
N64	-1.250	17.495	4.665
N65	-2.000	17.800	4.665
N66	-2.000	17.495	4.665
N67	-0.500	17.800	4.665
N68	-0.500	17.495	4.665
N69	1.250	18.200	4.665
N70	1.250	18.505	4.665
N72	2.000	18.505	4.665
N73	0.500	18.200	4.665
N74	0.500	18.505	4.665
N75	1.250	17.800	4.665
N76	1.250	17.495	4.665
N77	2.000	17.800	4.665
N78	2.000	17.495	4.665
N79	0.500	17.800	4.665
N80	0.500	17.495	4.665
N81	0.000	18.200	4.665
N82	0.000	17.800	4.665
N83	0.500	18.000	0.000
N84	0.500	18.000	4.665
N85	-0.500	18.000	0.000
N86	-0.500	18.000	4.665

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N87	-1.250	9.200	4.665
N88	-1.250	9.505	4.665
N89	-2.000	9.200	4.665
N90	-2.000	9.505	4.665
N91	-0.500	9.200	4.665
N92	-0.500	9.505	4.665
N93	-1.250	8.800	4.665
N94	-1.250	8.495	4.665
N95	-2.000	8.800	4.665
N96	-2.000	8.495	4.665
N97	-0.500	8.800	4.665
N98	-0.500	8.495	4.665
N99	1.250	9.200	4.665
N100	1.250	9.505	4.665
N101	2.000	9.200	4.665
N102	2.000	9.505	4.665
N103	0.500	9.200	4.665
N104	0.500	9.505	4.665
N105	1.250	8.800	4.665
N106	1.250	8.495	4.665
N107	2.000	8.800	4.665
N108	2.000	8.495	4.665
N109	0.500	8.800	4.665
N110	0.500	8.495	4.665
N111	0.000	9.200	4.665
N112	0.000	8.800	4.665
N113	0.500	9.000	0.000
N114	0.500	9.000	4.665
N115	-0.500	9.000	0.000
N116	-0.500	9.000	4.665
N117	-1.250	0.200	4.665
N118	-1.250	0.505	4.665
N119	-2.000	0.200	4.665
N120	-2.000	0.505	4.665
N121	-0.500	0.200	4.665
N122	-0.500	0.505	4.665
N123	-1.250	-0.200	4.665
N124	-1.250	-0.505	4.665
N125	-2.000	-0.200	4.665
N126	-2.000	-0.505	4.665
N127	-0.500	-0.200	4.665
N128	-0.500	-0.505	4.665
N129	1.250	0.200	4.665
N130	1.250	0.505	4.665
N131	2.000	0.200	4.665
N132	2.000	0.505	4.665
N133	0.500	0.200	4.665
N134	0.500	0.505	4.665
N135	1.250	-0.200	4.665
N136	1.250	-0.505	4.665
N137	2.000	-0.200	4.665
N138	2.000	-0.505	4.665
N139	0.500	-0.200	4.665
N140	0.500	-0.505	4.665
N141	0.000	0.200	4.665
N142	0.000	-0.200	4.665
N143	0.500	0.000	0.000
N144	0.500	0.000	4.665
N145	-0.500	0.000	0.000
N146	-0.500	0.000	4.665
N163	-2.000	27.200	4.665
N164	2.000	27.200	4.665
N165	2.000	26.800	4.665
N166	-2.000	26.800	4.665
N167	0.500	27.200	4.665
N168	0.500	26.800	4.665

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N169	-0.500	27.200	4.665
N170	-0.500	26.800	4.665
N171	0.000	27.200	4.665
N172	0.000	26.800	4.665
N173	0.500	26.495	4.665
N174	-0.500	26.495	4.665
N175	2.000	26.495	4.665
N176	1.250	26.800	4.665
N177	1.250	26.495	4.665
N178	1.250	27.200	4.665
N179	0.500	27.505	4.665
N180	-0.500	27.505	4.665
N181	2.000	27.505	4.665
N182	1.250	27.505	4.665
N183	-2.000	26.495	4.665
N184	-1.250	26.800	4.665
N185	-1.250	26.495	4.665
N186	-1.250	27.200	4.665
N187	-2.000	27.505	4.665
N188	-1.250	27.505	4.665
N209	-1.250	41.933	4.665
N210	-2.000	41.933	4.665
N211	-1.250	39.067	4.665
N212	-2.000	39.067	4.665
N213	-0.500	39.067	4.665
N214	-0.500	41.933	4.665
N215	2.000	84.457	4.665
N216	1.250	84.457	4.665
N217	0.500	84.457	4.665
N218	-0.500	84.457	4.665
N219	-1.250	84.457	4.665
N220	-2.000	84.457	4.665
N225	0.500	39.067	4.665
N226	0.500	41.933	4.665
N251	-2.000	-3.457	4.665
N252	-1.250	-3.457	4.665
N253	-0.500	-3.457	4.665
N254	0.500	-3.457	4.665
N255	1.250	-3.457	4.665
N256	2.000	-3.457	4.665
N257	-1.250	30.067	4.665
N258	-2.000	30.067	4.665
N259	-1.250	32.933	4.665
N260	-2.000	32.933	4.665
N261	-0.500	32.933	4.665
N262	-0.500	30.067	4.665
N265	1.250	30.067	4.665
N266	2.000	30.067	4.665
N267	1.250	32.933	4.665
N268	2.000	32.933	4.665
N269	0.500	32.933	4.665
N270	0.500	30.067	4.665
N273	-1.250	12.067	4.665
N274	-2.000	12.067	4.665
N275	-1.250	14.933	4.665
N276	-2.000	14.933	4.665
N277	-0.500	14.933	4.665
N278	-0.500	12.067	4.665
N281	1.250	12.067	4.665
N282	2.000	12.067	4.665
N283	1.250	14.933	4.665
N284	2.000	14.933	4.665
N285	0.500	14.933	4.665
N286	0.500	12.067	4.665
N289	-1.250	23.933	4.665
N290	-2.000	23.933	4.665

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N291	-1.250	21.067	4.665
N292	-2.000	21.067	4.665
N293	-0.500	21.067	4.665
N294	-0.500	23.933	4.665
N298	-2.000	18.200	4.665
N299	1.250	23.933	4.665
N300	2.000	23.933	4.665
N301	1.250	21.067	4.665
N302	2.000	21.067	4.665
N303	0.500	21.067	4.665
N304	0.500	23.933	4.665
N308	2.000	18.200	4.665
N309	-1.250	5.933	4.665
N310	-2.000	5.933	4.665
N311	-1.250	3.067	4.665
N312	-2.000	3.067	4.665
N313	-0.500	3.067	4.665
N314	-0.500	5.933	4.665
N317	1.250	5.933	4.665
N318	2.000	5.933	4.665
N319	1.250	3.067	4.665
N320	2.000	3.067	4.665
N321	0.500	3.067	4.665
N322	0.500	5.933	4.665
N336	0.500	45.000	-0.975
N337	-0.500	45.000	-0.975
N350	-0.500	18.000	-0.975
N351	0.500	18.000	-0.975
N356	-0.500	9.000	-0.975
N357	0.500	9.000	-0.975
N358	-1.300	0.800	-0.975
N359	-1.300	-0.800	-0.975
N360	1.300	-0.800	-0.975
N361	1.300	0.800	-0.975
N362	-0.500	0.000	-0.975
N363	0.500	0.000	-0.975
N2197	0.500	27.000	0.000
N2198	-0.500	27.000	0.000
N2203	-0.500	27.000	-0.975
N2204	0.500	27.000	-0.975
N2205	0.500	27.000	4.665
N2206	-0.500	27.000	4.665
N2207	0.500	36.000	0.000
N2208	-0.500	36.000	0.000
N2213	-0.500	36.000	-0.975
N2214	0.500	36.000	-0.975
N2215	0.500	36.000	4.665
N2216	-0.500	36.000	4.665
N2217	2.000	81.200	4.665
N2218	0.500	81.200	4.665
N2219	-0.500	81.200	4.665
N2220	1.250	81.200	4.665
N2221	-2.000	81.200	4.665
N2222	-1.250	81.200	4.665
N2223	-0.500	54.000	0.000
N2224	-0.500	54.000	4.665
N2225	0.500	54.000	0.000
N2226	0.500	54.000	4.665
N2227	-2.000	54.200	4.665
N2228	2.000	54.200	4.665
N2229	-2.000	53.800	4.665
N2230	0.500	54.200	4.665
N2231	-0.500	54.200	4.665
N2232	0.000	54.200	4.665
N2233	1.250	54.200	4.665
N2234	-1.250	54.200	4.665

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N2235	0.500	54.000	-0.975
N2236	-0.500	54.000	-0.975
N2241	2.000	53.800	4.665
N2242	1.250	53.800	4.665
N2243	-1.250	53.800	4.665
N2244	-0.500	53.800	4.665
N2245	0.500	53.800	4.665
N2246	-0.500	72.000	0.000
N2247	-0.500	72.000	4.665
N2248	0.500	72.000	0.000
N2249	0.500	72.000	4.665
N2250	-2.000	72.200	4.665
N2251	2.000	72.200	4.665
N2252	-2.000	71.800	4.665
N2253	0.500	72.200	4.665
N2254	-0.500	72.200	4.665
N2255	0.000	72.200	4.665
N2256	1.250	72.200	4.665
N2257	-1.250	72.200	4.665
N2258	0.500	72.000	-0.975
N2259	-0.500	72.000	-0.975
N2264	2.000	71.800	4.665
N2265	1.250	71.800	4.665
N2266	-1.250	71.800	4.665
N2267	-0.500	71.800	4.665
N2268	0.500	71.800	4.665
N2269	-0.500	81.000	0.000
N2270	-0.500	81.000	4.665
N2271	0.500	81.000	0.000
N2272	0.500	81.000	4.665
N2273	-2.000	80.800	4.665
N2274	0.000	81.200	4.665
N2275	0.500	81.000	-0.975
N2276	-0.500	81.000	-0.975
N2281	2.000	80.800	4.665
N2282	1.250	80.800	4.665
N2283	-1.250	80.800	4.665
N2284	-0.500	80.800	4.665
N2285	0.500	80.800	4.665
N2286	-0.500	63.000	0.000
N2287	-0.500	63.000	4.665
N2288	0.500	63.000	0.000
N2289	0.500	63.000	4.665
N2290	-2.000	63.200	4.665
N2291	2.000	63.200	4.665
N2292	-2.000	62.800	4.665
N2293	0.500	63.200	4.665
N2294	-0.500	63.200	4.665
N2295	0.000	63.200	4.665
N2296	1.250	63.200	4.665
N2297	-1.250	63.200	4.665
N2298	0.500	63.000	-0.975
N2299	-0.500	63.000	-0.975
N2304	2.000	62.800	4.665
N2305	1.250	62.800	4.665
N2306	-1.250	62.800	4.665
N2307	-0.500	62.800	4.665
N2308	0.500	62.800	4.665
N2309	0.500	53.495	4.665
N2310	-0.500	53.495	4.665
N2311	2.000	53.495	4.665
N2312	1.250	53.495	4.665
N2313	-2.000	53.495	4.665
N2314	-1.250	53.495	4.665
N2315	-1.250	50.933	4.665
N2316	-2.000	50.933	4.665

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N2317	-0.500	50.933	4.665
N2318	1.250	50.933	4.665
N2319	2.000	50.933	4.665
N2320	0.500	50.933	4.665
N2321	-1.250	45.505	4.665
N2322	-2.000	45.505	4.665
N2323	-0.500	45.505	4.665
N2324	1.250	45.505	4.665
N2325	2.000	45.505	4.665
N2326	0.500	45.505	4.665
N2333	-1.250	48.067	4.665
N2334	1.250	48.067	4.665
N2335	0.500	62.495	4.665
N2336	-0.500	62.495	4.665
N2337	2.000	62.495	4.665
N2338	1.250	62.495	4.665
N2339	-2.000	62.495	4.665
N2340	-1.250	62.495	4.665
N2341	-1.250	59.933	4.665
N2342	-2.000	59.933	4.665
N2343	-0.500	59.933	4.665
N2344	1.250	59.933	4.665
N2345	2.000	59.933	4.665
N2346	0.500	59.933	4.665
N2347	-1.250	54.505	4.665
N2348	-2.000	54.505	4.665
N2349	-0.500	54.505	4.665
N2350	1.250	54.505	4.665
N2351	2.000	54.505	4.665
N2352	0.500	54.505	4.665
N2359	-1.250	57.067	4.665
N2360	1.250	57.067	4.665
N2361	0.500	71.495	4.665
N2362	-0.500	71.495	4.665
N2363	2.000	71.495	4.665
N2364	1.250	71.495	4.665
N2365	-2.000	71.495	4.665
N2366	-1.250	71.495	4.665
N2367	-1.250	68.933	4.665
N2368	-2.000	68.933	4.665
N2369	-0.500	68.933	4.665
N2370	1.250	68.933	4.665
N2371	2.000	68.933	4.665
N2372	0.500	68.933	4.665
N2373	-1.250	63.505	4.665
N2374	-2.000	63.505	4.665
N2375	-0.500	63.505	4.665
N2376	1.250	63.505	4.665
N2377	2.000	63.505	4.665
N2378	0.500	63.505	4.665
N2385	-1.250	66.067	4.665
N2386	1.250	66.067	4.665
N2387	0.500	80.495	4.665
N2388	-0.500	80.495	4.665
N2389	2.000	80.495	4.665
N2390	1.250	80.495	4.665
N2391	-2.000	80.495	4.665
N2392	-1.250	80.495	4.665
N2393	-1.250	77.933	4.665
N2394	-2.000	77.933	4.665
N2395	-0.500	77.933	4.665
N2396	1.250	77.933	4.665
N2397	2.000	77.933	4.665
N2398	0.500	77.933	4.665
N2399	-1.250	72.505	4.665
N2400	-2.000	72.505	4.665

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N2401	-0.500	72.505	4.665
N2402	1.250	72.505	4.665
N2403	2.000	72.505	4.665
N2404	0.500	72.505	4.665
N2411	-1.250	75.067	4.665
N2412	1.250	75.067	4.665
N2185	0.000	53.800	4.665
N2413	0.000	62.800	4.665
N2414	0.000	71.800	4.665
N2415	0.000	80.800	4.665
N2416	0.000	-3.457	4.665
N2417	0.000	84.457	4.665
N2418	-2.000	40.500	4.665
N2419	0.000	40.500	4.665
N2420	2.000	40.500	4.665
N2421	1.250	41.933	4.665
N2422	1.250	39.067	4.665
N2423	2.000	41.933	4.665
N2424	2.000	39.067	4.665
N2425	1.300	9.800	-0.975
N2426	-1.300	9.800	-0.975
N2427	-1.300	8.200	-0.975
N2428	1.300	8.200	-0.975
N2429	1.300	18.800	-0.975
N2430	-1.300	18.800	-0.975
N2431	-1.300	17.200	-0.975
N2432	1.300	17.200	-0.975
N2433	1.300	27.800	-0.975
N2434	-1.300	27.800	-0.975
N2435	-1.300	26.200	-0.975
N2436	1.300	26.200	-0.975
N2437	1.300	36.800	-0.975
N2438	-1.300	36.800	-0.975
N2439	-1.300	35.200	-0.975
N2440	1.300	35.200	-0.975
N2441	1.300	45.800	-0.975
N2442	-1.300	45.800	-0.975
N2443	-1.300	44.200	-0.975
N2444	1.300	44.200	-0.975
N2445	1.300	54.800	-0.975
N2446	-1.300	54.800	-0.975
N2447	-1.300	53.200	-0.975
N2448	1.300	53.200	-0.975
N2449	1.300	63.800	-0.975
N2450	-1.300	63.800	-0.975
N2451	-1.300	62.200	-0.975
N2452	1.300	62.200	-0.975
N2453	1.300	72.800	-0.975
N2454	-1.300	72.800	-0.975
N2455	-1.300	71.200	-0.975
N2456	1.300	71.200	-0.975
N2457	1.300	81.800	-0.975
N2458	-1.300	81.800	-0.975
N2459	-1.300	80.200	-0.975
N2460	1.300	80.200	-0.975
N1	-2.000	48.067	4.665
N2461	-0.500	48.067	4.665
N2462	0.500	48.067	4.665
N2463	2.000	48.067	4.665
N2464	-2.000	57.067	4.665
N2465	-0.500	57.067	4.665
N2466	0.500	57.067	4.665
N2467	2.000	57.067	4.665
N2468	-2.000	66.067	4.665
N2469	-0.500	66.067	4.665
N2470	0.500	66.067	4.665

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N2471	2.000	66.067	4.665
N2472	-2.000	75.067	4.665
N2473	-0.500	75.067	4.665
N2474	0.500	75.067	4.665
N2475	2.000	75.067	4.665

5. Members

Name	Cross-section	Material	Length [m]	Beg. node	End node	Type
B1	CS2-vp - QRO220X8	S 235	4.665	N2196	N2	general (0)
B2	CS2-vp - QRO220X8	S 235	4.665	N3	N4	general (0)
B3	CS10 - Uw (240; 10; 150; 20; 0)	S 235	1.500	N5	N11	general (0)
B4	CS10 - Uw (240; 10; 150; 20; 0)	S 235	1.500	N7	N10	general (0)
B8	CS4 - IPE240	S 235	0.305	N10	N15	general (0)
B9	CS4 - IPE240	S 235	0.305	N12	N16	general (0)
B10	CS3 - UNP240	S 235	0.305	N7	N17	general (0)
B11	CS3 - UNP240	S 235	0.400	N6	N7	general (0)
B12	CS4 - IPE240	S 235	0.305	N18	N19	general (0)
B13	CS4 - IPE240	S 235	0.400	N20	N18	general (0)
B14	CS4 - IPE240	S 235	0.305	N2218	N21	general (0)
B15	CS4 - IPE240	S 235	0.305	N2219	N22	general (0)
B16	CS3 - UNP240	S 235	0.305	N2217	N23	general (0)
B17	CS4 - IPE240	S 235	0.305	N2220	N24	general (0)
B20	CS3 - UNP240	S 235	0.305	N8	N25	general (0)
B21	CS3 - UNP240	S 235	0.400	N5	N8	general (0)
B22	CS4 - IPE240	S 235	0.305	N26	N27	general (0)
B23	CS4 - IPE240	S 235	0.400	N28	N26	general (0)
B25	CS3 - UNP240	S 235	0.305	N2221	N29	general (0)
B26	CS4 - IPE240	S 235	0.305	N2222	N30	general (0)
B27	CS4 - IPE240	S 235	0.305	N31	N32	general (0)
B28	CS3 - UNP240	S 235	0.305	N33	N34	general (0)
B29	CS4 - IPE240	S 235	0.305	N35	N36	general (0)
B30	CS4 - IPE240	S 235	0.400	N31	N37	general (0)
B31	CS4 - IPE240	S 235	0.305	N37	N38	general (0)
B32	CS3 - UNP240	S 235	0.400	N33	N39	general (0)
B33	CS3 - UNP240	S 235	0.305	N39	N40	general (0)
B34	CS4 - IPE240	S 235	0.305	N41	N42	general (0)
B36	CS4 - IPE240	S 235	0.305	N43	N44	general (0)
B37	CS3 - UNP240	S 235	0.305	N45	N46	general (0)
B39	CS4 - IPE240	S 235	0.305	N47	N48	general (0)
B40	CS4 - IPE240	S 235	0.400	N43	N49	general (0)
B41	CS4 - IPE240	S 235	0.305	N49	N50	general (0)
B42	CS3 - UNP240	S 235	0.400	N45	N51	general (0)
B43	CS3 - UNP240	S 235	0.305	N51	N52	general (0)
B45	CS4 - IPE240	S 235	0.305	N53	N54	general (0)
B49	CS10 - Uw (240; 10; 150; 20; 0)	S 235	1.500	N51	N53	general (0)
B50	CS10 - Uw (240; 10; 150; 20; 0)	S 235	1.500	N33	N35	general (0)
B51	CS4 - IPE240	S 235	0.305	N57	N58	general (0)
B52	CS3 - UNP240	S 235	0.305	N298	N60	general (0)
B53	CS4 - IPE240	S 235	0.305	N61	N62	general (0)
B54	CS4 - IPE240	S 235	0.400	N57	N63	general (0)
B55	CS4 - IPE240	S 235	0.305	N63	N64	general (0)
B56	CS3 - UNP240	S 235	0.400	N298	N65	general (0)
B57	CS3 - UNP240	S 235	0.305	N65	N66	general (0)
B58	CS4 - IPE240	S 235	0.305	N67	N68	general (0)
B60	CS4 - IPE240	S 235	0.305	N69	N70	general (0)
B61	CS3 - UNP240	S 235	0.305	N308	N72	general (0)
B63	CS4 - IPE240	S 235	0.305	N73	N74	general (0)
B64	CS4 - IPE240	S 235	0.400	N69	N75	general (0)
B65	CS4 - IPE240	S 235	0.305	N75	N76	general (0)
B66	CS3 - UNP240	S 235	0.400	N308	N77	general (0)
B67	CS3 - UNP240	S 235	0.305	N77	N78	general (0)
B69	CS4 - IPE240	S 235	0.305	N79	N80	general (0)
B73	CS10 - Uw (240; 10; 150; 20; 0)	S 235	1.500	N77	N79	general (0)
B74	CS10 - Uw (240; 10; 150; 20; 0)	S 235	1.500	N298	N61	general (0)

Name	Cross-section	Material	Length [m]	Beg. node	End node	Type
B75	CS2-vp - QRO220X8	S 235	4.665	N83	N84	general (0)
B76	CS2-vp - QRO220X8	S 235	4.665	N85	N86	general (0)
B77	CS4 - IPE240	S 235	0.305	N87	N88	general (0)
B78	CS3 - UNP240	S 235	0.305	N89	N90	general (0)
B79	CS4 - IPE240	S 235	0.305	N91	N92	general (0)
B80	CS4 - IPE240	S 235	0.400	N87	N93	general (0)
B81	CS4 - IPE240	S 235	0.305	N93	N94	general (0)
B82	CS3 - UNP240	S 235	0.400	N89	N95	general (0)
B83	CS3 - UNP240	S 235	0.305	N95	N96	general (0)
B84	CS4 - IPE240	S 235	0.305	N97	N98	general (0)
B86	CS4 - IPE240	S 235	0.305	N99	N100	general (0)
B87	CS3 - UNP240	S 235	0.305	N101	N102	general (0)
B89	CS4 - IPE240	S 235	0.305	N103	N104	general (0)
B90	CS4 - IPE240	S 235	0.400	N99	N105	general (0)
B91	CS4 - IPE240	S 235	0.305	N105	N106	general (0)
B92	CS3 - UNP240	S 235	0.400	N101	N107	general (0)
B93	CS3 - UNP240	S 235	0.305	N107	N108	general (0)
B95	CS4 - IPE240	S 235	0.305	N109	N110	general (0)
B99	CS10 - Uw (240; 10; 150; 20; 0)	S 235	1.500	N107	N109	general (0)
B100	CS10 - Uw (240; 10; 150; 20; 0)	S 235	1.500	N89	N91	general (0)
B101	CS2-vp - QRO220X8	S 235	4.665	N113	N114	general (0)
B102	CS2-vp - QRO220X8	S 235	4.665	N115	N116	general (0)
B103	CS4 - IPE240	S 235	0.305	N117	N118	general (0)
B104	CS3 - UNP240	S 235	0.305	N119	N120	general (0)
B105	CS4 - IPE240	S 235	0.305	N121	N122	general (0)
B106	CS4 - IPE240	S 235	0.400	N117	N123	general (0)
B107	CS4 - IPE240	S 235	0.305	N123	N124	general (0)
B108	CS3 - UNP240	S 235	0.400	N119	N125	general (0)
B109	CS3 - UNP240	S 235	0.305	N125	N126	general (0)
B110	CS4 - IPE240	S 235	0.305	N127	N128	general (0)
B112	CS4 - IPE240	S 235	0.305	N129	N130	general (0)
B113	CS3 - UNP240	S 235	0.305	N131	N132	general (0)
B115	CS4 - IPE240	S 235	0.305	N133	N134	general (0)
B116	CS4 - IPE240	S 235	0.400	N129	N135	general (0)
B117	CS4 - IPE240	S 235	0.305	N135	N136	general (0)
B118	CS3 - UNP240	S 235	0.400	N131	N137	general (0)
B119	CS3 - UNP240	S 235	0.305	N137	N138	general (0)
B121	CS4 - IPE240	S 235	0.305	N139	N140	general (0)
B125	CS10 - Uw (240; 10; 150; 20; 0)	S 235	1.500	N137	N139	general (0)
B126	CS10 - Uw (240; 10; 150; 20; 0)	S 235	1.500	N119	N121	general (0)
B127	CS2-vp - QRO220X8	S 235	4.665	N143	N144	general (0)
B128	CS2-vp - QRO220X8	S 235	4.665	N145	N146	general (0)
B137	CS10 - Uw (240; 10; 150; 20; 0)	S 235	1.500	N163	N169	general (0)
B138	CS10 - Uw (240; 10; 150; 20; 0)	S 235	1.500	N165	N168	general (0)
B142	CS4 - IPE240	S 235	0.305	N168	N173	general (0)
B143	CS4 - IPE240	S 235	0.305	N170	N174	general (0)
B144	CS3 - UNP240	S 235	0.305	N165	N175	general (0)
B145	CS3 - UNP240	S 235	0.400	N164	N165	general (0)
B146	CS4 - IPE240	S 235	0.305	N176	N177	general (0)
B148	CS4 - IPE240	S 235	0.305	N167	N179	general (0)
B149	CS4 - IPE240	S 235	0.305	N169	N180	general (0)
B150	CS3 - UNP240	S 235	0.305	N164	N181	general (0)
B151	CS4 - IPE240	S 235	0.305	N178	N182	general (0)
B154	CS3 - UNP240	S 235	0.305	N166	N183	general (0)
B155	CS3 - UNP240	S 235	0.400	N163	N166	general (0)
B156	CS4 - IPE240	S 235	0.305	N184	N185	general (0)
B157	CS4 - IPE240	S 235	0.400	N186	N184	general (0)
B159	CS3 - UNP240	S 235	0.305	N163	N187	general (0)
B160	CS4 - IPE240	S 235	0.305	N186	N188	general (0)
B173	CS4 - IPE240	S 235	7.990	N19	N44	general (0)
B174	CS4 - IPE240	S 235	7.990	N48	N15	general (0)
B175	CS4 - IPE240	S 235	7.990	N36	N16	general (0)
B177	CS3 - UNP240	S 235	7.990	N34	N25	general (0)
B178	CS3 - UNP240	S 235	7.990	N17	N46	general (0)
B179	CS6 - RO26.9X3.2	S 235	0.750	N209	N210	general (0)
B180	CS6 - RO26.9X3.2	S 235	0.750	N211	N212	general (0)

Name	Cross-section	Material	Length [m]	Beg. node	End node	Type
B181	CS6 - RO26.9X3.2	S 235	0.750	N213	N211	general (0)
B182	CS6 - RO26.9X3.2	S 235	0.750	N214	N209	general (0)
B183	CS5 - RD16	S 235	2.963	N12	N209	truss diagonal (90)
B184	CS5 - RD16	S 235	2.963	N209	N8	truss diagonal (90)
B185	CS5 - RD16	S 235	2.963	N214	N211	truss diagonal (90)
B186	CS5 - RD16	S 235	2.963	N211	N210	truss diagonal (90)
B187	CS5 - RD16	S 235	2.963	N35	N211	truss diagonal (90)
B188	CS5 - RD16	S 235	2.963	N211	N33	truss diagonal (90)
B189	CS3 - UNP240	S 235	2.952	N215	N23	general (0)
B190	CS4 - IPE240	S 235	2.952	N216	N24	general (0)
B191	CS4 - IPE240	S 235	2.952	N21	N217	general (0)
B192	CS4 - IPE240	S 235	2.952	N22	N218	general (0)
B193	CS4 - IPE240	S 235	2.952	N219	N30	general (0)
B194	CS3 - UNP240	S 235	2.952	N29	N220	general (0)
B195	CS3 - UNP240	S 235	4.000	N220	N215	general (0)
B196	CS5 - RD16	S 235	3.343	N2219	N219	truss diagonal (90)
B197	CS5 - RD16	S 235	3.343	N219	N2221	truss diagonal (90)
B198	CS6 - RO26.9X3.2	S 235	0.750	N2421	N2423	general (0)
B199	CS6 - RO26.9X3.2	S 235	0.750	N2422	N2424	general (0)
B200	CS6 - RO26.9X3.2	S 235	0.750	N225	N2422	general (0)
B201	CS6 - RO26.9X3.2	S 235	0.750	N226	N2421	general (0)
B202	CS5 - RD16	S 235	2.963	N10	N2421	truss diagonal (90)
B203	CS5 - RD16	S 235	2.963	N2421	N7	truss diagonal (90)
B204	CS5 - RD16	S 235	2.963	N226	N2422	truss diagonal (90)
B205	CS5 - RD16	S 235	2.963	N2422	N2423	truss diagonal (90)
B206	CS5 - RD16	S 235	2.963	N47	N2422	truss diagonal (90)
B207	CS5 - RD16	S 235	2.963	N2422	N45	truss diagonal (90)
B208	CS5 - RD16	S 235	3.343	N2218	N216	truss diagonal (90)
B209	CS5 - RD16	S 235	3.343	N216	N2217	truss diagonal (90)
B210	CS3 - UNP240	S 235	7.990	N187	N40	general (0)
B211	CS4 - IPE240	S 235	7.990	N38	N188	general (0)
B212	CS4 - IPE240	S 235	7.990	N180	N42	general (0)
B213	CS4 - IPE240	S 235	7.990	N179	N54	general (0)
B214	CS4 - IPE240	S 235	7.990	N50	N182	general (0)
B215	CS3 - UNP240	S 235	7.990	N52	N181	general (0)
B216	CS3 - UNP240	S 235	7.990	N60	N183	general (0)
B217	CS4 - IPE240	S 235	7.990	N185	N58	general (0)
B218	CS4 - IPE240	S 235	7.990	N62	N174	general (0)
B219	CS4 - IPE240	S 235	7.990	N74	N173	general (0)
B220	CS4 - IPE240	S 235	7.990	N177	N70	general (0)
B221	CS3 - UNP240	S 235	7.990	N175	N72	general (0)
B222	CS3 - UNP240	S 235	7.990	N90	N66	general (0)
B223	CS4 - IPE240	S 235	7.990	N64	N88	general (0)
B224	CS4 - IPE240	S 235	7.990	N92	N68	general (0)
B225	CS4 - IPE240	S 235	7.990	N104	N80	general (0)
B226	CS4 - IPE240	S 235	7.990	N76	N100	general (0)
B227	CS3 - UNP240	S 235	7.990	N78	N102	general (0)
B228	CS3 - UNP240	S 235	7.990	N120	N96	general (0)
B229	CS4 - IPE240	S 235	7.990	N94	N118	general (0)
B230	CS4 - IPE240	S 235	7.990	N122	N98	general (0)
B231	CS4 - IPE240	S 235	7.990	N134	N110	general (0)
B232	CS4 - IPE240	S 235	7.990	N106	N130	general (0)
B233	CS3 - UNP240	S 235	7.990	N108	N132	general (0)
B234	CS3 - UNP240	S 235	2.952	N251	N126	general (0)
B235	CS4 - IPE240	S 235	2.952	N124	N252	general (0)
B236	CS4 - IPE240	S 235	2.952	N253	N128	general (0)
B237	CS4 - IPE240	S 235	2.952	N254	N140	general (0)
B238	CS4 - IPE240	S 235	2.952	N136	N255	general (0)
B239	CS3 - UNP240	S 235	2.952	N138	N256	general (0)
B240	CS3 - UNP240	S 235	4.000	N251	N256	general (0)
B241	CS6 - RO26.9X3.2	S 235	0.750	N257	N258	general (0)
B242	CS6 - RO26.9X3.2	S 235	0.750	N259	N260	general (0)
B243	CS6 - RO26.9X3.2	S 235	0.750	N261	N259	general (0)
B244	CS6 - RO26.9X3.2	S 235	0.750	N262	N257	general (0)
B245	CS5 - RD16	S 235	2.963	N169	N257	truss diagonal (90)
B246	CS5 - RD16	S 235	2.963	N257	N163	truss diagonal (90)

Name	Cross-section	Material	Length [m]	Beg. node	End node	Type
B247	CS5 - RD16	S 235	2.963	N262	N259	truss diagonal (90)
B248	CS5 - RD16	S 235	2.963	N259	N258	truss diagonal (90)
B249	CS5 - RD16	S 235	2.963	N41	N259	truss diagonal (90)
B250	CS5 - RD16	S 235	2.963	N259	N39	truss diagonal (90)
B251	CS6 - RO26.9X3.2	S 235	0.750	N265	N266	general (0)
B252	CS6 - RO26.9X3.2	S 235	0.750	N267	N268	general (0)
B253	CS6 - RO26.9X3.2	S 235	0.750	N269	N267	general (0)
B254	CS6 - RO26.9X3.2	S 235	0.750	N270	N265	general (0)
B255	CS5 - RD16	S 235	2.963	N167	N265	truss diagonal (90)
B256	CS5 - RD16	S 235	2.963	N265	N164	truss diagonal (90)
B257	CS5 - RD16	S 235	2.963	N270	N267	truss diagonal (90)
B258	CS5 - RD16	S 235	2.963	N267	N266	truss diagonal (90)
B259	CS5 - RD16	S 235	2.963	N53	N267	truss diagonal (90)
B260	CS5 - RD16	S 235	2.963	N267	N51	truss diagonal (90)
B261	CS6 - RO26.9X3.2	S 235	0.750	N273	N274	general (0)
B262	CS6 - RO26.9X3.2	S 235	0.750	N275	N276	general (0)
B263	CS6 - RO26.9X3.2	S 235	0.750	N277	N275	general (0)
B264	CS6 - RO26.9X3.2	S 235	0.750	N278	N273	general (0)
B265	CS5 - RD16	S 235	2.963	N91	N273	truss diagonal (90)
B266	CS5 - RD16	S 235	2.963	N273	N89	truss diagonal (90)
B267	CS5 - RD16	S 235	2.963	N278	N275	truss diagonal (90)
B268	CS5 - RD16	S 235	2.963	N275	N274	truss diagonal (90)
B269	CS5 - RD16	S 235	2.963	N67	N275	truss diagonal (90)
B270	CS5 - RD16	S 235	2.963	N275	N65	truss diagonal (90)
B271	CS6 - RO26.9X3.2	S 235	0.750	N281	N282	general (0)
B272	CS6 - RO26.9X3.2	S 235	0.750	N283	N284	general (0)
B273	CS6 - RO26.9X3.2	S 235	0.750	N285	N283	general (0)
B274	CS6 - RO26.9X3.2	S 235	0.750	N286	N281	general (0)
B275	CS5 - RD16	S 235	2.963	N103	N281	truss diagonal (90)
B276	CS5 - RD16	S 235	2.963	N281	N101	truss diagonal (90)
B277	CS5 - RD16	S 235	2.963	N286	N283	truss diagonal (90)
B278	CS5 - RD16	S 235	2.963	N283	N282	truss diagonal (90)
B279	CS5 - RD16	S 235	2.963	N79	N283	truss diagonal (90)
B280	CS5 - RD16	S 235	2.963	N283	N77	truss diagonal (90)
B281	CS6 - RO26.9X3.2	S 235	0.750	N289	N290	general (0)
B282	CS6 - RO26.9X3.2	S 235	0.750	N291	N292	general (0)
B283	CS6 - RO26.9X3.2	S 235	0.750	N293	N291	general (0)
B284	CS6 - RO26.9X3.2	S 235	0.750	N294	N289	general (0)
B285	CS5 - RD16	S 235	2.963	N170	N289	truss diagonal (90)
B286	CS5 - RD16	S 235	2.963	N289	N166	truss diagonal (90)
B287	CS5 - RD16	S 235	2.963	N294	N291	truss diagonal (90)
B288	CS5 - RD16	S 235	2.963	N291	N290	truss diagonal (90)
B289	CS5 - RD16	S 235	2.963	N61	N291	truss diagonal (90)
B290	CS5 - RD16	S 235	2.963	N291	N298	truss diagonal (90)
B291	CS6 - RO26.9X3.2	S 235	0.750	N299	N300	general (0)
B292	CS6 - RO26.9X3.2	S 235	0.750	N301	N302	general (0)
B293	CS6 - RO26.9X3.2	S 235	0.750	N303	N301	general (0)
B294	CS6 - RO26.9X3.2	S 235	0.750	N304	N299	general (0)
B295	CS5 - RD16	S 235	2.963	N168	N299	truss diagonal (90)
B296	CS5 - RD16	S 235	2.963	N299	N165	truss diagonal (90)
B297	CS5 - RD16	S 235	2.963	N304	N301	truss diagonal (90)
B298	CS5 - RD16	S 235	2.963	N301	N300	truss diagonal (90)
B299	CS5 - RD16	S 235	2.963	N73	N301	truss diagonal (90)
B300	CS5 - RD16	S 235	2.963	N301	N308	truss diagonal (90)
B301	CS6 - RO26.9X3.2	S 235	0.750	N309	N310	general (0)
B302	CS6 - RO26.9X3.2	S 235	0.750	N311	N312	general (0)
B303	CS6 - RO26.9X3.2	S 235	0.750	N313	N311	general (0)
B304	CS6 - RO26.9X3.2	S 235	0.750	N314	N309	general (0)
B305	CS5 - RD16	S 235	2.963	N97	N309	truss diagonal (90)
B306	CS5 - RD16	S 235	2.963	N309	N95	truss diagonal (90)
B307	CS5 - RD16	S 235	2.963	N314	N311	truss diagonal (90)
B308	CS5 - RD16	S 235	2.963	N311	N310	truss diagonal (90)
B309	CS5 - RD16	S 235	2.963	N121	N311	truss diagonal (90)
B310	CS5 - RD16	S 235	2.963	N311	N119	truss diagonal (90)
B311	CS6 - RO26.9X3.2	S 235	0.750	N317	N318	general (0)
B312	CS6 - RO26.9X3.2	S 235	0.750	N319	N320	general (0)

Name	Cross-section	Material	Length [m]	Beg. node	End node	Type
B313	CS6 - RO26.9X3.2	S 235	0.750	N321	N319	general (0)
B314	CS6 - RO26.9X3.2	S 235	0.750	N322	N317	general (0)
B315	CS5 - RD16	S 235	2.963	N109	N317	truss diagonal (90)
B316	CS5 - RD16	S 235	2.963	N317	N107	truss diagonal (90)
B317	CS5 - RD16	S 235	2.963	N322	N319	truss diagonal (90)
B318	CS5 - RD16	S 235	2.963	N319	N318	truss diagonal (90)
B319	CS5 - RD16	S 235	2.963	N133	N319	truss diagonal (90)
B320	CS5 - RD16	S 235	2.963	N319	N131	truss diagonal (90)
B321	CS5 - RD16	S 235	3.343	N137	N255	truss diagonal (90)
B322	CS5 - RD16	S 235	3.343	N255	N139	truss diagonal (90)
B323	CS5 - RD16	S 235	3.343	N127	N252	truss diagonal (90)
B324	CS5 - RD16	S 235	3.343	N252	N125	truss diagonal (90)
B325	CS9 - U g (195; 150; 25; 10)	S 235	1.000	N11	N9	general (0)
B326	CS10 - Uw (240; 10; 150; 20; 0)	S 235	1.500	N9	N6	general (0)
B327	CS9 - U g (195; 150; 25; 10)	S 235	1.000	N10	N12	general (0)
B328	CS10 - Uw (240; 10; 150; 20; 0)	S 235	1.500	N12	N8	general (0)
B329	CS9 - U g (195; 150; 25; 10)	S 235	1.000	N35	N47	general (0)
B330	CS10 - Uw (240; 10; 150; 20; 0)	S 235	1.500	N47	N45	general (0)
B331	CS9 - U g (195; 150; 25; 10)	S 235	1.000	N53	N41	general (0)
B332	CS10 - Uw (240; 10; 150; 20; 0)	S 235	1.500	N41	N39	general (0)
B333	CS9 - U g (195; 150; 25; 10)	S 235	1.000	N168	N170	general (0)
B334	CS10 - Uw (240; 10; 150; 20; 0)	S 235	1.500	N170	N166	general (0)
B335	CS9 - U g (195; 150; 25; 10)	S 235	1.000	N169	N167	general (0)
B336	CS10 - Uw (240; 10; 150; 20; 0)	S 235	1.500	N167	N164	general (0)
B337	CS9 - U g (195; 150; 25; 10)	S 235	1.000	N61	N73	general (0)
B338	CS10 - Uw (240; 10; 150; 20; 0)	S 235	1.500	N73	N308	general (0)
B339	CS9 - U g (195; 150; 25; 10)	S 235	1.000	N79	N67	general (0)
B340	CS10 - Uw (240; 10; 150; 20; 0)	S 235	1.500	N67	N65	general (0)
B343	CS9 - U g (195; 150; 25; 10)	S 235	1.000	N109	N97	general (0)
B344	CS10 - Uw (240; 10; 150; 20; 0)	S 235	1.500	N97	N95	general (0)
B345	CS9 - U g (195; 150; 25; 10)	S 235	1.000	N91	N103	general (0)
B346	CS10 - Uw (240; 10; 150; 20; 0)	S 235	1.500	N103	N101	general (0)
B347	CS9 - U g (195; 150; 25; 10)	S 235	1.000	N139	N127	general (0)
B348	CS10 - Uw (240; 10; 150; 20; 0)	S 235	1.500	N127	N125	general (0)
B349	CS9 - U g (195; 150; 25; 10)	S 235	1.000	N121	N133	general (0)
B350	CS10 - Uw (240; 10; 150; 20; 0)	S 235	1.500	N133	N131	general (0)
B364	CS12 - Rectangle (600; 600)	C25/30	0.975	N3	N336	general (0)
B365	CS12 - Rectangle (600; 600)	C25/30	0.975	N2196	N337	general (0)
B366	CS12 - Rectangle (600; 600)	C25/30	0.975	N85	N350	general (0)
B367	CS12 - Rectangle (600; 600)	C25/30	0.975	N83	N351	general (0)
B368	CS12 - Rectangle (600; 600)	C25/30	0.975	N115	N356	general (0)
B369	CS12 - Rectangle (600; 600)	C25/30	0.975	N113	N357	general (0)
B370	CS12 - Rectangle (600; 600)	C25/30	0.975	N145	N362	general (0)
B371	CS12 - Rectangle (600; 600)	C25/30	0.975	N143	N363	general (0)
B372	CS2-vp - QRO220X8	S 235	4.665	N2197	N2205	general (0)
B373	CS2-vp - QRO220X8	S 235	4.665	N2198	N2206	general (0)
B374	CS12 - Rectangle (600; 600)	C25/30	0.975	N2198	N2203	general (0)
B375	CS12 - Rectangle (600; 600)	C25/30	0.975	N2197	N2204	general (0)
B376	CS2-vp - QRO220X8	S 235	4.665	N2207	N2215	general (0)
B377	CS2-vp - QRO220X8	S 235	4.665	N2208	N2216	general (0)
B378	CS12 - Rectangle (600; 600)	C25/30	0.975	N2208	N2213	general (0)
B379	CS12 - Rectangle (600; 600)	C25/30	0.975	N2207	N2214	general (0)
B380	CS2-vp - QRO220X8	S 235	4.665	N2223	N2224	general (0)
B381	CS2-vp - QRO220X8	S 235	4.665	N2225	N2226	general (0)
B382	CS10 - Uw (240; 10; 150; 20; 0)	S 235	1.500	N2227	N2231	general (0)
B383	CS3 - UNP240	S 235	0.400	N2228	N2241	general (0)
B384	CS4 - IPE240	S 235	0.400	N2233	N2242	general (0)
B385	CS3 - UNP240	S 235	0.400	N2227	N2229	general (0)
B386	CS4 - IPE240	S 235	0.400	N2234	N2243	general (0)
B387	CS9 - U g (195; 150; 25; 10)	S 235	1.000	N2231	N2230	general (0)
B388	CS10 - Uw (240; 10; 150; 20; 0)	S 235	1.500	N2230	N2228	general (0)
B389	CS12 - Rectangle (600; 600)	C25/30	0.975	N2225	N2235	general (0)
B390	CS12 - Rectangle (600; 600)	C25/30	0.975	N2223	N2236	general (0)
B391	CS10 - Uw (240; 10; 150; 20; 0)	S 235	1.500	N2244	N2229	general (0)
B392	CS9 - U g (195; 150; 25; 10)	S 235	1.000	N2245	N2244	general (0)
B393	CS10 - Uw (240; 10; 150; 20; 0)	S 235	1.500	N2241	N2245	general (0)

Name	Cross-section	Material	Length [m]	Beg. node	End node	Type
B394	CS2-vp - QRO220X8	S 235	4.665	N2246	N2247	general (0)
B395	CS2-vp - QRO220X8	S 235	4.665	N2248	N2249	general (0)
B396	CS10 - Uw (240; 10; 150; 20; 0)	S 235	1.500	N2250	N2254	general (0)
B397	CS3 - UNP240	S 235	0.400	N2251	N2264	general (0)
B398	CS4 - IPE240	S 235	0.400	N2256	N2265	general (0)
B399	CS3 - UNP240	S 235	0.400	N2250	N2252	general (0)
B400	CS4 - IPE240	S 235	0.400	N2257	N2266	general (0)
B401	CS9 - U g (195; 150; 25; 10)	S 235	1.000	N2254	N2253	general (0)
B402	CS10 - Uw (240; 10; 150; 20; 0)	S 235	1.500	N2253	N2251	general (0)
B403	CS12 - Rectangle (600; 600)	C25/30	0.975	N2248	N2258	general (0)
B404	CS12 - Rectangle (600; 600)	C25/30	0.975	N2246	N2259	general (0)
B405	CS10 - Uw (240; 10; 150; 20; 0)	S 235	1.500	N2267	N2252	general (0)
B406	CS9 - U g (195; 150; 25; 10)	S 235	1.000	N2268	N2267	general (0)
B407	CS10 - Uw (240; 10; 150; 20; 0)	S 235	1.500	N2264	N2268	general (0)
B408	CS2-vp - QRO220X8	S 235	4.665	N2269	N2270	general (0)
B409	CS2-vp - QRO220X8	S 235	4.665	N2271	N2272	general (0)
B410	CS10 - Uw (240; 10; 150; 20; 0)	S 235	1.500	N2221	N2219	general (0)
B411	CS3 - UNP240	S 235	0.400	N2217	N2281	general (0)
B412	CS4 - IPE240	S 235	0.400	N2220	N2282	general (0)
B413	CS3 - UNP240	S 235	0.400	N2221	N2273	general (0)
B414	CS4 - IPE240	S 235	0.400	N2222	N2283	general (0)
B415	CS9 - U g (195; 150; 25; 10)	S 235	1.000	N2219	N2218	general (0)
B416	CS10 - Uw (240; 10; 150; 20; 0)	S 235	1.500	N2218	N2217	general (0)
B417	CS12 - Rectangle (600; 600)	C25/30	0.975	N2271	N2275	general (0)
B418	CS12 - Rectangle (600; 600)	C25/30	0.975	N2269	N2276	general (0)
B419	CS10 - Uw (240; 10; 150; 20; 0)	S 235	1.500	N2284	N2273	general (0)
B420	CS9 - U g (195; 150; 25; 10)	S 235	1.000	N2285	N2284	general (0)
B421	CS10 - Uw (240; 10; 150; 20; 0)	S 235	1.500	N2281	N2285	general (0)
B422	CS2-vp - QRO220X8	S 235	4.665	N2286	N2287	general (0)
B423	CS2-vp - QRO220X8	S 235	4.665	N2288	N2289	general (0)
B424	CS10 - Uw (240; 10; 150; 20; 0)	S 235	1.500	N2290	N2294	general (0)
B425	CS3 - UNP240	S 235	0.400	N2291	N2304	general (0)
B426	CS4 - IPE240	S 235	0.400	N2296	N2305	general (0)
B427	CS3 - UNP240	S 235	0.400	N2290	N2292	general (0)
B428	CS4 - IPE240	S 235	0.400	N2297	N2306	general (0)
B429	CS9 - U g (195; 150; 25; 10)	S 235	1.000	N2294	N2293	general (0)
B430	CS10 - Uw (240; 10; 150; 20; 0)	S 235	1.500	N2293	N2291	general (0)
B431	CS12 - Rectangle (600; 600)	C25/30	0.975	N2288	N2298	general (0)
B432	CS12 - Rectangle (600; 600)	C25/30	0.975	N2286	N2299	general (0)
B433	CS10 - Uw (240; 10; 150; 20; 0)	S 235	1.500	N2307	N2292	general (0)
B434	CS9 - U g (195; 150; 25; 10)	S 235	1.000	N2308	N2307	general (0)
B435	CS10 - Uw (240; 10; 150; 20; 0)	S 235	1.500	N2304	N2308	general (0)
B436	CS6 - RO26.9X3.2	S 235	0.750	N2315	N2316	general (0)
B437	CS6 - RO26.9X3.2	S 235	0.750	N2317	N2315	general (0)
B438	CS6 - RO26.9X3.2	S 235	0.750	N2318	N2319	general (0)
B439	CS6 - RO26.9X3.2	S 235	0.750	N2320	N2318	general (0)
B440	CS4 - IPE240	S 235	0.305	N2245	N2309	general (0)
B441	CS4 - IPE240	S 235	0.305	N2244	N2310	general (0)
B442	CS3 - UNP240	S 235	0.305	N2241	N2311	general (0)
B443	CS4 - IPE240	S 235	0.305	N2242	N2312	general (0)
B444	CS3 - UNP240	S 235	0.305	N2229	N2313	general (0)
B445	CS4 - IPE240	S 235	0.305	N2243	N2314	general (0)
B446	CS4 - IPE240	S 235	7.990	N2312	N2324	general (0)
B447	CS4 - IPE240	S 235	7.990	N2326	N2309	general (0)
B448	CS4 - IPE240	S 235	7.990	N2323	N2310	general (0)
B449	CS4 - IPE240	S 235	7.990	N2314	N2321	general (0)
B450	CS3 - UNP240	S 235	7.990	N2322	N2313	general (0)
B451	CS3 - UNP240	S 235	7.990	N2311	N2325	general (0)
B452	CS5 - RD16	S 235	2.963	N2244	N2315	truss diagonal (90)
B453	CS5 - RD16	S 235	2.963	N2315	N2229	truss diagonal (90)
B454	CS5 - RD16	S 235	2.963	N2317	N2333	truss diagonal (90)
B455	CS5 - RD16	S 235	2.963	N2333	N2316	truss diagonal (90)
B456	CS5 - RD16	S 235	2.963	N2245	N2318	truss diagonal (90)
B457	CS5 - RD16	S 235	2.963	N2318	N2241	truss diagonal (90)
B458	CS5 - RD16	S 235	2.963	N2320	N2334	truss diagonal (90)
B459	CS5 - RD16	S 235	2.963	N2334	N2319	truss diagonal (90)

Name	Cross-section	Material	Length [m]	Beg. node	End node	Type
B460	CS4 - IPE240	S 235	0.305	N28	N2321	general (0)
B461	CS3 - UNP240	S 235	0.305	N5	N2322	general (0)
B462	CS4 - IPE240	S 235	0.305	N11	N2323	general (0)
B463	CS4 - IPE240	S 235	0.305	N20	N2324	general (0)
B464	CS3 - UNP240	S 235	0.305	N6	N2325	general (0)
B465	CS4 - IPE240	S 235	0.305	N9	N2326	general (0)
B466	CS5 - RD16	S 235	2.963	N11	N2333	truss diagonal (90)
B467	CS5 - RD16	S 235	2.963	N2333	N5	truss diagonal (90)
B468	CS5 - RD16	S 235	2.963	N9	N2334	truss diagonal (90)
B469	CS5 - RD16	S 235	2.963	N2334	N6	truss diagonal (90)
B470	CS6 - RO26.9X3.2	S 235	0.750	N2341	N2342	general (0)
B471	CS6 - RO26.9X3.2	S 235	0.750	N2343	N2341	general (0)
B472	CS6 - RO26.9X3.2	S 235	0.750	N2344	N2345	general (0)
B473	CS6 - RO26.9X3.2	S 235	0.750	N2346	N2344	general (0)
B474	CS4 - IPE240	S 235	0.305	N2308	N2335	general (0)
B475	CS4 - IPE240	S 235	0.305	N2307	N2336	general (0)
B476	CS3 - UNP240	S 235	0.305	N2304	N2337	general (0)
B477	CS4 - IPE240	S 235	0.305	N2305	N2338	general (0)
B478	CS3 - UNP240	S 235	0.305	N2292	N2339	general (0)
B479	CS4 - IPE240	S 235	0.305	N2306	N2340	general (0)
B480	CS4 - IPE240	S 235	7.990	N2338	N2350	general (0)
B481	CS4 - IPE240	S 235	7.990	N2352	N2335	general (0)
B482	CS4 - IPE240	S 235	7.990	N2349	N2336	general (0)
B483	CS4 - IPE240	S 235	7.990	N2340	N2347	general (0)
B484	CS3 - UNP240	S 235	7.990	N2348	N2339	general (0)
B485	CS3 - UNP240	S 235	7.990	N2337	N2351	general (0)
B486	CS5 - RD16	S 235	2.963	N2307	N2341	truss diagonal (90)
B487	CS5 - RD16	S 235	2.963	N2341	N2292	truss diagonal (90)
B488	CS5 - RD16	S 235	2.963	N2343	N2359	truss diagonal (90)
B489	CS5 - RD16	S 235	2.963	N2359	N2342	truss diagonal (90)
B490	CS5 - RD16	S 235	2.963	N2308	N2344	truss diagonal (90)
B491	CS5 - RD16	S 235	2.963	N2344	N2304	truss diagonal (90)
B492	CS5 - RD16	S 235	2.963	N2346	N2360	truss diagonal (90)
B493	CS5 - RD16	S 235	2.963	N2360	N2345	truss diagonal (90)
B494	CS4 - IPE240	S 235	0.305	N2234	N2347	general (0)
B495	CS3 - UNP240	S 235	0.305	N2227	N2348	general (0)
B496	CS4 - IPE240	S 235	0.305	N2231	N2349	general (0)
B497	CS4 - IPE240	S 235	0.305	N2233	N2350	general (0)
B498	CS3 - UNP240	S 235	0.305	N2228	N2351	general (0)
B499	CS4 - IPE240	S 235	0.305	N2230	N2352	general (0)
B500	CS5 - RD16	S 235	2.963	N2231	N2359	truss diagonal (90)
B501	CS5 - RD16	S 235	2.963	N2359	N2227	truss diagonal (90)
B502	CS5 - RD16	S 235	2.963	N2230	N2360	truss diagonal (90)
B503	CS5 - RD16	S 235	2.963	N2360	N2228	truss diagonal (90)
B504	CS6 - RO26.9X3.2	S 235	0.750	N2367	N2368	general (0)
B505	CS6 - RO26.9X3.2	S 235	0.750	N2369	N2367	general (0)
B506	CS6 - RO26.9X3.2	S 235	0.750	N2370	N2371	general (0)
B507	CS6 - RO26.9X3.2	S 235	0.750	N2372	N2370	general (0)
B508	CS4 - IPE240	S 235	0.305	N2268	N2361	general (0)
B509	CS4 - IPE240	S 235	0.305	N2267	N2362	general (0)
B510	CS3 - UNP240	S 235	0.305	N2264	N2363	general (0)
B511	CS4 - IPE240	S 235	0.305	N2265	N2364	general (0)
B512	CS3 - UNP240	S 235	0.305	N2252	N2365	general (0)
B513	CS4 - IPE240	S 235	0.305	N2266	N2366	general (0)
B514	CS4 - IPE240	S 235	7.990	N2364	N2376	general (0)
B515	CS4 - IPE240	S 235	7.990	N2378	N2361	general (0)
B516	CS4 - IPE240	S 235	7.990	N2375	N2362	general (0)
B517	CS4 - IPE240	S 235	7.990	N2366	N2373	general (0)
B518	CS3 - UNP240	S 235	7.990	N2374	N2365	general (0)
B519	CS3 - UNP240	S 235	7.990	N2363	N2377	general (0)
B520	CS5 - RD16	S 235	2.963	N2267	N2367	truss diagonal (90)
B521	CS5 - RD16	S 235	2.963	N2367	N2252	truss diagonal (90)
B522	CS5 - RD16	S 235	2.963	N2369	N2385	truss diagonal (90)
B523	CS5 - RD16	S 235	2.963	N2385	N2368	truss diagonal (90)
B524	CS5 - RD16	S 235	2.963	N2268	N2370	truss diagonal (90)
B525	CS5 - RD16	S 235	2.963	N2370	N2264	truss diagonal (90)

Name	Cross-section	Material	Length [m]	Beg. node	End node	Type
B526	CS5 - RD16	S 235	2.963	N2372	N2386	truss diagonal (90)
B527	CS5 - RD16	S 235	2.963	N2386	N2371	truss diagonal (90)
B528	CS4 - IPE240	S 235	0.305	N2297	N2373	general (0)
B529	CS3 - UNP240	S 235	0.305	N2290	N2374	general (0)
B530	CS4 - IPE240	S 235	0.305	N2294	N2375	general (0)
B531	CS4 - IPE240	S 235	0.305	N2296	N2376	general (0)
B532	CS3 - UNP240	S 235	0.305	N2291	N2377	general (0)
B533	CS4 - IPE240	S 235	0.305	N2293	N2378	general (0)
B534	CS5 - RD16	S 235	2.963	N2294	N2385	truss diagonal (90)
B535	CS5 - RD16	S 235	2.963	N2385	N2290	truss diagonal (90)
B536	CS5 - RD16	S 235	2.963	N2293	N2386	truss diagonal (90)
B537	CS5 - RD16	S 235	2.963	N2386	N2291	truss diagonal (90)
B538	CS6 - RO26.9X3.2	S 235	0.750	N2393	N2394	general (0)
B539	CS6 - RO26.9X3.2	S 235	0.750	N2395	N2393	general (0)
B540	CS6 - RO26.9X3.2	S 235	0.750	N2396	N2397	general (0)
B541	CS6 - RO26.9X3.2	S 235	0.750	N2398	N2396	general (0)
B542	CS4 - IPE240	S 235	0.305	N2285	N2387	general (0)
B543	CS4 - IPE240	S 235	0.305	N2284	N2388	general (0)
B544	CS3 - UNP240	S 235	0.305	N2281	N2389	general (0)
B545	CS4 - IPE240	S 235	0.305	N2282	N2390	general (0)
B546	CS3 - UNP240	S 235	0.305	N2273	N2391	general (0)
B547	CS4 - IPE240	S 235	0.305	N2283	N2392	general (0)
B548	CS4 - IPE240	S 235	7.990	N2390	N2402	general (0)
B549	CS4 - IPE240	S 235	7.990	N2404	N2387	general (0)
B550	CS4 - IPE240	S 235	7.990	N2401	N2388	general (0)
B551	CS4 - IPE240	S 235	7.990	N2392	N2399	general (0)
B552	CS3 - UNP240	S 235	7.990	N2400	N2391	general (0)
B553	CS3 - UNP240	S 235	7.990	N2389	N2403	general (0)
B554	CS5 - RD16	S 235	2.963	N2284	N2393	truss diagonal (90)
B555	CS5 - RD16	S 235	2.963	N2393	N2273	truss diagonal (90)
B556	CS5 - RD16	S 235	2.963	N2395	N2411	truss diagonal (90)
B557	CS5 - RD16	S 235	2.963	N2411	N2394	truss diagonal (90)
B558	CS5 - RD16	S 235	2.963	N2285	N2396	truss diagonal (90)
B559	CS5 - RD16	S 235	2.963	N2396	N2281	truss diagonal (90)
B560	CS5 - RD16	S 235	2.963	N2398	N2412	truss diagonal (90)
B561	CS5 - RD16	S 235	2.963	N2412	N2397	truss diagonal (90)
B562	CS4 - IPE240	S 235	0.305	N2257	N2399	general (0)
B563	CS3 - UNP240	S 235	0.305	N2250	N2400	general (0)
B564	CS4 - IPE240	S 235	0.305	N2254	N2401	general (0)
B565	CS4 - IPE240	S 235	0.305	N2256	N2402	general (0)
B566	CS3 - UNP240	S 235	0.305	N2251	N2403	general (0)
B567	CS4 - IPE240	S 235	0.305	N2253	N2404	general (0)
B568	CS5 - RD16	S 235	2.963	N2254	N2411	truss diagonal (90)
B569	CS5 - RD16	S 235	2.963	N2411	N2250	truss diagonal (90)
B570	CS5 - RD16	S 235	2.963	N2253	N2412	truss diagonal (90)
B571	CS5 - RD16	S 235	2.963	N2412	N2251	truss diagonal (90)
B572	CS4 - IPE240	S 235	7.990	N27	N32	general (0)
B573	CS6 - RO26.9X3.2	S 235	0.750	N2333	N1	general (0)
B574	CS6 - RO26.9X3.2	S 235	0.750	N2461	N2333	general (0)
B575	CS6 - RO26.9X3.2	S 235	0.750	N2462	N2334	general (0)
B576	CS6 - RO26.9X3.2	S 235	0.750	N2334	N2463	general (0)
B577	CS6 - RO26.9X3.2	S 235	0.750	N2359	N2464	general (0)
B578	CS6 - RO26.9X3.2	S 235	0.750	N2465	N2359	general (0)
B579	CS6 - RO26.9X3.2	S 235	0.750	N2466	N2360	general (0)
B580	CS6 - RO26.9X3.2	S 235	0.750	N2360	N2467	general (0)
B581	CS6 - RO26.9X3.2	S 235	0.750	N2385	N2468	general (0)
B582	CS6 - RO26.9X3.2	S 235	0.750	N2469	N2385	general (0)
B583	CS6 - RO26.9X3.2	S 235	0.750	N2470	N2386	general (0)
B584	CS6 - RO26.9X3.2	S 235	0.750	N2386	N2471	general (0)
B585	CS6 - RO26.9X3.2	S 235	0.750	N2411	N2472	general (0)
B586	CS6 - RO26.9X3.2	S 235	0.750	N2473	N2411	general (0)
B587	CS6 - RO26.9X3.2	S 235	0.750	N2474	N2412	general (0)
B588	CS6 - RO26.9X3.2	S 235	0.750	N2412	N2475	general (0)

6. 2D members

Name	Layer	Type	Element type	Material	Thickness type	Th. [mm]
S4	konstrukcija	plate (90)	Standard	C25/30	constant	450
S5	konstrukcija	plate (90)	Standard	C25/30	constant	450
S6	konstrukcija	plate (90)	Standard	C25/30	constant	450
S7	konstrukcija	plate (90)	Standard	C25/30	constant	450
S8	konstrukcija	plate (90)	Standard	C25/30	constant	450
S9	konstrukcija	plate (90)	Standard	C25/30	constant	450
S10	konstrukcija	plate (90)	Standard	C25/30	constant	450
S11	konstrukcija	plate (90)	Standard	C25/30	constant	450
S12	konstrukcija	plate (90)	Standard	C25/30	constant	450
S13	konstrukcija	plate (90)	Standard	C25/30	constant	450

7. Hinges

Name	Member	Position	ux	uy	uz	fix	fiy	fiz
H1	B252	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2	B179	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H3	B180	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H4	B181	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H5	B182	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H6	B198	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H7	B199	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H8	B200	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H9	B201	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H10	B241	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H11	B242	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H12	B243	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H13	B251	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H14	B253	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H15	B254	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H16	B261	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H17	B262	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H18	B263	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H19	B264	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H20	B271	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H21	B272	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H22	B273	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H23	B274	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H24	B281	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H25	B282	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H26	B283	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H27	B284	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H28	B291	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H29	B292	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H30	B293	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H31	B294	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H32	B301	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H33	B302	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H34	B303	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H35	B304	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H36	B311	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H37	B312	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H38	B313	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H39	B314	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H40	B436	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H41	B437	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H42	B438	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H43	B439	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H44	B470	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H45	B471	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H46	B472	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H47	B473	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H48	B504	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H49	B505	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H50	B506	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H51	B507	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H52	B538	Both	Rigid	Rigid	Rigid	Rigid	Free	Free

Name	Member	Position	ux	uy	uz	fix	fiy	fiz
H53	B539	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H54	B540	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H55	B541	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H56	B573	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H57	B574	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H58	B575	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H59	B576	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H60	B577	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H61	B578	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H62	B579	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H63	B580	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H64	B581	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H65	B582	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H66	B583	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H67	B584	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H68	B585	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H69	B586	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H70	B587	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H71	B588	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H237	B244	Both	Rigid	Rigid	Rigid	Rigid	Free	Free

8. Rigid arms

Name	Master	Slave	Hinge on master	Hinge on slave
RA1	N142	N141	No	No
RA2	N146	N121	No	No
RA3	N146	N127	No	No
RA4	N112	N111	No	No
RA5	N116	N91	No	No
RA6	N116	N97	No	No
RA7	N114	N103	No	No
RA8	N114	N109	No	No
RA9	N82	N81	No	No
RA10	N86	N61	No	No
RA11	N86	N67	No	No
RA12	N84	N73	No	No
RA13	N84	N79	No	No
RA14	N172	N171	No	No
RA15	N56	N55	No	No
RA16	N2206	N169	No	No
RA17	N2206	N170	No	No
RA18	N2205	N168	No	No
RA19	N2205	N167	No	No
RA20	N2216	N35	No	No
RA21	N2216	N41	No	No
RA22	N2215	N47	No	No
RA23	N2215	N53	No	No
RA24	N14	N13	No	No
RA25	N2	N11	No	No
RA26	N2	N12	No	No
RA27	N4	N10	No	No
RA28	N4	N9	No	No
RA29	N2224	N2231	No	No
RA30	N2226	N2230	No	No
RA31	N2247	N2254	No	No
RA32	N2249	N2253	No	No
RA33	N2270	N2219	No	No
RA34	N2272	N2218	No	No
RA35	N2287	N2294	No	No
RA36	N2289	N2293	No	No
RA37	N2224	N2244	No	No
RA38	N2226	N2245	No	No
RA39	N2287	N2307	No	No
RA40	N2289	N2308	No	No
RA41	N2247	N2267	No	No
RA42	N2249	N2268	No	No
RA43	N2270	N2284	No	No

Name	Master	Slave	Hinge on master	Hinge on slave
RA44	N2272	N2285	No	No
RA45	N2274	N2415	No	No
RA46	N2255	N2414	No	No
RA47	N2295	N2413	No	No
RA48	N2232	N2185	No	No
RA49	N144	N139	No	No
RA50	N144	N133	No	No

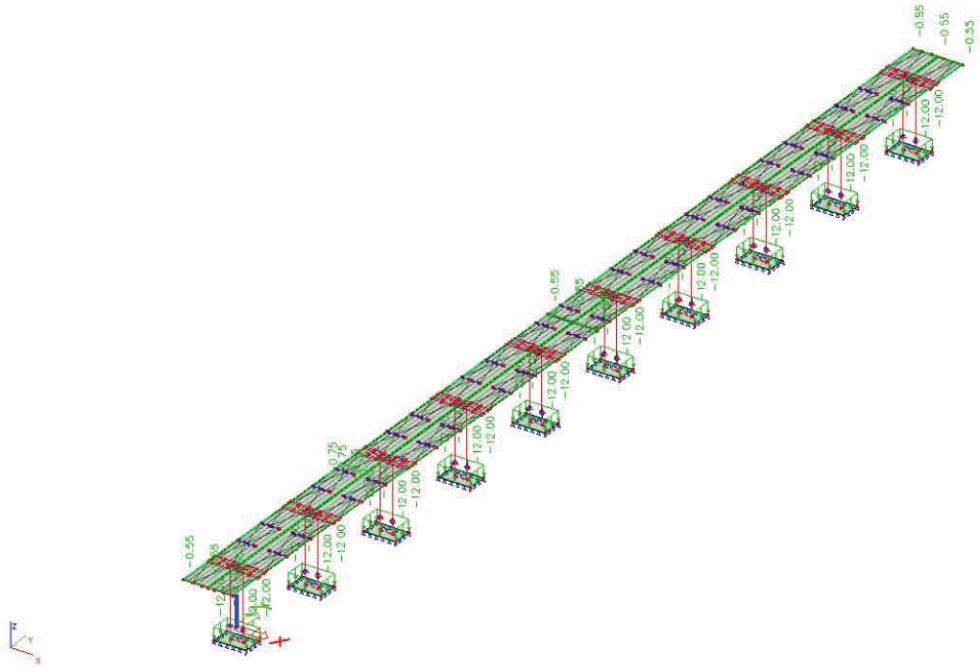
2. OBTEŽBE IN OBTEŽNE KOMBINACIJE

2.1. Obtežbe

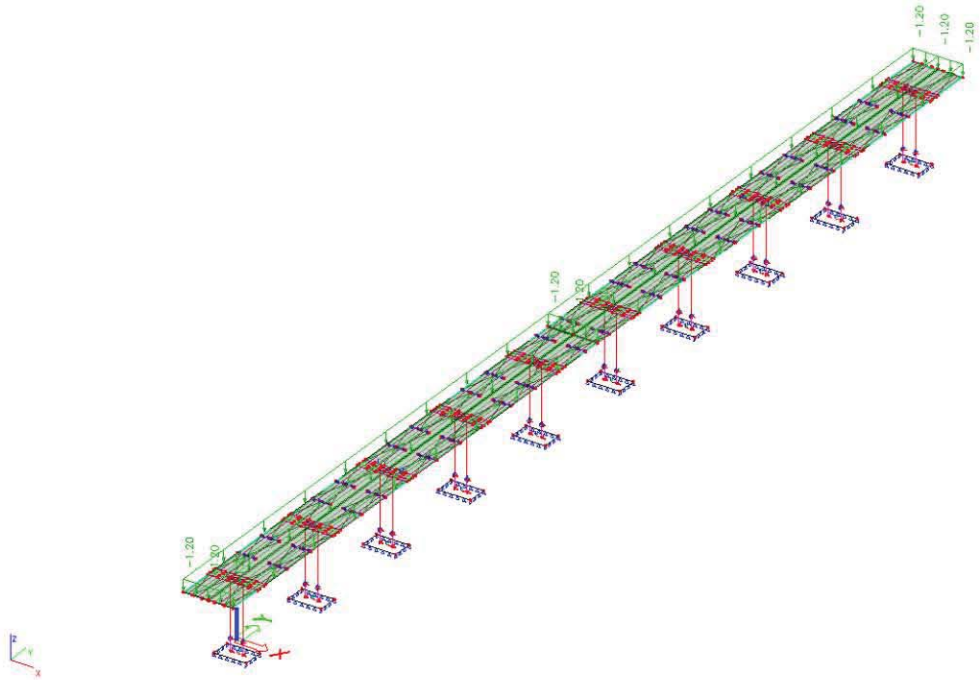
10. Load cases

Name	Description	Action type	Load group	Direction	Duration	Master load case
	Spec	Load type				
lastna		Permanent	L	-Z		
		Self weight				
stalna		Permanent	L			
		Standard				
sneg		Variable	S		Short	None
	Standard	Static				
horiz. ograja		Variable	HO		Short	None
	Standard	Static				
W x		Variable	Wxy		Short	None
	Standard	Static				
W -x		Variable	Wxy		Short	None
	Standard	Static				
W y		Variable	Wxy		Short	None
	Standard	Static				
W -y		Variable	Wxy		Short	None
	Standard	Static				
potres X		Variable	Ex			None
	Seismicity	Dynamic				
potres Y		Variable	Ey			None
	Seismicity	Dynamic				
W pritisk streha		Variable	Wps		Short	None
	Standard	Static				
W srk streha		Variable	Wps		Short	None
	Standard	Static				
Aeropri-1		Variable	aer		Short	None
	Standard	Static				
Aeropri-2		Variable	aer		Short	None
	Standard	Static				
sneg-s1		Variable	S		Short	None
	Standard	Static				
sneg-s2		Variable	S		Short	None
	Standard	Static				

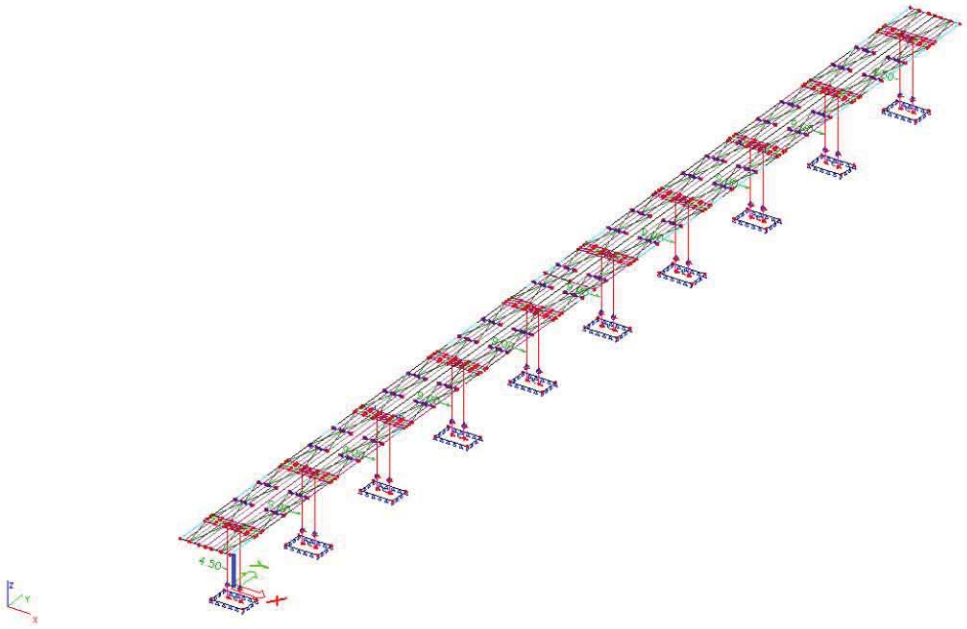
stalna



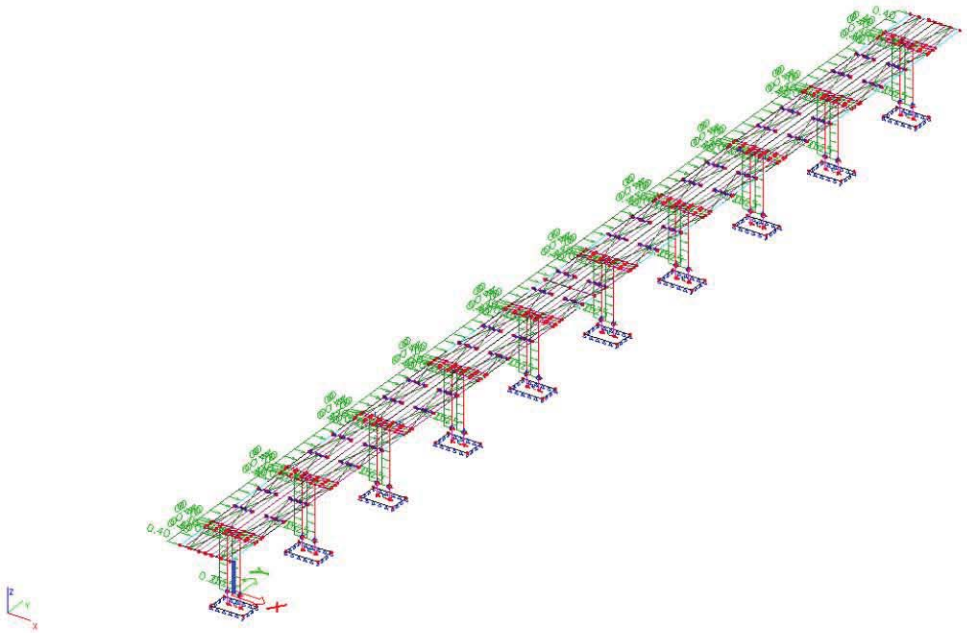
sneg



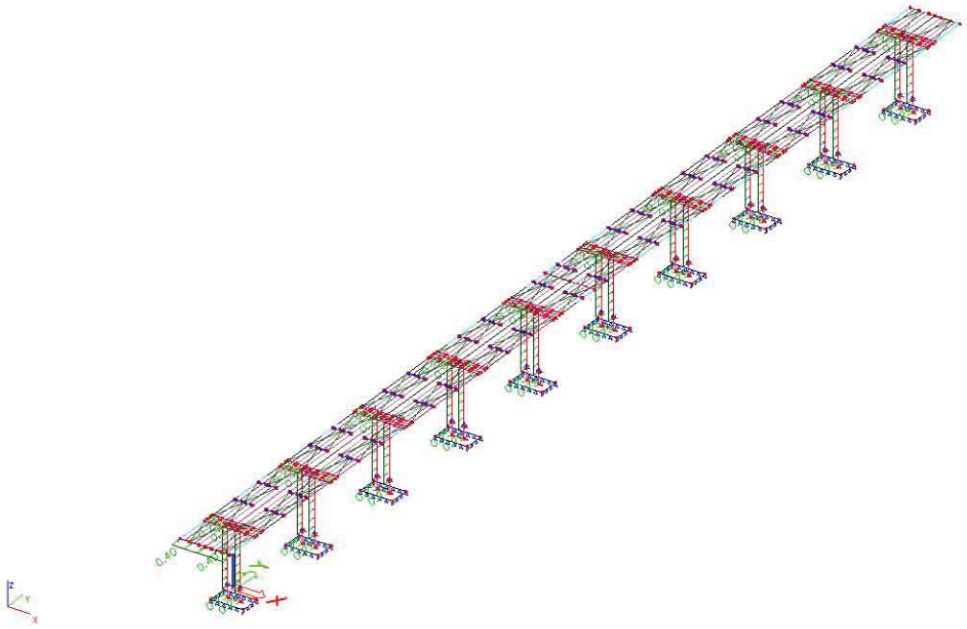
horzontalna ograja



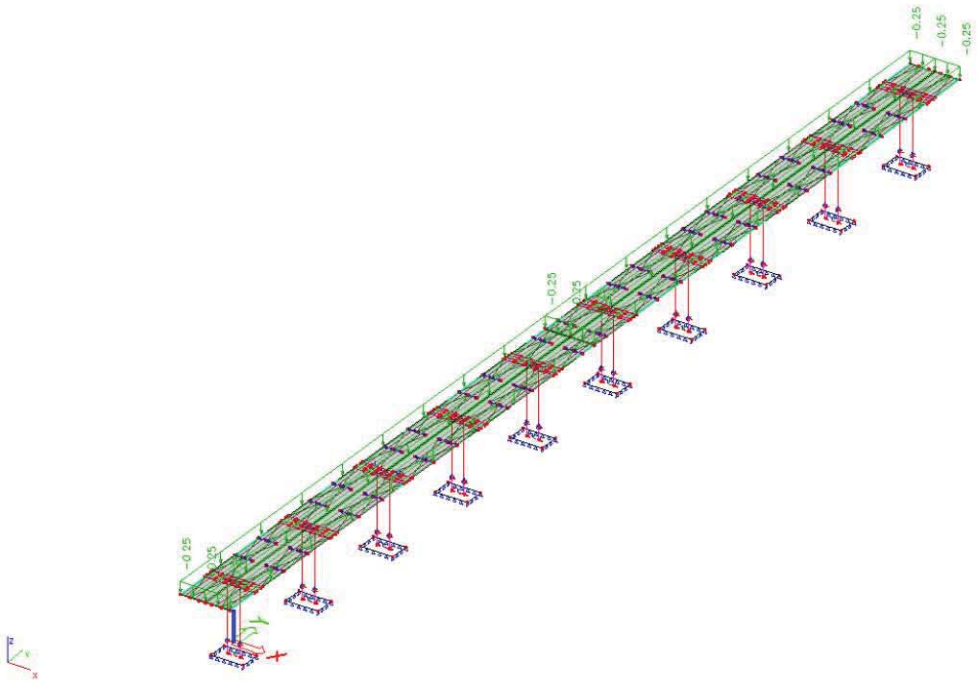
Wx



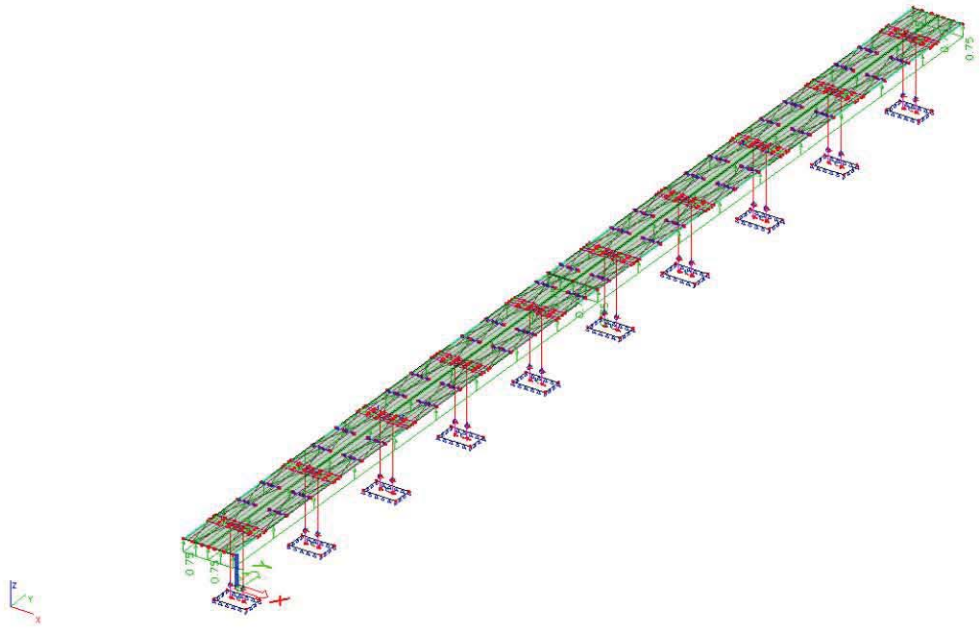
Wy



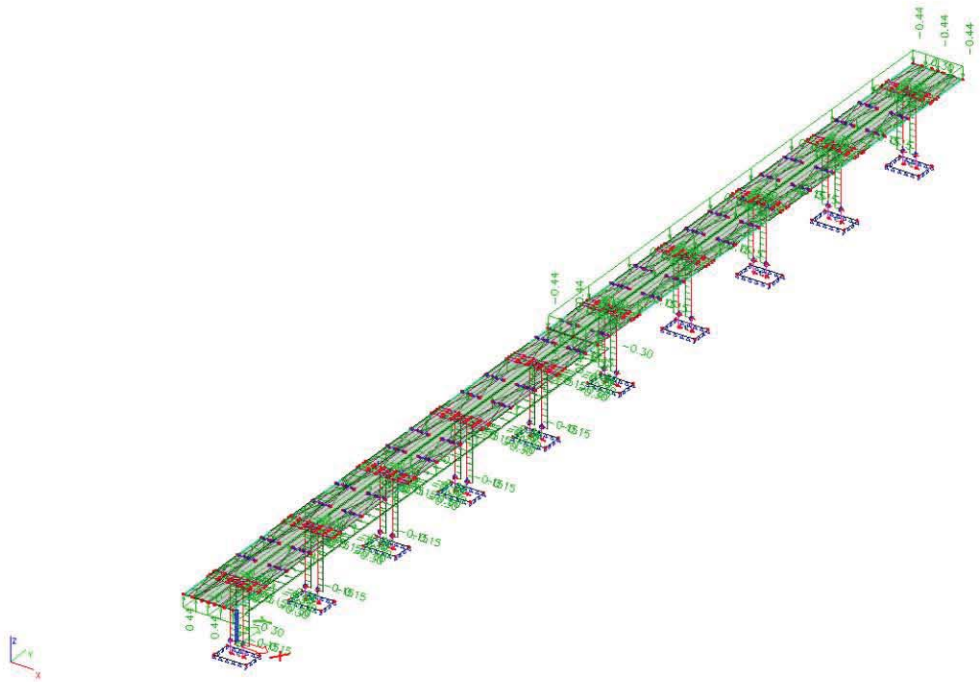
Wpritsk streha



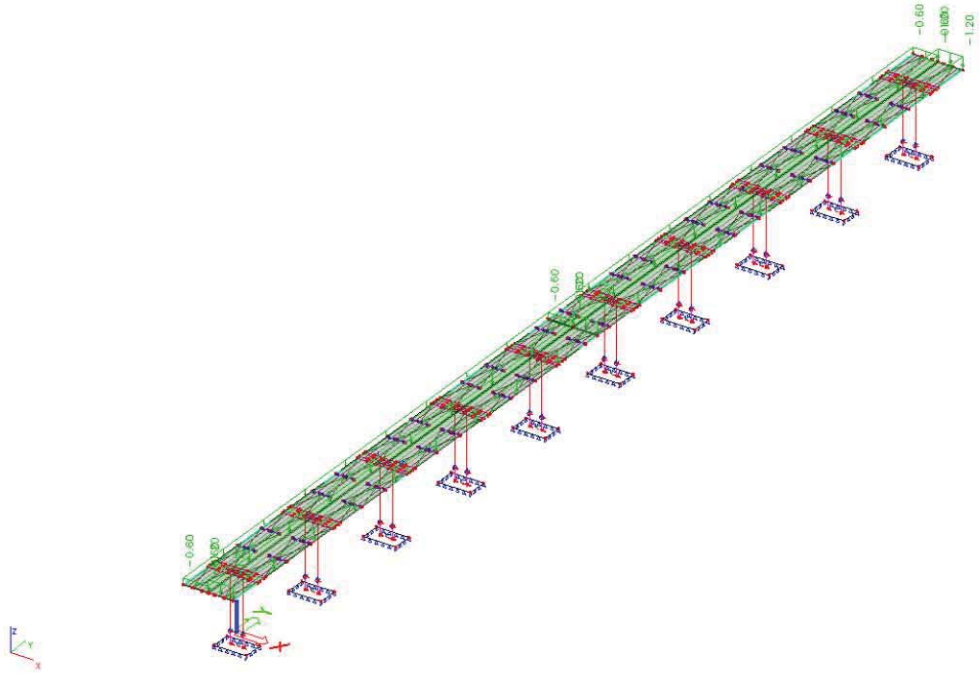
W srk streha



aeroprit-1



sneg-s1



11. Combinations

Name	Description	Type	Load cases	Coeff. [-]
potres 1		Linear - ultimate	lastna	1.00
			stalna	1.00
			potres X	1.00
			potres Y	0.30
potres 2		Linear - ultimate	lastna	1.00
			stalna	1.00
			potres X	1.00
			potres Y	-0.30
potres 3		Linear - ultimate	lastna	1.00
			stalna	1.00
			potres X	-1.00
			potres Y	0.30
potres 4		Linear - ultimate	lastna	1.00
			stalna	1.00
			potres X	-1.00
			potres Y	-0.30
potres 5		Linear - ultimate	lastna	1.00
			stalna	1.00
			potres X	0.30
			potres Y	1.00
potres 6		Linear - ultimate	lastna	1.00
			stalna	1.00
			potres X	-0.30
			potres Y	1.00
potres 7		Linear - ultimate	lastna	1.00
			stalna	1.00
			potres X	0.30
			potres Y	-1.00
potres 8		Linear - ultimate	lastna	1.00
			stalna	1.00
			potres X	-0.30
			potres Y	-1.00
MSN-temelj-1-1		Envelope - ultimate	lastna	1.35
			stalna	1.35
			sneg	1.50
			horiz. ograja	0.90
			W x	0.90
			W -x	0.90
			W y	0.90
			W -y	0.90
			W pritisk streha	0.90
			W srk streha	0.90
			Aeropri-1	0.90
			Aeropri-2	0.90
MSN-temelj-1-2		Envelope - ultimate	lastna	1.00
			stalna	1.00
			sneg	1.50
			horiz. ograja	0.90
			W x	0.90
			W -x	0.90
			W y	0.90
			W -y	0.90
			W pritisk streha	0.90
			W srk streha	0.90
			Aeropri-1	0.90
			Aeropri-2	0.90
MSN-temelj-2-1		Envelope - ultimate	lastna	1.35
			stalna	1.35
			sneg	0.90
			horiz. ograja	1.50
			W x	0.90
			W -x	0.90
			W y	0.90

Name	Description	Type	Load cases	Coeff. [-]
			W -y	0.90
			W pritisk streha	0.90
			W srk streha	0.90
			Aeropri-1	0.90
			Aeropri-2	0.90
MSN-temelj-2-2		Envelope - ultimate	lastna	1.00
			stalna	1.00
			sneg	0.90
			horiz. ograja	1.50
			W x	0.90
			W -x	0.90
			W y	0.90
			W -y	0.90
			W pritisk streha	0.90
			W srk streha	0.90
			Aeropri-1	0.90
			Aeropri-2	0.90
MSN-temelj-3-1		Envelope - ultimate	lastna	1.35
			stalna	1.35
			sneg	0.90
			horiz. ograja	0.90
			W x	1.50
			W -x	1.50
			W y	1.50
			W -y	1.50
			W pritisk streha	0.90
			W srk streha	0.90
			Aeropri-1	0.90
			Aeropri-2	0.90
MSN-temelj-3-2		Envelope - ultimate	lastna	1.00
			stalna	1.00
			sneg	0.90
			horiz. ograja	0.90
			W x	1.50
			W -x	1.50
			W y	1.50
			W -y	1.50
			W pritisk streha	0.90
			W srk streha	0.90
			Aeropri-1	0.90
			Aeropri-2	0.90
MSN-temelj-4-1		Envelope - ultimate	lastna	1.35
			stalna	1.35
			sneg	0.90
			horiz. ograja	0.90
			W x	0.90
			W -x	0.90
			W y	0.90
			W -y	0.90
			W pritisk streha	1.50
			W srk streha	0.90
			Aeropri-1	0.90
			Aeropri-2	0.90
MSN-temelj-4-2		Envelope - ultimate	lastna	1.00
			stalna	1.00
			sneg	0.90
			horiz. ograja	0.90
			W x	0.90
			W -x	0.90
			W y	0.90
			W -y	0.90
			W pritisk streha	1.50
			W srk streha	0.90
			Aeropri-1	0.90
			Aeropri-2	0.90
MSN-temelj-5-1		Envelope - ultimate	lastna	1.35

Name	Description	Type	Load cases	Coeff. [-]
			stalna	1.35
			sneg	0.90
			horiz. ograja	0.90
			W x	0.90
			W -x	0.90
			W y	0.90
			W -y	0.90
			W pritisk streha	0.90
			W srk streha	1.50
			Aeropri-1	0.90
			Aeropri-2	0.90
MSN-temelj-5-2		Envelope - ultimate	lastna	1.00
			stalna	1.00
			sneg	0.90
			horiz. ograja	0.90
			W x	0.90
			W -x	0.90
			W y	0.90
			W -y	0.90
			W pritisk streha	0.90
			W srk streha	1.50
			Aeropri-1	0.90
			Aeropri-2	0.90
MSN-temelj-6-1		Envelope - ultimate	lastna	1.35
			stalna	1.35
			sneg	0.90
			horiz. ograja	0.90
			W x	0.90
			W -x	0.90
			W y	0.90
			W -y	0.90
			W pritisk streha	0.90
			W srk streha	0.90
			Aeropri-1	1.50
			Aeropri-2	1.50
MSN-temelj-6-2		Envelope - ultimate	lastna	1.00
			stalna	1.00
			sneg	0.90
			horiz. ograja	0.90
			W x	0.90
			W -x	0.90
			W y	0.90
			W -y	0.90
			W pritisk streha	0.90
			W srk streha	0.90
			Aeropri-1	1.50
			Aeropri-2	1.50
MSN-temelj-7		Linear - ultimate	lastna	1.35
			stalna	1.35
			W x	0.90
			sneg-s1	1.50
MSN-temelj-8		Linear - ultimate	lastna	1.35
			stalna	1.35
			W -x	0.90
			sneg-s2	1.50

12. Nonlinear combinations

Name	Type	Load cases	Coeff. [-]
NC1	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	1.50
		W pritisk streha	1.50
NC2	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	1.50
		W x	1.50
		W pritisk streha	1.50
NC3	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	1.50
		W -x	1.50
		W pritisk streha	1.50
NC4	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	1.50
		W y	1.50
		W pritisk streha	1.50
NC5	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	1.50
		W -y	1.50
		W pritisk streha	1.50
NC6	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W x	1.50
		W srk streha	1.50
NC7	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W -x	1.50
		W srk streha	1.50
NC8	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W y	1.50
		W srk streha	1.50
NC9	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W -y	1.50
		W srk streha	1.50
NC10	Serviceability	lastna	1.00
		stalna	1.00
		sneg	1.00
		horiz. ograja	1.00
		W x	1.00
		W pritisk streha	1.00
NC11	Serviceability	lastna	1.00
		stalna	1.00
		sneg	1.00
		horiz. ograja	1.00
		W -x	1.00
		W pritisk streha	1.00
NC12	Serviceability	lastna	1.00
		stalna	1.00

Name	Type	Load cases	Coeff. [-]
		sneg	1.00
		horiz. ograja	1.00
		W y	1.00
		W pritisk streha	1.00
NC13	Serviceability	lastna	1.00
		stalna	1.00
		sneg	1.00
		horiz. ograja	1.00
		W -y	1.00
		W pritisk streha	1.00
NC14	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W pritisk streha	1.50
		Aeropri-1	0.90
NC15	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W x	1.50
		W pritisk streha	1.50
		Aeropri-1	0.90
NC16	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W -x	1.50
		W pritisk streha	1.50
		Aeropri-1	0.90
NC17	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W y	1.50
		W pritisk streha	1.50
		Aeropri-1	0.90
NC18	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W -y	1.50
		W pritisk streha	1.50
		Aeropri-1	0.90
NC19	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W x	1.50
		W srk streha	1.50
		Aeropri-1	0.90
NC20	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W -x	1.50
		W srk streha	1.50
		Aeropri-1	0.90
NC21	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W y	1.50
		W srk streha	1.50
		Aeropri-1	0.90
NC22	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W -y	1.50

Name	Type	Load cases	Coeff. [-]
		W srk streha	1.50
		Aeropri-1	0.90
NC23	Ultimate	lastna	1.35
		stalna	1.35
		sneg	0.90
		horiz. ograja	1.50
		W pritisk streha	1.50
		Aeropri-2	0.90
NC24	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W x	1.50
		W pritisk streha	1.50
		Aeropri-2	0.90
NC25	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W -x	1.50
		W pritisk streha	1.50
		Aeropri-2	0.90
NC26	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W y	1.50
		W pritisk streha	1.50
		Aeropri-2	0.90
NC27	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W -y	1.50
		W pritisk streha	1.50
		Aeropri-2	0.90
NC28	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W x	1.50
		W srk streha	1.50
		Aeropri-2	0.90
NC29	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W -x	1.50
		W srk streha	1.50
		Aeropri-2	0.90
NC30	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W y	1.50
		W srk streha	1.50
		Aeropri-2	0.90
NC31	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W -y	1.50
		W srk streha	1.50
		Aeropri-2	0.90
NC32	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W pritisk streha	0.90
		Aeropri-1	1.50

Name	Type	Load cases	Coeff. [-]
NC33	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W x	0.90
		W pritisk streha	0.90
		Aeropri-1	1.50
NC34	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W -x	0.90
		W pritisk streha	0.90
		Aeropri-1	1.50
NC35	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W y	0.90
		W pritisk streha	0.90
		Aeropri-1	1.50
NC36	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W -y	0.90
		W pritisk streha	0.90
		Aeropri-1	1.50
NC37	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W x	0.90
		W srk streha	0.90
		Aeropri-1	1.50
NC38	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W -x	0.90
		W srk streha	0.90
		Aeropri-1	1.50
NC39	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W y	0.90
		W srk streha	0.90
		Aeropri-1	1.50
NC40	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W -y	0.90
		W srk streha	0.90
		Aeropri-1	1.50
NC41	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W pritisk streha	0.90
		Aeropri-2	1.50
NC42	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W x	0.90
		W pritisk streha	0.90
		Aeropri-2	1.50
NC43	Ultimate	lastna	1.35

Name	Type	Load cases	Coeff. [-]
		stalna	1.35
		sneg	0.90
		horiz. ograja	1.50
		W -x	0.90
		W pritisk streha	0.90
		Aeropri-2	1.50
NC44	Ultimate	lastna	1.35
		stalna	1.35
		sneg	0.90
		horiz. ograja	1.50
		W y	0.90
		W pritisk streha	0.90
		Aeropri-2	1.50
NC45	Ultimate	lastna	1.35
		stalna	1.35
		sneg	0.90
		horiz. ograja	1.50
		W -y	0.90
		W pritisk streha	0.90
		Aeropri-2	1.50
NC46	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W x	0.90
		W srk streha	0.90
		Aeropri-2	1.50
NC47	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W -x	0.90
		W srk streha	0.90
		Aeropri-2	1.50
NC48	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W y	0.90
		W srk streha	0.90
		Aeropri-2	1.50
NC49	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W -y	0.90
		W srk streha	0.90
		Aeropri-2	1.50
NC50-s1	Ultimate	lastna	1.35
		stalna	1.35
		W x	0.90
		sneg-s1	1.50
NC51-s2	Ultimate	lastna	1.35
		stalna	1.35
		W -x	0.90
		sneg-s2	1.50

13. Mass groups

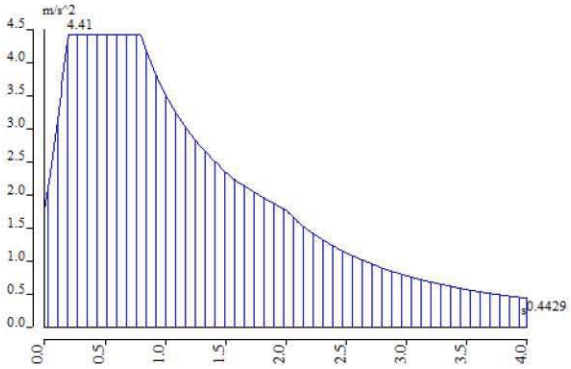
Name	Load case	Description
MG1	lastna	lastna
MG2	stalna	stalna

14. Combination of mass groups

Name	Mass group	Coeff. [-]
CM1	MG1 - lastna	1.00
	MG2 - stalna	1.00
CM1/1 - 2.65		
CM1/2 - 2.67		
CM1/3 - 2.68		
CM1/4 - 2.97		
CM1/5 - 3.44		
CM1/6 - 4.08		
CM1/7 - 4.75		
CM1/8 - 5.52		
CM1/9 - 6.24		
CM1/10 - 6.72		
CM1/11 - 6.76		
CM1/12 - 6.82		
CM1/13 - 6.90		
CM1/14 - 7.06		
CM1/15 - 7.57		
CM1/16 - 7.68		
CM1/17 - 7.96		
CM1/18 - 8.13		
CM1/19 - 8.39		
CM1/20 - 8.42		
CM1/21 - 8.54		
CM1/22 - 8.83		
CM1/23 - 8.87		
CM1/24 - 8.99		
CM1/25 - 9.06		
CM1/26 - 9.10		
CM1/27 - 9.11		
CM1/28 - 9.13		
CM1/29 - 9.15		
CM1/30 - 9.15		
CM1/31 - 9.16		
CM1/32 - 9.16		
CM1/33 - 9.16		
CM1/34 - 9.17		
CM1/35 - 9.17		
CM1/36 - 9.17		
CM1/37 - 9.20		
CM1/38 - 9.23		
CM1/39 - 9.24		
CM1/40 - 9.25		
CM1/41 - 9.25		
CM1/42 - 9.30		
CM1/43 - 9.33		
CM1/44 - 9.34		
CM1/45 - 9.35		
CM1/46 - 9.37		
CM1/47 - 9.37		
CM1/48 - 9.38		
CM1/49 - 9.41		
CM1/50 - 9.45		
CM1/51 - 9.45		
CM1/52 - 9.46		
CM1/53 - 9.46		
CM1/54 - 9.46		
CM1/55 - 9.46		

Name	Mass group	Coeff. [-]
CM1/56 - 9.46		
CM1/57 - 9.46		
CM1/58 - 9.47		
CM1/59 - 9.47		
CM1/60 - 9.47		
CM1/61 - 9.55		
CM1/62 - 9.59		
CM1/63 - 9.65		
CM1/64 - 9.75		
CM1/65 - 9.83		
CM1/66 - 9.88		
CM1/67 - 9.96		
CM1/68 - 10.15		
CM1/69 - 10.36		
CM1/70 - 10.43		
CM1/71 - 10.49		
CM1/72 - 10.64		
CM1/73 - 10.97		
CM1/74 - 11.03		
CM1/75 - 11.07		
CM1/76 - 11.14		
CM1/77 - 11.20		
CM1/78 - 11.34		
CM1/79 - 11.41		
CM1/80 - 11.51		
CM1/81 - 11.61		
CM1/82 - 11.66		
CM1/83 - 11.74		
CM1/84 - 11.78		
CM1/85 - 11.85		
CM1/86 - 11.97		
CM1/87 - 12.07		
CM1/88 - 12.12		
CM1/89 - 12.19		
CM1/90 - 12.23		
CM1/91 - 12.37		
CM1/92 - 12.52		
CM1/93 - 12.69		
CM1/94 - 12.78		
CM1/95 - 12.86		
CM1/96 - 12.89		
CM1/97 - 13.02		
CM1/98 - 13.08		
CM1/99 - 13.31		
CM1/100 - 13.36		

15. Seismic spectrums

Name	Type drawing	Info	Drawing
UniqueID			
EC 8, class D, q = 1.5, ag=0.20	Period	Type code - Eurocode Subsoil type - D Direction - Horizontal Spectrum type - type 1 coeff accel. ag - 0.2 ag - design acceleration - 1.962 beta - 0.2 q - behaviour factor - 1.5	

2.2. Ovojnice

16. Result classes

Name	Description	List
ULS-potres	linearno	potres 2 - Linear - ultimate
		potres 3 - Linear - ultimate
		potres 4 - Linear - ultimate
		potres 5 - Linear - ultimate
		potres 6 - Linear - ultimate
		potres 7 - Linear - ultimate
		potres 8 - Linear - ultimate
		potres 1 - Linear - ultimate
ULS	nelinearno	NC1
		NC2
		NC3
		NC4
		NC5
		NC6
		NC7
		NC8
		NC9
		NC14
		NC15
		NC16
		NC17
		NC18
		NC19
		NC20
		NC21
		NC22
		NC23
		NC24
		NC25
		NC26
		NC27
		NC28
		NC29
		NC30
		NC31
		NC32
		NC33
		NC34
		NC35
		NC36
		NC37
		NC38
		NC39
		NC40
		NC41
		NC42
		NC43
		NC44
		NC45
		NC46
		NC47
		NC48
		NC49
		NC50-s1
		NC51-s2
SLS	linearno	NC10
		NC11
		NC12
		NC13
ULS-temelji	linearno	MSN-temelj-1-1 - Envelope - ultimate
		MSN-temelj-1-2 - Envelope - ultimate

Name	Description	List
		MSN-temelj-2-1 - Envelope - ultimate
		MSN-temelj-2-2 - Envelope - ultimate
		MSN-temelj-3-1 - Envelope - ultimate
		MSN-temelj-3-2 - Envelope - ultimate
		MSN-temelj-4-1 - Envelope - ultimate
		MSN-temelj-4-2 - Envelope - ultimate
		MSN-temelj-5-1 - Envelope - ultimate
		MSN-temelj-5-2 - Envelope - ultimate
		MSN-temelj-6-1 - Envelope - ultimate
		MSN-temelj-6-2 - Envelope - ultimate
		MSN-temelj-7 - Linear - ultimate
		MSN-temelj-8 - Linear - ultimate

2.3. Računski protokoli

17. Calculation protocol

Linear calculation

Number of 2D elements	530
Number of 1D elements	2996
Number of mesh nodes	3345
Number of equations	20070
Bending theory	Mindlin
Load cases	lastna, stalna, sneg, horiz. ograja, W x, W -x, W y, W -y, W pritisk streha, W srk streha, Aeropri-1, Aeropri-2, sneg-s1, sneg-s2
Start of calculation	18.04.2021 08:37
End of calculation	18.04.2021 08:37

Sum of loads and reactions

Load case	Value	X [kN]	Y [kN]	Z [kN]
lastna	loads	0.00	0.00	-899.32
	reaction in nodes	0.00	0.00	0.00
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	0.00	0.00	899.32
stalna	loads	0.00	0.00	-695.61
	reaction in nodes	0.00	0.00	0.00
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	0.00	0.00	695.61
sneg	loads	0.00	0.00	-421.99
	reaction in nodes	0.00	0.00	0.00
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	0.00	0.00	421.99
horiz. ograja	loads	81.00	0.00	0.00
	reaction in nodes	0.00	0.00	0.00
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	-81.00	0.00	0.00
W x	loads	58.49	0.00	0.00
	reaction in nodes	0.00	0.00	0.00
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	-58.49	0.00	0.00
W -x	loads	-58.49	0.00	0.00
	reaction in nodes	0.00	0.00	0.00
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	58.49	0.00	0.00
W y	loads	0.00	24.93	0.00
	reaction in nodes	0.00	0.00	0.00
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	0.00	-24.93	0.00
W -y	loads	0.00	-24.93	0.00
	reaction in nodes	0.00	0.00	0.00
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	0.00	24.93	0.00

Load case	Value	X [kN]	Y [kN]	Z [kN]
W pritisk streha	loads	0.00	0.00	-87.91
	reaction in nodes	0.00	0.00	0.00
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	0.00	0.00	87.91
W srk streha	loads	0.00	0.00	263.74
	reaction in nodes	0.00	0.00	0.00
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	0.00	0.00	-263.74
Aeropri-1	loads	-7.79	0.00	0.00
	reaction in nodes	0.00	0.00	0.00
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	7.79	0.00	0.00
Aeropri-2	loads	-11.92	0.00	0.00
	reaction in nodes	0.00	0.00	0.00
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	11.92	0.00	0.00
sneg-s1	loads	0.00	0.00	-316.49
	reaction in nodes	0.00	0.00	0.00
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	0.00	0.00	316.49
sneg-s2	loads	0.00	0.00	-316.49
	reaction in nodes	0.00	0.00	0.00
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	0.00	0.00	316.49

The following dynamic load cases are detailed separately (see below):potres X, potres Y

Dynamic load case 15 : potres X

Mode	Freq. [Hz]	Damp ratio	Damp coef.	Sax [m/s^2]	Say [m/s^2]	Saz [m/s^2]	G(j) [-]	Fx [kN]	Fy [kN]	Mx [kNm]	My [kNm]
1	2.65	0.05	1	4.415	0.000	0.000	-3.46	207.85	0.47	-1.92	-844.86
2	2.67	0.05	1	4.415	0.000	0.000	-0.02	0.01	-1.44	5.82	-0.03
3	2.68	0.05	1	4.415	0.000	0.000	1.33	32.47	0.98	-3.96	-131.52
4	2.97	0.05	1	4.415	0.000	0.000	0.24	1.55	-0.02	0.07	-6.08
5	3.44	0.05	1	4.415	0.000	0.000	0.02	0.01	0.00	0.00	-0.05
6	4.08	0.05	1	4.415	0.000	0.000	0.04	0.18	0.00	-0.01	-0.59
7	4.75	0.05	1	4.415	0.000	0.000	0.01	0.01	0.00	0.00	-0.03
8	5.52	0.05	1	4.166	0.000	0.000	-0.01	0.05	0.00	0.00	-0.10
9	6.24	0.05	1	3.891	0.000	0.000	0.00	0.00	0.00	0.00	0.00
10	6.72	0.05	1	3.740	0.000	0.000	0.00	0.00	0.01	-0.02	0.00
11	6.76	0.05	1	3.726	0.000	0.000	0.00	0.00	0.01	-0.01	0.00
12	6.82	0.05	1	3.710	0.000	0.000	0.00	0.00	0.00	0.00	0.00
13	6.90	0.05	1	3.686	0.000	0.000	0.00	0.00	0.00	0.00	0.00
14	7.06	0.05	1	3.643	0.000	0.000	0.00	0.01	0.00	0.00	-0.01
15	7.57	0.05	1	3.516	0.000	0.000	0.00	0.00	0.00	0.00	0.00
16	7.68	0.05	1	3.493	0.000	0.000	0.00	0.00	0.00	0.00	0.00
17	7.96	0.05	1	3.431	0.000	0.000	0.00	0.00	-0.01	0.00	0.00
18	8.13	0.05	1	3.395	0.000	0.000	0.00	0.04	-0.21	0.00	-0.01
19	8.39	0.05	1	3.348	0.000	0.000	0.00	0.03	0.07	0.02	0.00
20	8.42	0.05	1	3.342	0.000	0.000	0.00	0.00	0.00	0.00	0.00
21	8.54	0.05	1	3.318	0.000	0.000	-0.01	0.31	0.03	0.01	0.08
22	8.83	0.05	1	3.265	0.000	0.000	0.00	0.04	0.00	0.00	0.02
23	8.87	0.05	1	3.259	0.000	0.000	0.00	0.01	0.00	0.00	0.01
24	8.99	0.05	1	3.241	0.000	0.000	0.00	0.02	0.05	0.05	0.02
25	9.06	0.05	1	3.230	0.000	0.000	0.02	1.72	-2.67	-2.60	1.58
26	9.10	0.05	1	3.224	0.000	0.000	-0.02	2.03	0.41	0.42	1.96
27	9.11	0.05	1	3.222	0.000	0.000	-0.08	21.57	3.74	3.82	21.44

Mode	Freq. [Hz]	Damp ratio	Damp coef.	Sax [m/s^2]	Say [m/s^2]	Saz [m/s^2]	G(j) [-]	Fx [kN]	Fy [kN]	Mx [kNm]	My [kNm]
28	9.13	0.05	1	3.219	0.000	0.000	-0.04	5.83	1.77	1.85	5.98
29	9.15	0.05	1	3.217	0.000	0.000	-0.04	5.20	0.76	0.81	5.37
30	9.15	0.05	1	3.215	0.000	0.000	-0.16	85.28	1.51	1.61	89.29
31	9.16	0.05	1	3.215	0.000	0.000	0.11	44.71	-0.04	-0.04	47.14
32	9.16	0.05	1	3.215	0.000	0.000	0.19	127.86	0.92	0.99	134.82
33	9.16	0.05	1	3.214	0.000	0.000	0.09	28.69	-5.30	-5.70	30.36
34	9.17	0.05	1	3.214	0.000	0.000	0.03	3.75	-3.36	-3.63	3.98
35	9.17	0.05	1	3.213	0.000	0.000	0.05	9.82	1.99	2.17	10.35
36	9.17	0.05	1	3.212	0.000	0.000	0.00	0.00	-0.03	-0.03	0.00
37	9.20	0.05	1	3.208	0.000	0.000	0.00	0.01	1.25	1.41	0.01
38	9.23	0.05	1	3.204	0.000	0.000	0.00	0.02	0.00	0.00	0.02
39	9.24	0.05	1	3.202	0.000	0.000	-0.01	0.14	0.90	1.04	0.16
40	9.25	0.05	1	3.201	0.000	0.000	-0.02	0.98	8.07	9.45	1.16
41	9.25	0.05	1	3.200	0.000	0.000	-0.03	3.57	-9.34	-10.96	4.22
42	9.30	0.05	1	3.192	0.000	0.000	-0.01	0.29	-0.04	-0.05	0.38
43	9.33	0.05	1	3.188	0.000	0.000	0.00	0.00	0.00	0.00	0.00
44	9.34	0.05	1	3.187	0.000	0.000	0.00	0.00	0.00	0.00	0.00
45	9.35	0.05	1	3.185	0.000	0.000	0.00	0.00	0.00	0.00	0.00
46	9.37	0.05	1	3.182	0.000	0.000	0.00	0.06	0.01	0.01	0.08
47	9.37	0.05	1	3.181	0.000	0.000	0.01	0.13	0.07	0.09	0.18
48	9.38	0.05	1	3.180	0.000	0.000	0.00	0.00	0.00	0.00	0.00
49	9.41	0.05	1	3.175	0.000	0.000	0.00	0.00	0.00	0.00	0.00
50	9.45	0.05	1	3.170	0.000	0.000	0.00	0.02	-0.03	-0.04	0.03
51	9.45	0.05	1	3.169	0.000	0.000	0.00	0.00	0.00	0.00	0.00
52	9.46	0.05	1	3.169	0.000	0.000	0.00	0.01	-0.01	-0.01	0.01
53	9.46	0.05	1	3.168	0.000	0.000	0.00	0.01	0.00	-0.01	0.01
54	9.46	0.05	1	3.168	0.000	0.000	0.00	0.00	0.00	0.00	0.00
55	9.46	0.05	1	3.168	0.000	0.000	0.00	0.01	-0.01	-0.01	0.01
56	9.46	0.05	1	3.167	0.000	0.000	0.00	0.00	0.00	-0.01	0.00
57	9.46	0.05	1	3.167	0.000	0.000	0.00	0.00	0.00	0.00	0.00
58	9.47	0.05	1	3.167	0.000	0.000	0.00	0.00	0.00	0.00	0.00
59	9.47	0.05	1	3.167	0.000	0.000	0.00	0.02	-0.01	-0.01	0.03
60	9.47	0.05	1	3.166	0.000	0.000	0.00	0.00	0.00	0.00	0.00
61	9.55	0.05	1	3.154	0.000	0.000	0.00	0.00	0.00	0.00	0.00
62	9.59	0.05	1	3.148	0.000	0.000	0.01	0.37	-0.70	-1.08	0.63
63	9.65	0.05	1	3.139	0.000	0.000	-0.01	0.41	-0.45	-0.72	0.73
64	9.75	0.05	1	3.125	0.000	0.000	0.00	0.01	-0.01	-0.03	0.02
65	9.83	0.05	1	3.115	0.000	0.000	0.00	0.00	-0.01	-0.02	0.00
66	9.88	0.05	1	3.109	0.000	0.000	0.00	0.06	0.07	0.13	0.12
67	9.96	0.05	1	3.099	0.000	0.000	-0.01	0.67	0.56	1.09	1.52
68	10.15	0.05	1	3.074	0.000	0.000	0.00	0.10	0.01	0.03	0.26
69	10.36	0.05	1	3.047	0.000	0.000	0.00	0.03	-0.02	-0.05	0.09
70	10.43	0.05	1	3.038	0.000	0.000	0.00	0.01	0.00	0.00	0.02
71	10.49	0.05	1	3.030	0.000	0.000	0.00	0.00	0.00	0.00	0.00
72	10.64	0.05	1	3.011	0.000	0.000	0.00	0.02	0.03	0.07	0.08
73	10.97	0.05	1	2.975	0.000	0.000	0.00	0.03	0.00	-0.01	0.10
74	11.03	0.05	1	2.970	0.000	0.000	0.00	0.00	0.00	0.00	0.01
75	11.07	0.05	1	2.965	0.000	0.000	0.00	0.07	0.03	0.09	0.30
76	11.14	0.05	1	2.958	0.000	0.000	0.00	0.00	0.00	0.00	0.01
77	11.20	0.05	1	2.951	0.000	0.000	0.00	0.08	0.06	0.19	0.36
78	11.34	0.05	1	2.938	0.000	0.000	0.00	0.04	-0.01	-0.05	0.16
79	11.41	0.05	1	2.930	0.000	0.000	-0.01	0.37	-0.11	-0.40	2.04
80	11.51	0.05	1	2.920	0.000	0.000	0.00	0.01	-0.01	-0.02	0.05
81	11.61	0.05	1	2.910	0.000	0.000	-0.01	0.51	-0.02	-0.06	2.91
82	11.66	0.05	1	2.904	0.000	0.000	0.00	0.00	0.00	0.00	0.00
83	11.74	0.05	1	2.897	0.000	0.000	0.00	0.07	-0.04	-0.14	0.28
84	11.78	0.05	1	2.892	0.000	0.000	-0.01	0.57	0.08	0.30	3.23
85	11.85	0.05	1	2.885	0.000	0.000	0.00	0.00	0.00	0.01	0.03
86	11.97	0.05	1	2.873	0.000	0.000	0.00	0.00	0.01	0.03	0.02
87	12.07	0.05	1	2.864	0.000	0.000	0.00	0.00	0.00	0.01	0.02
88	12.12	0.05	1	2.860	0.000	0.000	0.00	0.00	-0.01	-0.02	0.03
89	12.19	0.05	1	2.854	0.000	0.000	0.00	0.00	0.00	0.01	0.03
90	12.23	0.05	1	2.851	0.000	0.000	0.00	0.02	0.00	0.01	0.09
91	12.37	0.05	1	2.840	0.000	0.000	0.00	0.00	0.00	0.00	0.00
92	12.52	0.05	1	2.827	0.000	0.000	0.00	0.00	0.00	0.00	0.01
93	12.69	0.05	1	2.813	0.000	0.000	0.00	0.00	0.00	-0.01	0.00

Mode	Freq. [Hz]	Damp ratio	Damp coef.	Sax [m/s^2]	Say [m/s^2]	Saz [m/s^2]	G(j) [-]	Fx [kN]	Fy [kN]	Mx [kNm]	My [kNm]
94	12.78	0.05	1	2.806	0.000	0.000	0.00	0.00	0.00	0.00	0.00
95	12.86	0.05	1	2.800	0.000	0.000	0.00	0.05	0.00	-0.01	0.30
96	12.89	0.05	1	2.797	0.000	0.000	0.00	0.00	0.00	0.00	0.01
97	13.02	0.05	1	2.787	0.000	0.000	0.00	0.01	0.00	0.00	0.07
98	13.08	0.05	1	2.782	0.000	0.000	0.00	0.00	0.00	0.00	0.01
99	13.31	0.05	1	2.763	0.000	0.000	0.00	0.00	0.00	0.00	0.01
100	13.36	0.05	1	2.759	0.000	0.000	0.00	0.00	0.00	0.00	0.00
Level=	0.00							267.14	15.19	18.67	872.42

Dynamic load case 16 : potres Y

Mode	Freq. [Hz]	Damp ratio	Damp coef.	Sax [m/s^2]	Say [m/s^2]	Saz [m/s^2]	G(j) [-]	Fx [kN]	Fy [kN]	Mx [kNm]	My [kNm]
1	2.65	0.05	1	0.000	4.415	0.000	-0.01	0.47	0.00	0.00	-1.92
2	2.67	0.05	1	0.000	4.415	0.000	3.70	-1.44	245.44	-993.67	5.83
3	2.68	0.05	1	0.000	4.415	0.000	0.04	0.98	0.03	-0.12	-3.97
4	2.97	0.05	1	0.000	4.415	0.000	0.00	-0.02	0.00	0.00	0.07
5	3.44	0.05	1	0.000	4.415	0.000	0.00	0.00	0.00	0.00	0.00
6	4.08	0.05	1	0.000	4.415	0.000	0.00	0.00	0.00	0.00	-0.01
7	4.75	0.05	1	0.000	4.415	0.000	0.00	0.00	0.00	0.00	0.00
8	5.52	0.05	1	0.000	4.166	0.000	0.00	0.00	0.00	0.00	0.00
9	6.24	0.05	1	0.000	3.891	0.000	0.00	0.00	0.00	0.00	0.00
10	6.72	0.05	1	0.000	3.740	0.000	0.04	0.01	1.14	-1.53	-0.02
11	6.76	0.05	1	0.000	3.726	0.000	-0.05	0.01	2.40	-3.13	-0.01
12	6.82	0.05	1	0.000	3.710	0.000	0.00	0.00	0.00	0.00	0.00
13	6.90	0.05	1	0.000	3.686	0.000	0.00	0.00	0.00	0.00	0.00
14	7.06	0.05	1	0.000	3.643	0.000	0.00	0.00	0.00	0.00	0.00
15	7.57	0.05	1	0.000	3.516	0.000	0.00	0.00	0.00	0.00	0.00
16	7.68	0.05	1	0.000	3.493	0.000	0.00	0.00	0.00	0.00	0.00
17	7.96	0.05	1	0.000	3.431	0.000	0.00	-0.01	0.01	0.00	0.00
18	8.13	0.05	1	0.000	3.395	0.000	0.02	-0.21	1.23	0.00	0.05
19	8.39	0.05	1	0.000	3.348	0.000	-0.01	0.07	0.19	0.05	0.01
20	8.42	0.05	1	0.000	3.342	0.000	0.00	0.00	0.00	0.00	0.00
21	8.54	0.05	1	0.000	3.318	0.000	0.00	0.03	0.00	0.00	0.01
22	8.83	0.05	1	0.000	3.265	0.000	0.00	0.00	0.00	0.00	0.00
23	8.87	0.05	1	0.000	3.259	0.000	0.00	0.00	0.00	0.00	0.00
24	8.99	0.05	1	0.000	3.241	0.000	0.01	0.05	0.15	0.13	0.04
25	9.06	0.05	1	0.000	3.230	0.000	-0.04	-2.67	4.16	4.04	-2.47
26	9.10	0.05	1	0.000	3.224	0.000	-0.01	0.41	0.08	0.08	0.40
27	9.11	0.05	1	0.000	3.222	0.000	-0.01	3.74	0.65	0.66	3.71
28	9.13	0.05	1	0.000	3.219	0.000	-0.01	1.77	0.54	0.56	1.82
29	9.15	0.05	1	0.000	3.217	0.000	-0.01	0.76	0.11	0.12	0.79
30	9.15	0.05	1	0.000	3.215	0.000	0.00	1.51	0.03	0.03	1.58
31	9.16	0.05	1	0.000	3.215	0.000	0.00	-0.04	0.00	0.00	-0.04
32	9.16	0.05	1	0.000	3.215	0.000	0.00	0.92	0.01	0.01	0.97
33	9.16	0.05	1	0.000	3.214	0.000	-0.02	-5.30	0.98	1.05	-5.60
34	9.17	0.05	1	0.000	3.214	0.000	-0.03	-3.36	3.01	3.25	-3.57
35	9.17	0.05	1	0.000	3.213	0.000	0.01	1.99	0.40	0.44	2.10
36	9.17	0.05	1	0.000	3.212	0.000	-0.02	-0.03	1.43	1.56	-0.02
37	9.20	0.05	1	0.000	3.208	0.000	-0.25	1.25	226.12	253.71	1.40
38	9.23	0.05	1	0.000	3.204	0.000	0.00	0.00	0.00	0.00	0.00
39	9.24	0.05	1	0.000	3.202	0.000	-0.04	0.90	5.69	6.62	1.04
40	9.25	0.05	1	0.000	3.201	0.000	-0.14	8.07	66.36	77.71	9.51
41	9.25	0.05	1	0.000	3.200	0.000	0.08	-9.34	24.42	28.66	-11.03
42	9.30	0.05	1	0.000	3.192	0.000	0.00	-0.04	0.01	0.01	-0.05
43	9.33	0.05	1	0.000	3.188	0.000	0.00	0.00	0.00	0.00	0.00
44	9.34	0.05	1	0.000	3.187	0.000	0.00	0.00	0.00	0.00	0.00
45	9.35	0.05	1	0.000	3.185	0.000	0.00	0.00	0.07	0.08	0.00
46	9.37	0.05	1	0.000	3.182	0.000	0.00	0.01	0.00	0.00	0.01
47	9.37	0.05	1	0.000	3.181	0.000	0.00	0.07	0.04	0.05	0.09
48	9.38	0.05	1	0.000	3.180	0.000	0.00	0.00	0.02	0.02	0.00
49	9.41	0.05	1	0.000	3.175	0.000	0.00	0.00	0.00	0.01	0.00
50	9.45	0.05	1	0.000	3.170	0.000	0.00	-0.03	0.05	0.07	-0.05
51	9.45	0.05	1	0.000	3.169	0.000	0.00	0.00	0.00	0.00	0.00
52	9.46	0.05	1	0.000	3.169	0.000	0.00	-0.01	0.00	0.01	-0.01

Mode	Freq. [Hz]	Damp ratio	Damp coef.	Sax [m/s^2]	Say [m/s^2]	Saz [m/s^2]	G(j) [-]	Fx [kN]	Fy [kN]	Mx [kNm]	My [kNm]
53	9.46	0.05	1	0.000	3.168	0.000	0.00	0.00	0.00	0.00	-0.01
54	9.46	0.05	1	0.000	3.168	0.000	0.00	0.00	0.01	0.01	0.00
55	9.46	0.05	1	0.000	3.168	0.000	0.00	-0.01	0.01	0.01	-0.01
56	9.46	0.05	1	0.000	3.167	0.000	0.00	0.00	0.01	0.02	-0.01
57	9.46	0.05	1	0.000	3.167	0.000	0.00	0.00	0.00	0.00	0.00
58	9.47	0.05	1	0.000	3.167	0.000	0.00	0.00	0.00	0.00	0.00
59	9.47	0.05	1	0.000	3.167	0.000	0.00	-0.01	0.00	0.00	-0.01
60	9.47	0.05	1	0.000	3.166	0.000	0.00	0.00	0.00	0.00	0.00
61	9.55	0.05	1	0.000	3.154	0.000	0.00	0.00	0.00	0.00	0.00
62	9.59	0.05	1	0.000	3.148	0.000	-0.02	-0.70	1.32	2.03	-1.18
63	9.65	0.05	1	0.000	3.139	0.000	0.01	-0.45	0.50	0.80	-0.81
64	9.75	0.05	1	0.000	3.125	0.000	0.00	-0.01	0.03	0.05	-0.05
65	9.83	0.05	1	0.000	3.115	0.000	-0.02	-0.01	1.30	2.33	0.02
66	9.88	0.05	1	0.000	3.109	0.000	0.00	0.07	0.09	0.17	0.15
67	9.96	0.05	1	0.000	3.099	0.000	-0.01	0.56	0.47	0.92	1.28
68	10.15	0.05	1	0.000	3.074	0.000	0.00	0.01	0.00	0.00	0.03
69	10.36	0.05	1	0.000	3.047	0.000	0.00	-0.02	0.01	0.03	-0.06
70	10.43	0.05	1	0.000	3.038	0.000	0.00	0.00	0.00	0.00	0.00
71	10.49	0.05	1	0.000	3.030	0.000	0.00	0.00	0.00	0.00	0.00
72	10.64	0.05	1	0.000	3.011	0.000	0.00	0.03	0.03	0.08	0.09
73	10.97	0.05	1	0.000	2.975	0.000	0.00	0.00	0.00	0.00	-0.02
74	11.03	0.05	1	0.000	2.970	0.000	0.00	0.00	0.00	0.00	0.00
75	11.07	0.05	1	0.000	2.965	0.000	0.00	0.03	0.01	0.04	0.13
76	11.14	0.05	1	0.000	2.958	0.000	0.00	0.00	0.00	0.00	0.00
77	11.20	0.05	1	0.000	2.951	0.000	0.00	0.06	0.04	0.14	0.26
78	11.34	0.05	1	0.000	2.938	0.000	0.00	-0.01	0.01	0.02	-0.07
79	11.41	0.05	1	0.000	2.930	0.000	0.00	-0.11	0.03	0.12	-0.61
80	11.51	0.05	1	0.000	2.920	0.000	0.00	-0.01	0.00	0.01	-0.03
81	11.61	0.05	1	0.000	2.910	0.000	0.00	-0.02	0.00	0.00	-0.10
82	11.66	0.05	1	0.000	2.904	0.000	0.00	0.00	0.00	0.01	0.01
83	11.74	0.05	1	0.000	2.897	0.000	0.00	-0.04	0.02	0.07	-0.15
84	11.78	0.05	1	0.000	2.892	0.000	0.00	0.08	0.01	0.04	0.43
85	11.85	0.05	1	0.000	2.885	0.000	0.00	0.00	0.00	0.00	0.01
86	11.97	0.05	1	0.000	2.873	0.000	0.00	0.01	0.02	0.08	0.05
87	12.07	0.05	1	0.000	2.864	0.000	0.00	0.00	0.00	0.02	0.02
88	12.12	0.05	1	0.000	2.860	0.000	0.00	-0.01	0.01	0.04	-0.04
89	12.19	0.05	1	0.000	2.854	0.000	0.00	0.00	0.00	0.00	0.01
90	12.23	0.05	1	0.000	2.851	0.000	0.00	0.00	0.00	0.00	0.01
91	12.37	0.05	1	0.000	2.840	0.000	0.00	0.00	0.00	0.01	0.00
92	12.52	0.05	1	0.000	2.827	0.000	0.00	0.00	0.00	0.01	-0.02
93	12.69	0.05	1	0.000	2.813	0.000	0.00	0.00	0.00	0.01	-0.01
94	12.78	0.05	1	0.000	2.806	0.000	0.00	0.00	0.00	0.00	0.00
95	12.86	0.05	1	0.000	2.800	0.000	0.00	0.00	0.00	0.00	-0.01
96	12.89	0.05	1	0.000	2.797	0.000	0.00	0.00	0.00	0.00	0.00
97	13.02	0.05	1	0.000	2.787	0.000	0.00	0.00	0.00	0.00	0.01
98	13.08	0.05	1	0.000	2.782	0.000	0.00	0.00	0.00	0.00	0.00
99	13.31	0.05	1	0.000	2.763	0.000	0.00	0.00	0.00	0.00	0.00
100	13.36	0.05	1	0.000	2.759	0.000	0.00	0.00	0.00	0.00	0.00
Level=	0.00							15.19	341.24	1028.93	18.68

18. Calculation protocol

Solution of Free vibration

Number of 2D elements	530
Number of 1D elements	2996
Number of mesh nodes	3345
Number of equations	20070
Combination of mass groups	MC1 CM1
Number of frequencies	100
Method	Lanczos
Bending theory	Mindlin
Type of analysis model	Standard
Start of calculation	18.04.2021 08:36
End of calculation	18.04.2021 08:37

Sum of masses

	X [kg]	Y [kg]	Z [kg]
1	162582.29	162582.29	162582.29
1	162582.29	162582.29	162582.29

Relative modal masses

Mode	Omega [rad/s]	Period [s]	Freq. [Hz]	W_{xi}/W_{xtot}	W_{yi}/W_{ytot}	W_{zi}/W_{ztot}	W_{xi_R}/W_{xtot_R}	W_{yi_R}/W_{ytot_R}	W_{zi_R}/W_{ztot_R}
1	16.6451	0.38	2.65	0.2896	0.0000	0.0000	0.0000	0.5425	0.0460
2	16.7717	0.37	2.67	0.0000	0.3420	0.0000	0.0071	0.0000	0.0000
3	16.8473	0.37	2.68	0.0452	0.0000	0.0000	0.0000	0.0842	0.2872
4	18.6832	0.34	2.97	0.0022	0.0000	0.0000	0.0000	0.0037	0.0001
5	21.6347	0.29	3.44	0.0000	0.0000	0.0000	0.0000	0.0000	0.0010
6	25.6409	0.25	4.08	0.0003	0.0000	0.0000	0.0000	0.0003	0.0000
7	29.8565	0.21	4.75	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002
8	34.6879	0.18	5.52	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000
9	39.1791	0.16	6.24	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
10	42.1942	0.15	6.72	0.0000	0.0019	0.0001	0.0003	0.0000	0.0000
11	42.4974	0.15	6.76	0.0000	0.0040	0.0000	0.0003	0.0000	0.0000
12	42.8364	0.15	6.82	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
13	43.3588	0.14	6.90	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
14	44.3487	0.14	7.06	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
15	47.5804	0.13	7.57	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
16	48.2266	0.13	7.68	0.0000	0.0000	0.0001	0.0001	0.0000	0.0000
17	50.035	0.13	7.96	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
18	51.0815	0.12	8.13	0.0001	0.0022	0.0000	0.0001	0.0001	0.0000
19	52.6974	0.12	8.39	0.0001	0.0003	0.0004	0.0000	0.0000	0.0001
20	52.8756	0.12	8.42	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
21	53.6876	0.12	8.54	0.0006	0.0000	0.0006	0.0000	0.0006	0.0001
22	55.5056	0.11	8.83	0.0001	0.0000	0.0005	0.0003	0.0000	0.0000
23	55.763	0.11	8.87	0.0000	0.0000	0.0002	0.0001	0.0000	0.0000
24	56.4816	0.11	8.99	0.0000	0.0003	0.0000	0.0000	0.0000	0.0000
25	56.9412	0.11	9.06	0.0033	0.0079	0.0000	0.0002	0.0019	0.0012
26	57.1513	0.11	9.10	0.0039	0.0002	0.0002	0.0000	0.0022	0.0002
27	57.2467	0.11	9.11	0.0412	0.0012	0.0002	0.0000	0.0213	0.0238
28	57.3907	0.11	9.13	0.0111	0.0010	0.0000	0.0000	0.0055	0.0058
29	57.4598	0.11	9.15	0.0099	0.0002	0.0000	0.0000	0.0051	0.0134
30	57.5171	0.11	9.15	0.1631	0.0001	0.0000	0.0000	0.0820	0.0067
31	57.5477	0.11	9.16	0.0855	0.0000	0.0000	0.0000	0.0425	0.3340
32	57.5538	0.11	9.16	0.2447	0.0000	0.0000	0.0000	0.1224	0.2338
33	57.5648	0.11	9.16	0.0549	0.0019	0.0000	0.0000	0.0271	0.0055
34	57.5909	0.11	9.17	0.0072	0.0058	0.0000	0.0000	0.0036	0.0021
35	57.6264	0.11	9.17	0.0188	0.0008	0.0000	0.0000	0.0103	0.0239
36	57.6466	0.11	9.17	0.0000	0.0027	0.0000	0.0000	0.0000	0.0003
37	57.8338	0.11	9.20	0.0000	0.4336	0.0000	0.0034	0.0000	0.0000
38	57.9635	0.11	9.23	0.0000	0.0000	0.0000	0.0000	0.0000	0.0003
39	58.0778	0.11	9.24	0.0003	0.0109	0.0000	0.0001	0.0001	0.0037
40	58.1216	0.11	9.25	0.0019	0.1275	0.0001	0.0009	0.0008	0.0017
41	58.1359	0.11	9.25	0.0069	0.0469	0.0003	0.0001	0.0030	0.0013
42	58.4618	0.11	9.30	0.0006	0.0000	0.0000	0.0000	0.0002	0.0000
43	58.6138	0.11	9.33	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
44	58.6645	0.11	9.34	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
45	58.7526	0.11	9.35	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000
46	58.8551	0.11	9.37	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000

Mode	Omega [rad/s]	Period [s]	Freq. [Hz]	W_{xi}/W_{xtot}	W_{yi}/W_{ytot}	W_{zi}/W_{ztot}	W_{xi_R}/W_{xtot_R}	W_{yi_R}/W_{ytot_R}	W_{zi_R}/W_{ztot_R}
47	58.8985	0.11	9.37	0.0003	0.0001	0.0002	0.0001	0.0001	0.0002
48	58.9554	0.11	9.38	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
49	59.1375	0.11	9.41	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
50	59.371	0.11	9.45	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000
51	59.3966	0.11	9.45	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
52	59.4192	0.11	9.46	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
53	59.4303	0.11	9.46	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
54	59.4521	0.11	9.46	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001
55	59.455	0.11	9.46	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
56	59.4627	0.11	9.46	0.0000	0.0000	0.0000	0.0000	0.0000	0.0008
57	59.4673	0.11	9.46	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001
58	59.4759	0.11	9.47	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001
59	59.4879	0.11	9.47	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
60	59.5188	0.11	9.47	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
61	60.0041	0.10	9.55	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
62	60.2383	0.10	9.59	0.0007	0.0026	0.0016	0.0008	0.0001	0.0002
63	60.6033	0.10	9.65	0.0008	0.0010	0.0002	0.0000	0.0001	0.0004
64	61.2718	0.10	9.75	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001
65	61.7529	0.10	9.83	0.0000	0.0026	0.0013	0.0002	0.0000	0.0000
66	62.0574	0.10	9.88	0.0001	0.0002	0.0000	0.0001	0.0000	0.0000
67	62.5647	0.10	9.96	0.0013	0.0009	0.0068	0.0030	0.0000	0.0003
68	63.7707	0.10	10.15	0.0002	0.0000	0.0000	0.0003	0.0000	0.0001
69	65.0947	0.10	10.36	0.0001	0.0000	0.0007	0.0004	0.0000	0.0000
70	65.5453	0.10	10.43	0.0000	0.0000	0.0015	0.0006	0.0000	0.0000
71	65.9409	0.10	10.49	0.0000	0.0000	0.0004	0.0001	0.0001	0.0001
72	66.8672	0.09	10.64	0.0000	0.0001	0.0007	0.0002	0.0000	0.0000
73	68.9373	0.09	10.97	0.0001	0.0000	0.0001	0.0006	0.0000	0.0001
74	69.2844	0.09	11.03	0.0000	0.0000	0.0005	0.0017	0.0000	0.0000
75	69.5416	0.09	11.07	0.0001	0.0000	0.0010	0.0001	0.0003	0.0002
76	69.9848	0.09	11.14	0.0000	0.0000	0.0021	0.0013	0.0000	0.0000
77	70.403	0.09	11.20	0.0002	0.0001	0.0001	0.0009	0.0001	0.0003
78	71.2358	0.09	11.34	0.0001	0.0000	0.0001	0.0001	0.0000	0.0000
79	71.7123	0.09	11.41	0.0008	0.0001	0.0013	0.0045	0.0029	0.0006
80	72.2984	0.09	11.51	0.0000	0.0000	0.0027	0.0050	0.0001	0.0003
81	72.9467	0.09	11.61	0.0011	0.0000	0.0008	0.0012	0.0039	0.0022
82	73.2623	0.09	11.66	0.0000	0.0000	0.0111	0.0111	0.0000	0.0000
83	73.7396	0.09	11.74	0.0001	0.0000	0.0290	0.0497	0.0001	0.0000
84	74.0343	0.08	11.78	0.0012	0.0000	0.0201	0.0350	0.0022	0.0001
85	74.4266	0.08	11.85	0.0000	0.0000	0.0126	0.0000	0.0001	0.0000
86	75.1941	0.08	11.97	0.0000	0.0000	0.0111	0.1130	0.0001	0.0000
87	75.8516	0.08	12.07	0.0000	0.0000	0.0079	0.0442	0.0001	0.0000
88	76.1501	0.08	12.12	0.0000	0.0000	0.2388	0.0961	0.0001	0.0000
89	76.5752	0.08	12.19	0.0000	0.0000	0.0029	0.0012	0.0001	0.0000
90	76.8244	0.08	12.23	0.0000	0.0000	0.0078	0.0006	0.0000	0.0003
91	77.6926	0.08	12.37	0.0000	0.0000	0.0001	0.0062	0.0000	0.0000
92	78.6885	0.08	12.52	0.0000	0.0000	0.0477	0.0195	0.0003	0.0000
93	79.7623	0.08	12.69	0.0000	0.0000	0.0012	0.0087	0.0000	0.0000
94	80.2901	0.08	12.78	0.0000	0.0000	0.0003	0.0012	0.0000	0.0000
95	80.7734	0.08	12.86	0.0001	0.0000	0.0010	0.0000	0.0001	0.0000
96	81.0166	0.08	12.89	0.0000	0.0000	0.0010	0.0002	0.0000	0.0000
97	81.7944	0.08	13.02	0.0000	0.0000	0.0155	0.0017	0.0002	0.0000
98	82.205	0.08	13.08	0.0000	0.0000	0.0005	0.0008	0.0000	0.0000
99	83.6322	0.08	13.31	0.0000	0.0000	0.0000	0.0006	0.0000	0.0000
100	83.9431	0.07	13.36	0.0000	0.0000	0.0047	0.0001	0.0000	0.0000
				0.9992	0.9997	0.4389	0.4247	0.9711	0.9992

3. REZULTATI ANALIZE KONSTRUKCIJE

3.1. Notranje sile

19. Internal forces on member

Nonlinear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS
Cross-section : CS2-vp - QRO220X8

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B395	CS2-vp - QRO220X8	0.000	NC33	**-102.76**	-0.23	4.82	-0.13	-12.10	0.63
B101	CS2-vp - QRO220X8	4.665	NC20	**30.55**	0.26	-4.21	-0.07	-11.09	0.92
B376	CS2-vp - QRO220X8	0.000	NC26	-86.49	**-2.82**	0.15	-0.03	-1.83	**4.55**
B127	CS2-vp - QRO220X8	0.000	NC27	-66.93	**2.62**	-1.85	0.05	3.35	-4.30
B101	CS2-vp - QRO220X8	0.000	NC34	-28.46	0.52	**-8.66**	-0.07	**17.96**	-1.03
B373	CS2-vp - QRO220X8	0.000	NC2	-53.94	-0.33	**18.93**	-0.13	**-24.10**	0.85
B372	CS2-vp - QRO220X8	4.665	NC2	-79.65	-0.29	2.83	**-0.14**	6.20	-0.62
B372	CS2-vp - QRO220X8	4.665	NC45	-65.22	0.44	0.65	**0.12**	0.80	1.98
B376	CS2-vp - QRO220X8	4.665	NC26	-83.29	-1.03	-0.42	-0.04	-2.47	**-4.57**

20. Internal forces on member

Linear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS-potres
Cross-section : CS2-vp - QRO220X8

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B102	CS2-vp - QRO220X8	0.000	potres 1/2	**-90.48**	-3.58	14.87	0.01	-35.35	8.80
B128	CS2-vp - QRO220X8	4.665	potres 4/1	**48.27**	-3.24	14.34	0.01	33.04	-6.96
B101	CS2-vp - QRO220X8	0.000	potres 5/3	-1.47	**-11.59**	-5.16	-0.01	-10.39	**27.51**
B102	CS2-vp - QRO220X8	0.000	potres 8/4	-2.26	**11.95**	-4.04	-0.01	10.41	**-27.92**
B127	CS2-vp - QRO220X8	0.000	potres 1/2	-89.28	3.10	**-14.97**	0.01	**35.61**	-8.19
B128	CS2-vp - QRO220X8	0.000	potres 4/1	45.93	-3.31	**14.94**	0.01	**-35.56**	8.45
B2	CS2-vp - QRO220X8	0.000	potres 5/3	-37.78	-11.44	2.63	**-0.02**	8.55	27.37
B2	CS2-vp - QRO220X8	0.000	potres 8/4	-8.65	11.48	-3.75	**0.02**	-6.97	-27.42

21. Internal forces on member

Nonlinear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS
Cross-section : CS3 - UNP240

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B210	CS3 - UNP240	3.995	NC42	**-7.64**	0.00	-0.05	0.00	-6.02	-0.23
B145	CS3 - UNP240	0.300	NC47	**6.98**	0.08	0.00	0.00	3.44	-0.02
B11	CS3 - UNP240	0.000	NC43	4.18	**-1.75**	-0.32	0.00	6.16	0.44
B21	CS3 - UNP240	0.400	NC42	3.21	**1.97**	0.25	0.00	-7.58	0.45
B144	CS3 - UNP240	0.000	NC42	5.46	0.74	**-7.64**	0.00	10.89	-0.46
B150	CS3 - UNP240	0.000	NC41	5.61	0.77	**7.72**	0.00	-10.85	-0.53
B195	CS3 - UNP240	3.250	NC36	0.37	-0.39	0.14	**-0.01**	0.14	-0.13
B16	CS3 - UNP240	0.305	NC33	0.22	0.72	5.56	**0.01**	-8.91	-0.35
B413	CS3 - UNP240	0.000	NC35	1.48	0.45	2.65	0.00	**-10.86**	-0.09
B145	CS3 - UNP240	0.400	NC42	5.18	-0.26	0.44	0.00	**11.36**	-0.16
B57	CS3 - UNP240	0.000	NC41	-3.83	0.82	7.42	0.00	-10.09	**-0.67**

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B464	CS3 - UNP240	0.000	NC29	-2.84	-1.50	-0.10	0.00	-0.16	**1.08**

22. Internal forces on member

Linear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS-potres
Cross-section : CS3 - UNP240

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B234	CS3 - UNP240	1.181	potres 8/4	**-8.63**	-1.16	11.31	0.01	1.40	0.29
B234	CS3 - UNP240	1.181	potres 5/3	**8.63**	1.16	-9.75	-0.01	-0.30	-0.29
B233	CS3 - UNP240	4.855	potres 4/1	-4.98	**-2.53**	32.54	-0.04	14.62	0.69
B233	CS3 - UNP240	4.855	potres 1/2	4.97	**2.53**	-31.61	0.04	**-17.75**	-0.69
B239	CS3 - UNP240	0.000	potres 1/2	4.86	-2.35	**-34.33**	0.01	12.87	0.17
B233	CS3 - UNP240	7.990	potres 4/1	-5.06	-2.52	**34.21**	0.01	9.17	-0.11
B233	CS3 - UNP240	0.000	potres 8/4	3.55	2.43	15.32	**-0.11**	-7.51	-0.91
B233	CS3 - UNP240	0.000	potres 5/3	-3.55	-2.43	-19.62	**0.11**	12.58	0.91
B240	CS3 - UNP240	0.900	potres 1/2	4.97	-2.35	-32.56	-0.04	**16.72**	-0.63
B240	CS3 - UNP240	0.900	potres 5/3	3.45	2.40	9.80	-0.06	-6.03	**-1.23**
B240	CS3 - UNP240	0.900	potres 8/4	-3.45	-2.40	-9.69	0.06	6.01	**1.23**

23. Internal forces on member

Nonlinear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS
Cross-section : CS4 - IPE240

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B22	CS4 - IPE240	0.000	NC42	**-7.71**	-0.21	9.26	0.00	-12.95	0.48
B214	CS4 - IPE240	2.562	NC20	**5.11**	0.00	-0.94	0.00	-1.31	0.28
B13	CS4 - IPE240	0.000	NC40	-0.76	**-1.29**	2.05	0.00	-3.77	0.25
B13	CS4 - IPE240	0.400	NC42	-2.81	**1.56**	-1.14	0.00	-12.57	0.33
B220	CS4 - IPE240	7.990	NC41	-0.39	0.21	**-14.71**	0.00	-19.70	0.36
B69	CS4 - IPE240	0.000	NC41	-2.37	-0.12	**15.87**	0.00	-22.66	0.19
B220	CS4 - IPE240	2.049	NC16	-2.08	0.30	2.44	**-0.01**	11.41	0.12
B174	CS4 - IPE240	3.708	NC42	-3.03	-0.07	0.26	**0.01**	8.63	0.04
B60	CS4 - IPE240	0.000	NC41	-0.40	0.22	15.62	0.00	**-24.33**	-0.42
B214	CS4 - IPE240	4.855	NC42	3.32	0.01	0.04	0.00	**16.70**	-0.17
B45	CS4 - IPE240	0.000	NC16	-1.42	0.30	11.58	0.00	-15.73	**-0.59**
B465	CS4 - IPE240	0.000	NC25	-0.38	-0.31	11.80	0.00	-16.74	**0.61**

24. Internal forces on member

Linear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS-potres
Cross-section : CS4 - IPE240

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B232	CS4 - IPE240	0.000	potres 5/3	**-8.75**	1.18	13.58	-0.01	-8.54	-0.27
B232	CS4 - IPE240	0.000	potres 8/4	**8.80**	-1.18	-7.68	0.01	1.29	0.27
B235	CS4 - IPE240	2.362	potres 4/1	-4.97	**-2.53**	32.64	-0.04	14.75	-0.59
B235	CS4 - IPE240	2.362	potres 1/2	4.97	**2.53**	-31.51	0.04	-15.17	0.58
B232	CS4 - IPE240	7.478	potres 4/1	5.37	-2.53	**-35.26**	-0.04	14.37	-0.69
B232	CS4 - IPE240	0.000	potres 1/2	-5.29	2.53	**35.66**	-0.02	-17.44	-0.48
B232	CS4 - IPE240	7.478	potres 8/4	3.58	2.47	14.92	**-0.11**	-14.68	**-1.28**
B232	CS4 - IPE240	7.478	potres 5/3	-3.54	-2.47	-20.02	**0.11**	10.64	**1.28**
B238	CS4 - IPE240	0.000	potres 4/1	-4.95	2.35	34.86	0.04	**-20.18**	-0.63
B235	CS4 - IPE240	2.952	potres 4/1	-4.97	-2.53	32.22	-0.04	**16.24**	-0.69

25. Internal forces on member

Nonlinear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS
Cross-section : CS5 - RD16

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B469	CS5 - RD16	0.000	NC25	**7.08**	0.00	0.00	0.00	0.00	0.00

26. Internal forces on member

Linear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS-potres
Cross-section : CS5 - RD16

Member	css	dx [m]	Case	N [kN]
B250	CS5 - RD16	0.000	potres 1/2	**-66.35**
B249	CS5 - RD16	0.000	potres 4/1	**66.32**

27. Internal forces on member

Nonlinear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS
Cross-section : CS6 - RO26.9X3.2

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B291	CS6 - RO26.9X3.2	0.750	NC20	**-2.34**	0.00	-0.01	0.00	0.00	0.00
B588	CS6 - RO26.9X3.2	0.000	NC37	**1.21**	0.00	0.01	0.00	0.00	0.00
B292	CS6 - RO26.9X3.2	0.000	NC3	-1.55	**0.00**	0.01	-0.01	0.00	0.00
B252	CS6 - RO26.9X3.2	0.000	NC16	-2.24	**0.00**	0.01	0.01	0.00	0.00
B271	CS6 - RO26.9X3.2	0.750	NC16	-2.30	0.00	**-0.01**	0.00	0.00	0.00
B271	CS6 - RO26.9X3.2	0.000	NC16	-2.30	0.00	**0.01**	0.00	0.00	0.00
B292	CS6 - RO26.9X3.2	0.000	NC42	1.11	0.00	0.01	**-0.01**	0.00	0.00
B252	CS6 - RO26.9X3.2	0.300	NC42	1.14	0.00	0.00	**0.01**	0.00	0.00
B292	CS6 - RO26.9X3.2	0.000	NC33	-1.17	0.00	0.01	-0.01	**0.00**	0.00
B271	CS6 - RO26.9X3.2	0.450	NC16	-2.30	0.00	0.00	0.00	**0.00**	0.00
B292	CS6 - RO26.9X3.2	0.300	NC25	-0.87	0.00	0.00	-0.01	0.00	**0.00**
B252	CS6 - RO26.9X3.2	0.300	NC25	-0.86	0.00	0.00	0.01	0.00	**0.00**

28. Internal forces on member

Linear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS-potres
Cross-section : CS6 - RO26.9X3.2

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B252	CS6 - RO26.9X3.2	0.600	potres 1/2	**-67.87**	3.76	15.00	-0.01	-46.14	-10.66
B252	CS6 - RO26.9X3.2	0.600	potres 4/1	**67.87**	-3.76	-15.01	0.01	46.14	10.66
B251	CS6 - RO26.9X3.2	0.150	potres 5/3	-22.02	**-12.33**	-5.21	0.01	14.53	36.91
B251	CS6 - RO26.9X3.2	0.150	potres 8/4	22.04	**12.33**	5.22	-0.01	-14.53	-36.91
B241	CS6 - RO26.9X3.2	0.150	potres 4/1	4.65	2.35	**-32.62**	0.04	-16.54	0.63
B241	CS6 - RO26.9X3.2	0.000	potres 1/2	-4.67	-2.35	**32.63**	-0.04	15.25	-0.54
B313	CS6 - RO26.9X3.2	0.000	potres 5/3	3.55	2.31	17.48	**-0.11**	-10.10	-0.87
B313	CS6 - RO26.9X3.2	0.000	potres 8/4	-3.55	-2.31	-17.47	**0.11**	10.10	0.87
B253	CS6 - RO26.9X3.2	0.450	potres 4/1	67.61	-3.75	-15.02	-0.01	**-49.10**	11.12
B253	CS6 - RO26.9X3.2	0.450	potres 1/2	-67.62	3.75	15.01	0.01	**49.10**	-11.12
B251	CS6 - RO26.9X3.2	0.300	potres 8/4	22.04	12.33	5.22	-0.01	-15.28	**-39.24**
B251	CS6 - RO26.9X3.2	0.300	potres 5/3	-22.02	-12.33	-5.21	0.01	15.29	**39.24**

29. Internal forces on member

Nonlinear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS
Cross-section : CS9 - U g (195; 150; 25; 10)

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B325	CS9 - U g	1.000	NC46	**-7.16**	1.92	-3.22	0.03	-2.56	0.54
B345	CS9 - U g	0.500	NC41	**6.36**	-1.77	-0.20	0.01	-20.27	0.39
B343	CS9 - U g	1.000	NC44	1.76	**-1.88**	-0.45	-0.03	-17.52	-0.48
B325	CS9 - U g	0.000	NC41	-0.67	**2.00**	1.84	0.03	-15.48	-0.51
B343	CS9 - U g	1.000	NC34	-0.80	0.41	**-15.15**	0.01	-21.85	0.11
B337	CS9 - U g	0.000	NC34	-1.82	-0.39	**14.89**	0.00	-21.77	0.11
B345	CS9 - U g	0.040	NC44	1.59	-1.88	0.15	**-0.03**	-17.45	0.40
B327	CS9 - U g	0.960	NC41	-0.29	2.00	-1.61	**0.03**	-15.36	0.43
B329	CS9 - U g	1.000	NC24	-3.37	0.89	-14.35	0.00	**-26.21**	0.26
B343	CS9 - U g	0.000	NC20	-0.82	0.17	-12.05	0.00	**6.32**	-0.05
B327	CS9 - U g	0.000	NC41	4.40	2.00	-0.71	0.03	-14.12	**-0.56**
B325	CS9 - U g	1.000	NC41	-5.36	2.00	0.90	0.03	-14.23	**0.56**

30. Internal forces on member

Linear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS-potres
Cross-section : CS9 - U g (195; 150; 25; 10)

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B343	CS9 - U g	0.120	potres 4/1	**-36.92**	4.01	8.45	-0.01	-31.28	-11.47
B343	CS9 - U g	0.120	potres 1/2	**37.41**	-4.01	-8.15	0.01	19.38	11.47
B343	CS9 - U g	0.120	potres 5/3	13.07	**-11.91**	-2.68	0.01	2.35	36.17
B343	CS9 - U g	0.120	potres 8/4	-12.58	**11.91**	2.98	-0.02	-14.25	-36.17
B343	CS9 - U g	1.000	potres 4/1	4.03	-1.31	**-18.52**	-0.02	1.61	0.26
B339	CS9 - U g	0.000	potres 4/1	-3.48	-1.30	**19.19**	0.01	-2.67	-0.07
B327	CS9 - U g	0.200	potres 5/3	-3.60	2.30	16.37	**-0.10**	2.94	0.86
B327	CS9 - U g	0.040	potres 8/4	4.14	-2.11	-15.72	**0.10**	-4.64	0.51
B343	CS9 - U g	0.160	potres 4/1	-36.92	4.01	8.43	-0.01	**-32.84**	-12.17
B343	CS9 - U g	0.160	potres 1/2	37.41	-4.01	-8.18	0.01	**20.95**	12.17
B343	CS9 - U g	0.160	potres 8/4	-12.58	11.91	2.95	-0.02	-14.73	**-38.42**
B343	CS9 - U g	0.160	potres 5/3	13.07	-11.91	-2.70	0.01	2.84	**38.42**

31. Internal forces on member

Nonlinear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS
Cross-section : CS10 - Uw (240; 10; 150; 20; 0)

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B326	CS10 - Uw	0.000	NC43	**-6.58**	-0.19	-12.52	0.02	12.82	-0.18
B326	CS10 - Uw	0.750	NC36	**3.81**	0.03	-24.10	0.05	5.52	0.21
B330	CS10 - Uw	0.750	NC34	-0.10	**-2.47**	-8.74	0.01	6.32	0.88
B138	CS10 - Uw	1.500	NC20	-4.13	**2.51**	-0.87	0.07	-0.81	0.91
B338	CS10 - Uw	0.000	NC27	1.23	-0.43	**-32.95**	0.09	**27.90**	0.24
B49	CS10 - Uw	1.500	NC41	2.92	1.10	**33.81**	-0.09	27.81	0.60
B138	CS10 - Uw	1.500	NC26	0.63	-0.28	19.85	**-0.50**	21.04	-0.09
B336	CS10 - Uw	0.000	NC27	0.67	0.31	-19.99	**0.50**	21.21	-0.10
B49	CS10 - Uw	1.500	NC22	-2.90	0.19	-3.83	0.02	**-2.31**	-0.06
B125	CS10 - Uw	0.000	NC20	-1.41	2.28	-0.79	0.01	0.00	**-1.09**
B3	CS10 - Uw	0.750	NC42	0.72	2.19	6.78	0.01	4.85	**0.94**

32. Internal forces on member

Linear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS-potres
Cross-section : CS10 - Uw (240; 10; 150; 20; 0)

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B340	CS10 - Uw	1.200	potres 4/1	**-37.15**	4.00	6.11	0.00	25.97	-11.43
B340	CS10 - Uw	1.200	potres 1/2	**37.15**	-3.99	-10.52	-0.02	-24.70	11.43
B340	CS10 - Uw	1.200	potres 5/3	12.89	**-11.91**	-5.08	-0.02	-7.67	36.17
B340	CS10 - Uw	1.200	potres 8/4	-12.89	**11.92**	0.67	0.01	8.94	-36.17
B338	CS10 - Uw	0.600	potres 1/2	3.84	1.32	**-26.50**	0.04	-6.29	0.36
B99	CS10 - Uw	1.500	potres 5/3	-3.64	2.46	**24.05**	-0.12	19.64	1.27
B138	CS10 - Uw	0.750	potres 5/3	-2.15	2.45	0.95	**-0.33**	-0.99	-0.48
B138	CS10 - Uw	0.000	potres 5/3	-1.87	-0.26	-1.57	**0.19**	0.02	-0.40
B340	CS10 - Uw	1.350	potres 1/2	37.15	-3.99	-10.43	-0.02	**-26.59**	12.13
B340	CS10 - Uw	1.350	potres 4/1	-37.15	4.00	6.20	0.00	**27.22**	-12.13
B340	CS10 - Uw	1.350	potres 8/4	-12.89	11.92	0.76	0.01	9.12	**-38.43**
B340	CS10 - Uw	1.350	potres 5/3	12.89	-11.91	-4.99	-0.02	-8.50	**38.43**

33. Internal forces on member

Nonlinear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS
Cross-section : CS12 - Rectangle (600; 600)

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B403	CS12 - Rectangle	0.975	NC33	**-114.38**	0.28	4.88	-0.13	16.83	0.88
B369	CS12 - Rectangle	0.000	NC20	**28.18**	-0.27	-6.61	-0.07	-14.02	-0.32
B371	CS12 - Rectangle	0.975	NC27	-78.55	**-2.68**	-1.91	0.05	-5.19	**-6.88**
B379	CS12 - Rectangle	0.975	NC26	-98.11	**2.88**	0.21	-0.03	2.01	**7.34**
B369	CS12 - Rectangle	0.975	NC34	-40.08	-0.58	**-8.72**	-0.07	**-26.43**	-1.57
B374	CS12 - Rectangle	0.975	NC2	-65.57	0.39	**18.99**	-0.13	**42.58**	1.20
B375	CS12 - Rectangle	0.000	NC2	-82.85	0.31	4.53	**-0.14**	11.20	0.79
B375	CS12 - Rectangle	0.000	NC45	-68.43	-1.51	1.64	**0.12**	4.63	-2.61

34. Internal forces on member

Linear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS-potres
Cross-section : CS12 - Rectangle (600; 600)

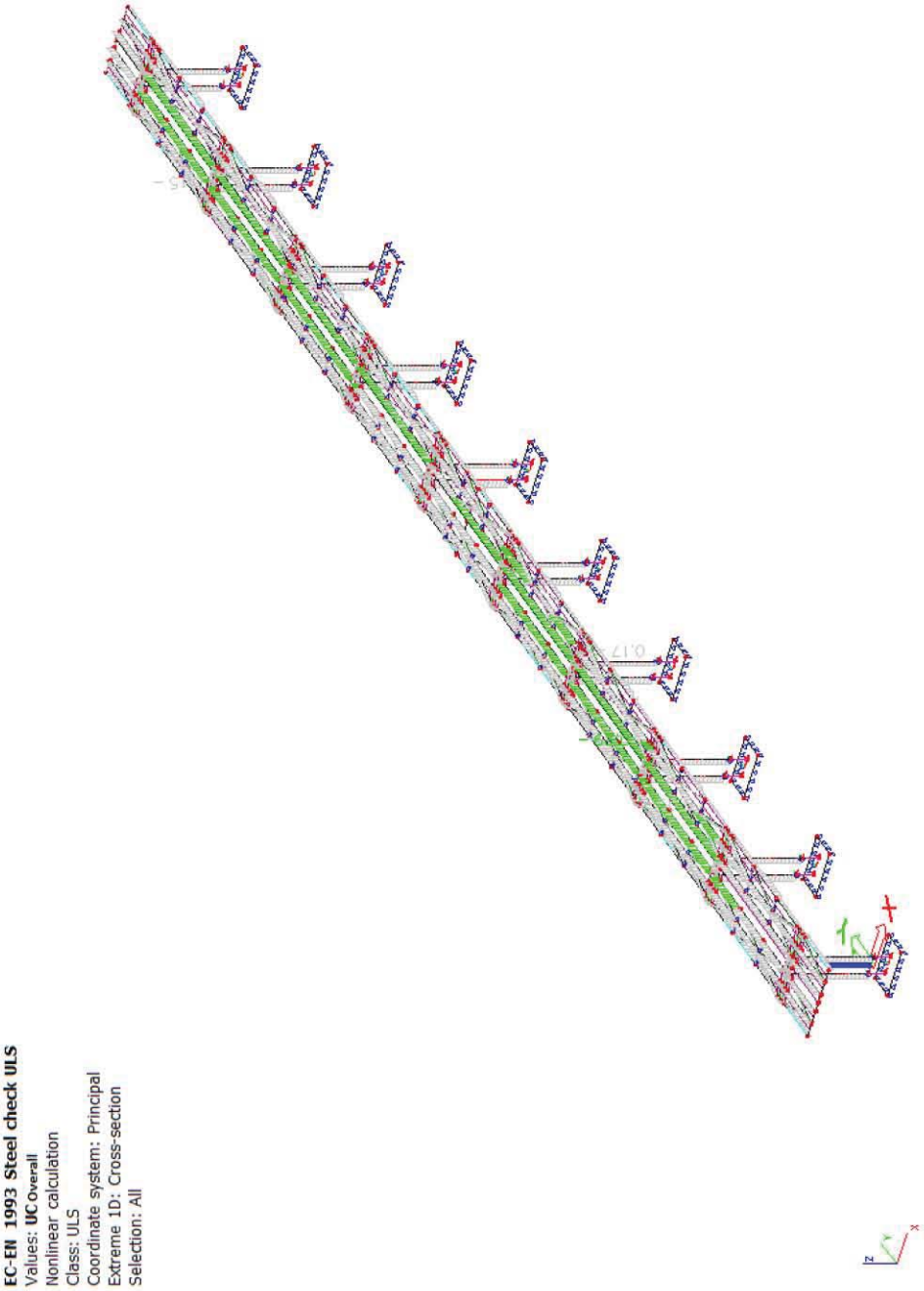
Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B374	CS12 - Rectangle	0.975	potres 1/2	**-37.50**	0.09	0.19	0.00	1.76	-0.04
B369	CS12 - Rectangle	0.195	potres 1/2	-23.95	**-0.62**	-1.36	0.00	-3.44	-0.40
B366	CS12 - Rectangle	0.390	potres 1/2	-28.63	**0.62**	-0.20	0.00	3.84	-0.13
B431	CS12 - Rectangle	0.195	potres 8/4	-23.03	0.16	**-2.99**	0.00	10.14	-0.16
B368	CS12 - Rectangle	0.000	potres 8/4	-23.45	-0.09	**2.75**	0.00	1.55	-0.35
B432	CS12 - Rectangle	0.585	potres 8/4	-29.88	0.13	1.26	**0.00**	4.58	-0.16
B431	CS12 - Rectangle	0.390	potres 8/4	-28.43	0.15	-1.25	**0.00**	-4.49	-0.19
B431	CS12 - Rectangle	0.000	potres 5/3	-25.50	-0.18	1.86	0.00	**-12.11**	0.16
B431	CS12 - Rectangle	0.000	potres 8/4	-21.27	0.17	-2.99	0.00	**10.50**	-0.17
B369	CS12 - Rectangle	0.390	potres 1/2	-25.67	-0.62	-1.36	0.00	-3.93	**-0.66**
B366	CS12 - Rectangle	0.390	potres 1/2	-25.57	0.60	-0.20	0.00	-1.84	**0.63**

3.2. Izkoriščenost jeklenih elementov

35. EC-EN 1993 Steel check ULS

Nonlinear calculation
Class: ULS
Coordinate system: Principal
Extreme 1D: Cross-section
Selection: All
Overall Unity Check

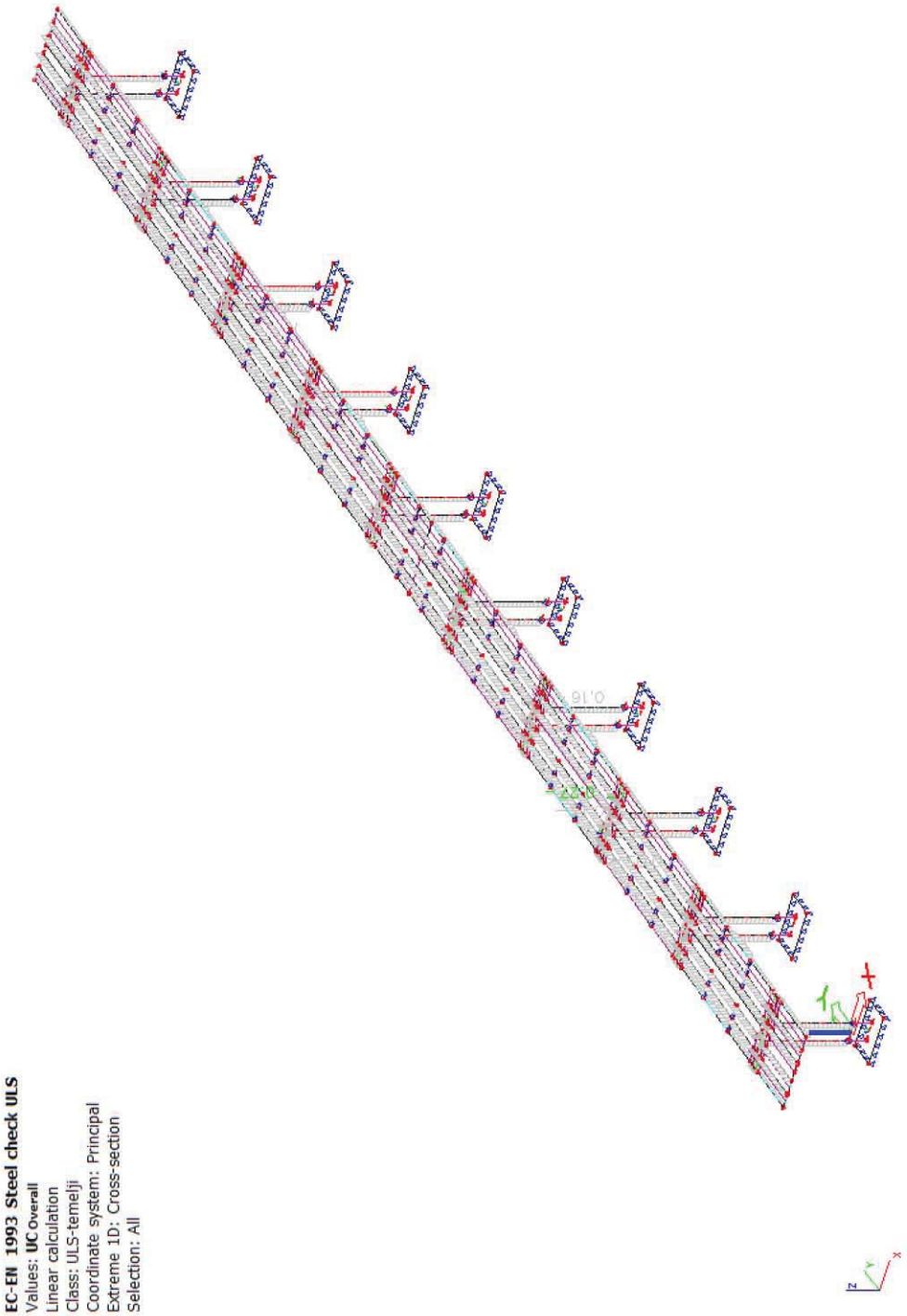
Name	dx [m]	Case	Cross-section	Material	$UC_{Overall}$ [-]	UC_{Sec} [-]	UC_{Stab} [-]
B373	0.000	NC2	CS2-vp - QRO220X8	S 235	**0.23**	0.20	0.23
B336	0.000	NC27	CS10 - Uw (240; 10; 150; 20; 0)	S 235	**0.17**	0.17	0.00
B60	0.000	NC41	CS4 - IPE240	S 235	**0.29**	0.28	0.29
B210	3.995	NC42	CS3 - UNP240	S 235	**0.24**	0.09	0.24
B271	0.000	NC16	CS6 - RO26.9X3.2	S 235	**0.05**	0.04	0.05
B406	0.200+	NC33	CS9 - U g (195; 150; 25; 10)	S 235	**0.15**	0.15	0.00


EC-EN 1993 Steel check ULS
Values: UC Overall
Nonlinear calculation
Class: ULS
Coordinate system: Principal
Extreme 1D: Cross-section
Selection: All

36. EC-EN 1993 Steel check ULS

Linear calculation
Class: ULS-temelji
Coordinate system: Principal
Extreme 1D: Cross-section
Selection: All
Overall Unity Check

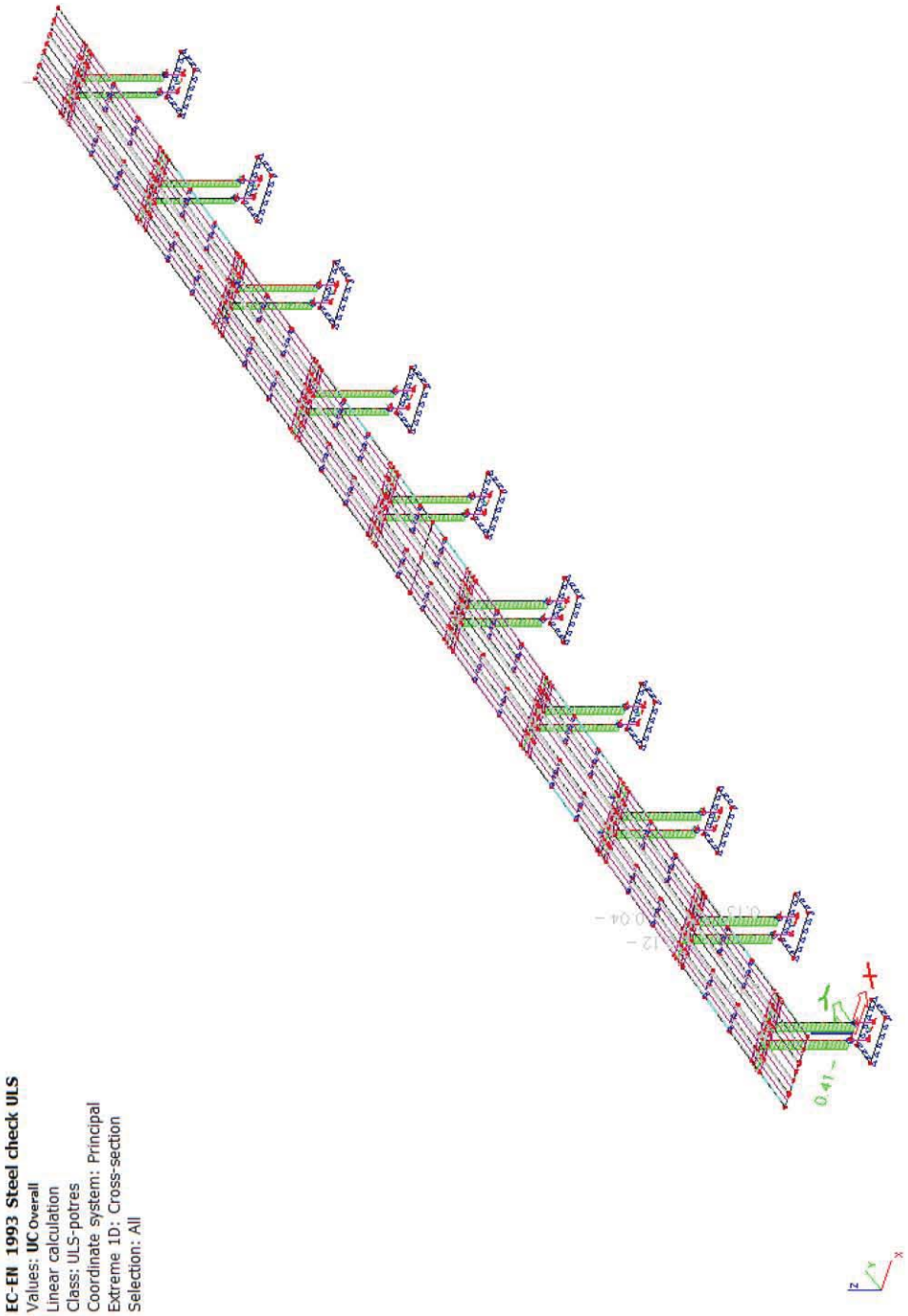
Name	dx [m]	Case	Cross-section	Material	$UC_{Overall}$ [-]	UC_{Sec} [-]	UC_{Stab} [-]
B422	0.000	MSN-temelj-2-1/1	CS2-vp - QRO220X8	S 235	**0.21**	0.18	0.21
B336	0.000	MSN-temelj-1-1/2	CS10 - Uw (240; 10; 150; 20; 0)	S 235	**0.16**	0.16	0.00
B60	0.000	MSN-temelj-1-1/2	CS4 - IPE240	S 235	**0.27**	0.27	0.00
B210	3.995	MSN-temelj-1-1/3	CS3 - UNP240	S 235	**0.22**	0.08	0.22
B271	0.000	MSN-temelj-3-1/4	CS6 - RO26.9X3.2	S 235	**0.05**	0.04	0.05
B339	0.200-	MSN-temelj-1-1/3	CS9 - U g (195; 150; 25; 10)	S 235	**0.13**	0.13	0.13


EC-EN 1993 Steel check ULS
Values: UC Overall
Linear calculation
Class: ULS-temelji
Coordinate system: Principal
Extreme 1D: Cross-section
Selection: All

37. EC-EN 1993 Steel check ULS

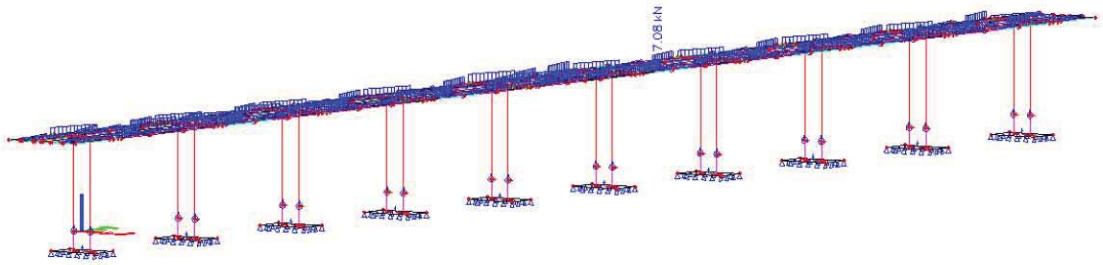
Linear calculation
Class: ULS-potres
Coordinate system: Principal
Extreme 1D: Cross-section
Selection: All
Overall Unity Check

Name	dx [m]	Case	Cross-section	Material	$UC_{Overall}$ [-]	UC_{Sec} [-]	UC_{Stab} [-]
B128	0.000	potres 1/1	CS2-vp - QRO220X8	S 235	**0.41**	0.29	0.41
B99	1.500	potres 8/2	CS10 - Uw (240; 10; 150; 20; 0)	S 235	**0.13**	0.13	0.00
B542	0.000	potres 8/2	CS4 - IPE240	S 235	**0.19**	0.19	0.00
B113	0.000	potres 1/1	CS3 - UNP240	S 235	**0.10**	0.10	0.09
B264	0.600+	potres 4/3	CS6 - RO26.9X3.2	S 235	**0.04**	0.03	0.04
B343	0.800+	potres 1/1	CS9 - U g (195; 150; 25; 10)	S 235	**0.12**	0.12	0.03

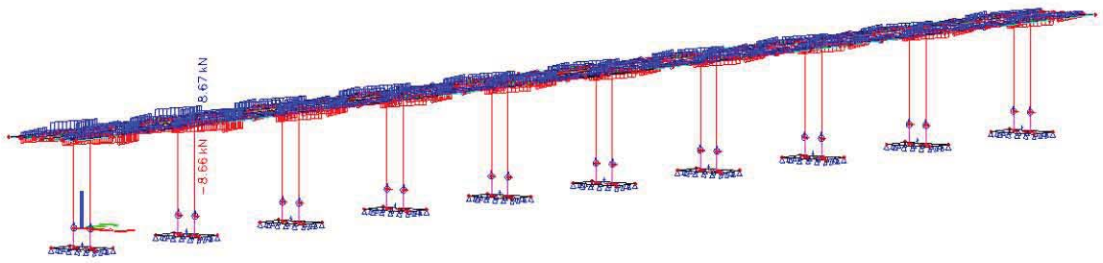

EC-EN 1993 Steel check ULS
Values: UC Overall
Linear calculation
Class: ULS-potres
Coordinate system: Principal
Extreme 1D: Cross-section
Selection: All
0.41
Z
Y
X

Natezna diagonala M16

1D internal forces
Values: **N**
Nonlinear calculation
Class: ULS
Coordinate system: Principal
Extreme 1D: Global
Selection: All
Filter: Cross-section = CS5 - RD16



1D internal forces
Values: **N**
Linear calculation
Class: ULS-potres
Coordinate system: Principal
Extreme 1D: Global
Selection: All
Filter: Cross-section = CS5 - RD16

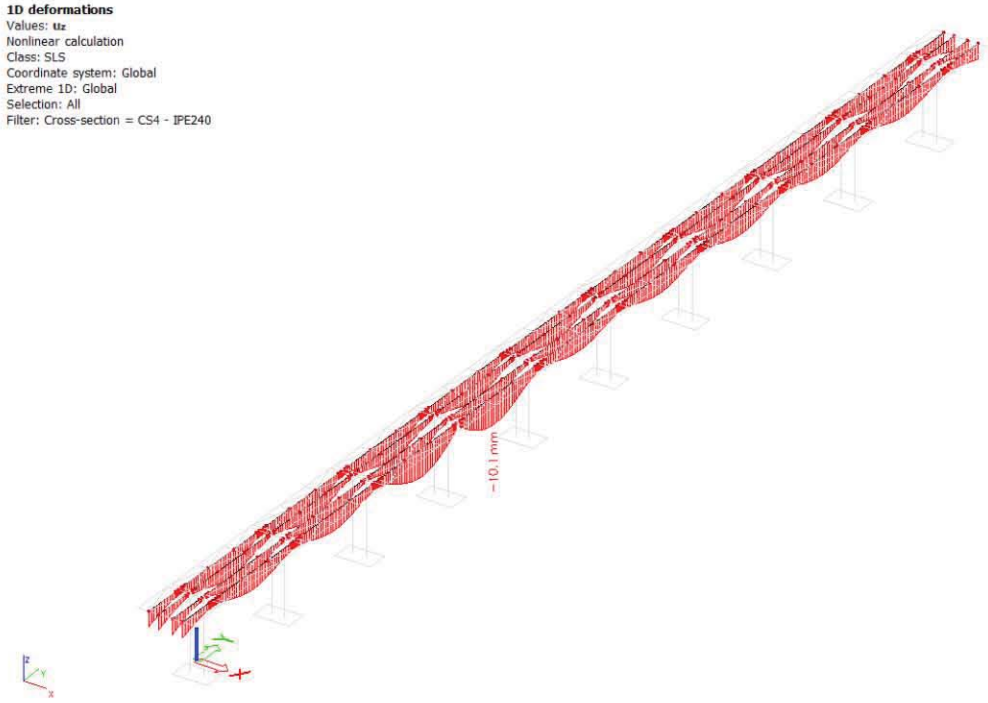


Ker imamo le natezne diagonale upoštevamo dvojno silo v diagonali

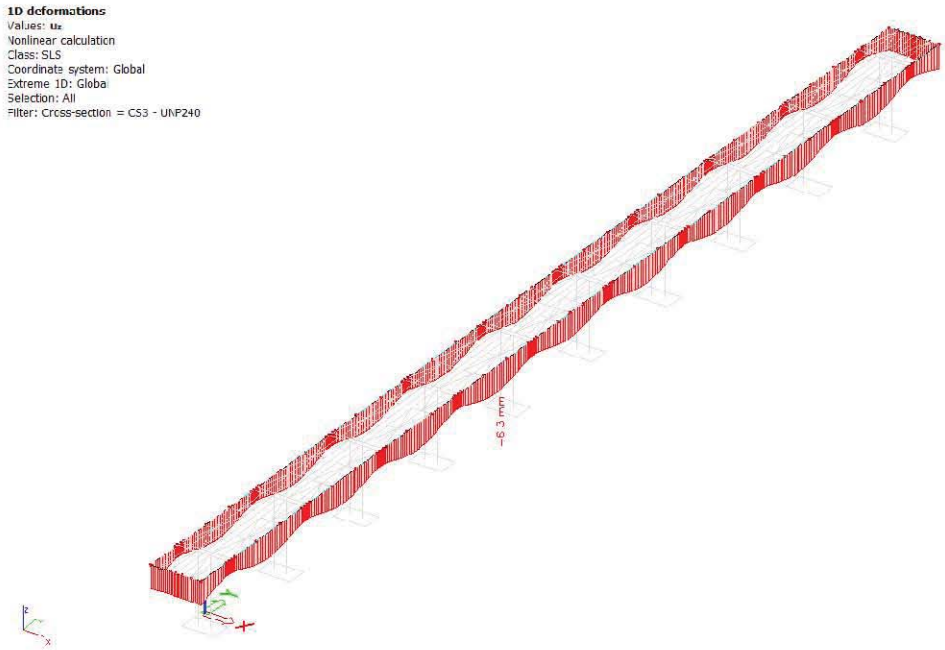
$F_{t,Ed,max} = 2x9 = 16\ kN < F_{t,Rd} = 45.2\ kN$ (M16, S235 z napenjalko)

3.3. Pomiki

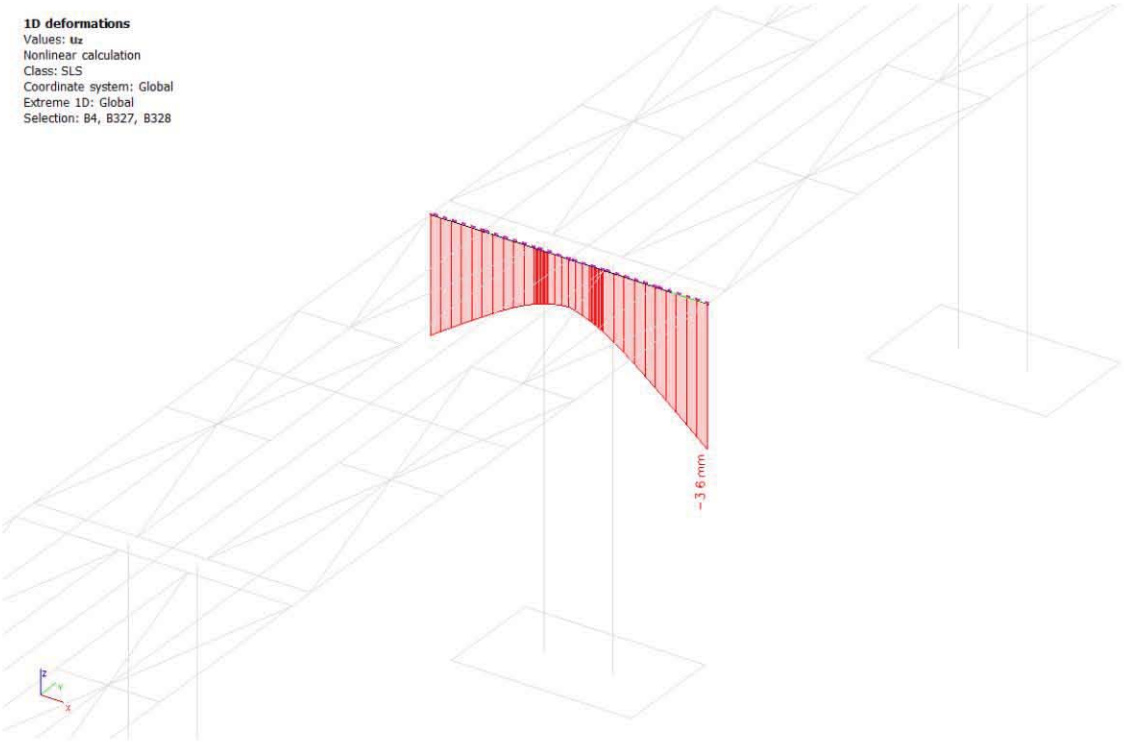
MSU – vertikalni pomiki



$$w_{vert,max,Q} = 10.1 \text{ mm} \leq w_{vert,dov,Q} = L/250 = 9000/250 = 36 \text{ mm}$$



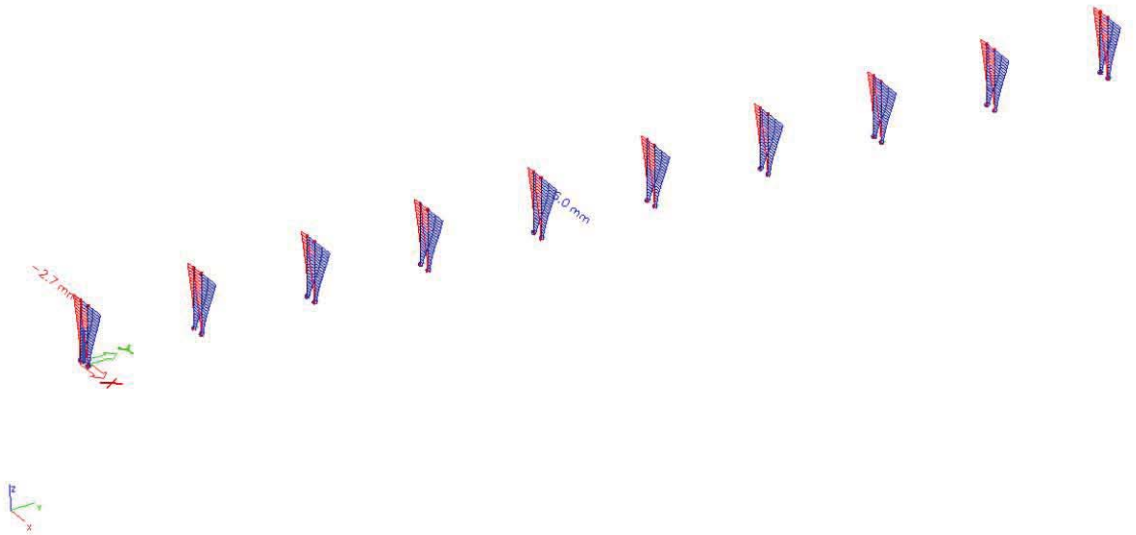
$$w_{vert,max,Q} = 6.3 \text{ mm} \leq w_{vert,dov,Q} = L/250 = 9000/250 = 36 \text{ mm}$$



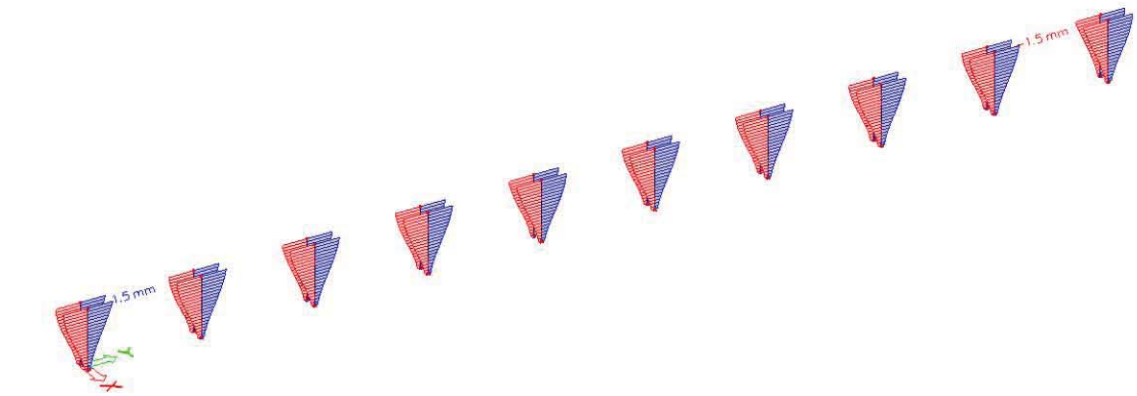
$$w_{vert,max,Q} = 3.6 \text{ mm} \leq w_{vert,dov,Q} = 2xL/250 = 2x1500/250 = 12 \text{ mm}$$

MSU – horizontalni pomiki

1D deformations
Values: u_x
Nonlinear calculation
Class: SLS
Coordinate system: Global
Extreme 1D: Global
Selection: All
Filter: Cross-section = CS2-vp - QRO220X8



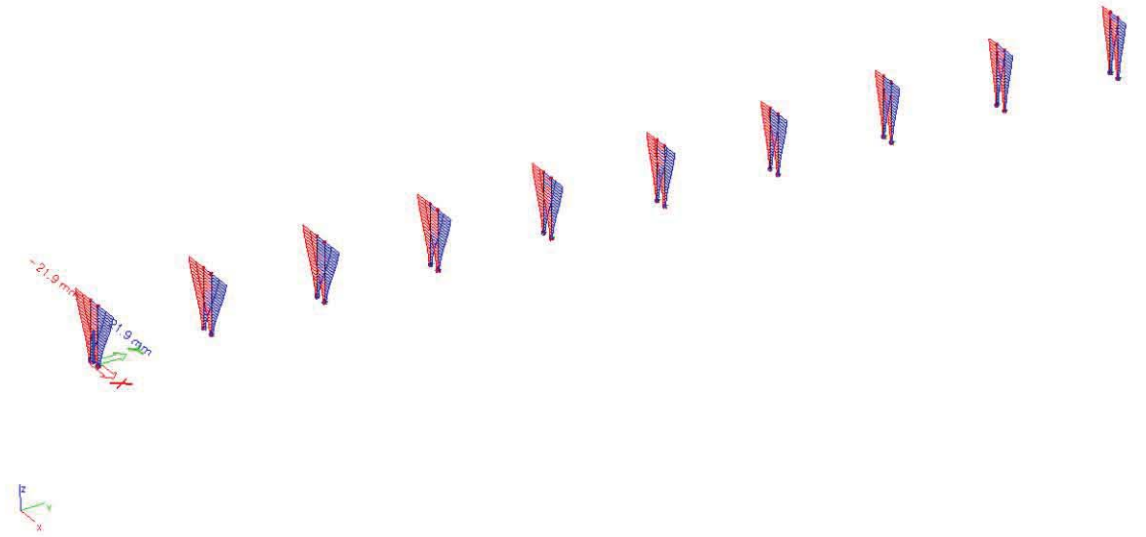
1D deformations
Values: u_y
Nonlinear calculation
Class: SLS
Coordinate system: Global
Extreme 1D: Global
Selection: All
Filter: Cross-section = CS2-vp - QRO220X8



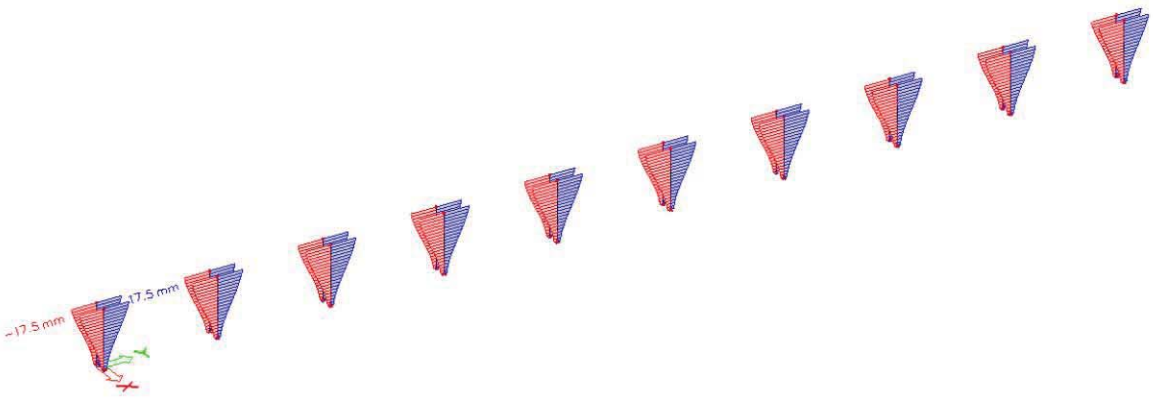
$$u_{hor,max,W} = 7 \text{ mm} \leq u_{hor,dov,W} = h/150 = 4600/150 = 30 \text{ mm}$$

Potresna kombinacija

1D deformations
Values: ux
Linear calculation
Class: ULS-potres
Coordinate system: Global
Extreme 1D: Global
Selection: All
Filter: Cross-section = CS2-vp - QRO220X8

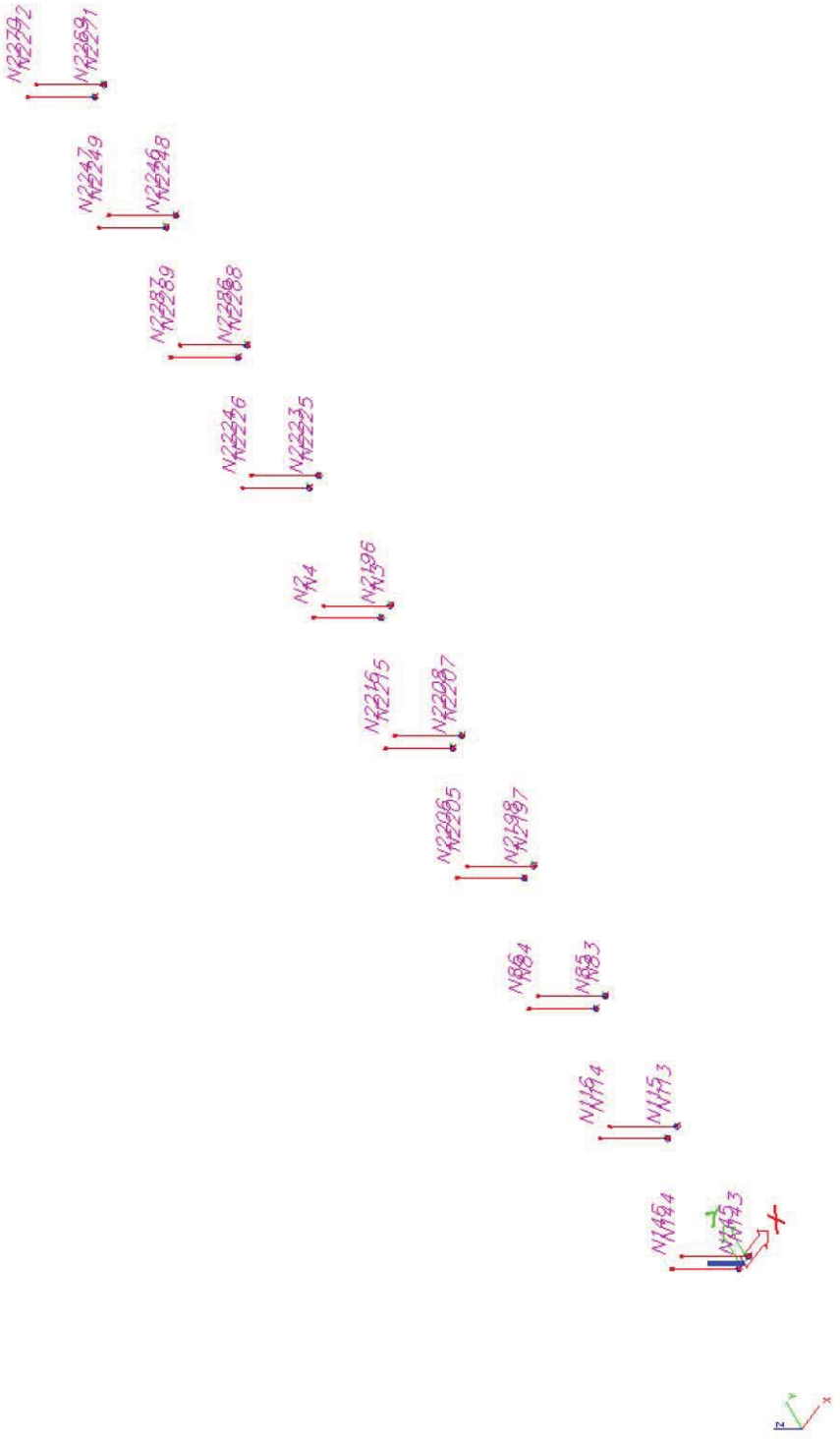


1D deformations
Values: uy
Linear calculation
Class: ULS-potres
Coordinate system: Global
Extreme 1D: Global
Selection: All
Filter: Cross-section = CS2-vp - QRO220X8



$U_{hor,max,E} = 1.5x22x0.5= 16.5 \text{ mm} \leq U_{hor,dov,E} = 0.010xh = 0.010x4600 = 46 \text{ mm}$

4. REAKCIJE


N22392
N22391
N22349
N22348
N22289
N22288
N22226
N22225
N24
N1996
N2195
N2207
N2205
N1987
N884
N883
N1194
N1193
N1464
N1463

46. Connection forces

Nonlinear calculation, Extreme : Global
Selection : All
Class : ULS

Case	Connection	Node	Beams	Rx [kN]	Ry [kN]	Rz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
NC34	FC26	N113	B101	**-8.66**	-0.52	-28.46	1.03	**-17.96**	0.07
NC2	FC23	N2196	B1	**18.90**	0.33	-51.72	-0.83	**24.08**	0.13
NC27	FC28	N143	B127	-1.85	**-2.62**	-66.93	**4.30**	-3.35	-0.05
NC17	FC3	N85	B76	6.46	**2.48**	-71.33	**-4.26**	3.40	-0.04
NC24	FC4	N83	B75	4.23	0.22	**-102.36**	-0.64	10.46	0.12
NC20	FC26	N113	B101	-6.61	-0.27	**28.18**	0.32	-14.02	0.07
NC45	FC4	N83	B75	0.24	-1.50	-74.12	2.64	1.46	**-0.10**
NC2	FC24	N3	B2	4.37	0.29	-89.10	-0.78	10.99	**0.14**

47. Connection forces

Linear calculation, Extreme : Global
Selection : All
Class : ULS-potres

Case	Connection	Node	Beams	Rx [kN]	Ry [kN]	Rz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
potres 1/2	FC28	N143	B127	**-14.97**	-3.10	-89.28	8.19	**-35.61**	-0.01
potres 4/1	FC27	N145	B128	**14.94**	3.31	**45.93**	-8.45	**35.56**	-0.01
potres 8/4	FC25	N115	B102	-4.04	**-11.95**	-2.26	**27.92**	-10.41	0.01
potres 5/3	FC26	N113	B101	-5.16	**11.59**	-1.47	**-27.51**	10.39	0.01
potres 1/2	FC25	N115	B102	14.87	3.58	**-90.48**	-8.80	35.35	-0.01
potres 8/4	FC24	N3	B2	-3.75	-11.48	-8.65	27.42	6.97	**-0.02**
potres 5/3	FC24	N3	B2	2.63	11.44	-37.78	-27.37	-8.55	**0.02**

5. AB TEMELJI

Del tega načrta so tudi novi AB temelji, ki so izven območja podpiranja jeklenih stebrov z AB konstrukcjo podhoda

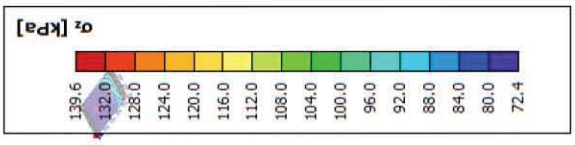
V okviru analize je bi upoštevan vertikalni modul podajnosti tal 45000 kN/m^3.

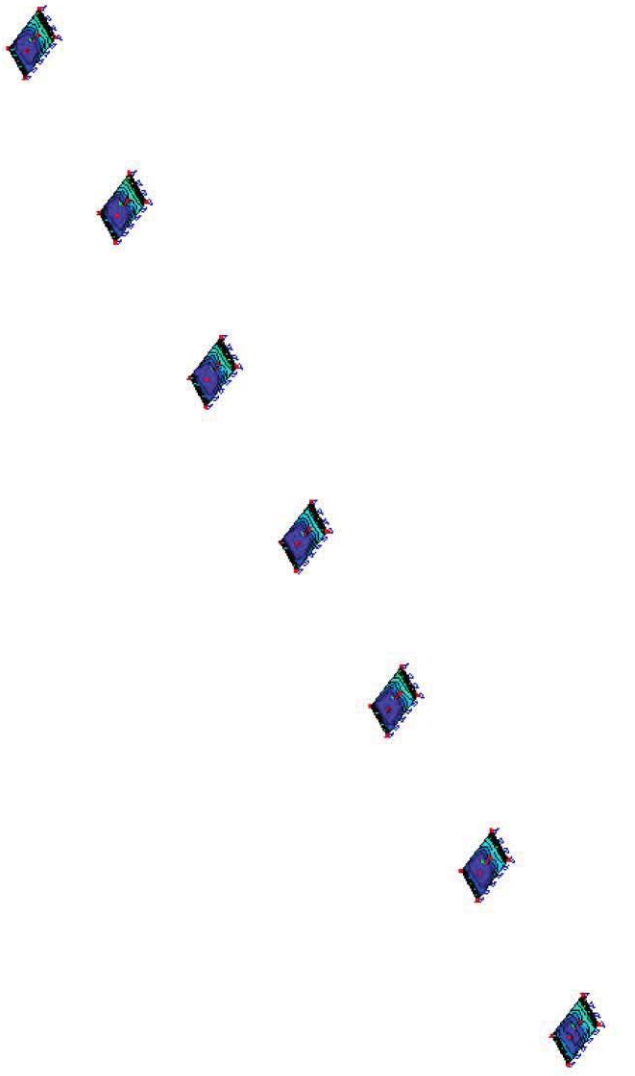
Vodneprepustni beton
C30/37, PV-II, XC2, XD3-odporen proti solem

Armatura S500B

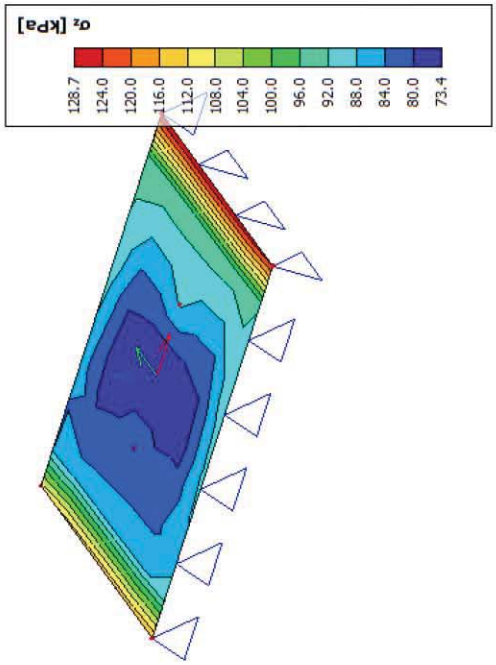
Kontaktne napetosti v temeljnih tleh

Maksimalne kontaktne napetosti R_d/A potd temelji pri ULS (faktrorirana obtežba) in pri potresnih obtežnih kombinacijah znašajo največ 200 kN/m^2 in ne presegajo maksimalnih dovoljenih napetosti 370 kN/m^2.

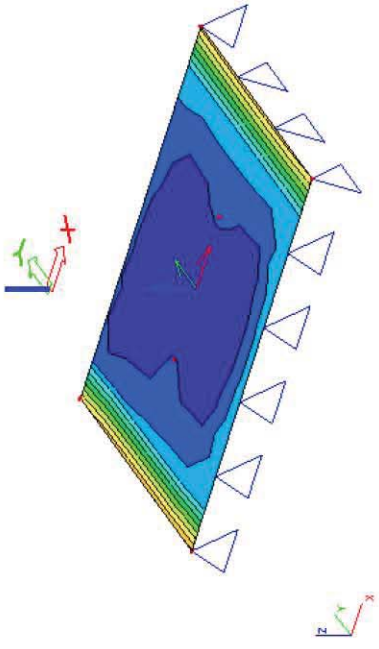




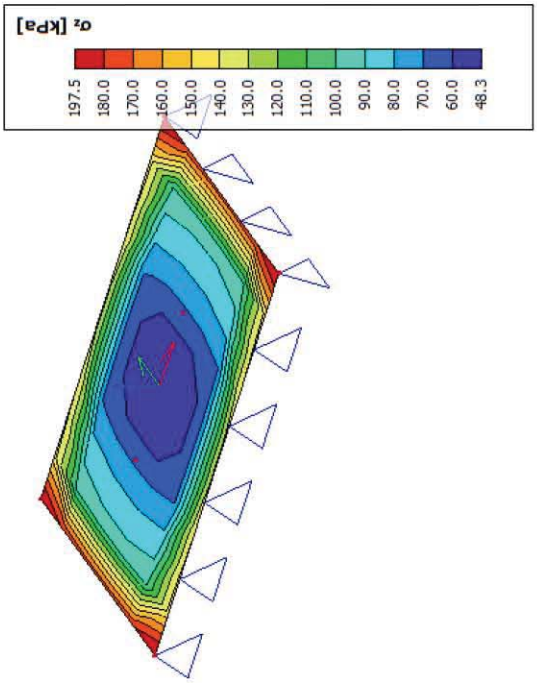
2D contact stresses
Values: σz
Nonlinear calculation
Class: ULS
Extreme: Global
Selection: All
Location: In nodes avg.. System: LCS
mesh element

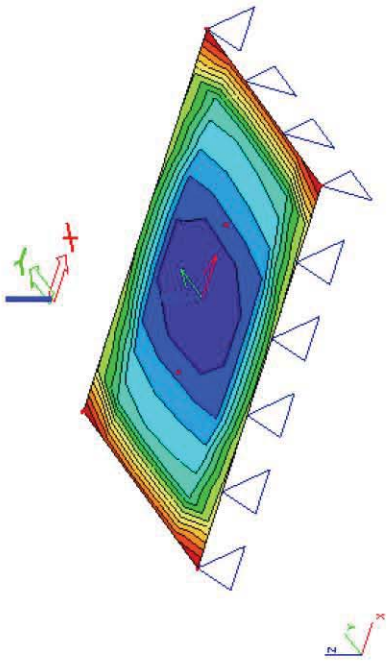


2D contact stresses
Values: σz
Nonlinear calculation
Class: ULS
Extreme: Global
Selection: All
Location: In nodes avg.. System: LCS
mesh element



σz [kPa]
197.5
180.0
170.0
160.0
150.0
140.0
130.0
120.0
110.0
100.0
90.0
80.0
70.0
60.0
44.3
2D contact stresses
Values: σz
Linear calculation
Class: ULS-potres
Extreme: Global
Selection: All
Location: In nodes avg.. System: LCS
mesh element





2D contact stresses
Values: σ_z
Linear calculation
Class: ULS-potres
Extreme: Global
Selection: All
Location: In nodes avg.. System: LCS
mesh element

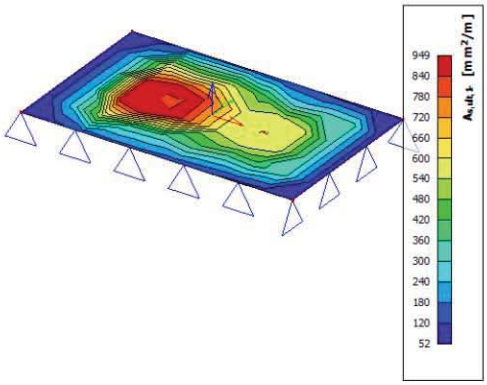
Armatura

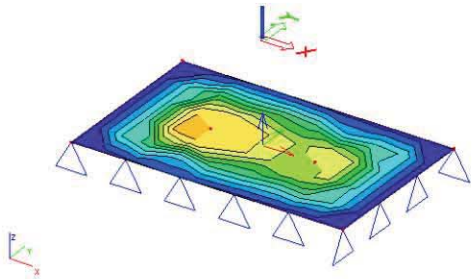
- Temeljna peta

160x260x45 cm

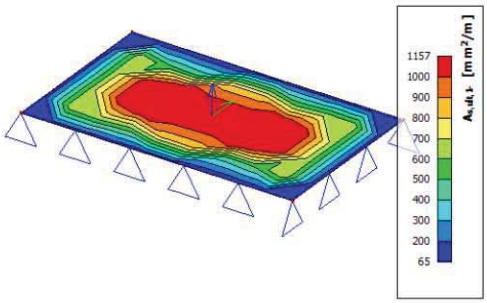
Izberem armaturo zgoraj in spodaj v obeh smereh +/- ϕ16/15cm, $A_{s,dej}$ = 13.4 cm^2/m

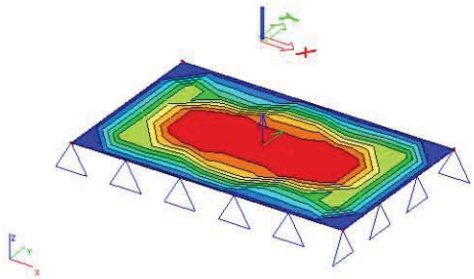
Reinforcement design (ULS+SLS)
Values: $A_{s,ult,1-}$
Nonlinear calculation
Class: ULS
Extreme: Global
Selection: All
Location: In nodes avg. on macro.
System: LCS mesh element



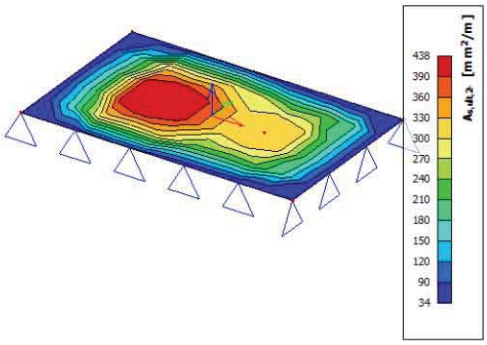


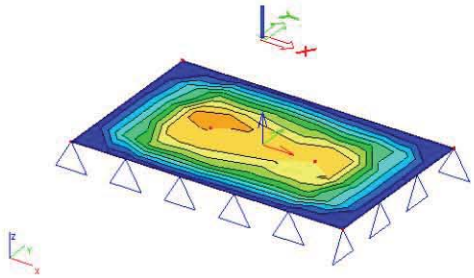
Reinforcement design (ULS+SLS)
Values: $A_{s,ult,1-}$
Linear calculation
Class: ULS-potres
Extreme: Global
Selection: All
Location: In nodes avg. on macro.
System: LCS mesh element



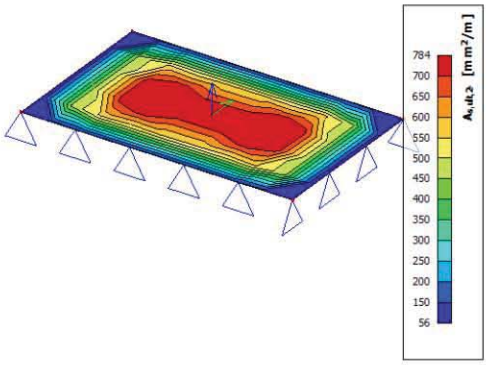


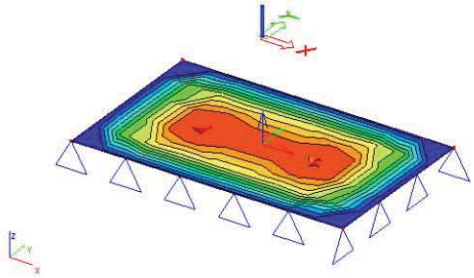
Reinforcement design (ULS+SLS)
Values: $A_{s,ult,2-}$
Nonlinear calculation
Class: ULS
Extreme: Global
Selection: All
Location: In nodes avg. on macro.
System: LCS mesh element



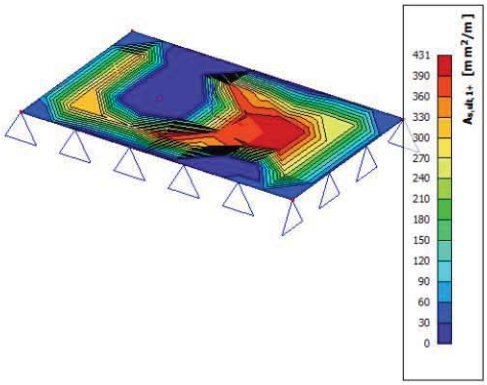


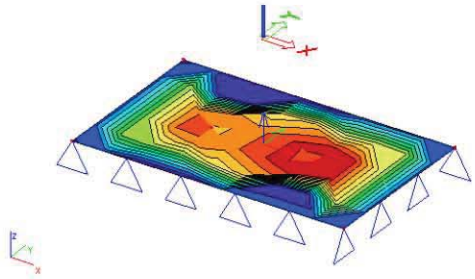
Reinforcement design (ULS+SLS)
Values: $A_{s,ult,2-}$
Linear calculation
Class: ULS-potres
Extreme: Global
Selection: All
Location: In nodes avg. on macro.
System: LCS mesh element



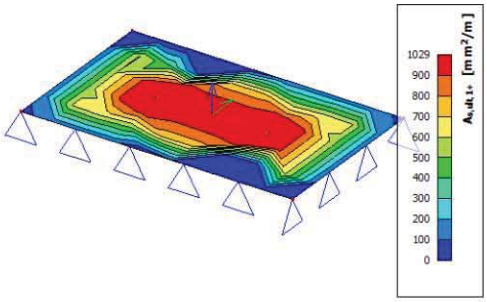


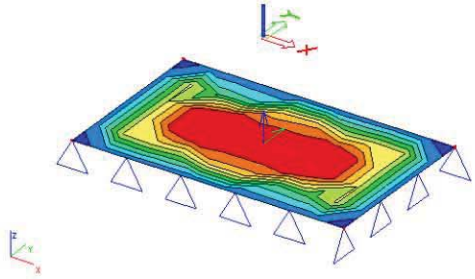
Reinforcement design (ULS+SLS)
Values: $A_{s,ult,1+}$
Nonlinear calculation
Class: ULS
Extreme: Global
Selection: All
Location: In nodes avg. on macro.
System: LCS mesh element



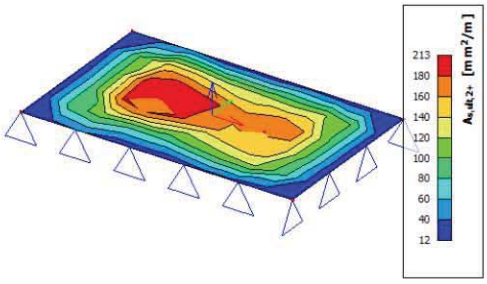


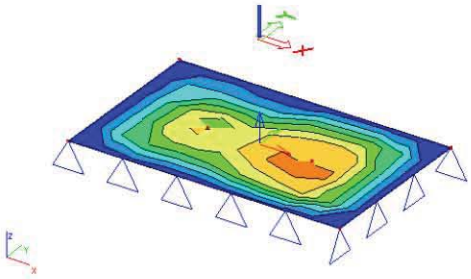
Reinforcement design (ULS+SLS)
Values: $A_{s,ult,1+}$
Linear calculation
Class: ULS-potres
Extreme: Global
Selection: All
Location: In nodes avg. on macro.
System: LCS mesh element



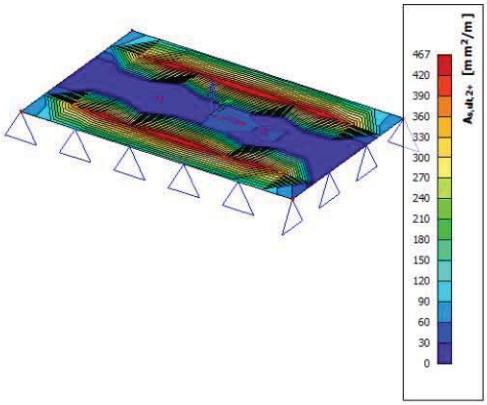


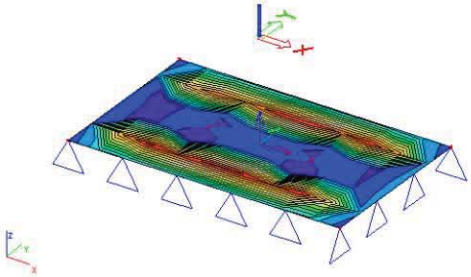
Reinforcement design (ULS+SLS)
Values: $A_{s,ult,2+}$
Nonlinear calculation
Class: ULS
Extreme: Global
Selection: All
Location: In nodes avg. on macro.
System: LCS mesh element





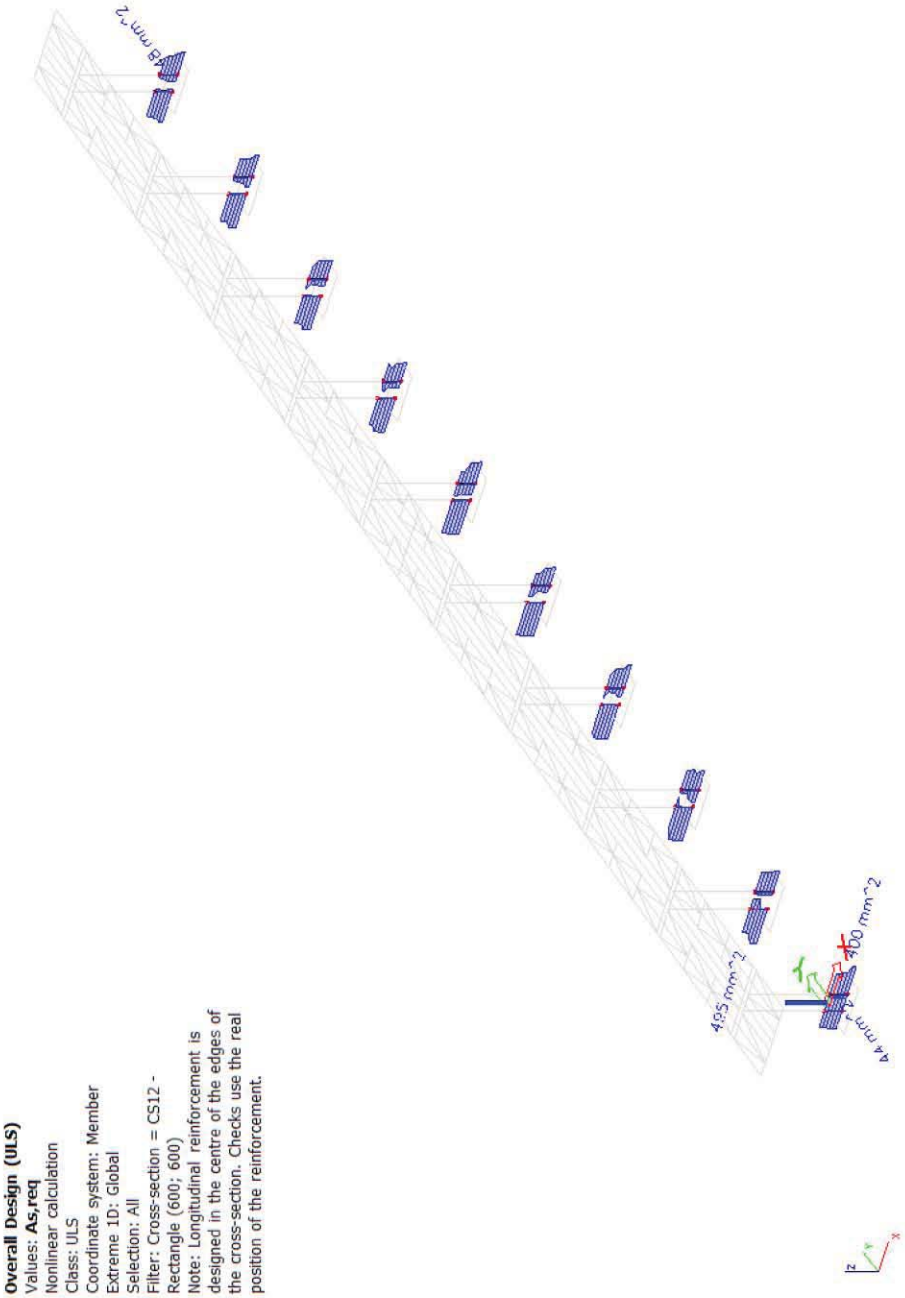
Reinforcement design (ULS+SLS)
Values: $A_{s,ult,2+}$
Linear calculation
Class: ULS-potres
Extreme: Global
Selection: All
Location: In nodes avg. on macro.
System: LCS mesh element

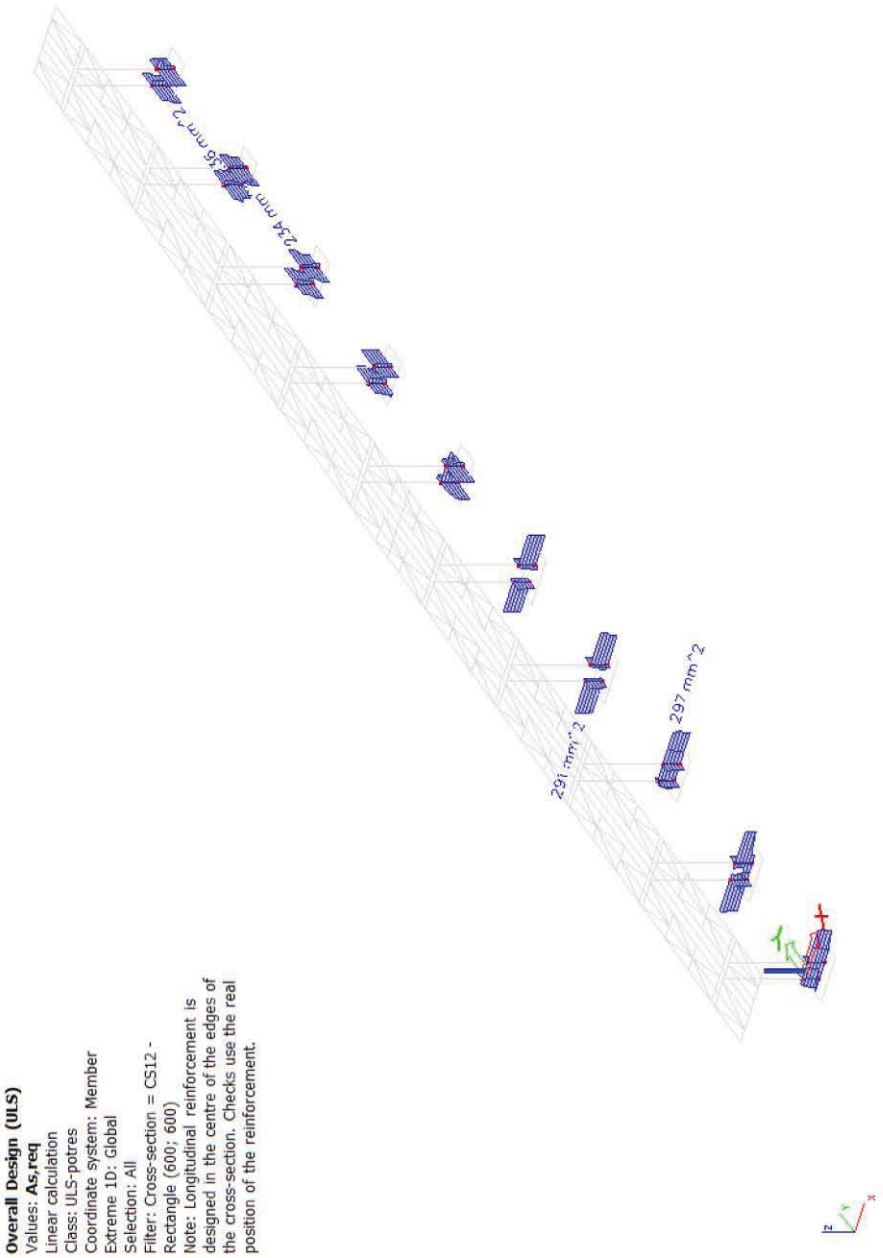




- Temeljni nastavki

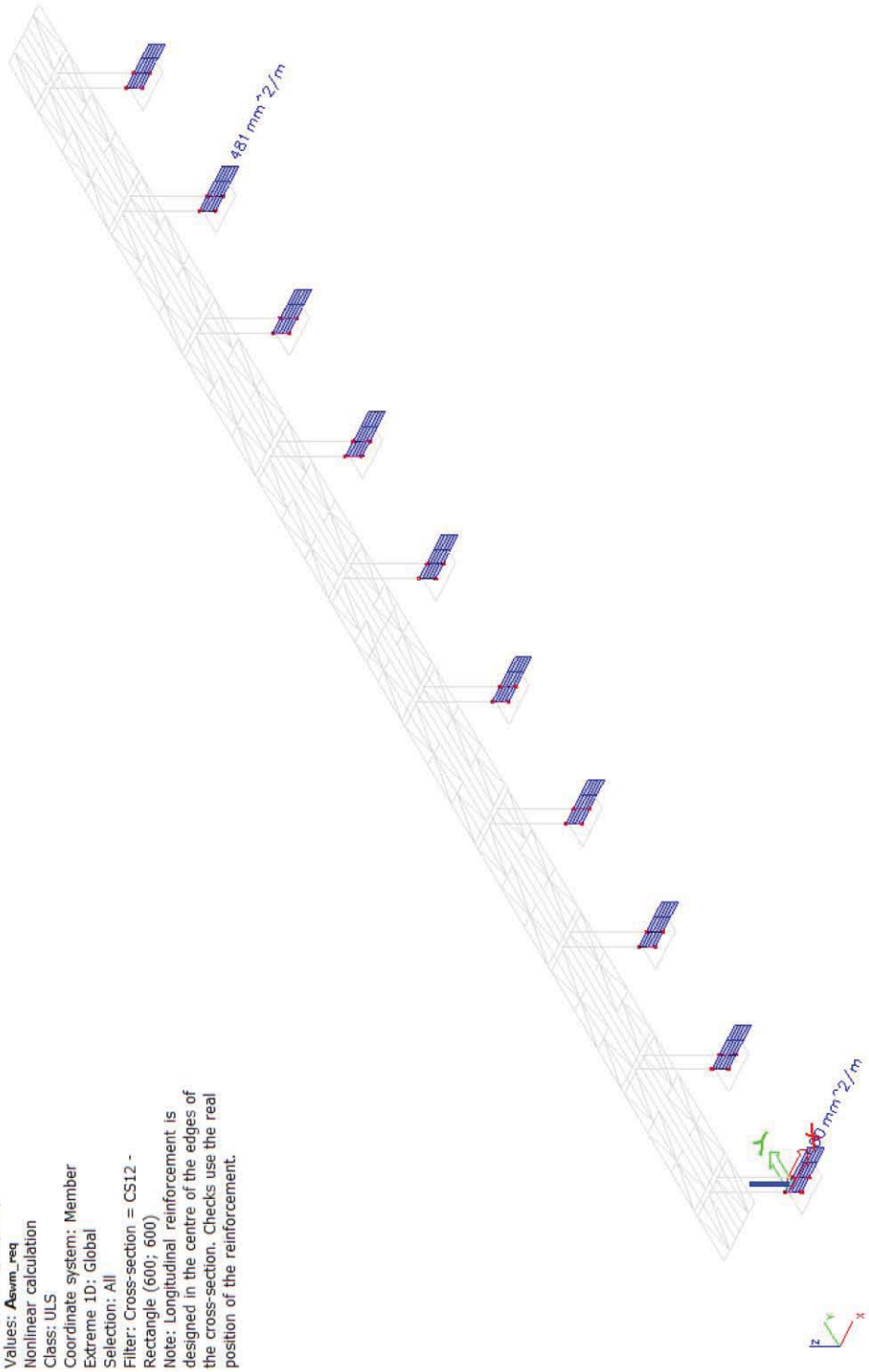
60x60x75 cm



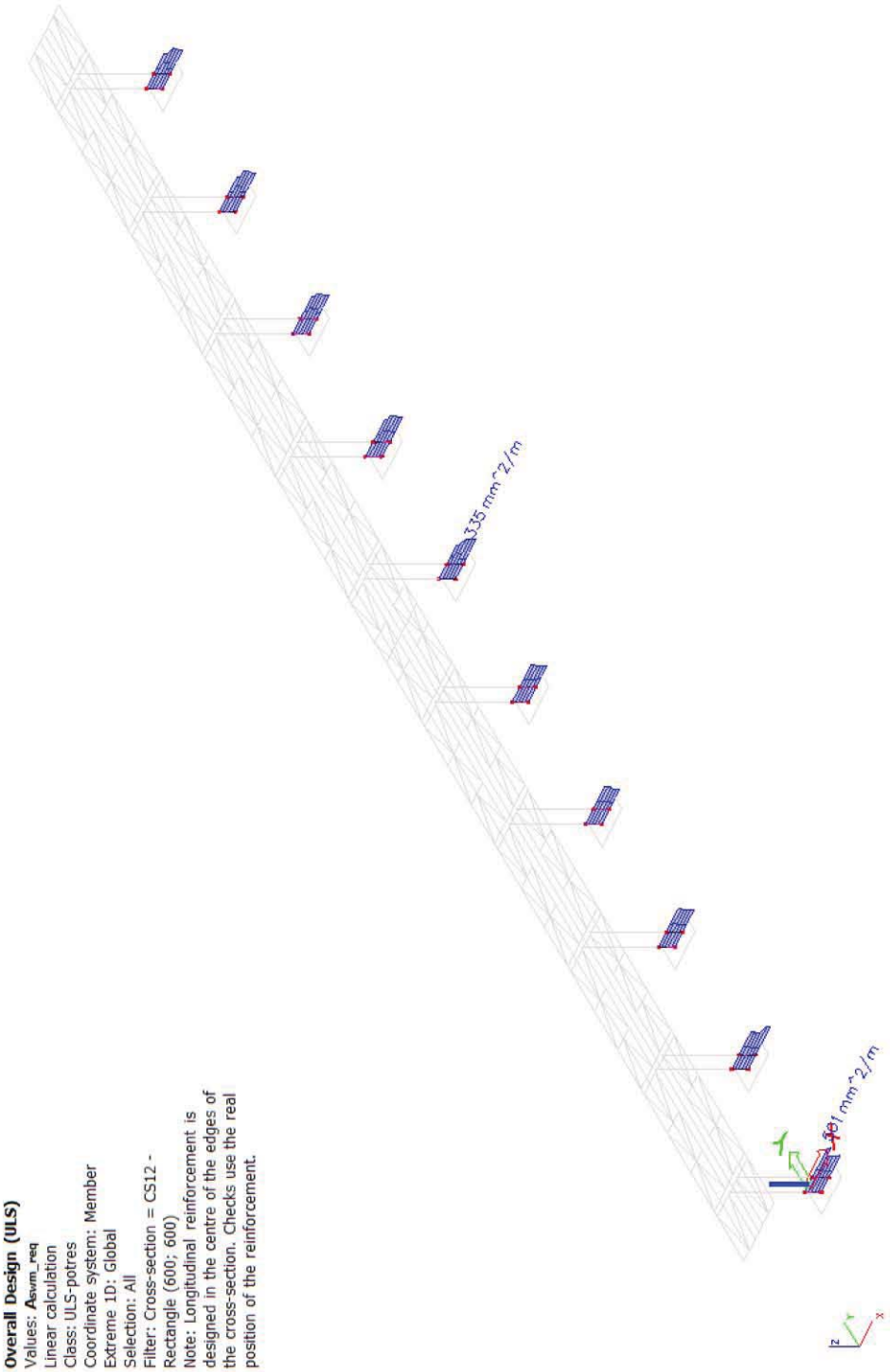


Izberem armaturo na vsaki stranici 16ϕ14 po obodu.

To je na eni stranici 5ϕ14, $A_{s,dej}$ = 7.7 cm^2/eni stranici.



Overall Design (ULS)
Values: A_{swm_req}
Nonlinear calculation
Class: ULS
Coordinate system: Member
Extreme 1D: Global
Selection: All
Filter: Cross-section = CS12 - Rectangle (600; 600)
Note: Longitudinal reinforcement is designed in the centre of the edges of the cross-section. Checks use the real position of the reinforcement.



Izberem dvostrižno streme ϕ12/20, $A_{sw,dej}$ = 11.3 cm^2/m

6. LESENA KRITINA

OSB3 vodoodporna plošča D=25mm

L = cca 0.80 m , nosilec preko dveh ali več polj (2xL, 3xL,...)

$q_{Ed,MSU}$ = 0.55+1.20 = 1.75 kN/m^2

AGEPAN® OSB/3 | TECHNISCHE DATEN

Zulässige Flächenlast q_{max} [kN/m²]
Zweifeldträger beidseitig belastet, Durchbiegungsbeschränkung l/300

	12	15	18	22	25
l (m)			Dicke (in mm)		
0,20	22,01	34,41	47,41	70,85	91,52
0,25	14,06	21,99	30,30	45,30	58,52
0,30	9,74	15,24	21,01	31,42	40,59
0,35	7,14	11,18	15,41	23,05	29,78
0,40	5,45	8,54	11,77	17,61	22,77
0,45	4,22	6,72	9,28	13,89	17,96
0,50	3,06	5,43	7,50	11,23	14,52
0,55	2,28	4,47	6,18	9,25	11,97
0,60	1,74	3,45	5,17	7,76	10,04
0,625	1,53	3,04	4,76	7,14	9,24
0,65	1,35	2,69	4,39	6,59	8,53
0,70	1,07	2,14	3,74	5,66	7,33
0,75	0,86	1,72	3,02	4,92	6,37
0,80	0,69	1,40	2,47	4,30	5,58
0,833	0,60	1,23	2,18	3,96	5,13
0,90	0,46	0,96	1,70	3,17	4,38
0,95	0,38	0,80	1,43	2,68	3,91
1,00	0,32	0,67	1,21	2,28	3,39

Max. zul. Flächenlast q_{max} gemäß Spannungsnachweis/Gebrauchstauglichkeit l = vorh. Unterstützungsabstand

7. DETAJLI

7.1. Sidranje KC220/8

Vpeto na nov točkovni temelj

4xM20 8.8

maksimalne vrednosti

natezna sila na eno sidro

N = 49/4+3561/26.5/2 = 80 kN

prečna sila na eno sidro

Vx = 20/4 = 5 kN
Vy = 20/4 = 5 kN

kontrola tlačnih kontaktnih napetosti betona:

$f_{j,d} = \alpha\beta f_{cd}$ = 1.0×2/3×2.5/1.5 = 1.11 kN/cm^2

σ = 102/(42×42)+3561/(42×42^2/6) = 0.35 kN/cm^2 < 1.11 kN/cm^2 ... OK

Detail S1: Control of anchoring rods

KC220/8, vpeto | SŽ PP Litija | Peronski nadstrešek 3

Anchors		d (cm)	d_0 (cm)	A_s (cm^2)	A (cm^2)
	M20	2	2.2	2.45	3.14

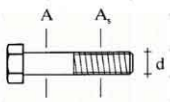
Concrete f_{ck} (kN/cm^2) = 2.50
C25/30 $f_{ctk\,0,05}$ (kN/cm^2) = 0.18

grade 8.8
f_{ub} (kN/cm^2) 80
f_{yb} (kN/cm^2) 64
num. of anchors 1 obravnavam eno sidro

Anchoring plate t (cm)= 2.00
S235 f_u (kN/cm^2)= 36.0

k= 1 | k=0,85 carved later | γ_{M2}= 1.25
k=1,0 standard manufactured bolts, rods | γ_c= 1.5

share plane 1
1 - share plane A_S
2 - share plane A



factor 0.6
0,6 for shear plane A
0,6 for ductility anchors (4.6, 5.6, 8.8) - share plane A_S
0,5 for nonductility anchors (4.8, 5.8, 6.8, 10.9) - share plane A_S

Shear resistance: $F_{v,Rd} = k*0,6(0,5)*f_{ub}*A_s(A)/\gamma_{M2}$ | $F_{v,Ed} / F_{v,Rd} < 1,0$ | $F_{Rv,Ed} = (Fx^2+Fy^2)^{0,5}$

$F_{v,Rd}$ = 94.1 kN

$F_{vb,Rd} = \alpha_b*f_{ub}*A_s/\gamma_{M2}$ | $\alpha_b = 0,44 - 0,0003*f_{yb}$

$F_{vb,Rd}$ = 38.9 kN

min $F_{v,Rd}$ = 38.9 kN

Tension resistance $F_{t,Rd} = k*0,9*f_{ub}*A_s/\gamma_{M2}$ | $F_{t,Ed} / F_{t,Rd} < 1,0$ | $(F_{v,Ed} / F_{v,Rd})+(F_{t,Ed} / (1,4\ F_{t,Rd})) < 1,0$

$F_{t,Rd}$ = 141.1 kN

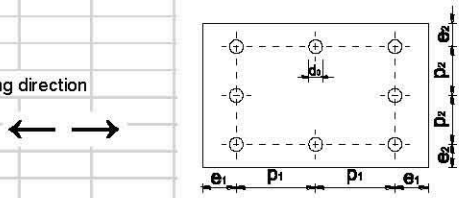
Bearing resistance $F_{b,Rd} = k_1*\alpha_b*f_u*d*t/\gamma_{M2}$ | $F_{b,Ed} / F_{b,Rd} < 1,0$

$F_{b,Rd}$ = 193.0 kN

		usual values		I choose
e_1=2*d_0		e_1 (cm)=	4.40	e_1 (cm)= 4.40
p_1=3*d_0		p_1 (cm)=	6.60	p_1 (cm)= 6.60
e_2=1,5*d_0		e_2 (cm)=	3.30	e_2 (cm)= 3.30
p_2=3*d_0		p_2 (cm)=	6.60	p_2 (cm)= 6.60

		in loading direction			orthogonal to loading direction			
outter anchor	→	α_d=e_1/3d_0	$\alpha_{d,outter}$=	0.67	k_1=min(2,8*e_2/d_0-1,7≤2,5; 1,4*p_2/d_0-1,7≤2,	$k_{1,outter}$=	2.50	
inner anchor	→	α_d=p_1/3d_0 - 1/4	$\alpha_{d,inner}$=	0.75	k_1=1,4*p_2/d_0-1,7≤ 2,5	$k_{1,inner}$=	2.50	
			α_d=	0.67	$_b$=min(α_d; f_{ub}/f_u; 1,0)	α_b= 0.67	k_1=	2.50

loading direction



Anchoring length: 2 / 2

$l_{b,req.} = \alpha_1 * F_{t,Ed} / (\pi * d * f_{bd})$ η_1 = 1…good anchoring conditions η_2 = 1 d ≤ 32 mm

η_1 = 1 0,7…poor anchoring conditions $\mu_2 = (132-d)/100$ η_2 = 1.12 d > 32 mm

η_2 = 1

α_1 = 1 α_1 = 0,7...bent rods or additional anchoring plates

1...straight rod

ribbed rebar (threaded rods) … EC2

$f_{bd} = 2{,}25 * \eta_1 * \eta_2 * f_{ctd}$ f_{bd} (kN/cm²) = 0.27 $f_{ctd} = \alpha_{ct} * f_{ctk,0,05} / \gamma_c$

α_{ct} = 1.00

plain rods … Tabel 5.3 or Equation 5.1, ENV 1992-1-1, for plain (smooth) rebar

f_{bd} (MPa) = $(0{,}36 * (f_{ck})^{0,5}) / \gamma_c$ …(f_{ck} in f_{bd} v MPa) f_{bd} (kN/cm²) = 0.12

I choose f_{bd} (kN/cm²) = 0.27 threaded rods with thread along the entire lenght

obremenitve na eno sidro

(+) tension

F_X	F_Y	F_Z	$F_{Rv,Ed}$	$F_{v,Ed}$	$F_{v,Ed}/F_{v,Rd}$	$F_{b,Ed}/F_{b,Rd}$	$F_{t,Ed}$	$F_{t,Ed}/F_{t,Rd}$	inter.	$l_{b,req.}$ (cm)
5.0	5.0	80.0	7.1	7.1	0.18	0.04	80.0	0.57	0.59	47
0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.0	0.00	0.00	0
0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.0	0.00	0.00	0
0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.0	0.00	0.00	0
(kN)				max.	0.18	0.04		0.57	0.59	47

7.2. Montažni spoj IPE240 in UNP240

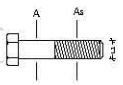
Detail D1.1: Bolted moment resistance joint 1 / 2

IPE240, U240 | SŽ PP Litija | Peronski nadstrešek 3 | Plate

Bolts		d(cm)	d_0(cm)	As(cm^2)	A(cm^2)
	M20	2	2.2	2.45	3.14

grade 10.9 | f_{ub}(kN/cm^2) 100

shear plane 1 — 1 - share plane A_S; 2 - share plane A



factor 0.5 — 0,6 for shear plane A; 0,6 for ductility anchors (4.6, 5.6, 8.8) - share plane A_S; 0,5 for nonductility anchors (4.8, 5.8, 6.8, 10.9) - share plane A_S

plate: grade 235; s (cm)= 2.0; f_u(kN/cm^2)= 36; γ_{M0}= 1.00; γ_{M2}= 1.25

Shear resistance: $F_{v,Rd} = 0,6(0,5)*f_{ub}*A_s(A)/\gamma_{M2}$ — $F_{v,Ed} / F_{v,Rd} < 1,0$

$F_{v,Rd}$ = 98.0 kN

interaction V - M: $(F_{v,Ed} / F_{v,Rd})+(F_{t,Ed} / F_{t,Rd})/1,4 < 1,0$

Tension resistance $F_{t,Rd} = 0,9*f_{ub}*A_s/\gamma_{M2}$ — $F_{t,Ed} / F_{t,Rd} < 1,0$

$F_{t,Rd}$ = 176.4 kN

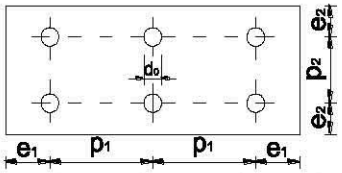
Bearing resistance $F_{b,Rd} = k_1*\alpha_b*f_u*d*t/\gamma_{M2}$ — $F_{b,Ed} / F_{b,Rd} < 1,0$

$F_{b,Rd}$ = 193.0 kN

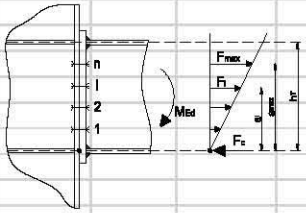
	usual values		I choose
$e_1=2*d_0$	e_1 (cm)=	4.40	e_1 (cm)= 4.40
$p_1=3*d_0$	p_1 (cm)=	6.60	p_1 (cm)= 6.60
$e_2=1,5*d_0$	e_2 (cm)=	3.30	e_2 (cm)= 3.30
$p_2=3*d_0$	p_2 (cm)=	6.60	p_2 (cm)= 6.60

	in loading direction			orthogonal to loading direction			
outter anchc →	$\alpha_d=e_1/3d_0$	$\alpha_{d,outter}$=	0.67	$k_1=\min(2,8*e_2/d_0-1,7\leq 2,5;\ 1,4*p_2/d_0-1,7\leq 2,5$		$k_{1,outter}$=	2.50
inner anchor →	$\alpha_d=p_1/3d_0$ - 1/4	$\alpha_{d,inner}$=	0.75	$k_1=1,4*p_2/d_0-1,7\leq 2,5$		$k_{1,inner}$=	2.50
		α_d=	0.67	$\alpha_b=\min(\alpha_d;\ f_{ub}/f_u;\ 1,0)$	α_b= 0.67	k_1=	2.50

load direction ← →



num. of bolts for transfering tension and shear laod					$n_{vij,N,V}$=	4				2 / 2
Connection load				load of maximal loaded bolt						
$M_{Ed,y}$=	4000	kNcm		$F_{t,Ed,M}$=	98.45	kN		check		
N_{Ed} =	20	kN	(+) tension	$F_{t,Ed,N}$=	5.00	kN	$F_{t,Ed\ My+N}/F_{t,Rd}$=	0.586	OK	
$V_{Ed,z}$ =	20	kN		$F_{v,Ed}$=	5.00	kN	$F_{v,Ed}/F_{v,Rd}$=	0.051	OK	
							interaction =	0.470	OK	
							$F_{v,Ed}/F_{b,Rd}$=	0.026	OK	
num. of bolts in line		$n_{vij,v\ vrsti}$ =	2	(for 4 bolts in line w e take 3,6 "due to prying force")						
lines	a_i (cm)	a_i^2 (cm^2)								
1	5.00	25.0								
2	19.00	361.0								
3	0.00	0.0								
4	0.0	0.0								
5	0.0	0.0								
6	0.0	0.0								
7	0.0	0.0								
8	0.0	0.0								
9	0.0	0.0								
10	0.0	0.0								
11	0.0	0.0								
12	0.0	0.0								
Σa_i^2=	386.0	cm^2								
a_{max}=	19	cm								
Maximum bending load capacity of bolts										
$M_{Rd,vija.}$ =	7167	kNcm								
Obojstranski koti zvari				a = 0.6 x t			polnonosilni			



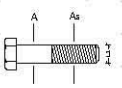
7.3. Montažni spoj U zvarjenca (Konzole)

Detail D1.2: Bolted moment resistance joint 1 / 2

U zvarjenec - konzola | SŽ PP Litija | Peronski nadstrešek 3 | **Plate**

Bolts		d(cm)	d_0 (cm)	As(cm^2)	A(cm^2)
	M24	2.4	2.6	3.53	4.52
grade		10.9			
f_{ub}(kN/cm^2)		100			

grade 235 | s (cm)= 2.5 | f_u(kN/cm^2)= 36



shear plane: 1 — 1 - share plane A_S; 2 - share plane A

γ_{M0}= 1.00 | γ_{M2}= 1.25

factor: 0.5 — 0,6 for shear plane A; 0,6 for ductility anchors (4.6, 5.6, 8.8) - share plane A_S; 0,5 for nonductility anchors (4.8, 5.8, 6.8, 10.9) - share plane A_S

Shear resistance: $F_{v,Rd} = 0{,}6(0{,}5)*f_{ub}*A_s(A)/\gamma_{M2}$ | $F_{v,Ed} / F_{v,Rd} < 1{,}0$

$F_{v,Rd}$ = 141.2 kN

Tension resistance $F_{t,Rd} = 0{,}9*f_{ub}*A_s/\gamma_{M2}$ | $F_{t,Ed} / F_{t,Rd} < 1{,}0$

$F_{t,Rd}$ = 254.2 kN

interaction V - M $(F_{v,Ed} / F_{v,Rd})+(F_{t,Ed} / F_{t,Rd})/1{,}4 < 1{,}0$

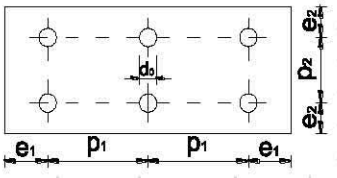
Bearing resistance $F_{b,Rd} = k_1*\alpha_b*f_u*d*t/\gamma_{M2}$ | $F_{b,Ed} / F_{b,Rd} < 1{,}0$

$F_{b,Rd}$ = 276.5 kN

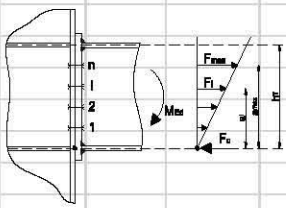
		usual values		I choose
e_1=2*d_o	e_1 (cm)=	5.20	e_1 (cm)=	5.00
p_1=3*d_o	p_1 (cm)=	7.80	p_1 (cm)=	7.80
e_2=1,5*d_o	e_2 (cm)=	3.90	e_2 (cm)=	5.00
p_2=3*d_o	p_2 (cm)=	7.80	p_2 (cm)=	7.80

		in loading direction			orthogonal to loading direction				
outter ancho	→	α_d=e_1/3d_o	$\alpha_{d,outter}$=	0.64	k_1=min(2,8*e_2/d_o-1,7≤2,5; 1,4*p_2/d_o -1,7≤2,5	$k_{1,outter}$=	2.50		
inner anchor	→	α_d=p_1/3d_o - 1/4	$\alpha_{d,inner}$=	0.75	k_1=1,4*p_2/d_o-1,7≤ 2,5			$k_{1,inner}$=	2.50
			α_d=	0.64	α_b=min(α_d ; f_{ub}/f_u ; 1,0)	α_b=	0.64	k_1=	2.50

load direction ← →



num. of bolts for transfering tension and shear laod						$n_{vij,N,V}$=	4				2 / 2
Connection load					load of maximal loaded bolt						
$M_{Ed,y}$=	6000	kNcm			$F_{t,Ed,M}$=	150.65	kN		check		
N_{Ed} =	50	kN	(+) tension		$F_{t,Ed,N}$=	12.50	kN		$F_{t,Ed\ My+N}/F_{t,Rd}$=	0.642	OK
$V_{Ed,z}$ =	50	kN			$F_{v,Ed}$=	12.50	kN		$F_{v,Ed}/F_{v,Rd}$=	0.089	OK
									interaction =	0.547	OK
									$F_{v,Ed}/F_{b,Rd}$=	0.045	OK
num. of bolts in line		$n_{vij,v\ vrsti}$ =	2	(for 4 bolts in line we take 3,6 "due to prying force")							
lines	a_i (cm)	a_i^2 (cm^2)									
1	6.50	42.3									
2	17.50	306.3									
3	0.00	0.0									
4	0.0	0.0									
5	0.0	0.0									
6	0.0	0.0									
7	0.0	0.0									
8	0.0	0.0									
9	0.0	0.0									
10	0.0	0.0									
11	0.0	0.0									
12	0.0	0.0									
Σa_i^2=	348.5	cm^2									
a_{max}=	17.5	cm									
Maximum bending load capacity of bolts											
$M_{Rd,vija.}$=	10123	kNcm									
Obojstranski koti zvari				a = 0.6 x t		polnonosilni					



H I Š A, NAČRTOVANJE IN SVETOVANJE, d.o.o.
Ukmarjeva ulica 4, 1000 Ljubljana

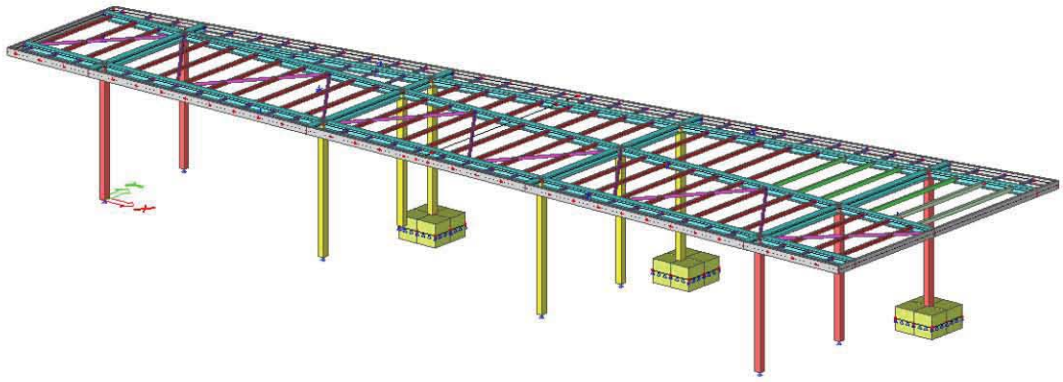
NADSTREŠEK 4

Železniška postaja Litija

ANALIZA KONSTRUKCIJE

Faza: IZN

Revizija:0



April 2021

Računal:
Dr. Leon Hladnik, udig G-0296.

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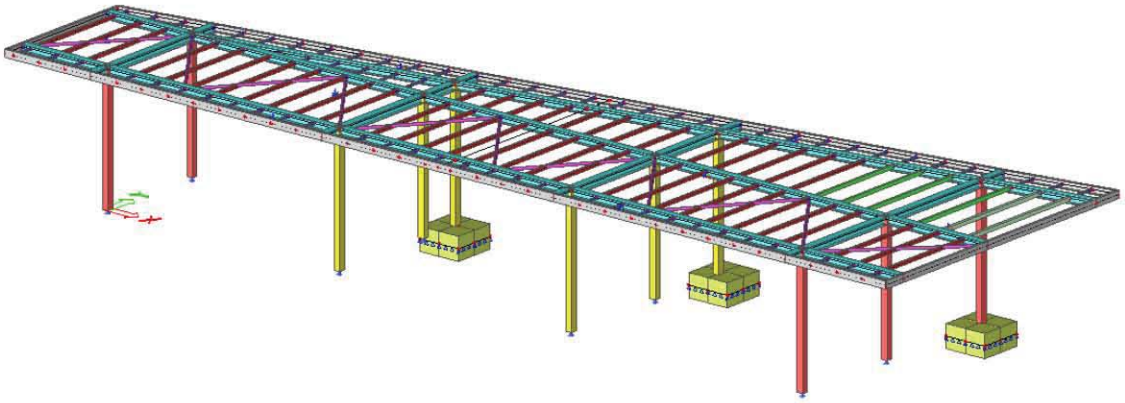
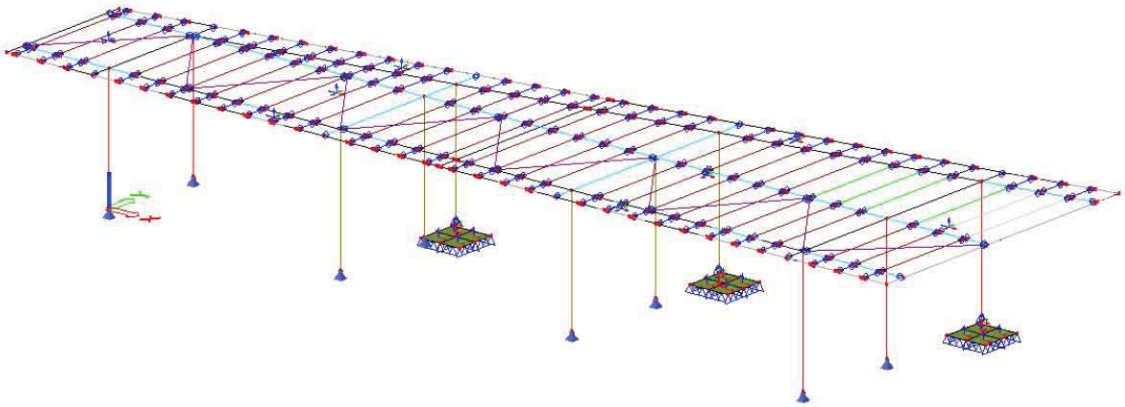
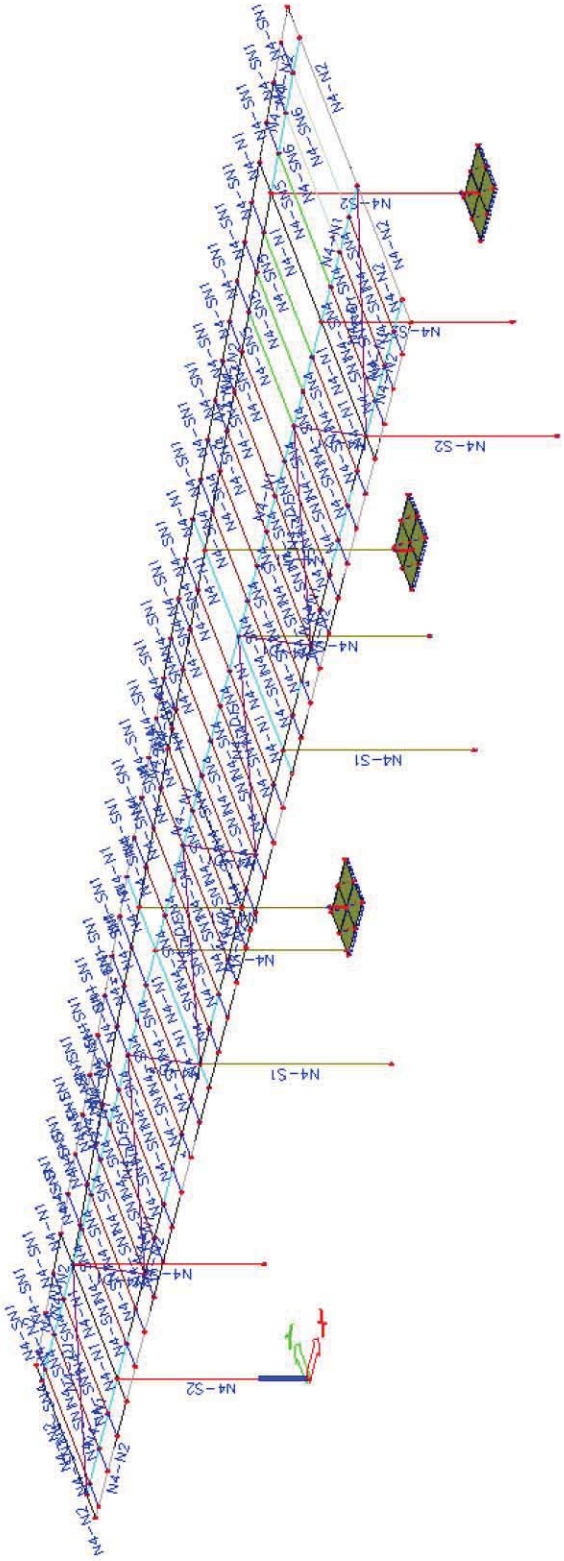
1. RAČUNSKI MODEL

1.1. Statični model






N4-S2
N4-S1
N4-N2
N4-SN6
N4-SN1
N4-N1
N4-SN4
N4-SN5
N4-SN3
N4-SN2

1.2. Marterial in profili

1. Bill of material

Selection: All
Type of sorting: Material

Summary

Material	Mass [kg]	Surface [m²]	Volume [m³]
Steel	17887.85	401.846	2.2787e+00
Concrete	13500.00	6.750	5.4000e+00
Total	31387.85	408.596	7.6787e+00

Note: Value 'Surface' represents for 1D members the total exposed surface area, while for 2D members it corresponds only to the surface area of the centroidal plane.

Steel (1D)

Material	Density [kg/m³]	Mass [kg]	Surface [m²]	Volume [m³]
S 235	7850.00	17887.85	401.846	2.2787e+00
Total		17887.85	401.846	2.2787e+00

Concrete (2D)

Material	Density [kg/m³]	Mass [kg]	Surface [m²]	Volume [m³]
C25/30	2500.00	13500.00	6.750	5.4000e+00
Total		13500.00	6.750	5.4000e+00

2. Materials

Steel EC3

Name	ρ [kg/m³]	E_{mod} [MPa]	μ	Lower limit [mm]	Upper limit [mm]	F_y [kN/cm²]	F_u [kN/cm²]	Colour
		G_{mod} [MPa]	α [m/mK]					
S 235	7850.00	2.1000e+05	0.3	0	100	23.5	36.0	
		8.0769e+04	0.00					

Name	Type	ρ [kg/m³]	Density in fresh state [kg/m³]	E_{mod} [MPa]	μ	α [m/mK]	$f_{c.k.28}$ [MPa]	Colour
C25/30	Concrete	2500.00	2600.00	3.1500e+04	0.2	0.00	25.00	

Explanations of symbols	
Density in fresh state	The value in the density in fresh state property is used only in case a composite deck is input and its self-weight load is taken into account.

3. Cross-sections

Name	Type	Item material	Fabrication	A [m²]	A_y [m²]	I_y [m⁴]	$W_{el.y}$ [m³]	$W_{pl.y}$ [m³]	Colour
	Detailed				A_z [m²]	I_z [m⁴]	$W_{el.z}$ [m³]	$W_{pl.z}$ [m³]	
N4-S1	CFRHS220X220X8	S 235	rolled	6.5640e-03	3.2801e-03	4.8280e-05	4.3891e-04	5.1562e-04	
					3.2801e-03	4.8280e-05	4.3891e-04	5.1562e-04	
N4-S2	CFRHS220X220X10	S 235	rolled	8.0570e-03	4.0251e-03	5.7825e-05	5.2568e-04	6.2465e-04	
					4.0251e-03	5.7825e-05	5.2568e-04	6.2465e-04	
N4-N1	HEA260	S 235	rolled	8.6800e-03	6.3059e-03	1.0500e-04	8.3600e-04	9.2083e-04	
					2.0196e-03	3.6700e-05	2.8200e-04	4.2917e-04	
N4-N2	UNP260	S 235	rolled	4.8300e-03	2.4565e-03	4.8200e-05	3.7100e-04	4.4200e-04	
					2.5786e-03	3.1700e-06	4.7700e-05	9.1600e-05	
N4-SN1	CFRHS60X60X4	S 235	cold formed	8.5500e-04	4.2702e-04	4.3550e-07	1.4520e-05	1.7640e-05	
					4.2702e-04	4.3550e-07	1.4520e-05	1.7640e-05	
N4-SN4	CFRHS120X60X4	S 235	cold formed	1.3350e-03	4.4468e-04	2.4074e-06	4.0120e-05	5.0490e-05	
					8.8935e-04	8.1250e-07	2.7080e-05	3.1080e-05	
N4-SN5	CFRHS120X80X4	S 235	cold formed	1.4950e-03	5.9761e-04	2.9459e-06	4.9100e-05	5.9770e-05	
					8.9642e-04	1.5729e-06	3.9320e-05	4.5230e-05	
N4-SN6	CFRHS120X120X5	S 235	cold formed	2.2360e-03	1.1172e-03	4.8547e-06	8.0910e-05	9.5450e-05	
					1.1172e-03	4.8547e-06	8.0910e-05	9.5450e-05	
N4-D1	CFCHS88.9X4	S 235	cold formed	1.0670e-03	6.7920e-04	9.6340e-07	2.1670e-05	2.8850e-05	
					6.7920e-04	9.6340e-07	2.1670e-05	2.8850e-05	

1.3. Vozlišča, elementi, podpore, sprostitve

4. Nodes

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N1764	0.000	-0.800	4.450
N1765	0.000	0.000	4.450
N1766	0.000	3.980	4.450
N1767	0.000	5.054	4.450
N1768	0.000	3.980	0.000
N1769	0.000	0.000	0.000
N1770	9.000	0.000	0.000
N1771	9.000	0.000	4.450
N1772	9.000	3.980	0.000
N1773	9.000	3.980	4.450
N1774	9.000	5.473	0.000
N1775	9.000	5.473	4.450
N1776	18.000	0.000	0.000
N1777	18.000	0.000	4.450
N1778	18.000	3.980	0.000
N1779	18.000	3.980	4.450
N1780	18.000	6.967	0.000
N1781	18.000	6.967	4.450
N1782	27.000	0.000	0.000
N1783	27.000	0.000	4.450
N1784	27.000	3.980	0.000
N1785	27.000	3.980	4.450
N1786	27.000	8.460	0.000
N1787	27.000	8.460	4.450
N1788	9.000	-0.800	4.450
N1789	18.000	-0.800	4.450
N1790	27.000	-0.800	4.450
N1791	27.000	9.526	4.450
N1792	9.000	6.536	4.450
N1793	18.000	8.039	4.450
N1794	-3.324	0.000	4.450
N1795	30.900	0.000	4.450
N1796	-3.324	3.980	4.450
N1797	30.900	3.980	4.450
N1798	30.900	9.132	4.450
N1799	30.900	10.203	4.450
N1800	-3.324	-0.800	4.450
N1801	30.900	-0.800	4.450
N1802	-3.324	4.506	4.450
N1896	13.500	-0.800	4.450
N1897	13.500	0.000	4.450
N1899	13.500	6.220	4.450
N1900	13.500	7.288	4.450
N1	1.000	-0.800	4.450
N1907	1.000	0.000	4.450
N1908	1.000	3.980	4.450
N1909	2.000	-0.800	4.450
N1910	2.000	0.000	4.450
N1911	2.000	3.980	4.450
N1912	3.000	-0.800	4.450
N1913	3.000	0.000	4.450
N1914	3.000	3.980	4.450
N1915	4.000	-0.800	4.450
N1916	4.000	0.000	4.450
N1917	4.000	3.980	4.450
N1918	5.000	-0.800	4.450
N1919	5.000	0.000	4.450
N1920	5.000	3.980	4.450
N1921	6.000	-0.800	4.450
N1922	6.000	0.000	4.450

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N1923	6.000	3.980	4.450
N1924	7.000	-0.800	4.450
N1925	7.000	0.000	4.450
N1926	7.000	3.980	4.450
N1927	8.000	-0.800	4.450
N1928	8.000	0.000	4.450
N1929	8.000	3.980	4.450
N1930	10.000	0.000	4.450
N1931	10.000	3.980	4.450
N1932	10.000	-0.800	4.450
N1933	11.000	-0.800	4.450
N1934	11.000	0.000	4.450
N1935	11.000	3.980	4.450
N1936	12.000	-0.800	4.450
N1937	12.000	0.000	4.450
N1938	12.000	3.980	4.450
N1939	13.000	-0.800	4.450
N1940	13.000	0.000	4.450
N1941	13.000	3.980	4.450
N1942	14.000	-0.800	4.450
N1943	14.000	0.000	4.450
N1944	14.000	3.980	4.450
N1945	15.000	-0.800	4.450
N1946	15.000	0.000	4.450
N1947	15.000	3.980	4.450
N1948	16.000	-0.800	4.450
N1949	16.000	0.000	4.450
N1950	16.000	3.980	4.450
N1951	17.000	-0.800	4.450
N1952	17.000	0.000	4.450
N1953	17.000	3.980	4.450
N1954	19.000	0.000	4.450
N1955	19.000	3.980	4.450
N1956	19.000	-0.800	4.450
N1957	20.000	-0.800	4.450
N1958	20.000	0.000	4.450
N1959	20.000	3.980	4.450
N1960	21.000	-0.800	4.450
N1961	21.000	0.000	4.450
N1962	21.000	3.980	4.450
N1963	22.000	-0.800	4.450
N1964	22.000	0.000	4.450
N1965	22.000	3.980	4.450
N1966	23.000	-0.800	4.450
N1967	23.000	0.000	4.450
N1968	23.000	3.980	4.450
N1969	24.000	-0.800	4.450
N1970	24.000	0.000	4.450
N1971	24.000	3.980	4.450
N1972	25.000	-0.800	4.450
N1973	25.000	0.000	4.450
N1974	25.000	3.980	4.450
N1975	26.000	-0.800	4.450
N1976	26.000	0.000	4.450
N1977	26.000	3.980	4.450
N1978	-1.000	0.000	4.450
N1979	-1.000	3.980	4.450
N1980	-1.000	-0.800	4.450
N1981	-2.000	0.000	4.450
N1982	-2.000	3.980	4.450
N1983	-2.000	-0.800	4.450
N1984	-3.000	0.000	4.450
N1985	-3.000	3.980	4.450
N1986	-3.000	-0.800	4.450
N1987	28.000	0.000	4.450
N1988	28.000	3.980	4.450

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N1989	28.000	-0.800	4.450
N1990	29.000	0.000	4.450
N1991	29.000	3.980	4.450
N1992	29.000	-0.800	4.450
N1993	30.000	0.000	4.450
N1994	30.000	3.980	4.450
N1995	30.000	-0.800	4.450
N1996	-3.000	4.560	4.450
N1997	-2.000	4.724	4.450
N1998	-1.000	4.889	4.450
N1999	1.000	4.146	4.450
N2000	2.000	4.312	4.450
N2001	3.000	4.478	4.450
N2002	4.000	4.644	4.450
N2003	5.000	4.810	4.450
N2004	6.000	4.976	4.450
N2005	7.000	5.142	4.450
N2006	8.000	5.307	4.450
N2015	19.000	7.133	4.450
N2016	20.000	7.299	4.450
N2017	21.000	7.465	4.450
N2018	22.000	7.631	4.450
N2019	23.000	7.796	4.450
N2020	24.000	7.962	4.450
N2021	25.000	8.128	4.450
N2022	26.000	8.294	4.450
N2026	10.000	5.639	4.450
N2027	11.000	5.805	4.450
N2028	12.000	5.971	4.450
N2029	13.000	6.137	4.450
N2030	14.000	6.303	4.450
N2031	15.000	6.469	4.450
N2032	16.000	6.635	4.450
N2033	17.000	6.801	4.450
N2036	3.000	5.548	4.450
N2037	4.000	5.712	4.450
N2038	5.000	5.877	4.450
N2039	6.000	6.042	4.450
N2040	7.000	6.207	4.450
N2041	8.000	6.371	4.450
N2042	10.000	6.703	4.450
N2043	11.000	6.870	4.450
N2044	12.000	7.037	4.450
N2045	13.000	7.204	4.450
N2046	14.000	7.371	4.450
N2047	15.000	7.538	4.450
N2048	16.000	7.705	4.450
N2049	17.000	7.872	4.450
N2050	19.000	8.205	4.450
N2051	20.000	8.370	4.450
N2052	21.000	8.535	4.450
N2053	22.000	8.700	4.450
N2054	23.000	8.865	4.450
N2055	24.000	9.030	4.450
N2056	25.000	9.196	4.450
N2057	26.000	9.361	4.450
N2061	2.000	5.383	4.450
N2062	1.000	5.218	4.450
N2290	28.000	8.632	4.450
N2291	28.000	9.699	4.450
N2295	29.000	8.805	4.450
N2296	29.000	9.873	4.450
N2300	30.000	8.977	4.450
N2301	30.000	10.047	4.450
N2302	27.750	8.460	-0.400
N2303	27.750	9.210	-0.400

Name	Coord X [m]	Coord Y [m]	Coord Z [m]
N2304	27.000	9.210	-0.400
N2305	26.250	8.460	-0.400
N2306	26.250	9.210	-0.400
N2307	27.000	7.710	-0.400
N2308	27.750	7.710	-0.400
N2309	26.250	7.710	-0.400
N2310	27.000	8.460	-0.400
N2311	18.750	7.237	-0.400
N2312	18.750	7.987	-0.400
N2313	17.250	7.237	-0.400
N2314	17.250	7.987	-0.400
N2315	18.000	6.487	-0.400
N2316	18.750	6.487	-0.400
N2317	17.250	6.487	-0.400
N2318	18.000	7.237	-0.400
N2319	18.000	7.987	-0.400
N2320	9.750	5.473	-0.400
N2321	9.750	6.223	-0.400
N2322	8.250	5.473	-0.400
N2323	8.250	6.223	-0.400
N2324	9.000	4.723	-0.400
N2325	9.750	4.723	-0.400
N2326	8.250	4.723	-0.400
N2327	9.000	5.473	-0.400
N2328	9.000	6.223	-0.400
N2401	18.000	6.967	-0.400

5. Members

Name	Cross-section	Material	Length [m]	Beg. node	End node	Type
B1616	N4-S2 - CFRHS220X220X10	S 235	4.450	N1768	N1766	general (0)
B1617	N4-S2 - CFRHS220X220X10	S 235	4.450	N1769	N1765	general (0)
B1618	N4-S1 - CFRHS220X220X8	S 235	4.450	N1770	N1771	general (0)
B1619	N4-S1 - CFRHS220X220X8	S 235	4.450	N1772	N1773	general (0)
B1620	N4-S1 - CFRHS220X220X8	S 235	4.450	N1774	N1775	general (0)
B1621	N4-S1 - CFRHS220X220X8	S 235	4.450	N1776	N1777	general (0)
B1622	N4-S1 - CFRHS220X220X8	S 235	4.450	N1778	N1779	general (0)
B1623	N4-S1 - CFRHS220X220X8	S 235	4.450	N1780	N1781	general (0)
B1624	N4-S2 - CFRHS220X220X10	S 235	4.450	N1782	N1783	general (0)
B1625	N4-S2 - CFRHS220X220X10	S 235	4.450	N1784	N1785	general (0)
B1626	N4-S2 - CFRHS220X220X10	S 235	4.450	N1786	N1787	general (0)
B1653	N4-N2 - UNP260	S 235	6.223	N1799	N1797	general (0)
B1654	N4-N2 - UNP260	S 235	3.980	N1797	N1795	general (0)
B1655	N4-N2 - UNP260	S 235	3.980	N1796	N1794	general (0)
B1656	N4-N2 - UNP260	S 235	0.800	N1794	N1800	general (0)
B1657	N4-N2 - UNP260	S 235	3.324	N1764	N1800	general (0)
B1658	N4-N2 - UNP260	S 235	9.000	N1764	N1788	general (0)
B1659	N4-N2 - UNP260	S 235	9.000	N1788	N1789	general (0)
B1660	N4-N2 - UNP260	S 235	9.000	N1789	N1790	general (0)
B1661	N4-N2 - UNP260	S 235	3.900	N1790	N1801	general (0)
B1662	N4-N2 - UNP260	S 235	0.800	N1801	N1795	general (0)
B1663	N4-N2 - UNP260	S 235	0.526	N1796	N1802	general (0)
B1664	N4-N2 - UNP260	S 235	3.369	N1802	N1767	general (0)
B1665	N4-N2 - UNP260	S 235	9.121	N1767	N1792	general (0)
B1666	N4-N2 - UNP260	S 235	9.125	N1792	N1793	general (0)
B1667	N4-N2 - UNP260	S 235	9.122	N1793	N1791	general (0)
B1793	N4-N2 - UNP260	S 235	3.958	N1791	N1799	general (0)
B1794	N4-SN1 - CFRHS60X60X4	S 235	0.800	N1	N1907	general (0)
B1795	N4-SN4 - CFRHS120X60X4	S 235	3.980	N1907	N1908	general (0)
B1796	N4-SN1 - CFRHS60X60X4	S 235	0.800	N1909	N1910	general (0)
B1797	N4-SN4 - CFRHS120X60X4	S 235	3.980	N1910	N1911	general (0)
B1798	N4-SN1 - CFRHS60X60X4	S 235	0.800	N1912	N1913	general (0)
B1799	N4-SN4 - CFRHS120X60X4	S 235	3.980	N1913	N1914	general (0)
B1800	N4-SN1 - CFRHS60X60X4	S 235	0.800	N1915	N1916	general (0)
B1801	N4-SN4 - CFRHS120X60X4	S 235	3.980	N1916	N1917	general (0)

Name	Cross-section	Material	Length [m]	Beg. node	End node	Type
B1802	N4-SN1 - CFRHS60X60X4	S 235	0.800	N1918	N1919	general (0)
B1803	N4-SN4 - CFRHS120X60X4	S 235	3.980	N1919	N1920	general (0)
B1804	N4-SN1 - CFRHS60X60X4	S 235	0.800	N1921	N1922	general (0)
B1805	N4-SN4 - CFRHS120X60X4	S 235	3.980	N1922	N1923	general (0)
B1806	N4-SN1 - CFRHS60X60X4	S 235	0.800	N1924	N1925	general (0)
B1807	N4-SN4 - CFRHS120X60X4	S 235	3.980	N1925	N1926	general (0)
B1808	N4-SN1 - CFRHS60X60X4	S 235	0.800	N1927	N1928	general (0)
B1809	N4-SN4 - CFRHS120X60X4	S 235	3.980	N1928	N1929	general (0)
B1810	N4-SN4 - CFRHS120X60X4	S 235	3.980	N1930	N1931	general (0)
B1811	N4-SN1 - CFRHS60X60X4	S 235	0.800	N1932	N1930	general (0)
B1812	N4-SN1 - CFRHS60X60X4	S 235	0.800	N1933	N1934	general (0)
B1813	N4-SN4 - CFRHS120X60X4	S 235	3.980	N1934	N1935	general (0)
B1814	N4-SN1 - CFRHS60X60X4	S 235	0.800	N1936	N1937	general (0)
B1815	N4-SN4 - CFRHS120X60X4	S 235	3.980	N1937	N1938	general (0)
B1816	N4-SN1 - CFRHS60X60X4	S 235	0.800	N1939	N1940	general (0)
B1817	N4-SN4 - CFRHS120X60X4	S 235	3.980	N1940	N1941	general (0)
B1818	N4-SN1 - CFRHS60X60X4	S 235	0.800	N1942	N1943	general (0)
B1819	N4-SN4 - CFRHS120X60X4	S 235	3.980	N1943	N1944	general (0)
B1820	N4-SN1 - CFRHS60X60X4	S 235	0.800	N1945	N1946	general (0)
B1821	N4-SN4 - CFRHS120X60X4	S 235	3.980	N1946	N1947	general (0)
B1822	N4-SN1 - CFRHS60X60X4	S 235	0.800	N1948	N1949	general (0)
B1823	N4-SN4 - CFRHS120X60X4	S 235	3.980	N1949	N1950	general (0)
B1824	N4-SN1 - CFRHS60X60X4	S 235	0.800	N1951	N1952	general (0)
B1825	N4-SN4 - CFRHS120X60X4	S 235	3.980	N1952	N1953	general (0)
B1826	N4-SN4 - CFRHS120X60X4	S 235	3.980	N1954	N1955	general (0)
B1827	N4-SN1 - CFRHS60X60X4	S 235	0.800	N1956	N1954	general (0)
B1828	N4-SN1 - CFRHS60X60X4	S 235	0.800	N1957	N1958	general (0)
B1829	N4-SN4 - CFRHS120X60X4	S 235	3.980	N1958	N1959	general (0)
B1830	N4-SN1 - CFRHS60X60X4	S 235	0.800	N1960	N1961	general (0)
B1831	N4-SN4 - CFRHS120X60X4	S 235	3.980	N1961	N1962	general (0)
B1832	N4-SN1 - CFRHS60X60X4	S 235	0.800	N1963	N1964	general (0)
B1833	N4-SN4 - CFRHS120X60X4	S 235	3.980	N1964	N1965	general (0)
B1834	N4-SN1 - CFRHS60X60X4	S 235	0.800	N1966	N1967	general (0)
B1835	N4-SN4 - CFRHS120X60X4	S 235	3.980	N1967	N1968	general (0)
B1836	N4-SN1 - CFRHS60X60X4	S 235	0.800	N1969	N1970	general (0)
B1837	N4-SN4 - CFRHS120X60X4	S 235	3.980	N1970	N1971	general (0)
B1838	N4-SN1 - CFRHS60X60X4	S 235	0.800	N1972	N1973	general (0)
B1839	N4-SN4 - CFRHS120X60X4	S 235	3.980	N1973	N1974	general (0)
B1840	N4-SN1 - CFRHS60X60X4	S 235	0.800	N1975	N1976	general (0)
B1841	N4-SN4 - CFRHS120X60X4	S 235	3.980	N1976	N1977	general (0)
B1842	N4-SN4 - CFRHS120X60X4	S 235	3.980	N1978	N1979	general (0)
B1843	N4-SN1 - CFRHS60X60X4	S 235	0.800	N1980	N1978	general (0)
B1844	N4-SN4 - CFRHS120X60X4	S 235	3.980	N1981	N1982	general (0)
B1845	N4-SN1 - CFRHS60X60X4	S 235	0.800	N1983	N1981	general (0)
B1846	N4-SN4 - CFRHS120X60X4	S 235	3.980	N1984	N1985	general (0)
B1847	N4-SN1 - CFRHS60X60X4	S 235	0.800	N1986	N1984	general (0)
B1848	N4-SN4 - CFRHS120X60X4	S 235	3.980	N1987	N1988	general (0)
B1849	N4-SN1 - CFRHS60X60X4	S 235	0.800	N1989	N1987	general (0)
B1850	N4-SN4 - CFRHS120X60X4	S 235	3.980	N1990	N1991	general (0)
B1851	N4-SN1 - CFRHS60X60X4	S 235	0.800	N1992	N1990	general (0)
B1852	N4-SN4 - CFRHS120X60X4	S 235	3.980	N1993	N1994	general (0)
B1853	N4-SN1 - CFRHS60X60X4	S 235	0.800	N1995	N1993	general (0)
B1854	N4-SN1 - CFRHS60X60X4	S 235	0.580	N1985	N1996	general (0)
B1855	N4-SN1 - CFRHS60X60X4	S 235	0.744	N1982	N1997	general (0)
B1856	N4-SN1 - CFRHS60X60X4	S 235	0.909	N1979	N1998	general (0)
B1857	N4-SN1 - CFRHS60X60X4	S 235	0.166	N1908	N1999	general (0)
B1858	N4-SN1 - CFRHS60X60X4	S 235	0.332	N1911	N2000	general (0)
B1859	N4-SN1 - CFRHS60X60X4	S 235	0.498	N1914	N2001	general (0)
B1860	N4-SN1 - CFRHS60X60X4	S 235	0.664	N1917	N2002	general (0)
B1861	N4-SN1 - CFRHS60X60X4	S 235	0.830	N1920	N2003	general (0)
B1862	N4-SN1 - CFRHS60X60X4	S 235	0.996	N1923	N2004	general (0)
B1863	N4-SN1 - CFRHS60X60X4	S 235	1.162	N1926	N2005	general (0)
B1864	N4-SN1 - CFRHS60X60X4	S 235	1.327	N1929	N2006	general (0)
B1873	N4-SN4 - CFRHS120X60X4	S 235	3.153	N1955	N2015	general (0)
B1874	N4-SN4 - CFRHS120X60X4	S 235	3.319	N1959	N2016	general (0)
B1875	N4-SN4 - CFRHS120X60X4	S 235	3.485	N1962	N2017	general (0)

Name	Cross-section	Material	Length [m]	Beg. node	End node	Type
B1876	N4-SN4 - CFRHS120X60X4	S 235	3.651	N1965	N2018	general (0)
B1877	N4-SN4 - CFRHS120X60X4	S 235	3.816	N1968	N2019	general (0)
B1878	N4-SN5 - CFRHS120X80X4	S 235	3.982	N1971	N2020	general (0)
B1879	N4-SN5 - CFRHS120X80X4	S 235	4.148	N1974	N2021	general (0)
B1880	N4-SN5 - CFRHS120X80X4	S 235	4.314	N1977	N2022	general (0)
B1881	N4-SN5 - CFRHS120X80X4	S 235	4.652	N1988	N2290	general (0)
B1882	N4-SN6 - CFRHS120X120X5	S 235	4.825	N1991	N2295	general (0)
B1883	N4-SN6 - CFRHS120X120X5	S 235	4.997	N1994	N2300	general (0)
B1884	N4-SN4 - CFRHS120X60X4	S 235	1.659	N1931	N2026	general (0)
B1885	N4-SN4 - CFRHS120X60X4	S 235	1.825	N1935	N2027	general (0)
B1886	N4-SN4 - CFRHS120X60X4	S 235	1.991	N1938	N2028	general (0)
B1887	N4-SN4 - CFRHS120X60X4	S 235	2.157	N1941	N2029	general (0)
B1888	N4-SN4 - CFRHS120X60X4	S 235	2.323	N1944	N2030	general (0)
B1889	N4-SN4 - CFRHS120X60X4	S 235	2.489	N1947	N2031	general (0)
B1890	N4-SN4 - CFRHS120X60X4	S 235	2.655	N1950	N2032	general (0)
B1891	N4-SN4 - CFRHS120X60X4	S 235	2.821	N1953	N2033	general (0)
B1894	N4-SN1 - CFRHS60X60X4	S 235	1.070	N2001	N2036	general (0)
B1895	N4-SN1 - CFRHS60X60X4	S 235	1.069	N2002	N2037	general (0)
B1896	N4-SN1 - CFRHS60X60X4	S 235	1.067	N2003	N2038	general (0)
B1897	N4-SN1 - CFRHS60X60X4	S 235	1.066	N2004	N2039	general (0)
B1898	N4-SN1 - CFRHS60X60X4	S 235	1.065	N2005	N2040	general (0)
B1899	N4-SN1 - CFRHS60X60X4	S 235	1.064	N2006	N2041	general (0)
B1900	N4-SN1 - CFRHS60X60X4	S 235	1.064	N2026	N2042	general (0)
B1901	N4-SN1 - CFRHS60X60X4	S 235	1.065	N2027	N2043	general (0)
B1902	N4-SN1 - CFRHS60X60X4	S 235	1.066	N2028	N2044	general (0)
B1903	N4-SN1 - CFRHS60X60X4	S 235	1.067	N2029	N2045	general (0)
B1904	N4-SN1 - CFRHS60X60X4	S 235	1.068	N2030	N2046	general (0)
B1905	N4-SN1 - CFRHS60X60X4	S 235	1.069	N2031	N2047	general (0)
B1906	N4-SN1 - CFRHS60X60X4	S 235	1.070	N2032	N2048	general (0)
B1907	N4-SN1 - CFRHS60X60X4	S 235	1.071	N2033	N2049	general (0)
B1908	N4-SN1 - CFRHS60X60X4	S 235	1.072	N2015	N2050	general (0)
B1909	N4-SN1 - CFRHS60X60X4	S 235	1.071	N2016	N2051	general (0)
B1910	N4-SN1 - CFRHS60X60X4	S 235	1.070	N2017	N2052	general (0)
B1911	N4-SN1 - CFRHS60X60X4	S 235	1.069	N2018	N2053	general (0)
B1912	N4-SN1 - CFRHS60X60X4	S 235	1.069	N2019	N2054	general (0)
B1913	N4-SN1 - CFRHS60X60X4	S 235	1.068	N2020	N2055	general (0)
B1914	N4-SN1 - CFRHS60X60X4	S 235	1.067	N2021	N2056	general (0)
B1915	N4-SN1 - CFRHS60X60X4	S 235	1.066	N2022	N2057	general (0)
B1916	N4-SN1 - CFRHS60X60X4	S 235	1.067	N2290	N2291	general (0)
B1917	N4-SN1 - CFRHS60X60X4	S 235	1.068	N2295	N2296	general (0)
B1918	N4-SN1 - CFRHS60X60X4	S 235	1.070	N2300	N2301	general (0)
B1919	N4-SN1 - CFRHS60X60X4	S 235	1.071	N2000	N2061	general (0)
B1920	N4-SN1 - CFRHS60X60X4	S 235	1.072	N1999	N2062	general (0)
B427	N4-N1 - HEA260	S 235	0.800	N1764	N1765	general (0)
B2082	N4-N1 - HEA260	S 235	1.074	N1766	N1767	general (0)
B2083	N4-N1 - HEA260	S 235	0.800	N1788	N1771	general (0)
B2084	N4-N1 - HEA260	S 235	1.493	N1773	N1775	general (0)
B2086	N4-N1 - HEA260	S 235	3.980	N1765	N1766	general (0)
B2087	N4-N1 - HEA260	S 235	0.800	N1789	N1777	general (0)
B2088	N4-N1 - HEA260	S 235	3.980	N1777	N1779	general (0)
B2089	N4-N1 - HEA260	S 235	0.800	N1790	N1783	general (0)
B2090	N4-N1 - HEA260	S 235	3.980	N1783	N1785	general (0)
B2091	N4-N1 - HEA260	S 235	3.980	N1771	N1773	general (0)
B2092	N4-N1 - HEA260	S 235	1.063	N1775	N1792	general (0)
B2093	N4-N1 - HEA260	S 235	2.987	N1779	N1781	beam (80)
B2094	N4-N1 - HEA260	S 235	1.073	N1781	N1793	beam (80)
B2095	N4-N1 - HEA260	S 235	4.480	N1785	N1787	beam (80)
B2096	N4-N1 - HEA260	S 235	1.066	N1787	N1791	beam (80)
B2097	N4-N1 - HEA260	S 235	3.324	N1794	N1765	beam (80)
B2098	N4-N1 - HEA260	S 235	9.000	N1765	N1771	beam (80)
B2099	N4-N1 - HEA260	S 235	9.000	N1771	N1777	beam (80)
B2100	N4-N1 - HEA260	S 235	9.000	N1777	N1783	beam (80)
B2101	N4-N1 - HEA260	S 235	3.900	N1783	N1795	beam (80)
B2102	N4-N1 - HEA260	S 235	3.324	N1796	N1766	beam (80)
B2103	N4-N1 - HEA260	S 235	9.000	N1766	N1773	beam (80)
B2104	N4-N1 - HEA260	S 235	9.000	N1773	N1779	beam (80)

Name	Cross-section	Material	Length [m]	Beg. node	End node	Type
B2105	N4-N1 - HEA260	S 235	9.000	N1779	N1785	beam (80)
B2106	N4-N1 - HEA260	S 235	3.900	N1785	N1797	beam (80)
B2107	N4-N1 - HEA260	S 235	9.123	N1766	N1775	beam (80)
B2108	N4-N1 - HEA260	S 235	9.123	N1775	N1781	beam (80)
B2109	N4-N1 - HEA260	S 235	9.123	N1781	N1787	beam (80)
B2110	N4-N1 - HEA260	S 235	3.957	N1787	N1798	beam (80)
B2130	N4-D1 - CFCHS88.9X4	S 235	5.186	N1766	N1794	truss diagonal (90)
B2131	N4-D1 - CFCHS88.9X4	S 235	4.984	N1766	N1913	truss diagonal (90)
B2132	N4-D1 - CFCHS88.9X4	S 235	4.984	N1923	N1913	truss diagonal (90)
B2133	N4-D1 - CFCHS88.9X4	S 235	4.984	N1923	N1771	truss diagonal (90)
B2136	N4-D1 - CFCHS88.9X4	S 235	4.984	N1938	N1771	truss diagonal (90)
B2137	N4-D1 - CFCHS88.9X4	S 235	4.984	N1938	N1946	truss diagonal (90)
B2138	N4-D1 - CFCHS88.9X4	S 235	4.984	N1779	N1946	truss diagonal (90)
B2139	N4-D1 - CFCHS88.9X4	S 235	4.984	N1779	N1961	truss diagonal (90)
B2140	N4-D1 - CFCHS88.9X4	S 235	4.984	N1971	N1961	truss diagonal (90)
B2141	N4-D1 - CFCHS88.9X4	S 235	5.572	N1783	N1797	truss diagonal (90)
B2142	N4-D1 - CFCHS88.9X4	S 235	4.984	N1971	N1783	truss diagonal (90)

6. 2D members

Name	Layer	Type	Element type	Material	Thickness type	Th. [mm]
S1	konstrukcija	plate (90)	Standard	C25/30	constant	800
S2	konstrukcija	plate (90)	Standard	C25/30	constant	800
S3	konstrukcija	plate (90)	Standard	C25/30	constant	800
S4	konstrukcija	plate (90)	Standard	C25/30	constant	800
S5	konstrukcija	plate (90)	Standard	C25/30	constant	800
S6	konstrukcija	plate (90)	Standard	C25/30	constant	800
S7	konstrukcija	plate (90)	Standard	C25/30	constant	800
S8	konstrukcija	plate (90)	Standard	C25/30	constant	800
S9	konstrukcija	plate (90)	Standard	C25/30	constant	800
S10	konstrukcija	plate (90)	Standard	C25/30	constant	800
S11	konstrukcija	plate (90)	Standard	C25/30	constant	800
S12	konstrukcija	plate (90)	Standard	C25/30	constant	800

7. Hinges

Name	Member	Position	ux	uy	uz	fix	fiy	fiz
H1	B1795	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H2	B1794	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H3	B1796	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H4	B1797	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H5	B1798	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H6	B1799	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H7	B1800	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H8	B1801	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H9	B1802	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H10	B1803	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H11	B1804	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H12	B1805	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H13	B1806	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H14	B1807	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H15	B1808	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H16	B1809	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H17	B1810	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H18	B1811	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H19	B1812	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H20	B1813	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H21	B1814	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H22	B1815	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H23	B1816	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H24	B1817	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H25	B1818	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H26	B1819	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H27	B1820	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H28	B1821	Both	Rigid	Rigid	Rigid	Rigid	Free	Free

Name	Member	Position	ux	uy	uz	fix	fiy	fiz
H29	B1822	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H30	B1823	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H31	B1824	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H32	B1825	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H33	B1826	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H34	B1827	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H35	B1828	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H36	B1829	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H37	B1830	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H38	B1831	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H39	B1832	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H40	B1833	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H41	B1834	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H42	B1835	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H43	B1836	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H44	B1837	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H45	B1838	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H46	B1839	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H47	B1840	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H48	B1841	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H49	B1842	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H50	B1843	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H51	B1844	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H52	B1845	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H53	B1846	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H54	B1847	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H55	B1848	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H56	B1849	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H57	B1850	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H58	B1851	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H59	B1852	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H60	B1853	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H61	B1854	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H62	B1855	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H63	B1856	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H65	B1857	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H66	B1858	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H67	B1859	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H68	B1860	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H69	B1861	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H70	B1862	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H71	B1863	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H72	B1864	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H81	B1873	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H82	B1874	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H83	B1875	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H84	B1876	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H85	B1877	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H86	B1878	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H87	B1879	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H88	B1880	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H89	B1881	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H90	B1882	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H91	B1883	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H92	B1884	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H93	B1885	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H94	B1886	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H95	B1887	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H96	B1888	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H97	B1889	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H98	B1890	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H99	B1891	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H102	B1894	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H103	B1895	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H104	B1896	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H105	B1897	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H106	B1898	Both	Rigid	Rigid	Rigid	Rigid	Free	Free

Name	Member	Position	ux	uy	uz	fix	fiy	fiz
H107	B1899	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H108	B1900	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H109	B1901	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H110	B1902	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H111	B1903	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H112	B1904	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H113	B1905	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H114	B1906	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H115	B1907	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H116	B1908	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H117	B1909	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H118	B1910	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H119	B1911	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H120	B1912	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H121	B1913	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H122	B1914	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H123	B1915	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H124	B1916	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H125	B1917	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H126	B1918	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H127	B1919	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H128	B1920	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H348	B2097	Begin	Rigid	Rigid	Rigid	Rigid	Free	Free
H349	B2102	Begin	Rigid	Rigid	Rigid	Rigid	Free	Free
H350	B427	Begin	Rigid	Rigid	Rigid	Rigid	Free	Free
H351	B2082	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H352	B2107	Begin	Rigid	Rigid	Rigid	Rigid	Free	Free
H353	B2083	Begin	Rigid	Rigid	Rigid	Rigid	Free	Free
H354	B2092	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H355	B2094	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H356	B2087	Begin	Rigid	Rigid	Rigid	Rigid	Free	Free
H357	B2089	Begin	Rigid	Rigid	Rigid	Rigid	Free	Free
H358	B2096	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H359	B2110	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H360	B2106	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H361	B2101	End	Rigid	Rigid	Rigid	Rigid	Free	Free
H380	B2130	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H381	B2131	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H382	B2132	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H383	B2133	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H386	B2136	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H387	B2137	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H388	B2138	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H389	B2139	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H390	B2140	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H391	B2141	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H392	B2142	Both	Rigid	Rigid	Rigid	Rigid	Free	Free
H393	B1626	Begin	Rigid	Rigid	Rigid	Rigid	Free	Free
H397	B1623	Begin	Rigid	Rigid	Rigid	Rigid	Free	Free
H398	B1620	Begin	Rigid	Rigid	Rigid	Rigid	Free	Free

8. Rigid arms

Name	Master	Slave	Hinge on master	Hinge on slave
RA1	N1786	N2310	No	No
RA3	N1774	N2327	No	No
RA11	N1780	N2401	No	No

9. Nodal supports

Name	Node	System	Type	X	Y	Z	Rx	Ry	Rz
Sn52	N1768	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn53	N1769	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn54	N1770	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn55	N1772	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn57	N1776	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn58	N1778	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn60	N1782	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free
Sn61	N1784	GCS	Standard	Rigid	Rigid	Rigid	Free	Free	Free

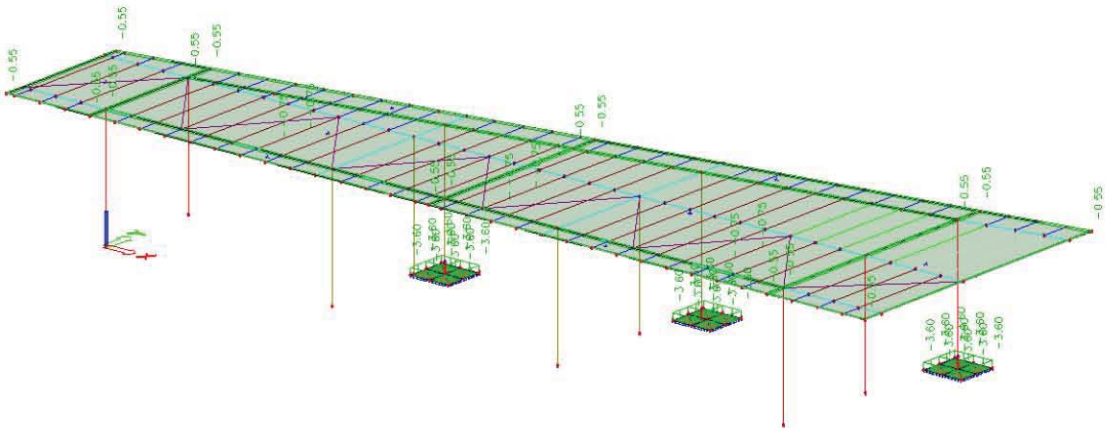
2. OBTEŽBE IN OBTEŽNE KOMBINACIJE

2.1. Obtežbe

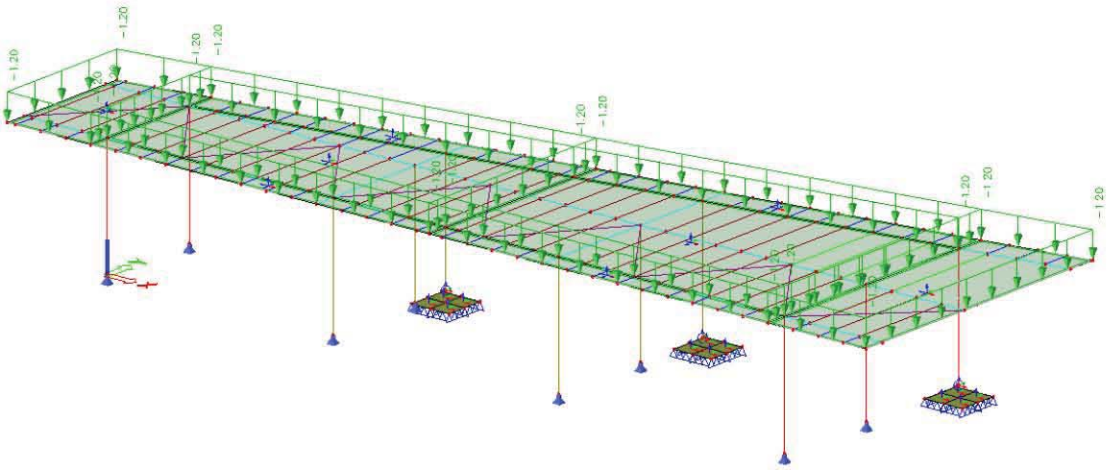
10. Load cases

Name	Description	Action type	Load group	Direction	Duration	Master load case
	Spec	Load type				
lastna		Permanent	L	-Z		
		Self weight				
stalna		Permanent	L			
		Standard				
sneg		Variable	S		Short	None
	Standard	Static				
horiz. ograja		Variable	HO		Short	None
	Standard	Static				
W x		Variable	Wxy		Short	None
	Standard	Static				
W -x		Variable	Wxy		Short	None
	Standard	Static				
W y		Variable	Wxy		Short	None
	Standard	Static				
W -y		Variable	Wxy		Short	None
	Standard	Static				
potres X		Variable	Ex			None
	Seismicity	Dynamic				
potres Y		Variable	Ey			None
	Seismicity	Dynamic				
W pritisk streha		Variable	Wps		Short	None
	Standard	Static				
W srk streha		Variable	Wps		Short	None
	Standard	Static				
Aeropri-1		Variable	aer		Short	None
	Standard	Static				
Aeropri-2		Variable	aer		Short	None
	Standard	Static				
sneg-s1		Variable	S		Short	None
	Standard	Static				
sneg-s2		Variable	S		Short	None
	Standard	Static				

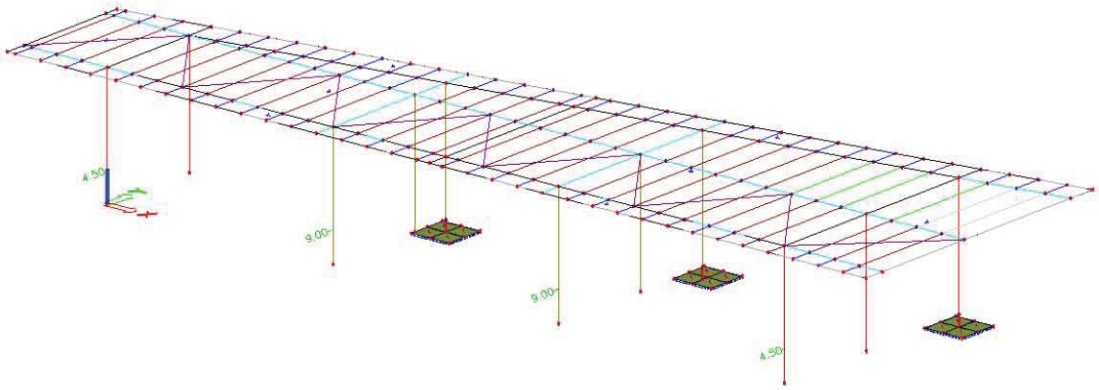
stalna



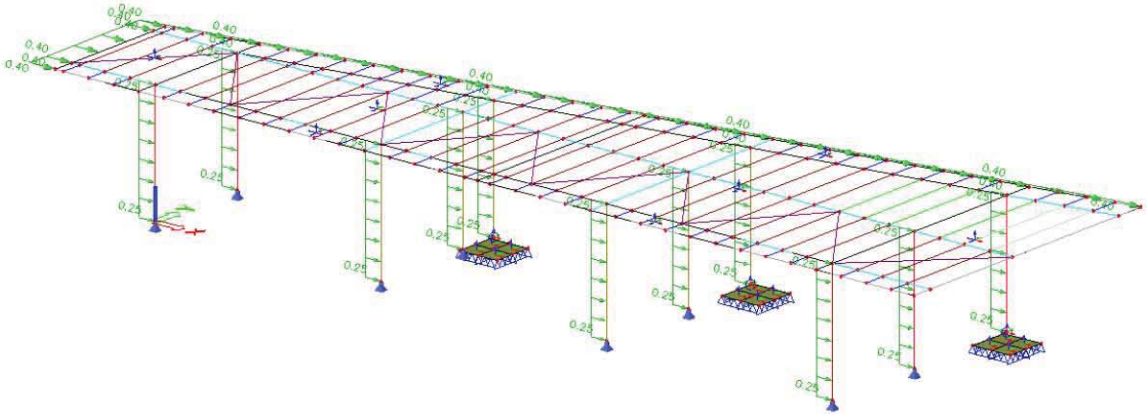
sneg



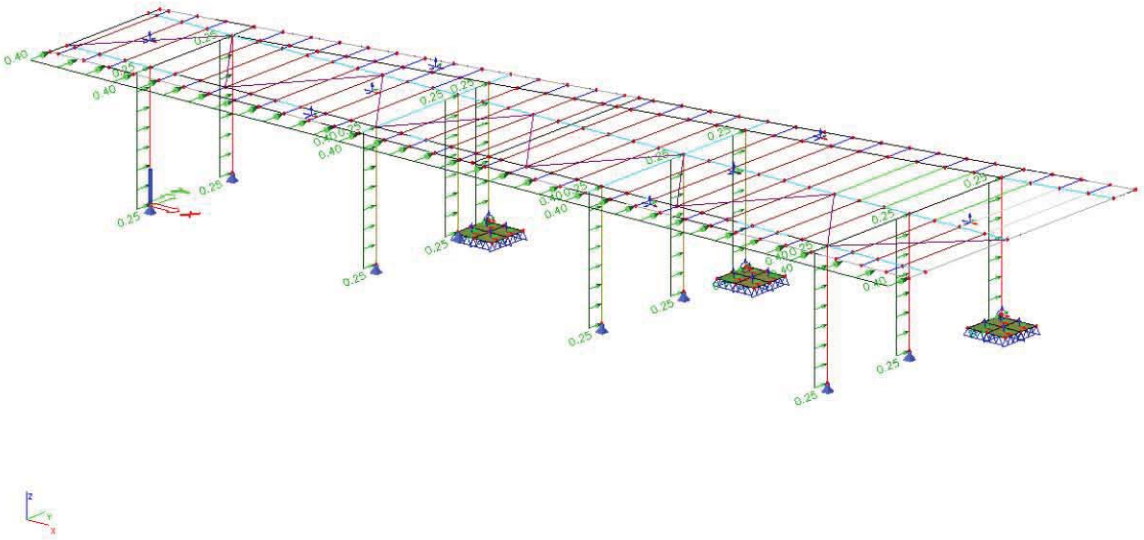
horzontalna ograja



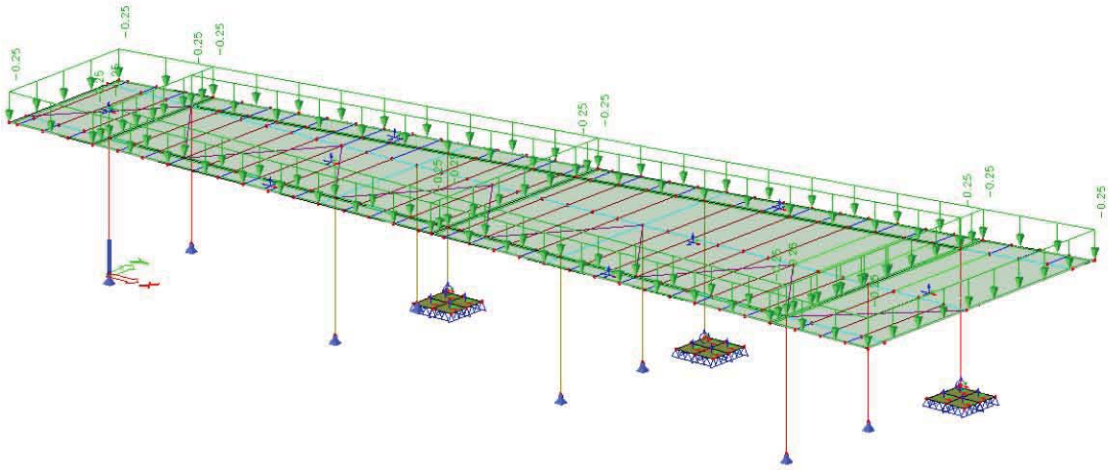
Wx



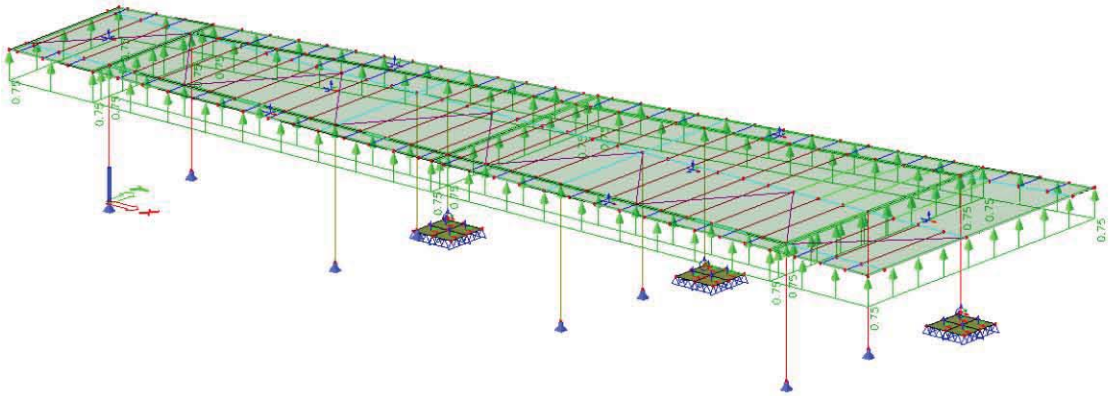
Wy



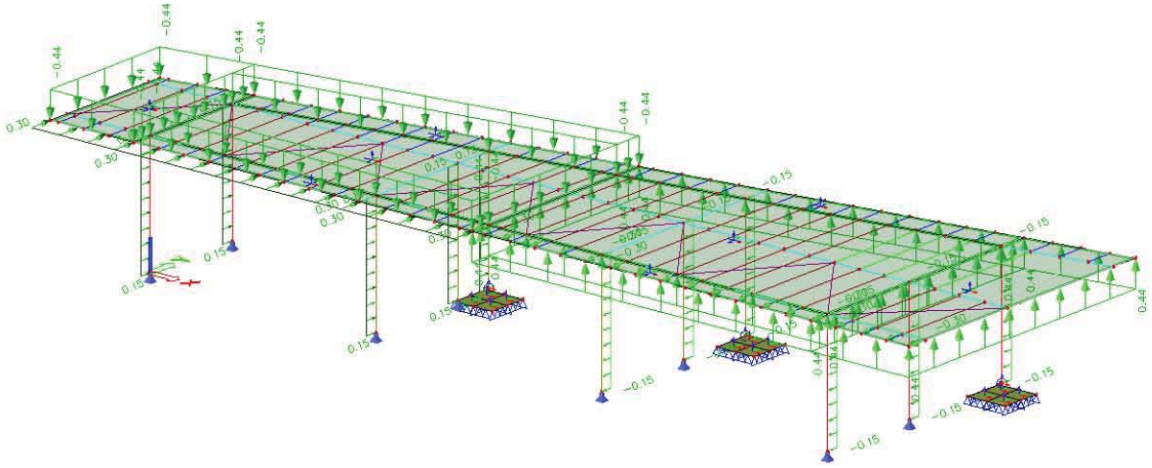
Wpritsk streha



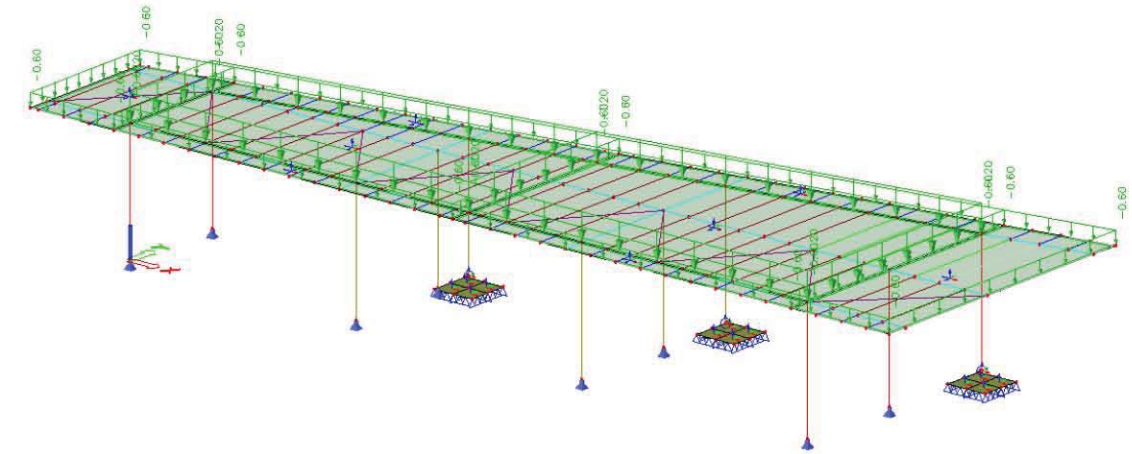
W srk streha



aeroprit-1



sneg-s1



11. Combinations

Name	Description	Type	Load cases	Coeff. [-]
potres 1		Linear - ultimate	lastna	1.00
			stalna	1.00
			potres X	1.00
			potres Y	0.30
potres 2		Linear - ultimate	lastna	1.00
			stalna	1.00
			potres X	1.00
			potres Y	-0.30
potres 3		Linear - ultimate	lastna	1.00
			stalna	1.00
			potres X	-1.00
			potres Y	0.30
potres 4		Linear - ultimate	lastna	1.00
			stalna	1.00
			potres X	-1.00
			potres Y	-0.30
potres 5		Linear - ultimate	lastna	1.00
			stalna	1.00
			potres X	0.30
			potres Y	1.00
potres 6		Linear - ultimate	lastna	1.00
			stalna	1.00
			potres X	-0.30
			potres Y	1.00
potres 7		Linear - ultimate	lastna	1.00
			stalna	1.00
			potres X	0.30
			potres Y	-1.00
potres 8		Linear - ultimate	lastna	1.00
			stalna	1.00
			potres X	-0.30
			potres Y	-1.00
MSN-temelj-1-1		Envelope - ultimate	lastna	1.35
			stalna	1.35
			sneg	1.50
			horiz. ograja	0.90
			W x	0.90
			W -x	0.90
			W y	0.90
			W -y	0.90
			W pritisk streha	0.90
			W srk streha	0.90
			Aeropri-1	0.90
			Aeropri-2	0.90
MSN-temelj-1-2		Envelope - ultimate	lastna	1.00
			stalna	1.00
			sneg	1.50
			horiz. ograja	0.90
			W x	0.90
			W -x	0.90
			W y	0.90
			W -y	0.90
			W pritisk streha	0.90
			W srk streha	0.90
			Aeropri-1	0.90
			Aeropri-2	0.90
MSN-temelj-2-1		Envelope - ultimate	lastna	1.35
			stalna	1.35
			sneg	0.90
			horiz. ograja	1.50
			W x	0.90
			W -x	0.90
			W y	0.90

Name	Description	Type	Load cases	Coeff. [-]
			W -y	0.90
			W pritisk streha	0.90
			W srk streha	0.90
			Aeropri-1	0.90
			Aeropri-2	0.90
MSN-temelj-2-2		Envelope - ultimate	lastna	1.00
			stalna	1.00
			sneg	0.90
			horiz. ograja	1.50
			W x	0.90
			W -x	0.90
			W y	0.90
			W -y	0.90
			W pritisk streha	0.90
			W srk streha	0.90
			Aeropri-1	0.90
			Aeropri-2	0.90
MSN-temelj-3-1		Envelope - ultimate	lastna	1.35
			stalna	1.35
			sneg	0.90
			horiz. ograja	0.90
			W x	1.50
			W -x	1.50
			W y	1.50
			W -y	1.50
			W pritisk streha	0.90
			W srk streha	0.90
			Aeropri-1	0.90
			Aeropri-2	0.90
MSN-temelj-3-2		Envelope - ultimate	lastna	1.00
			stalna	1.00
			sneg	0.90
			horiz. ograja	0.90
			W x	1.50
			W -x	1.50
			W y	1.50
			W -y	1.50
			W pritisk streha	0.90
			W srk streha	0.90
			Aeropri-1	0.90
			Aeropri-2	0.90
MSN-temelj-4-1		Envelope - ultimate	lastna	1.35
			stalna	1.35
			sneg	0.90
			horiz. ograja	0.90
			W x	0.90
			W -x	0.90
			W y	0.90
			W -y	0.90
			W pritisk streha	1.50
			W srk streha	0.90
			Aeropri-1	0.90
			Aeropri-2	0.90
MSN-temelj-4-2		Envelope - ultimate	lastna	1.00
			stalna	1.00
			sneg	0.90
			horiz. ograja	0.90
			W x	0.90
			W -x	0.90
			W y	0.90
			W -y	0.90
			W pritisk streha	1.50
			W srk streha	0.90
			Aeropri-1	0.90
			Aeropri-2	0.90
MSN-temelj-5-1		Envelope - ultimate	lastna	1.35

Name	Description	Type	Load cases	Coeff. [-]
			stalna	1.35
			sneg	0.90
			horiz. ograja	0.90
			W x	0.90
			W -x	0.90
			W y	0.90
			W -y	0.90
			W pritisk streha	0.90
			W srk streha	1.50
			Aeropri-1	0.90
			Aeropri-2	0.90
MSN-temelj-5-2		Envelope - ultimate	lastna	1.00
			stalna	1.00
			sneg	0.90
			horiz. ograja	0.90
			W x	0.90
			W -x	0.90
			W y	0.90
			W -y	0.90
			W pritisk streha	0.90
			W srk streha	1.50
			Aeropri-1	0.90
			Aeropri-2	0.90
MSN-temelj-6-1		Envelope - ultimate	lastna	1.35
			stalna	1.35
			sneg	0.90
			horiz. ograja	0.90
			W x	0.90
			W -x	0.90
			W y	0.90
			W -y	0.90
			W pritisk streha	0.90
			W srk streha	0.90
			Aeropri-1	1.50
			Aeropri-2	1.50
MSN-temelj-6-2		Envelope - ultimate	lastna	1.00
			stalna	1.00
			sneg	0.90
			horiz. ograja	0.90
			W x	0.90
			W -x	0.90
			W y	0.90
			W -y	0.90
			W pritisk streha	0.90
			W srk streha	0.90
			Aeropri-1	1.50
			Aeropri-2	1.50
MSN-temelj-7		Linear - ultimate	lastna	1.35
			stalna	1.35
			W x	0.90
			sneg-s1	1.50
MSN-temelj-8		Linear - ultimate	lastna	1.35
			stalna	1.35
			W -x	0.90
			sneg-s2	1.50

12. Nonlinear combinations

Name	Type	Load cases	Coeff. [-]
NC1	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	1.50
		W pritisk streha	1.50
NC2	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	1.50
		W x	1.50
		W pritisk streha	1.50
NC3	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	1.50
		W -x	1.50
		W pritisk streha	1.50
NC4	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	1.50
		W y	1.50
		W pritisk streha	1.50
NC5	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	1.50
		W -y	1.50
		W pritisk streha	1.50
NC6	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W x	1.50
		W srk streha	1.50
NC7	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W -x	1.50
		W srk streha	1.50
NC8	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W y	1.50
		W srk streha	1.50
NC9	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W -y	1.50
		W srk streha	1.50
NC10	Serviceability	lastna	1.00
		stalna	1.00
		sneg	1.00
		horiz. ograja	1.00
		W x	1.00
		W pritisk streha	1.00
NC11	Serviceability	lastna	1.00
		stalna	1.00
		sneg	1.00
		horiz. ograja	1.00
		W -x	1.00
		W pritisk streha	1.00
NC12	Serviceability	lastna	1.00
		stalna	1.00

Name	Type	Load cases	Coeff. [-]
		sneg	1.00
		horiz. ograja	1.00
		W y	1.00
		W pritisk streha	1.00
NC13	Serviceability	lastna	1.00
		stalna	1.00
		sneg	1.00
		horiz. ograja	1.00
		W -y	1.00
		W pritisk streha	1.00
NC14	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W pritisk streha	1.50
		Aeropri-1	0.90
NC15	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W x	1.50
		W pritisk streha	1.50
		Aeropri-1	0.90
NC16	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W -x	1.50
		W pritisk streha	1.50
		Aeropri-1	0.90
NC17	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W y	1.50
		W pritisk streha	1.50
		Aeropri-1	0.90
NC18	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W -y	1.50
		W pritisk streha	1.50
		Aeropri-1	0.90
NC19	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W x	1.50
		W srk streha	1.50
		Aeropri-1	0.90
NC20	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W -x	1.50
		W srk streha	1.50
		Aeropri-1	0.90
NC21	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W y	1.50
		W srk streha	1.50
		Aeropri-1	0.90
NC22	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W -y	1.50

Name	Type	Load cases	Coeff. [-]
		W srk streha	1.50
		Aeropri-1	0.90
NC23	Ultimate	lastna	1.35
		stalna	1.35
		sneg	0.90
		horiz. ograja	1.50
		W pritisk streha	1.50
		Aeropri-2	0.90
NC24	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W x	1.50
		W pritisk streha	1.50
		Aeropri-2	0.90
NC25	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W -x	1.50
		W pritisk streha	1.50
		Aeropri-2	0.90
NC26	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W y	1.50
		W pritisk streha	1.50
		Aeropri-2	0.90
NC27	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W -y	1.50
		W pritisk streha	1.50
		Aeropri-2	0.90
NC28	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W x	1.50
		W srk streha	1.50
		Aeropri-2	0.90
NC29	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W -x	1.50
		W srk streha	1.50
		Aeropri-2	0.90
NC30	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W y	1.50
		W srk streha	1.50
		Aeropri-2	0.90
NC31	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W -y	1.50
		W srk streha	1.50
		Aeropri-2	0.90
NC32	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W pritisk streha	0.90
		Aeropri-1	1.50

Name	Type	Load cases	Coeff. [-]
NC33	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W x	0.90
		W pritisk streha	0.90
		Aeropri-1	1.50
NC34	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W -x	0.90
		W pritisk streha	0.90
		Aeropri-1	1.50
NC35	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W y	0.90
		W pritisk streha	0.90
		Aeropri-1	1.50
NC36	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W -y	0.90
		W pritisk streha	0.90
		Aeropri-1	1.50
NC37	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W x	0.90
		W srk streha	0.90
		Aeropri-1	1.50
NC38	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W -x	0.90
		W srk streha	0.90
		Aeropri-1	1.50
NC39	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W y	0.90
		W srk streha	0.90
		Aeropri-1	1.50
NC40	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W -y	0.90
		W srk streha	0.90
		Aeropri-1	1.50
NC41	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W pritisk streha	0.90
		Aeropri-2	1.50
NC42	Ultimate	lastna	1.35
		stalna	1.35
		sneg	1.50
		horiz. ograja	0.90
		W x	0.90
		W pritisk streha	0.90
		Aeropri-2	1.50
NC43	Ultimate	lastna	1.35

Name	Type	Load cases	Coeff. [-]
		stalna	1.35
		sneg	0.90
		horiz. ograja	1.50
		W -x	0.90
		W pritisk streha	0.90
		Aeropri-2	1.50
NC44	Ultimate	lastna	1.35
		stalna	1.35
		sneg	0.90
		horiz. ograja	1.50
		W y	0.90
		W pritisk streha	0.90
		Aeropri-2	1.50
NC45	Ultimate	lastna	1.35
		stalna	1.35
		sneg	0.90
		horiz. ograja	1.50
		W -y	0.90
		W pritisk streha	0.90
		Aeropri-2	1.50
NC46	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W x	0.90
		W srk streha	0.90
		Aeropri-2	1.50
NC47	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W -x	0.90
		W srk streha	0.90
		Aeropri-2	1.50
NC48	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W y	0.90
		W srk streha	0.90
		Aeropri-2	1.50
NC49	Ultimate	lastna	1.00
		stalna	1.00
		horiz. ograja	1.00
		W -y	0.90
		W srk streha	0.90
		Aeropri-2	1.50
NC50-s1	Ultimate	lastna	1.35
		stalna	1.35
		W x	0.90
		sneg-s1	1.50
NC51-s2	Ultimate	lastna	1.35
		stalna	1.35
		W -x	0.90
		sneg-s2	1.50

13. Mass groups

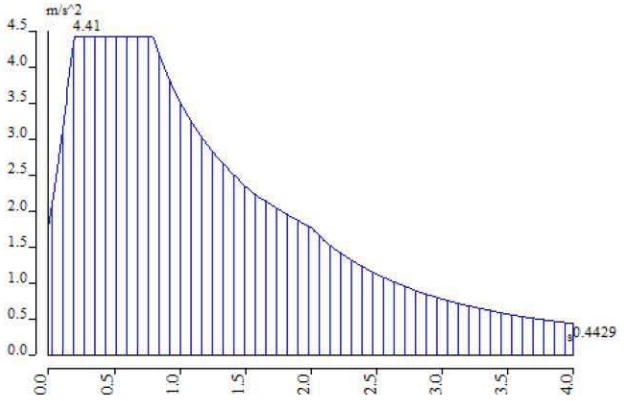
Name	Load case	Description
MG1	lastna	lastna
MG2	stalna	stalna

14. Combination of mass groups

Name	Mass group	Coeff. [-]
CM1	MG1 - lastna	1.00
	MG2 - stalna	1.00
CM1/1 - 1.50		
CM1/2 - 1.57		
CM1/3 - 1.65		
CM1/4 - 3.72		
CM1/5 - 3.72		
CM1/6 - 3.77		
CM1/7 - 4.67		
CM1/8 - 5.04		
CM1/9 - 5.05		
CM1/10 - 5.05		
CM1/11 - 5.05		
CM1/12 - 5.05		
CM1/13 - 5.05		
CM1/14 - 5.05		
CM1/15 - 5.05		
CM1/16 - 5.05		
CM1/17 - 5.05		
CM1/18 - 5.05		
CM1/19 - 5.05		
CM1/20 - 5.05		
CM1/21 - 5.05		
CM1/22 - 5.05		
CM1/23 - 5.05		
CM1/24 - 5.05		
CM1/25 - 5.05		
CM1/26 - 5.05		
CM1/27 - 5.05		
CM1/28 - 5.05		
CM1/29 - 5.05		
CM1/30 - 5.05		
CM1/31 - 5.05		
CM1/32 - 5.08		
CM1/33 - 5.15		
CM1/34 - 5.42		
CM1/35 - 5.55		
CM1/36 - 5.59		
CM1/37 - 5.77		
CM1/38 - 5.93		
CM1/39 - 5.98		
CM1/40 - 6.08		
CM1/41 - 6.12		
CM1/42 - 6.37		
CM1/43 - 6.44		
CM1/44 - 6.63		
CM1/45 - 6.66		
CM1/46 - 6.96		
CM1/47 - 6.99		
CM1/48 - 7.14		
CM1/49 - 7.31		
CM1/50 - 7.41		
CM1/51 - 7.55		
CM1/52 - 7.62		
CM1/53 - 7.75		
CM1/54 - 7.82		
CM1/55 - 7.83		

Name	Mass group	Coeff. [-]
CM1/56 - 7.89		
CM1/57 - 7.98		
CM1/58 - 8.00		
CM1/59 - 8.01		
CM1/60 - 8.14		
CM1/61 - 8.15		
CM1/62 - 8.27		
CM1/63 - 8.53		
CM1/64 - 8.56		
CM1/65 - 8.58		
CM1/66 - 8.64		
CM1/67 - 8.64		
CM1/68 - 8.65		
CM1/69 - 8.67		
CM1/70 - 8.67		
CM1/71 - 8.67		
CM1/72 - 8.68		
CM1/73 - 8.68		
CM1/74 - 8.68		
CM1/75 - 8.68		
CM1/76 - 8.68		
CM1/77 - 8.68		
CM1/78 - 8.68		
CM1/79 - 8.68		
CM1/80 - 8.69		
CM1/81 - 8.69		
CM1/82 - 8.69		
CM1/83 - 8.71		
CM1/84 - 8.81		
CM1/85 - 8.93		
CM1/86 - 9.00		
CM1/87 - 9.09		
CM1/88 - 9.28		
CM1/89 - 9.45		
CM1/90 - 9.47		
CM1/91 - 9.57		
CM1/92 - 9.57		
CM1/93 - 9.57		
CM1/94 - 9.58		
CM1/95 - 9.66		
CM1/96 - 9.75		
CM1/97 - 9.76		
CM1/98 - 9.77		
CM1/99 - 9.78		
CM1/100 - 9.78		

15. Seismic spectrums

Name	Type drawing	Info	Drawing
UniqueID			
EC 8, class D, q = 1.5, ag=0.20	Period	Type code - Eurocode Subsoil type - D Direction - Horizontal Spectrum type - type 1 coeff accel. ag - 0.2 ag - design acceleration - 1.962 beta - 0.2 q - behaviour factor - 1.5	

2.2. Ovojnice

16. Result classes

Name	Description	List
ULS-potres	linearno	potres 2 - Linear - ultimate
		potres 3 - Linear - ultimate
		potres 4 - Linear - ultimate
		potres 5 - Linear - ultimate
		potres 6 - Linear - ultimate
		potres 7 - Linear - ultimate
		potres 8 - Linear - ultimate
		potres 1 - Linear - ultimate
ULS	nelinearno	NC1
		NC2
		NC3
		NC4
		NC5
		NC6
		NC7
		NC8
		NC9
		NC14
		NC15
		NC16
		NC17
		NC18
		NC19
		NC20
		NC21
		NC22
		NC23
		NC24
		NC25
		NC26
		NC27
		NC28
		NC29
		NC30
		NC31
		NC32
		NC33
		NC34
		NC35
		NC36
		NC37
		NC38
		NC39
		NC40
		NC41
		NC42
		NC43
		NC44
		NC45
		NC46
		NC47
		NC48
		NC49
		NC50-s1
		NC51-s2
SLS	linearno	NC10
		NC11
		NC12
		NC13
ULS-temelji	linearno	MSN-temelj-1-1 - Envelope - ultimate
		MSN-temelj-1-2 - Envelope - ultimate

Name	Description	List
		MSN-temelj-2-1 - Envelope - ultimate
		MSN-temelj-2-2 - Envelope - ultimate
		MSN-temelj-3-1 - Envelope - ultimate
		MSN-temelj-3-2 - Envelope - ultimate
		MSN-temelj-4-1 - Envelope - ultimate
		MSN-temelj-4-2 - Envelope - ultimate
		MSN-temelj-5-1 - Envelope - ultimate
		MSN-temelj-5-2 - Envelope - ultimate
		MSN-temelj-6-1 - Envelope - ultimate
		MSN-temelj-6-2 - Envelope - ultimate
		MSN-temelj-7 - Linear - ultimate
		MSN-temelj-8 - Linear - ultimate

2.3. Računski protokoli

17. Calculation protocol

Linear calculation

Number of 2D elements	108
Number of 1D elements	1938
Number of mesh nodes	1939
Number of equations	11634
Bending theory	Mindlin
Load cases	lastna, stalna, sneg, horiz. ograja, W x, W -x, W y, W -y, W pritisk streha, W srk streha, Aeropri-1, Aeropri-2, sneg-s1, sneg-s2
Start of calculation	25.04.2021 18:31
End of calculation	25.04.2021 18:32

Sum of loads and reactions

Load case	Value	X [kN]	Y [kN]	Z [kN]
lastna	loads	0.00	0.00	-307.91
	reaction in nodes	0.00	-1.17	129.18
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	0.00	1.17	178.73
stalna	loads	0.00	0.00	-181.97
	reaction in nodes	-0.04	-0.50	119.22
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	0.04	0.50	62.75
sneg	loads	0.00	0.00	-334.19
	reaction in nodes	-0.04	-0.91	248.66
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	0.04	0.91	85.54
horiz. ograja	loads	0.00	27.00	0.00
	reaction in nodes	0.14	-24.77	-7.22
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	-0.14	-2.23	7.22
W x	loads	28.24	0.00	0.00
	reaction in nodes	-20.23	-0.28	1.08
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	-8.01	0.28	-1.08
W -x	loads	-16.64	0.00	0.00
	reaction in nodes	12.16	-0.02	-0.39
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	4.48	0.02	0.39
W y	loads	0.00	25.93	0.00
	reaction in nodes	0.22	-19.44	-13.56
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	-0.22	-6.49	13.56
W -y	loads	0.00	-26.12	0.00
	reaction in nodes	-0.23	19.58	13.69
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	0.23	6.54	-13.69

Load case	Value	X [kN]	Y [kN]	Z [kN]
W pritisk streha	loads	0.00	0.00	-69.62
	reaction in nodes	-0.01	-0.19	51.80
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	0.01	0.19	17.82
W srk streha	loads	0.00	0.00	208.87
	reaction in nodes	0.03	0.57	-155.41
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	-0.03	-0.57	-53.46
Aeropri-1	loads	0.00	-0.84	23.44
	reaction in nodes	1.24	-0.42	-7.42
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	-1.24	1.26	-16.02
Aeropri-2	loads	0.00	0.84	-23.44
	reaction in nodes	-1.24	0.42	7.42
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	1.24	-1.26	16.02
sneg-s1	loads	0.00	0.00	-267.86
	reaction in nodes	0.25	-0.35	208.10
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	-0.25	0.35	59.76
sneg-s2	loads	0.00	0.00	-233.43
	reaction in nodes	-0.31	-1.01	164.88
	reaction on lines	0.00	0.00	0.00
	contact 1D	0.00	0.00	0.00
	contact 2D	0.31	1.01	68.55

The following dynamic load cases are detailed separately (see below):potres X, potres Y

Dynamic load case 15 : potres X

Mode	Freq. [Hz]	Damp ratio	Damp coef.	Sax [m/s^2]	Say [m/s^2]	Saz [m/s^2]	G(j) [-]	Fx [kN]	Fy [kN]	Mx [kNm]	My [kNm]
1	1.50	0.05	1	4.415	0.000	0.000	9.00	143.13	-14.33	62.26	-621.85
2	1.57	0.05	1	4.415	0.000	0.000	-1.14	2.77	13.37	-57.91	-12.17
3	1.65	0.05	1	4.415	0.000	0.000	-0.07	0.01	1.01	-4.37	-0.04
4	3.72	0.05	1	4.415	0.000	0.000	0.00	0.00	0.00	0.00	0.00
5	3.72	0.05	1	4.415	0.000	0.000	0.00	0.00	0.00	0.00	0.00
6	3.77	0.05	1	4.415	0.000	0.000	0.04	0.10	0.00	0.00	-0.38
7	4.67	0.05	1	4.415	0.000	0.000	0.08	1.08	0.05	-0.15	-4.10
8	5.04	0.05	1	4.372	0.000	0.000	0.00	0.00	0.00	0.00	0.00
9	5.05	0.05	1	4.369	0.000	0.000	0.00	0.00	0.00	0.00	0.00
10	5.05	0.05	1	4.368	0.000	0.000	0.00	0.00	0.00	0.00	0.00
11	5.05	0.05	1	4.368	0.000	0.000	0.00	0.00	0.00	0.00	0.00
12	5.05	0.05	1	4.368	0.000	0.000	0.00	0.00	0.00	0.00	0.00
13	5.05	0.05	1	4.368	0.000	0.000	0.00	0.00	0.00	0.00	0.00
14	5.05	0.05	1	4.368	0.000	0.000	0.00	0.00	0.00	0.00	0.00
15	5.05	0.05	1	4.368	0.000	0.000	0.00	0.00	0.00	0.00	0.00
16	5.05	0.05	1	4.368	0.000	0.000	0.00	0.00	0.00	0.00	0.00
17	5.05	0.05	1	4.368	0.000	0.000	0.00	0.00	0.00	0.00	0.00
18	5.05	0.05	1	4.368	0.000	0.000	0.00	0.00	0.00	0.00	0.00
19	5.05	0.05	1	4.368	0.000	0.000	0.00	0.00	0.00	0.00	0.00
20	5.05	0.05	1	4.368	0.000	0.000	0.00	0.00	0.00	0.00	0.00
21	5.05	0.05	1	4.368	0.000	0.000	0.00	0.00	0.00	0.00	0.00
22	5.05	0.05	1	4.368	0.000	0.000	0.00	0.00	0.00	0.00	0.00
23	5.05	0.05	1	4.368	0.000	0.000	0.00	0.00	0.00	0.00	0.00
24	5.05	0.05	1	4.368	0.000	0.000	0.00	0.00	0.00	0.00	0.00
25	5.05	0.05	1	4.368	0.000	0.000	0.00	0.00	0.00	0.00	0.00
26	5.05	0.05	1	4.368	0.000	0.000	0.00	0.00	0.00	0.00	0.00
27	5.05	0.05	1	4.368	0.000	0.000	0.00	0.00	0.00	0.00	0.00

Mode	Freq. [Hz]	Damp ratio	Damp coef.	Sax [m/s^2]	Say [m/s^2]	Saz [m/s^2]	G(j) [-]	Fx [kN]	Fy [kN]	Mx [kNm]	My [kNm]
28	5.05	0.05	1	4.368	0.000	0.000	0.00	0.00	0.00	0.00	0.00
29	5.05	0.05	1	4.368	0.000	0.000	0.00	0.00	0.00	0.00	0.00
30	5.05	0.05	1	4.368	0.000	0.000	0.00	0.00	0.00	0.00	0.00
31	5.05	0.05	1	4.368	0.000	0.000	0.00	0.00	0.00	0.00	0.00
32	5.08	0.05	1	4.357	0.000	0.000	0.00	0.00	0.00	0.00	0.00
33	5.15	0.05	1	4.333	0.000	0.000	0.00	0.00	0.00	0.00	0.00
34	5.42	0.05	1	4.209	0.000	0.000	0.02	0.08	0.00	0.00	-0.26
35	5.55	0.05	1	4.152	0.000	0.000	0.01	0.02	0.00	-0.01	-0.07
36	5.59	0.05	1	4.136	0.000	0.000	-0.02	0.21	0.01	-0.03	-0.60
37	5.77	0.05	1	4.061	0.000	0.000	0.01	0.08	-0.01	0.02	-0.41
38	5.93	0.05	1	3.999	0.000	0.000	0.00	0.01	0.00	0.00	-0.02
39	5.98	0.05	1	3.982	0.000	0.000	0.00	0.01	0.00	0.00	-0.03
40	6.08	0.05	1	3.946	0.000	0.000	0.01	0.06	0.00	0.00	-0.17
41	6.12	0.05	1	3.929	0.000	0.000	0.00	0.00	0.00	0.00	0.00
42	6.37	0.05	1	3.846	0.000	0.000	0.00	0.01	0.00	0.00	-0.05
43	6.44	0.05	1	3.824	0.000	0.000	0.00	0.01	0.00	0.00	-0.04
44	6.63	0.05	1	3.764	0.000	0.000	0.00	0.00	0.00	0.00	-0.02
45	6.66	0.05	1	3.755	0.000	0.000	0.01	0.16	0.00	0.00	-0.61
46	6.96	0.05	1	3.670	0.000	0.000	0.00	0.00	0.00	0.00	0.00
47	6.99	0.05	1	3.662	0.000	0.000	0.00	0.02	0.00	0.00	-0.04
48	7.14	0.05	1	3.622	0.000	0.000	0.00	0.00	0.00	0.00	-0.01
49	7.31	0.05	1	3.580	0.000	0.000	0.00	0.01	0.00	0.00	-0.02
50	7.41	0.05	1	3.555	0.000	0.000	0.00	0.00	0.00	0.00	0.00
51	7.55	0.05	1	3.521	0.000	0.000	0.00	0.00	0.00	0.00	-0.02
52	7.62	0.05	1	3.506	0.000	0.000	0.00	0.01	0.00	0.00	-0.03
53	7.75	0.05	1	3.477	0.000	0.000	0.00	0.00	0.00	0.00	-0.01
54	7.82	0.05	1	3.463	0.000	0.000	0.01	0.05	0.00	0.00	-0.11
55	7.83	0.05	1	3.459	0.000	0.000	0.00	0.00	0.00	0.00	0.00
56	7.89	0.05	1	3.447	0.000	0.000	0.00	0.00	0.00	0.00	0.00
57	7.98	0.05	1	3.428	0.000	0.000	0.00	0.01	0.00	0.00	-0.05
58	8.00	0.05	1	3.423	0.000	0.000	0.00	0.01	0.00	0.00	-0.01
59	8.01	0.05	1	3.420	0.000	0.000	0.00	0.01	0.00	0.00	-0.03
60	8.14	0.05	1	3.394	0.000	0.000	0.00	0.00	0.00	0.00	0.00
61	8.15	0.05	1	3.392	0.000	0.000	-0.01	0.06	0.00	0.00	-0.10
62	8.27	0.05	1	3.369	0.000	0.000	-0.01	0.06	0.00	0.00	-0.05
63	8.53	0.05	1	3.322	0.000	0.000	0.00	0.01	0.00	0.00	-0.05
64	8.56	0.05	1	3.315	0.000	0.000	0.00	0.00	0.00	0.00	0.00
65	8.58	0.05	1	3.311	0.000	0.000	0.00	0.00	0.00	0.00	0.00
66	8.64	0.05	1	3.301	0.000	0.000	0.00	0.00	0.00	0.00	0.00
67	8.64	0.05	1	3.300	0.000	0.000	0.00	0.00	0.00	0.00	0.00
68	8.65	0.05	1	3.299	0.000	0.000	0.00	0.00	0.00	0.00	0.00
69	8.67	0.05	1	3.295	0.000	0.000	0.00	0.00	0.00	0.00	0.00
70	8.67	0.05	1	3.294	0.000	0.000	0.00	0.00	0.00	0.00	0.00
71	8.67	0.05	1	3.294	0.000	0.000	0.00	0.00	0.00	0.00	0.00
72	8.68	0.05	1	3.294	0.000	0.000	0.00	0.00	0.00	0.00	0.00
73	8.68	0.05	1	3.294	0.000	0.000	0.00	0.00	0.00	0.00	0.00
74	8.68	0.05	1	3.293	0.000	0.000	0.00	0.00	0.00	0.00	0.00
75	8.68	0.05	1	3.293	0.000	0.000	0.00	0.00	0.00	0.00	0.00
76	8.68	0.05	1	3.293	0.000	0.000	0.00	0.00	0.00	0.00	0.00
77	8.68	0.05	1	3.293	0.000	0.000	0.00	0.00	0.00	0.00	0.00
78	8.68	0.05	1	3.293	0.000	0.000	0.00	0.00	0.00	0.00	0.00
79	8.68	0.05	1	3.293	0.000	0.000	0.00	0.00	0.00	0.00	0.00
80	8.69	0.05	1	3.292	0.000	0.000	0.00	0.00	0.00	0.00	0.00
81	8.69	0.05	1	3.292	0.000	0.000	0.00	0.00	0.00	0.00	0.00
82	8.69	0.05	1	3.292	0.000	0.000	0.00	0.00	0.00	0.00	0.00
83	8.71	0.05	1	3.288	0.000	0.000	0.00	0.00	0.00	0.00	0.00
84	8.81	0.05	1	3.270	0.000	0.000	0.00	0.00	0.00	0.00	0.00
85	8.93	0.05	1	3.250	0.000	0.000	0.00	0.01	0.00	0.00	-0.02
86	9.00	0.05	1	3.239	0.000	0.000	0.00	0.00	0.00	0.00	0.00
87	9.09	0.05	1	3.225	0.000	0.000	0.00	0.00	0.00	0.00	0.00
88	9.28	0.05	1	3.196	0.000	0.000	0.00	0.04	0.00	0.00	-0.06
89	9.45	0.05	1	3.169	0.000	0.000	-0.01	0.18	0.07	0.02	0.04
90	9.47	0.05	1	3.167	0.000	0.000	-0.01	0.10	0.03	0.01	0.00
91	9.57	0.05	1	3.152	0.000	0.000	-0.01	0.21	0.05	-0.01	0.04
92	9.57	0.05	1	3.151	0.000	0.000	0.00	0.00	0.00	0.00	0.00
93	9.57	0.05	1	3.151	0.000	0.000	0.00	0.00	0.00	0.00	0.00

Mode	Freq. [Hz]	Damp ratio	Damp coef.	Sax [m/s^2]	Say [m/s^2]	Saz [m/s^2]	G(j) [-]	Fx [kN]	Fy [kN]	Mx [kNm]	My [kNm]
94	9.58	0.05	1	3.150	0.000	0.000	0.01	0.28	0.07	-0.01	0.10
95	9.66	0.05	1	3.137	0.000	0.000	0.02	1.19	0.16	0.07	0.56
96	9.75	0.05	1	3.125	0.000	0.000	0.00	0.01	0.01	0.00	0.00
97	9.76	0.05	1	3.123	0.000	0.000	0.02	1.07	0.47	0.20	0.41
98	9.77	0.05	1	3.122	0.000	0.000	0.01	0.46	0.13	0.06	0.17
99	9.78	0.05	1	3.121	0.000	0.000	-0.02	1.53	-0.27	-0.13	0.69
100	9.78	0.05	1	3.121	0.000	0.000	0.01	0.45	0.31	0.14	0.17
Level=	0.00							143.18	-19.63	85.14	-621.99

Dynamic load case 16 : potres Y

Mode	Freq. [Hz]	Damp ratio	Damp coef.	Sax [m/s^2]	Say [m/s^2]	Saz [m/s^2]	G(j) [-]	Fx [kN]	Fy [kN]	Mx [kNm]	My [kNm]
1	1.50	0.05	1	0.000	4.415	0.000	-0.90	-14.33	1.43	-6.23	62.24
2	1.57	0.05	1	0.000	4.415	0.000	-5.51	13.37	64.55	-279.72	-58.77
3	1.65	0.05	1	0.000	4.415	0.000	-5.58	1.01	81.93	-355.84	-3.49
4	3.72	0.05	1	0.000	4.415	0.000	0.00	0.00	0.00	0.00	0.00
5	3.72	0.05	1	0.000	4.415	0.000	0.00	0.00	0.00	0.00	0.00
6	3.77	0.05	1	0.000	4.415	0.000	0.00	0.00	0.00	0.00	0.00
7	4.67	0.05	1	0.000	4.415	0.000	0.00	0.05	0.00	-0.01	-0.18
8	5.04	0.05	1	0.000	4.372	0.000	0.00	0.00	0.00	0.00	0.00
9	5.05	0.05	1	0.000	4.369	0.000	0.00	0.00	0.00	0.00	0.00
10	5.05	0.05	1	0.000	4.368	0.000	0.00	0.00	0.00	0.00	0.00
11	5.05	0.05	1	0.000	4.368	0.000	0.00	0.00	0.00	0.00	0.00
12	5.05	0.05	1	0.000	4.368	0.000	0.00	0.00	0.00	0.00	0.00
13	5.05	0.05	1	0.000	4.368	0.000	0.00	0.00	0.00	0.00	0.00
14	5.05	0.05	1	0.000	4.368	0.000	0.00	0.00	0.00	0.00	0.00
15	5.05	0.05	1	0.000	4.368	0.000	0.00	0.00	0.00	0.00	0.00
16	5.05	0.05	1	0.000	4.368	0.000	0.00	0.00	0.00	0.00	0.00
17	5.05	0.05	1	0.000	4.368	0.000	0.00	0.00	0.00	0.00	0.00
18	5.05	0.05	1	0.000	4.368	0.000	0.00	0.00	0.00	0.00	0.00
19	5.05	0.05	1	0.000	4.368	0.000	0.00	0.00	0.00	0.00	0.00
20	5.05	0.05	1	0.000	4.368	0.000	0.00	0.00	0.00	0.00	0.00
21	5.05	0.05	1	0.000	4.368	0.000	0.00	0.00	0.00	0.00	0.00
22	5.05	0.05	1	0.000	4.368	0.000	0.00	0.00	0.00	0.00	0.00
23	5.05	0.05	1	0.000	4.368	0.000	0.00	0.00	0.00	0.00	0.00
24	5.05	0.05	1	0.000	4.368	0.000	0.00	0.00	0.00	0.00	0.00
25	5.05	0.05	1	0.000	4.368	0.000	0.00	0.00	0.00	0.00	0.00
26	5.05	0.05	1	0.000	4.368	0.000	0.00	0.00	0.00	0.00	0.00
27	5.05	0.05	1	0.000	4.368	0.000	0.00	0.00	0.00	0.00	0.00
28	5.05	0.05	1	0.000	4.368	0.000	0.00	0.00	0.00	0.00	0.00
29	5.05	0.05	1	0.000	4.368	0.000	0.00	0.00	0.00	0.00	0.00
30	5.05	0.05	1	0.000	4.368	0.000	0.00	0.00	0.00	0.00	0.00
31	5.05	0.05	1	0.000	4.368	0.000	0.00	0.00	0.00	0.00	0.00
32	5.08	0.05	1	0.000	4.357	0.000	0.00	0.00	0.00	0.00	0.00
33	5.15	0.05	1	0.000	4.333	0.000	0.00	0.00	0.00	0.00	0.00
34	5.42	0.05	1	0.000	4.209	0.000	0.00	0.00	0.00	0.00	0.00
35	5.55	0.05	1	0.000	4.152	0.000	0.00	0.00	0.00	0.00	-0.01
36	5.59	0.05	1	0.000	4.136	0.000	0.00	0.01	0.00	0.00	-0.03
37	5.77	0.05	1	0.000	4.061	0.000	0.00	-0.01	0.00	0.00	0.04
38	5.93	0.05	1	0.000	3.999	0.000	0.00	0.00	0.00	0.00	0.00
39	5.98	0.05	1	0.000	3.982	0.000	0.00	0.00	0.00	0.00	0.00
40	6.08	0.05	1	0.000	3.946	0.000	0.00	0.00	0.00	0.00	0.00
41	6.12	0.05	1	0.000	3.929	0.000	0.00	0.00	0.00	0.00	0.00
42	6.37	0.05	1	0.000	3.846	0.000	0.00	0.00	0.00	0.00	0.01
43	6.44	0.05	1	0.000	3.824	0.000	0.00	0.00	0.00	0.00	0.00
44	6.63	0.05	1	0.000	3.764	0.000	0.00	0.00	0.00	0.00	0.00
45	6.66	0.05	1	0.000	3.755	0.000	0.00	0.00	0.00	0.00	-0.01
46	6.96	0.05	1	0.000	3.670	0.000	0.00	0.00	0.00	0.00	0.00
47	6.99	0.05	1	0.000	3.662	0.000	0.00	0.00	0.00	0.00	0.00
48	7.14	0.05	1	0.000	3.622	0.000	0.00	0.00	0.00	0.00	0.00
49	7.31	0.05	1	0.000	3.580	0.000	0.00	0.00	0.00	0.00	0.00
50	7.41	0.05	1	0.000	3.555	0.000	0.00	0.00	0.00	0.00	0.00
51	7.55	0.05	1	0.000	3.521	0.000	0.00	0.00	0.00	0.00	-0.01
52	7.62	0.05	1	0.000	3.506	0.000	0.00	0.00	0.00	0.00	0.00

Mode	Freq. [Hz]	Damp ratio	Damp coef.	Sax [m/s^2]	Say [m/s^2]	Saz [m/s^2]	G(j) [-]	Fx [kN]	Fy [kN]	Mx [kNm]	My [kNm]
53	7.75	0.05	1	0.000	3.477	0.000	0.00	0.00	0.00	0.00	0.00
54	7.82	0.05	1	0.000	3.463	0.000	0.00	0.00	0.00	0.00	0.00
55	7.83	0.05	1	0.000	3.459	0.000	0.00	0.00	0.00	0.00	0.00
56	7.89	0.05	1	0.000	3.447	0.000	0.00	0.00	0.00	0.00	0.00
57	7.98	0.05	1	0.000	3.428	0.000	0.00	0.00	0.00	0.00	0.00
58	8.00	0.05	1	0.000	3.423	0.000	0.00	0.00	0.00	0.00	0.00
59	8.01	0.05	1	0.000	3.420	0.000	0.00	0.00	0.00	0.00	0.00
60	8.14	0.05	1	0.000	3.394	0.000	0.00	0.00	0.00	0.00	0.00
61	8.15	0.05	1	0.000	3.392	0.000	0.00	0.00	0.00	0.00	0.00
62	8.27	0.05	1	0.000	3.369	0.000	0.00	0.00	0.00	0.00	0.00
63	8.53	0.05	1	0.000	3.322	0.000	0.00	0.00	0.00	0.00	0.00
64	8.56	0.05	1	0.000	3.315	0.000	0.00	0.00	0.00	0.00	0.00
65	8.58	0.05	1	0.000	3.311	0.000	0.00	0.00	0.00	0.00	0.00
66	8.64	0.05	1	0.000	3.301	0.000	0.00	0.00	0.00	0.00	0.00
67	8.64	0.05	1	0.000	3.300	0.000	0.00	0.00	0.00	0.00	0.00
68	8.65	0.05	1	0.000	3.299	0.000	0.00	0.00	0.00	0.00	0.00
69	8.67	0.05	1	0.000	3.295	0.000	0.00	0.00	0.00	0.00	0.00
70	8.67	0.05	1	0.000	3.294	0.000	0.00	0.00	0.00	0.00	0.00
71	8.67	0.05	1	0.000	3.294	0.000	0.00	0.00	0.00	0.00	0.00
72	8.68	0.05	1	0.000	3.294	0.000	0.00	0.00	0.00	0.00	0.00
73	8.68	0.05	1	0.000	3.294	0.000	0.00	0.00	0.00	0.00	0.00
74	8.68	0.05	1	0.000	3.293	0.000	0.00	0.00	0.00	0.00	0.00
75	8.68	0.05	1	0.000	3.293	0.000	0.00	0.00	0.00	0.00	0.00
76	8.68	0.05	1	0.000	3.293	0.000	0.00	0.00	0.00	0.00	0.00
77	8.68	0.05	1	0.000	3.293	0.000	0.00	0.00	0.00	0.00	0.00
78	8.68	0.05	1	0.000	3.293	0.000	0.00	0.00	0.00	0.00	0.00
79	8.68	0.05	1	0.000	3.293	0.000	0.00	0.00	0.00	0.00	0.00
80	8.69	0.05	1	0.000	3.292	0.000	0.00	0.00	0.00	0.00	0.00
81	8.69	0.05	1	0.000	3.292	0.000	0.00	0.00	0.00	0.00	0.00
82	8.69	0.05	1	0.000	3.292	0.000	0.00	0.00	0.00	0.00	0.00
83	8.71	0.05	1	0.000	3.288	0.000	0.00	0.00	0.00	0.00	0.00
84	8.81	0.05	1	0.000	3.270	0.000	0.00	0.00	0.00	0.00	0.00
85	8.93	0.05	1	0.000	3.250	0.000	0.00	0.00	0.00	0.00	0.00
86	9.00	0.05	1	0.000	3.239	0.000	0.00	0.00	0.00	0.00	0.00
87	9.09	0.05	1	0.000	3.225	0.000	0.00	0.00	0.00	0.00	0.00
88	9.28	0.05	1	0.000	3.196	0.000	0.00	0.00	0.00	0.00	-0.01
89	9.45	0.05	1	0.000	3.169	0.000	0.00	0.07	0.03	0.01	0.01
90	9.47	0.05	1	0.000	3.167	0.000	0.00	0.03	0.01	0.00	0.00
91	9.57	0.05	1	0.000	3.152	0.000	0.00	0.05	0.01	0.00	0.01
92	9.57	0.05	1	0.000	3.151	0.000	0.00	0.00	0.00	0.00	0.00
93	9.57	0.05	1	0.000	3.151	0.000	0.00	0.00	0.00	0.00	0.00
94	9.58	0.05	1	0.000	3.150	0.000	0.00	0.07	0.02	0.00	0.03
95	9.66	0.05	1	0.000	3.137	0.000	0.00	0.16	0.02	0.01	0.08
96	9.75	0.05	1	0.000	3.125	0.000	0.00	0.01	0.01	0.00	0.00
97	9.76	0.05	1	0.000	3.123	0.000	0.01	0.47	0.21	0.09	0.18
98	9.77	0.05	1	0.000	3.122	0.000	0.00	0.13	0.04	0.02	0.05
99	9.78	0.05	1	0.000	3.121	0.000	0.00	-0.27	0.05	0.02	-0.12
100	9.78	0.05	1	0.000	3.121	0.000	0.01	0.31	0.21	0.10	0.11
Level=	0.00							-19.63	104.31	-452.66	85.67

18. Calculation protocol

Solution of Free vibration

Number of 2D elements	108
Number of 1D elements	1938
Number of mesh nodes	1939
Number of equations	11634
Combination of mass groups	MC1 CM1
Number of frequencies	100
Method	Lanczos
Bending theory	Mindlin
Type of analysis model	Standard
Start of calculation	25.04.2021 18:31
End of calculation	25.04.2021 18:31

Sum of masses

	X [kg]	Y [kg]	Z [kg]
1	49556.85	49556.85	49556.85
1	49761.15	49761.15	49761.15

Relative modal masses

Mode	Omega [rad/s]	Period [s]	Freq. [Hz]	W_{xi}/W_{xtot}	W_{yi}/W_{ytot}	W_{zi}/W_{ztot}	W_{xi_R}/W_{xtot_R}	W_{yi_R}/W_{ytot_R}	W_{zi_R}/W_{ztot_R}
1	9.39805	0.67	1.50	0.6543	0.0066	0.0000	0.0010	0.0264	0.0003
2	9.84094	0.64	1.57	0.0126	0.2951	0.0000	0.0539	0.0006	0.3710
3	10.3812	0.61	1.65	0.0001	0.3745	0.0000	0.0688	0.0000	0.3991
4	23.3442	0.27	3.72	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	23.3475	0.27	3.72	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6	23.6938	0.27	3.77	0.0005	0.0000	0.0000	0.0000	0.0001	0.0001
7	29.3141	0.21	4.67	0.0049	0.0000	0.0087	0.0018	0.0364	0.0000
8	31.6759	0.20	5.04	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
9	31.7248	0.20	5.05	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
10	31.7342	0.20	5.05	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
11	31.7371	0.20	5.05	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12	31.7389	0.20	5.05	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
13	31.7397	0.20	5.05	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
14	31.7402	0.20	5.05	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
15	31.7406	0.20	5.05	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
16	31.7408	0.20	5.05	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
17	31.7409	0.20	5.05	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
18	31.7413	0.20	5.05	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
19	31.7413	0.20	5.05	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
20	31.7413	0.20	5.05	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
21	31.7414	0.20	5.05	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
22	31.7414	0.20	5.05	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
23	31.7415	0.20	5.05	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
24	31.7415	0.20	5.05	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
25	31.7415	0.20	5.05	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
26	31.7415	0.20	5.05	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
27	31.7415	0.20	5.05	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mode	Omega [rad/s]	Period [s]	Freq. [Hz]	W_{xi}/W_{xtot}	W_{yi}/W_{ytot}	W_{zi}/W_{ztot}	W_{xi_R}/W_{xtot_R}	W_{yi_R}/W_{ytot_R}	W_{zi_R}/W_{ztot_R}
28	31.7415	0.20	5.05	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
29	31.7416	0.20	5.05	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
30	31.7416	0.20	5.05	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
31	31.7416	0.20	5.05	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
32	31.941	0.20	5.08	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
33	32.3704	0.19	5.15	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
34	34.067	0.18	5.42	0.0004	0.0000	0.0000	0.0000	0.0000	0.0001
35	34.8982	0.18	5.55	0.0001	0.0000	0.0045	0.0011	0.0043	0.0001
36	35.1313	0.18	5.59	0.0010	0.0000	0.0016	0.0007	0.0017	0.0000
37	36.2587	0.17	5.77	0.0004	0.0000	0.0000	0.0028	0.0078	0.0002
38	37.2872	0.17	5.93	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
39	37.5719	0.17	5.98	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
40	38.1894	0.16	6.08	0.0003	0.0000	0.0000	0.0000	0.0002	0.0000
41	38.4661	0.16	6.12	0.0000	0.0000	0.0194	0.0077	0.0091	0.0000
42	40.0461	0.16	6.37	0.0000	0.0000	0.0350	0.0138	0.0319	0.0001
43	40.4515	0.16	6.44	0.0001	0.0000	0.0003	0.0001	0.0000	0.0000
44	41.6762	0.15	6.63	0.0000	0.0000	0.0008	0.0005	0.0039	0.0000
45	41.875	0.15	6.66	0.0009	0.0000	0.0018	0.0015	0.0149	0.0001
46	43.7166	0.14	6.96	0.0000	0.0000	0.0040	0.0008	0.0044	0.0000
47	43.8969	0.14	6.99	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000
48	44.8863	0.14	7.14	0.0000	0.0000	0.0248	0.0004	0.0262	0.0000
49	45.9321	0.14	7.31	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
50	46.5408	0.14	7.41	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
51	47.4166	0.13	7.55	0.0000	0.0000	0.0433	0.0002	0.0345	0.0000
52	47.857	0.13	7.62	0.0001	0.0000	0.0001	0.0000	0.0000	0.0000
53	48.7108	0.13	7.75	0.0000	0.0000	0.0015	0.0029	0.0105	0.0000
54	49.1145	0.13	7.82	0.0003	0.0000	0.0086	0.0008	0.0106	0.0000
55	49.2093	0.13	7.83	0.0000	0.0000	0.0001	0.0003	0.0018	0.0000
56	49.5769	0.13	7.89	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
57	50.1102	0.13	7.98	0.0001	0.0000	0.0569	0.0035	0.0319	0.0000
58	50.2606	0.13	8.00	0.0000	0.0000	0.0188	0.0500	0.0349	0.0000
59	50.3387	0.12	8.01	0.0001	0.0000	0.0001	0.0003	0.0001	0.0000
60	51.1162	0.12	8.14	0.0000	0.0000	0.0004	0.0000	0.0009	0.0000

Mode	Omega [rad/s]	Period [s]	Freq. [Hz]	W_{xi}/W_{xtot}	W_{yi}/W_{ytot}	W_{zi}/W_{ztot}	W_{xi_R}/W_{xtot_R}	W_{yi_R}/W_{ytot_R}	W_{zi_R}/W_{ztot_R}
61	51.1856	0.12	8.15	0.0004	0.0000	0.0011	0.0004	0.0046	0.0000
62	51.9836	0.12	8.27	0.0003	0.0000	0.0052	0.0132	0.0064	0.0000
63	53.5724	0.12	8.53	0.0001	0.0000	0.0002	0.0003	0.0094	0.0000
64	53.7889	0.12	8.56	0.0000	0.0000	0.0001	0.0003	0.0000	0.0000
65	53.9284	0.12	8.58	0.0000	0.0000	0.0000	0.0000	0.0009	0.0000
66	54.2802	0.12	8.64	0.0000	0.0000	0.0006	0.0003	0.0000	0.0000
67	54.3138	0.12	8.64	0.0000	0.0000	0.0000	0.0000	0.0098	0.0000
68	54.3396	0.12	8.65	0.0000	0.0000	0.0155	0.0075	0.0020	0.0000
69	54.4972	0.12	8.67	0.0000	0.0000	0.0009	0.0004	0.0006	0.0000
70	54.499	0.12	8.67	0.0000	0.0000	0.0001	0.0000	0.0011	0.0000
71	54.5008	0.12	8.67	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000
72	54.5077	0.12	8.68	0.0000	0.0000	0.0024	0.0010	0.0036	0.0000
73	54.5294	0.12	8.68	0.0000	0.0000	0.0017	0.0008	0.0051	0.0000
74	54.5507	0.12	8.68	0.0000	0.0000	0.0025	0.0012	0.0002	0.0000
75	54.5513	0.12	8.68	0.0000	0.0000	0.0000	0.0000	0.0016	0.0000
76	54.5516	0.12	8.68	0.0000	0.0000	0.0005	0.0002	0.0002	0.0000
77	54.5611	0.12	8.68	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
78	54.5615	0.12	8.68	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
79	54.5617	0.12	8.68	0.0000	0.0000	0.0000	0.0000	0.0003	0.0000
80	54.5745	0.12	8.69	0.0000	0.0000	0.0001	0.0001	0.0000	0.0000
81	54.5745	0.12	8.69	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000
82	54.5746	0.12	8.69	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000
83	54.7315	0.11	8.71	0.0000	0.0000	0.0007	0.0001	0.0006	0.0000
84	55.3296	0.11	8.81	0.0000	0.0000	0.0005	0.0000	0.0003	0.0000
85	56.114	0.11	8.93	0.0001	0.0000	0.0005	0.0001	0.0000	0.0000
86	56.5639	0.11	9.00	0.0000	0.0000	0.0037	0.0003	0.0002	0.0000
87	57.1265	0.11	9.09	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
88	58.3207	0.11	9.28	0.0003	0.0000	0.0000	0.0001	0.0005	0.0000
89	59.4032	0.11	9.45	0.0012	0.0002	0.0019	0.0048	0.0097	0.0000
90	59.484	0.11	9.47	0.0006	0.0000	0.0000	0.0007	0.0013	0.0000
91	60.1026	0.10	9.57	0.0013	0.0001	0.0008	0.0005	0.0000	0.0001
92	60.1101	0.10	9.57	0.0000	0.0000	0.0000	0.0000	0.0000	0.0005
93	60.1103	0.10	9.57	0.0000	0.0000	0.0000	0.0000	0.0000	0.0004

Mode	Omega [rad/s]	Period [s]	Freq. [Hz]	W_{xi}/W_{xtot}	W_{yi}/W_{ytot}	W_{zi}/W_{ztot}	W_{xi_R}/W_{xtot_R}	W_{yi_R}/W_{ytot_R}	W_{zi_R}/W_{ztot_R}
94	60.1824	0.10	9.58	0.0018	0.0001	0.0009	0.0023	0.0012	0.0011
95	60.7013	0.10	9.66	0.0077	0.0001	0.0000	0.0000	0.0012	0.0035
96	61.2453	0.10	9.75	0.0001	0.0000	0.0000	0.0004	0.0001	0.0001
97	61.3401	0.10	9.76	0.0069	0.0013	0.0001	0.0028	0.0002	0.0031
98	61.3989	0.10	9.77	0.0030	0.0002	0.0026	0.0031	0.0023	0.0003
99	61.4536	0.10	9.78	0.0099	0.0003	0.0000	0.0003	0.0021	0.0011
100	61.4678	0.10	9.78	0.0029	0.0014	0.0000	0.0011	0.0020	0.0013
				0.7130	0.6800	0.2737	0.2553	0.3614	0.7827

3. REZULTATI ANALIZE KONSTRUKCIJE

3.1. Notranje sile

19. Internal forces on member

Nonlinear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS
Cross-section : N4-S1 - CFRHS220X220X8

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1622	N4-S1 - CFRHS220X220X8	0.000	NC42	**-116.96**	-2.62	3.45	0.00	0.00	0.00
B1622	N4-S1 - CFRHS220X220X8	4.450	NC21	**18.18**	-2.76	0.44	0.01	1.95	-14.51
B1618	N4-S1 - CFRHS220X220X8	0.000	NC4	-89.77	**-15.58**	1.42	0.00	0.00	0.00
B1621	N4-S1 - CFRHS220X220X8	1.113	NC5	-98.31	**5.87**	0.54	0.00	0.61	-8.29
B1619	N4-S1 - CFRHS220X220X8	0.000	NC25	-80.80	0.64	**-2.94**	0.00	0.00	0.00
B1623	N4-S1 - CFRHS220X220X8	0.000	NC15	-77.56	0.41	**6.50**	0.01	0.00	0.00
B1618	N4-S1 - CFRHS220X220X8	0.890	NC2	-95.14	-12.30	5.34	**-0.04**	4.92	-10.98
B1620	N4-S1 - CFRHS220X220X8	4.450	NC15	-81.71	-0.27	3.72	**0.04**	21.56	-2.75
B1619	N4-S1 - CFRHS220X220X8	4.450	NC25	-77.78	-0.01	-1.07	0.00	**-9.03**	1.43
B1623	N4-S1 - CFRHS220X220X8	4.450	NC15	-74.56	-0.18	4.37	0.03	**24.51**	0.52
B1622	N4-S1 - CFRHS220X220X8	4.450	NC4	-99.25	-3.94	1.08	0.00	5.19	**-22.90**
B1620	N4-S1 - CFRHS220X220X8	4.450	NC27	-50.84	2.89	0.10	0.00	0.40	**18.62**

20. Internal forces on member

Linear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS-potres
Cross-section : N4-S1 - CFRHS220X220X8

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1620	N4-S1 - CFRHS220X220X8	0.000	potres 6/1	**-67.47**	10.95	5.93	0.07	0.00	0.00
B1620	N4-S1 - CFRHS220X220X8	4.450	potres 7/2	**24.84**	-9.13	-5.04	-0.07	-22.99	-41.79
B1619	N4-S1 - CFRHS220X220X8	0.000	potres 7/2	-56.62	**-11.60**	-5.76	0.00	0.00	0.00
B1619	N4-S1 - CFRHS220X220X8	0.000	potres 6/1	-3.52	**11.96**	5.97	0.00	0.00	0.00
B1623	N4-S1 - CFRHS220X220X8	0.000	potres 2/3	-7.90	-3.88	**-14.89**	-0.05	0.00	0.00
B1623	N4-S1 - CFRHS220X220X8	0.000	potres 3/4	-46.27	4.78	**15.47**	0.05	0.00	0.00
B1623	N4-S1 - CFRHS220X220X8	0.000	potres 7/2	-2.89	-8.66	-6.89	**-0.08**	0.00	0.00
B1623	N4-S1 - CFRHS220X220X8	0.000	potres 6/1	-51.28	9.57	7.48	**0.08**	0.00	0.00
B1623	N4-S1 - CFRHS220X220X8	4.450	potres 2/3	-5.66	-3.69	-14.34	-0.05	**-65.24**	-16.91
B1623	N4-S1 - CFRHS220X220X8	4.450	potres 3/4	-44.01	4.59	14.93	0.05	**67.84**	20.94
B1619	N4-S1 - CFRHS220X220X8	4.450	potres 7/2	-54.37	-11.13	-5.55	0.00	-25.26	**-50.75**
B1619	N4-S1 - CFRHS220X220X8	4.450	potres 6/1	-1.27	11.49	5.76	0.00	26.16	**52.35**

21. Internal forces on member

Nonlinear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS
Cross-section : N4-S2 - CFRHS220X220X10

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1625	N4-S2 - CFRHS220X220X10	0.000	NC42	**-143.65**	-4.55	1.03	0.00	0.00	0.00
B1625	N4-S2 - CFRHS220X220X10	4.450	NC20	**20.66**	0.07	-0.88	0.00	-7.56	1.66
B1617	N4-S2 - CFRHS220X220X10	0.000	NC4	-69.97	**-12.40**	0.25	0.00	0.00	0.00
B1616	N4-S2 - CFRHS220X220X10	0.000	NC27	-76.58	**6.16**	-0.38	0.00	0.00	0.00

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1625	N4-S2 - CFRHS220X220X10	0.000	NC51-s2	-93.37	0.20	**-5.60**	0.00	0.00	0.00
B1617	N4-S2 - CFRHS220X220X10	0.000	NC24	-68.35	-4.68	**4.96**	0.00	0.00	0.00
B1625	N4-S2 - CFRHS220X220X10	4.450	NC26	-135.15	-5.23	-1.24	**-0.06**	-5.90	-30.81
B1626	N4-S2 - CFRHS220X220X10	4.450	NC36	-78.75	3.16	-1.14	**0.05**	-5.33	19.46
B1625	N4-S2 - CFRHS220X220X10	4.450	NC51-s2	-89.67	0.16	-4.19	0.00	**-22.04**	0.81
B1617	N4-S2 - CFRHS220X220X10	4.450	NC24	-64.68	-1.07	3.02	-0.02	**17.90**	-8.34
B1617	N4-S2 - CFRHS220X220X10	4.450	NC17	-72.87	-5.09	-0.42	-0.03	-1.89	**-33.82**
B1616	N4-S2 - CFRHS220X220X10	4.450	NC27	-72.89	3.54	-0.34	0.01	-1.61	**21.80**

22. Internal forces on member

Linear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS-potres
Cross-section : N4-S2 - CFRHS220X220X10

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1616	N4-S2 - CFRHS220X220X10	0.000	potres 6/1	**-75.78**	-18.40	5.44	0.00	0.00	0.00
B1617	N4-S2 - CFRHS220X220X10	4.450	potres 7/2	**16.82**	17.08	-7.04	0.00	-32.25	78.18
B1625	N4-S2 - CFRHS220X220X10	0.000	potres 7/2	-44.06	**-19.32**	-5.61	0.00	0.00	0.00
B1625	N4-S2 - CFRHS220X220X10	0.000	potres 6/1	-28.46	**19.11**	4.01	0.00	0.00	0.00
B1626	N4-S2 - CFRHS220X220X10	0.000	potres 2/3	-48.70	-7.37	**-13.90**	-0.04	0.00	0.00
B1617	N4-S2 - CFRHS220X220X10	0.000	potres 3/4	-50.58	-7.04	**13.42**	0.00	0.00	0.00
B1626	N4-S2 - CFRHS220X220X10	0.000	potres 7/2	-58.14	-13.97	-7.61	**-0.08**	0.00	0.00
B1626	N4-S2 - CFRHS220X220X10	0.000	potres 6/1	-12.32	15.04	6.26	**0.08**	0.00	0.00
B1626	N4-S2 - CFRHS220X220X10	4.450	potres 2/3	-45.93	-7.01	-13.24	-0.04	**-60.65**	-32.13
B1617	N4-S2 - CFRHS220X220X10	4.450	potres 3/4	-47.82	-6.75	12.82	0.00	**58.62**	-30.80
B1625	N4-S2 - CFRHS220X220X10	4.450	potres 7/2	-41.30	-18.63	-5.37	0.00	-24.53	**-84.68**
B1625	N4-S2 - CFRHS220X220X10	4.450	potres 6/1	-25.70	18.42	3.77	0.00	17.39	**83.76**

23. Internal forces on member

Nonlinear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS
Cross-section : N4-N1 - HEA260

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B2103	N4-N1 - HEA260	4.000	NC24	**-16.12**	0.09	2.22	0.00	27.95	0.05
B2107	N4-N1 - HEA260	8.109	NC24	**7.65**	-1.69	-17.70	-0.01	-23.08	-0.20
B2109	N4-N1 - HEA260	9.123	NC15	3.76	**-1.80**	-37.86	0.03	-83.69	-2.16
B2092	N4-N1 - HEA260	0.000	NC2	0.63	**4.23**	21.77	0.06	-21.76	**-4.49**
B2105	N4-N1 - HEA260	9.000	NC42	0.54	0.59	**-68.51**	-0.06	-130.67	0.49
B2106	N4-N1 - HEA260	0.000	NC41	-0.56	-0.39	**58.65**	-0.06	-128.77	0.39
B2110	N4-N1 - HEA260	0.000	NC41	0.07	-0.23	41.96	**-0.11**	-95.34	0.32
B2096	N4-N1 - HEA260	0.000	NC15	0.49	3.91	20.63	**0.11**	-20.65	-4.17
B2105	N4-N1 - HEA260	9.000	NC24	0.20	0.67	-67.48	-0.01	**-132.35**	0.35
B2105	N4-N1 - HEA260	4.000	NC41	4.94	-0.12	10.14	0.03	**47.80**	-0.12
B2108	N4-N1 - HEA260	0.000	NC24	6.22	-1.60	18.92	-0.02	-22.48	**1.98**

24. Internal forces on member

Linear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS-potres
Cross-section : N4-N1 - HEA260

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B2106	N4-N1 - HEA260	0.000	potres 4/5	**-1.32**	0.12	**14.30**	0.01	-32.96	-0.13
B2105	N4-N1 - HEA260	0.000	potres 5/6	**2.45**	-0.08	13.70	0.00	-24.39	0.07
B2101	N4-N1 - HEA260	0.000	potres 5/6	0.61	**-0.17**	9.06	0.01	-21.12	0.18
B2109	N4-N1 - HEA260	8.920	potres 5/6	0.36	**0.19**	-9.46	0.00	-12.92	0.17

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B2105	N4-N1 - HEA260	9.000	potres 4/5	0.75	-0.09	**-16.82**	0.00	**-36.65**	-0.09
B2110	N4-N1 - HEA260	1.015	potres 4/5	-0.67	0.06	7.91	**-0.02**	-14.03	0.00
B2107	N4-N1 - HEA260	0.000	potres 1/7	0.12	0.00	4.11	**0.03**	0.00	0.00
B2105	N4-N1 - HEA260	5.000	potres 5/6	1.43	0.06	-1.85	0.00	**11.15**	-0.04
B2107	N4-N1 - HEA260	9.123	potres 4/5	0.81	-0.17	-7.35	0.00	-15.50	**-0.16**
B2109	N4-N1 - HEA260	9.123	potres 5/6	0.36	0.19	-9.62	0.00	-14.85	**0.21**

25. Internal forces on member

Nonlinear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS
Cross-section : N4-N2 - UNP260

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1667	N4-N2 - UNP260	9.122	NC19	**-2.11**	0.02	0.18	0.01	1.61	0.04
B1665	N4-N2 - UNP260	0.000	NC24	**6.45**	-0.10	-7.57	0.01	8.85	0.02
B1663	N4-N2 - UNP260	0.000	NC24	4.62	**-4.80**	-0.14	0.00	-0.01	1.14
B1664	N4-N2 - UNP260	0.328	NC24	4.98	**3.86**	0.51	0.02	0.13	-0.04
B1793	N4-N2 - UNP260	0.000	NC24	1.94	0.06	**-10.64**	-0.15	26.35	-0.43
B1667	N4-N2 - UNP260	9.122	NC42	-1.00	-0.19	**10.75**	0.04	25.78	-0.44
B1793	N4-N2 - UNP260	0.000	NC42	1.20	0.13	-10.57	**-0.15**	25.68	-0.44
B1667	N4-N2 - UNP260	9.122	NC15	-2.02	-0.10	8.89	**0.07**	22.93	-0.28
B1661	N4-N2 - UNP260	0.000	NC24	0.03	-0.17	8.88	0.00	**-21.77**	0.12
B1667	N4-N2 - UNP260	9.122	NC24	-1.88	-0.18	10.65	0.05	**26.45**	-0.43
B1663	N4-N2 - UNP260	0.526	NC24	4.62	-4.48	0.28	0.00	0.02	**-1.30**
B1653	N4-N2 - UNP260	6.223	NC25	0.63	1.54	3.92	0.00	-5.30	**1.22**

26. Internal forces on member

Linear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS-potres
Cross-section : N4-N2 - UNP260

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1653	N4-N2 - UNP260	5.193	potres 7/2	**-4.37**	0.26	0.56	0.00	-0.90	-0.07
B1653	N4-N2 - UNP260	5.193	potres 6/1	**4.39**	-0.26	0.95	-0.01	-3.88	0.07
B1663	N4-N2 - UNP260	0.000	potres 3/4	-2.02	**-1.82**	-2.78	0.00	1.43	0.39
B1663	N4-N2 - UNP260	0.000	potres 2/3	2.04	**1.81**	3.16	0.00	-1.74	-0.38
B1793	N4-N2 - UNP260	0.000	potres 3/4	-0.55	-0.26	**-5.88**	**-0.08**	18.11	0.20
B1664	N4-N2 - UNP260	3.369	potres 2/3	0.86	0.13	**5.47**	0.00	14.95	0.09
B1667	N4-N2 - UNP260	8.108	potres 3/4	1.33	0.12	4.41	**0.04**	13.61	0.03
B1660	N4-N2 - UNP260	9.000	potres 3/4	1.65	-0.18	-4.35	0.00	**-15.81**	-0.15
B1667	N4-N2 - UNP260	9.122	potres 3/4	1.46	0.22	4.78	0.04	**18.25**	0.20
B1653	N4-N2 - UNP260	1.071	potres 3/4	0.61	-1.07	-2.52	0.00	-2.98	**-0.69**
B1653	N4-N2 - UNP260	1.071	potres 2/3	-0.59	1.08	2.55	-0.01	2.46	**0.70**

27. Internal forces on member

Nonlinear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS
Cross-section : N4-SN1 - CFRHS60X60X4

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1854	N4-SN1 - CFRHS60X60X4	0.348	NC24	**-3.94**	0.00	-0.07	-0.07	0.04	0.00
B1864	N4-SN1 - CFRHS60X60X4	0.000	NC24	**1.31**	0.00	1.10	-0.03	0.00	0.00
B1918	N4-SN1 - CFRHS60X60X4	1.070	NC24	0.47	**-0.01**	-0.97	0.10	0.00	0.00
B1918	N4-SN1 - CFRHS60X60X4	0.000	NC42	0.25	**0.01**	1.00	0.11	0.00	0.00
B1904	N4-SN1 - CFRHS60X60X4	1.068	NC42	-0.05	0.00	**-1.73**	-0.02	0.00	0.00
B1864	N4-SN1 - CFRHS60X60X4	0.000	NC36	-0.26	0.00	**1.47**	-0.03	0.00	0.00

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1857	N4-SN1 - CFRHS60X60X4	0.166	NC51-s2	0.08	0.00	-0.02	**-0.33**	0.00	0.00
B1857	N4-SN1 - CFRHS60X60X4	0.000	NC50-s1	0.53	0.00	0.02	**0.27**	0.00	0.00
B1864	N4-SN1 - CFRHS60X60X4	0.531	NC31	-0.20	0.00	-0.12	0.01	**-0.15**	0.00
B1864	N4-SN1 - CFRHS60X60X4	0.531	NC36	-0.26	0.00	0.46	-0.03	**0.60**	0.00
B1864	N4-SN1 - CFRHS60X60X4	0.531	NC34	-0.10	0.00	0.46	-0.02	0.60	**0.00**
B1857	N4-SN1 - CFRHS60X60X4	0.000	NC51-s2	0.08	0.00	0.02	-0.33	0.00	**0.00**

28. Internal forces on member

Linear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS-potres
Cross-section : N4-SN1 - CFRHS60X60X4

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1798	N4-SN1 - CFRHS60X60X4	0.640	potres 6/1	**-0.70**	-0.03	-0.09	0.01	0.02	0.00
B1798	N4-SN1 - CFRHS60X60X4	0.640	potres 7/2	**0.70**	0.03	-0.09	-0.04	0.02	0.00
B1818	N4-SN1 - CFRHS60X60X4	0.000	potres 2/3	-0.01	**-0.05**	0.11	-0.07	0.00	0.00
B1818	N4-SN1 - CFRHS60X60X4	0.000	potres 3/4	0.01	**0.05**	0.12	0.08	0.00	0.00
B1904	N4-SN1 - CFRHS60X60X4	1.068	potres 2/3	0.00	0.00	**-0.31**	0.00	0.00	0.00
B1864	N4-SN1 - CFRHS60X60X4	0.000	potres 2/3	0.03	0.00	**0.27**	0.00	0.00	0.00
B1811	N4-SN1 - CFRHS60X60X4	0.000	potres 3/4	-0.07	0.05	0.12	**-0.09**	0.00	0.00
B1808	N4-SN1 - CFRHS60X60X4	0.000	potres 2/3	-0.06	-0.05	0.11	**0.10**	0.00	0.00
B1794	N4-SN1 - CFRHS60X60X4	0.000	potres 7/2	0.10	-0.03	0.11	0.00	**0.00**	0.00
B1864	N4-SN1 - CFRHS60X60X4	0.531	potres 2/3	0.03	0.00	0.08	0.00	**0.11**	0.00
B1818	N4-SN1 - CFRHS60X60X4	0.320	potres 2/3	-0.01	-0.03	0.04	-0.07	0.03	**-0.01**
B1818	N4-SN1 - CFRHS60X60X4	0.320	potres 3/4	0.01	0.03	0.03	0.08	0.03	**0.01**

29. Internal forces on member

Nonlinear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS
Cross-section : N4-SN4 - CFRHS120X60X4

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1884	N4-SN4 - CFRHS120X60X4	0.332	NC19	**-1.48**	0.00	-0.03	-0.01	-0.01	0.00
B1891	N4-SN4 - CFRHS120X60X4	0.000	NC15	**1.32**	-0.01	3.11	-0.05	0.00	0.00
B1852	N4-SN4 - CFRHS120X60X4	3.980	NC42	-0.13	**-0.06**	-5.98	-0.16	0.00	0.00
B1852	N4-SN4 - CFRHS120X60X4	0.000	NC42	-0.10	**0.04**	5.98	-0.16	0.00	0.00
B1805	N4-SN4 - CFRHS120X60X4	3.980	NC35	-0.91	0.02	**-7.26**	0.00	0.00	0.00
B1805	N4-SN4 - CFRHS120X60X4	0.000	NC35	-0.91	-0.02	**7.28**	0.00	0.00	0.00
B1852	N4-SN4 - CFRHS120X60X4	3.980	NC24	-0.02	-0.06	-5.79	**-0.16**	0.00	0.00
B1884	N4-SN4 - CFRHS120X60X4	1.659	NC16	-0.05	0.00	-2.03	**0.13**	0.00	0.00
B1799	N4-SN4 - CFRHS120X60X4	1.990	NC31	-0.98	0.00	0.00	0.00	**-1.68**	0.00
B1805	N4-SN4 - CFRHS120X60X4	1.990	NC35	-1.07	0.00	0.01	-0.01	**8.30**	-0.02
B1837	N4-SN4 - CFRHS120X60X4	2.388	NC42	-0.65	0.00	-1.41	0.05	8.01	**-0.02**
B1852	N4-SN4 - CFRHS120X60X4	2.388	NC42	-0.22	-0.01	-1.35	-0.15	6.33	**0.05**

30. Internal forces on member

Linear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS-potres
Cross-section : N4-SN4 - CFRHS120X60X4

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1799	N4-SN4 - CFRHS120X60X4	0.000	potres 7/2	**-4.05**	-0.25	1.13	-0.01	0.00	0.00
B1799	N4-SN4 - CFRHS120X60X4	0.000	potres 6/1	**4.01**	0.25	1.19	0.01	0.00	0.00
B1805	N4-SN4 - CFRHS120X60X4	0.000	potres 2/3	-0.55	**-0.96**	1.75	0.00	0.00	0.00
B1805	N4-SN4 - CFRHS120X60X4	0.000	potres 3/4	0.52	**0.96**	**2.08**	0.00	0.00	0.00
B1805	N4-SN4 - CFRHS120X60X4	3.980	potres 3/4	-1.06	-0.95	**-2.07**	0.00	0.00	0.00

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1852	N4-SN4 - CFRHS120X60X4	0.000	potres 2/3	0.00	0.00	1.12	**-0.04**	0.00	0.00
B1884	N4-SN4 - CFRHS120X60X4	0.000	potres 2/3	0.03	0.00	0.40	**0.03**	0.00	0.00
B1795	N4-SN4 - CFRHS120X60X4	0.000	potres 7/2	-1.53	-0.25	1.14	0.01	**0.00**	0.00
B1805	N4-SN4 - CFRHS120X60X4	1.990	potres 3/4	-0.80	0.01	0.00	0.00	**2.49**	1.21
B1805	N4-SN4 - CFRHS120X60X4	2.388	potres 2/3	0.78	-0.01	-0.24	0.00	2.00	**-1.21**
B1805	N4-SN4 - CFRHS120X60X4	2.388	potres 3/4	-0.80	0.01	-0.26	0.00	2.44	**1.21**

31. Internal forces on member

Nonlinear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS
Cross-section : N4-SN5 - CFRHS120X80X4

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1881	N4-SN5 - CFRHS120X80X4	2.171	NC28	**-1.25**	0.00	-0.01	0.01	-0.17	0.00
B1880	N4-SN5 - CFRHS120X80X4	0.000	NC15	**1.37**	0.00	5.12	-0.05	0.00	0.00
B1881	N4-SN5 - CFRHS120X80X4	4.652	NC24	-1.00	**-0.05**	-7.26	0.07	0.00	0.00
B1881	N4-SN5 - CFRHS120X80X4	0.000	NC24	-1.00	**0.05**	7.26	0.07	0.00	0.00
B1881	N4-SN5 - CFRHS120X80X4	4.652	NC42	-0.58	-0.04	**-7.48**	0.07	0.00	0.00
B1881	N4-SN5 - CFRHS120X80X4	0.000	NC42	-0.57	0.05	**7.49**	0.07	0.00	0.00
B1879	N4-SN5 - CFRHS120X80X4	1.659	NC50-s1	0.09	0.00	1.12	**-0.07**	5.46	-0.01
B1881	N4-SN5 - CFRHS120X80X4	1.861	NC41	-0.04	0.01	1.67	**0.08**	9.16	0.05
B1881	N4-SN5 - CFRHS120X80X4	2.171	NC19	-1.11	0.00	-0.13	-0.01	**-2.27**	0.00
B1881	N4-SN5 - CFRHS120X80X4	2.171	NC42	-0.75	0.00	0.56	0.08	**9.53**	0.06
B1879	N4-SN5 - CFRHS120X80X4	1.659	NC41	-0.12	0.00	1.49	-0.06	7.26	**-0.02**
B1881	N4-SN5 - CFRHS120X80X4	1.861	NC24	-1.16	0.01	1.62	0.07	8.91	**0.06**

32. Internal forces on member

Linear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS-potres
Cross-section : N4-SN5 - CFRHS120X80X4

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1878	N4-SN5 - CFRHS120X80X4	0.000	potres 2/3	**-0.01**	**0.00**	1.19	-0.01	**0.00**	**0.00**
B1881	N4-SN5 - CFRHS120X80X4	0.000	potres 2/3	**0.04**	0.00	**1.41**	**0.02**	0.00	0.00
B1881	N4-SN5 - CFRHS120X80X4	4.652	potres 2/3	0.04	0.00	**-1.41**	0.02	0.00	0.00
B1879	N4-SN5 - CFRHS120X80X4	0.000	potres 2/3	0.00	0.00	1.24	**-0.01**	0.00	0.00
B1881	N4-SN5 - CFRHS120X80X4	2.171	potres 2/3	0.04	0.00	0.10	0.02	**1.77**	0.00

33. Internal forces on member

Nonlinear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS
Cross-section : N4-SN6 - CFRHS120X120X5

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1882	N4-SN6 - CFRHS120X120X5	4.825	NC31	**-0.54**	0.00	-0.03	0.03	0.00	0.00
B1883	N4-SN6 - CFRHS120X120X5	4.997	NC15	**0.35**	-0.05	-5.97	0.14	0.00	0.00
B1883	N4-SN6 - CFRHS120X120X5	4.997	NC42	0.14	**-0.07**	-7.92	0.19	0.00	0.00
B1883	N4-SN6 - CFRHS120X120X5	0.000	NC42	0.14	**0.08**	7.94	0.19	0.00	0.00
B1882	N4-SN6 - CFRHS120X120X5	4.825	NC42	-0.18	-0.06	**-7.97**	0.20	0.00	0.00
B1882	N4-SN6 - CFRHS120X120X5	0.000	NC42	-0.18	0.07	**7.97**	0.20	0.00	**0.00**
B1882	N4-SN6 - CFRHS120X120X5	0.000	NC20	0.04	0.00	-1.68	**-0.03**	0.00	0.00
B1882	N4-SN6 - CFRHS120X120X5	1.930	NC42	-0.30	0.02	1.77	**0.21**	10.08	0.09
B1883	N4-SN6 - CFRHS120X120X5	2.332	NC22	-0.30	0.00	-0.12	-0.02	**-2.30**	0.00
B1883	N4-SN6 - CFRHS120X120X5	2.332	NC41	-0.13	0.01	0.58	0.19	**10.71**	0.09
B1883	N4-SN6 - CFRHS120X120X5	1.999	NC42	0.01	0.02	1.74	0.20	10.32	**0.10**

34. Internal forces on member

Linear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS-potres
Cross-section : N4-SN6 - CFRHS120X120X5

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B1883	N4-SN6 - CFRHS120X120X5	0.000	potres 2/3	**-0.01**	0.00	**1.61**	0.05	0.00	0.00
B1882	N4-SN6 - CFRHS120X120X5	0.000	potres 2/3	**0.00**	**0.00**	1.60	**0.05**	0.00	**0.00**
B1883	N4-SN6 - CFRHS120X120X5	4.997	potres 2/3	-0.01	0.00	**-1.61**	0.05	0.00	0.00
B1883	N4-SN6 - CFRHS120X120X5	2.332	potres 2/3	-0.01	0.00	0.12	0.05	**2.14**	0.00

35. Internal forces on member

Nonlinear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS
Cross-section : N4-D1 - CFCHS88.9X4

Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B2137	N4-D1 - CFCHS88.9X4	2.326	NC42	**-5.64**	0.00	0.02	-0.08	0.37	0.00
B2142	N4-D1 - CFCHS88.9X4	4.984	NC44	**5.17**	0.00	-0.26	0.09	0.00	0.00
B2141	N4-D1 - CFCHS88.9X4	5.572	NC24	-0.22	**0.00**	-0.31	-0.02	0.00	0.00
B2140	N4-D1 - CFCHS88.9X4	0.000	NC42	-0.59	**0.00**	0.28	0.10	0.00	0.00
B2141	N4-D1 - CFCHS88.9X4	5.572	NC18	-1.70	0.00	**-0.32**	-0.01	0.00	0.00
B2141	N4-D1 - CFCHS88.9X4	0.000	NC18	-1.69	0.00	**0.32**	-0.01	0.00	0.00
B2137	N4-D1 - CFCHS88.9X4	1.994	NC18	2.08	0.00	0.05	**-0.08**	0.32	0.00
B2142	N4-D1 - CFCHS88.9X4	1.994	NC24	0.30	0.00	0.06	**0.12**	0.33	0.00
B2137	N4-D1 - CFCHS88.9X4	4.984	NC33	1.58	0.00	-0.27	-0.08	**0.00**	0.00
B2141	N4-D1 - CFCHS88.9X4	2.600	NC18	-1.70	0.00	0.02	-0.01	**0.44**	0.00
B2131	N4-D1 - CFCHS88.9X4	2.990	NC15	-2.46	0.00	-0.06	0.01	0.34	**0.00**
B2141	N4-D1 - CFCHS88.9X4	3.343	NC24	-0.22	0.00	-0.06	-0.02	0.41	**0.00**

36. Internal forces on member

Linear calculation, Extreme : Cross-section, System : Principal
Selection : All
Class : ULS-potres
Cross-section : N4-D1 - CFCHS88.9X4

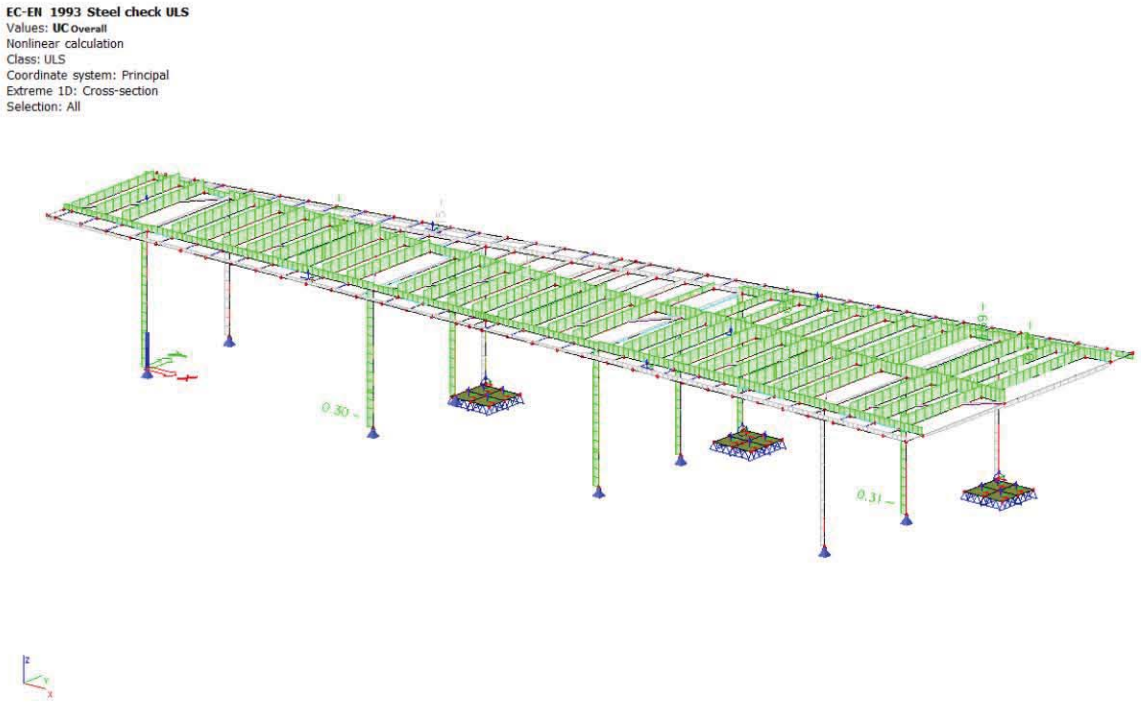
Member	css	dx [m]	Case	N [kN]	Vy [kN]	Vz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
B2133	N4-D1 - CFCHS88.9X4	3.987	potres 1/7	**-0.58**	-0.01	-0.12	0.00	0.16	0.01
B2142	N4-D1 - CFCHS88.9X4	3.987	potres 4/5	**0.62**	0.01	-0.12	0.03	0.16	-0.01
B2141	N4-D1 - CFCHS88.9X4	4.458	potres 4/5	0.53	**-0.01**	-0.14	0.00	0.21	0.01
B2141	N4-D1 - CFCHS88.9X4	4.458	potres 5/6	-0.50	**0.01**	-0.13	-0.01	0.20	-0.01
B2141	N4-D1 - CFCHS88.9X4	5.572	potres 4/5	0.53	-0.01	**-0.23**	0.00	0.00	0.00
B2141	N4-D1 - CFCHS88.9X4	0.000	potres 4/5	0.51	0.01	**0.23**	0.00	0.00	0.00
B2137	N4-D1 - CFCHS88.9X4	0.000	potres 4/5	0.20	-0.01	0.20	**-0.02**	0.00	0.00
B2142	N4-D1 - CFCHS88.9X4	0.000	potres 4/5	0.61	-0.01	0.20	**0.03**	0.00	0.00
B2131	N4-D1 - CFCHS88.9X4	0.000	potres 4/5	-0.31	-0.01	0.21	0.00	**0.00**	0.00
B2141	N4-D1 - CFCHS88.9X4	2.972	potres 4/5	0.52	0.00	-0.01	0.00	**0.32**	0.02
B2141	N4-D1 - CFCHS88.9X4	3.343	potres 5/6	-0.49	0.00	-0.05	-0.01	0.30	**-0.02**
B2141	N4-D1 - CFCHS88.9X4	3.343	potres 4/5	0.52	0.00	-0.05	0.00	0.31	**0.02**

3.2. Izkoriščenost jeklenih elementov

37. EC-EN 1993 Steel check ULS

Nonlinear calculation
Class: ULS
Coordinate system: Principal
Extreme 1D: Cross-section
Selection: All
Overall Unity Check

Name	dx [m]	Case	Cross-section	Material	$UC_{Overall}$ [-]	UC_{Sec} [-]	UC_{Stab} [-]
B1625	0.000	NC26	N4-S2 - CFRHS220X220X10	S 235	**0.31**	0.07	0.31
B1618	0.000	NC2	N4-S1 - CFRHS220X220X8	S 235	**0.30**	0.06	0.30
B1667	9.122	NC24	N4-N2 - UNP260	S 235	**0.28**	0.28	0.27
B1864	0.796-	NC36	N4-SN1 - CFRHS60X60X4	S 235	**0.15**	0.14	0.15
B1805	1.990	NC35	N4-SN4 - CFRHS120X60X4	S 235	**0.71**	0.70	0.71
B1881	2.481	NC42	N4-SN5 - CFRHS120X80X4	S 235	**0.69**	0.68	0.69
B1883	2.332	NC41	N4-SN6 - CFRHS120X120X5	S 235	**0.48**	0.48	0.48
B2105	4.000+	NC24	N4-N1 - HEA260	S 235	**0.62**	0.21	0.62
B2137	2.326	NC42	N4-D1 - CFCHS88.9X4	S 235	**0.15**	0.05	0.15

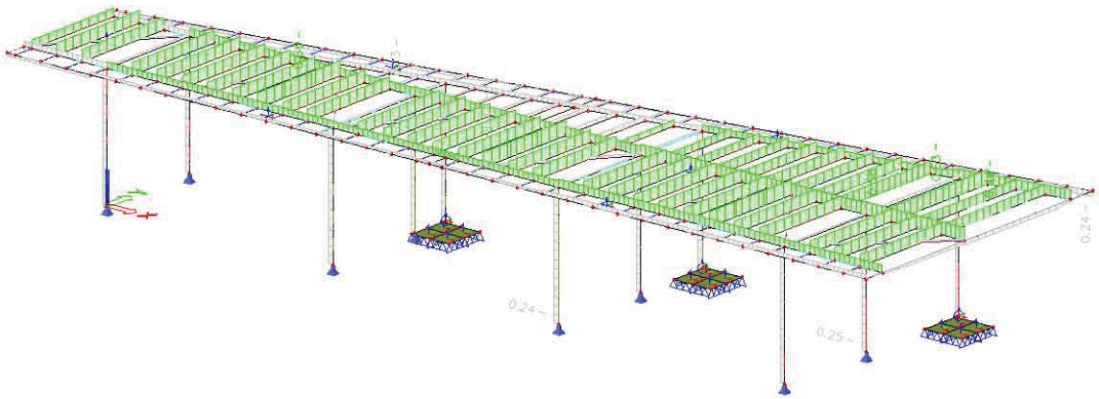


38. EC-EN 1993 Steel check ULS

Linear calculation
Class: ULS-temelji
Coordinate system: Principal
Extreme 1D: Cross-section
Selection: All
Overall Unity Check

Name	dx [m]	Case	Cross-section	Material	$UC_{Overall}$ [-]	UC_{Sec} [-]	UC_{Stab} [-]
B1625	0.000	MSN-temelj-3-1/1	N4-S2 - CFRHS220X220X10	S 235	**0.25**	0.06	0.25
B1621	0.000	MSN-temelj-3-1/2	N4-S1 - CFRHS220X220X8	S 235	**0.24**	0.05	0.24
B1793	3.958	MSN-temelj-1-1/3	N4-N2 - UNP260	S 235	**0.24**	0.03	0.24
B1864	0.531-	MSN-temelj-1-1/4	N4-SN1 - CFRHS60X60X4	S 235	**0.13**	0.13	0.13
B1805	1.990	MSN-temelj-1-1/5	N4-SN4 - CFRHS120X60X4	S 235	**0.66**	0.65	0.66
B1881	2.171	MSN-temelj-1-1/6	N4-SN5 - CFRHS120X80X4	S 235	**0.63**	0.63	0.63
B1883	2.332	MSN-temelj-1-1/7	N4-SN6 - CFRHS120X120X5	S 235	**0.44**	0.44	0.44
B2106	0.000	MSN-temelj-1-1/8	N4-N1 - HEA260	S 235	**0.56**	0.56	0.56
B2137	2.326	MSN-temelj-6-1/9	N4-D1 - CFCHS88.9X4	S 235	**0.14**	0.05	0.14

EC-EN 1993 Steel check ULS
Values: **UC Overall**
Linear calculation
Class: ULS-temelji
Coordinate system: Principal
Extreme 1D: Cross-section
Selection: All

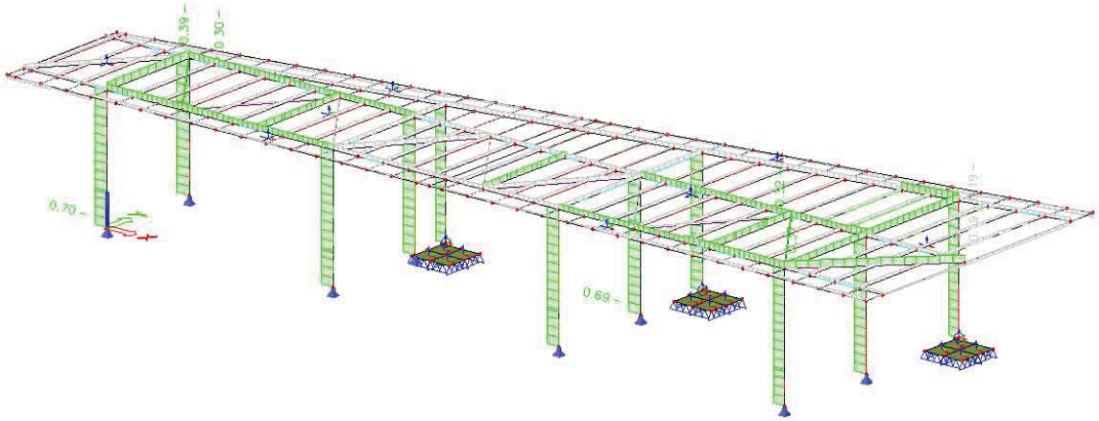


39. EC-EN 1993 Steel check ULS

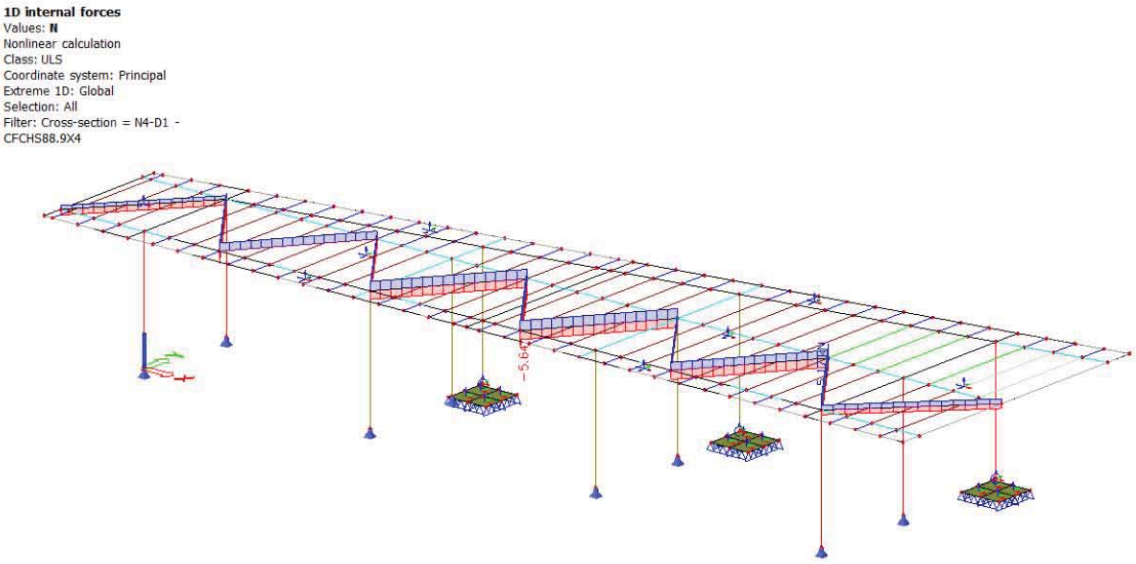
Linear calculation
Class: ULS-potres
Coordinate system: Principal
Extreme 1D: Cross-section
Selection: All
Overall Unity Check

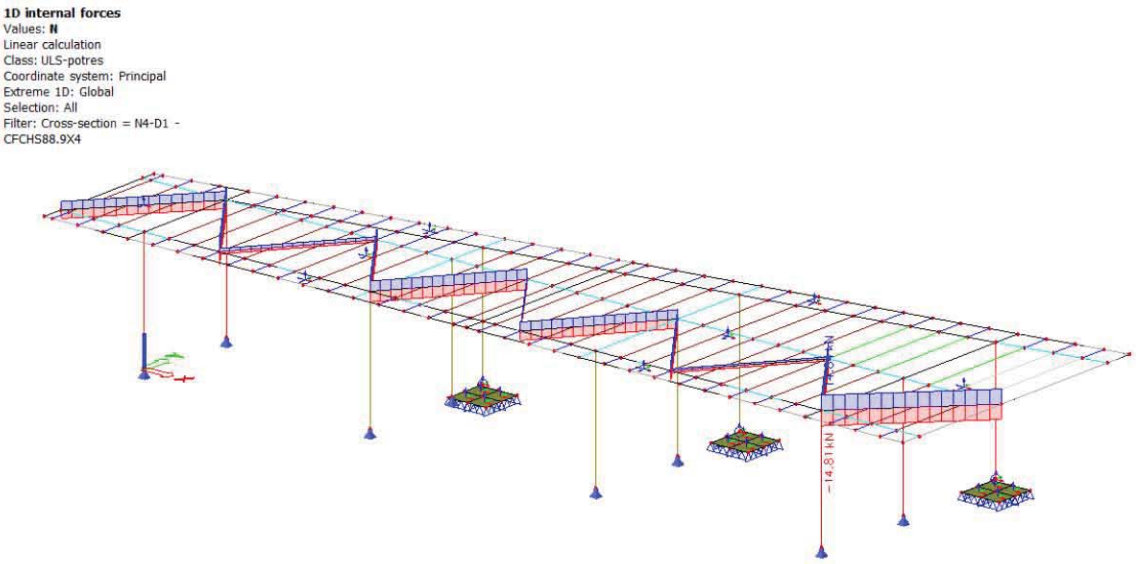
Name	dx [m]	Case	Cross-section	Material	$UC_{Overall}$ [-]	UC_{Sec} [-]	UC_{Stab} [-]
B1617	0.000	potres 6/1	N4-S2 - CFRHS220X220X10	S 235	**0.70**	0.04	0.70
B1622	0.000	potres 2/2	N4-S1 - CFRHS220X220X8	S 235	**0.69**	0.03	0.69
B1667	9.122	potres 2/2	N4-N2 - UNP260	S 235	**0.19**	0.19	0.18
B1857	0.000	potres 3/3	N4-SN1 - CFRHS60X60X4	S 235	**0.30**	0.30	0.00
B1837	3.184+	potres 3/3	N4-SN4 - CFRHS120X60X4	S 235	**0.32**	0.13	0.32
B1881	3.722+	potres 2/2	N4-SN5 - CFRHS120X80X4	S 235	**0.19**	0.09	0.19
B1883	0.999-	potres 2/2	N4-SN6 - CFRHS120X120X5	S 235	**0.15**	0.07	0.15
B2086	3.980	potres 7/4	N4-N1 - HEA260	S 235	**0.39**	0.39	0.00
B2141	0.000	potres 7/4	N4-D1 - CFCHS88.9X4	S 235	**0.37**	0.06	0.37

EC-EN 1993 Steel check ULS
Values: **UC Overall**
Linear calculation
Class: ULS-potres
Coordinate system: Principal
Extreme 1D: Cross-section
Selection: All



Natezna diagonala M24 z napenjalko





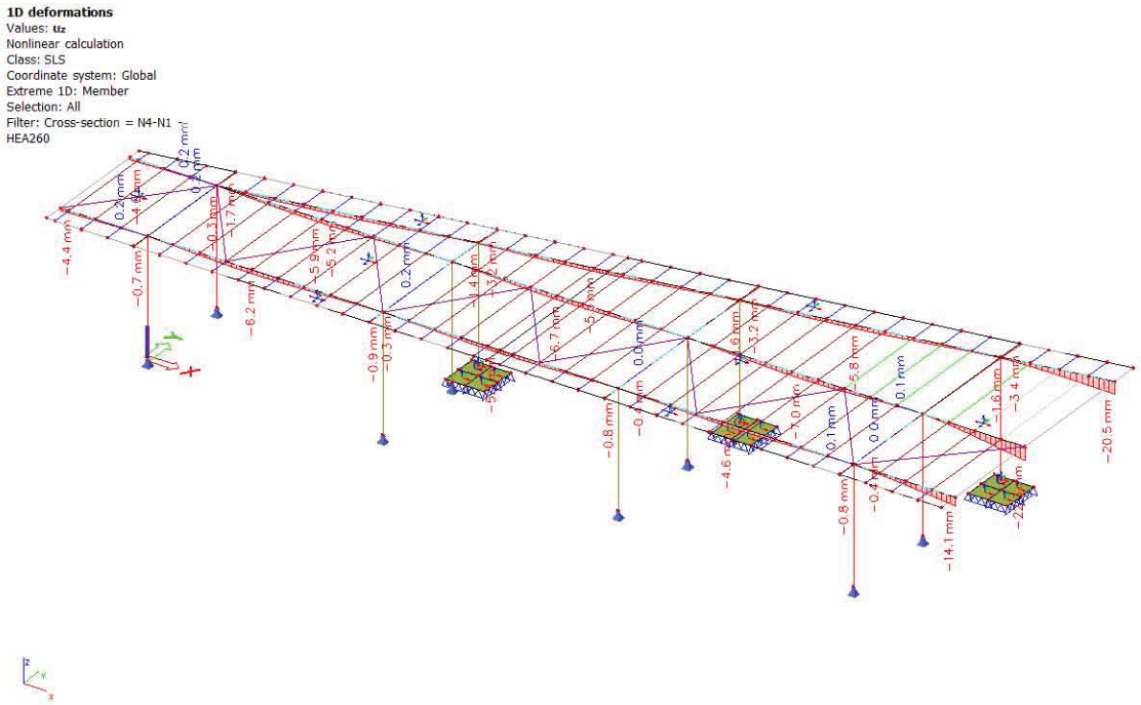
Nameto posamezne natezno tlačne diagonale upoštevane v modelu, vgradimo vgradimo sistem križnih nateznih diagonal z napenjalko.

$F_{t,Ed,max}$ = 15 kN < $F_{t,Rd}$ = 101.7 kN (M24, 4.6 ali S235)

Priključek: vijak M24 8.8 $F_{v,Rd}$ = 135.6 kN

3.3. Pomiki

MSU – vertikalni pomiki



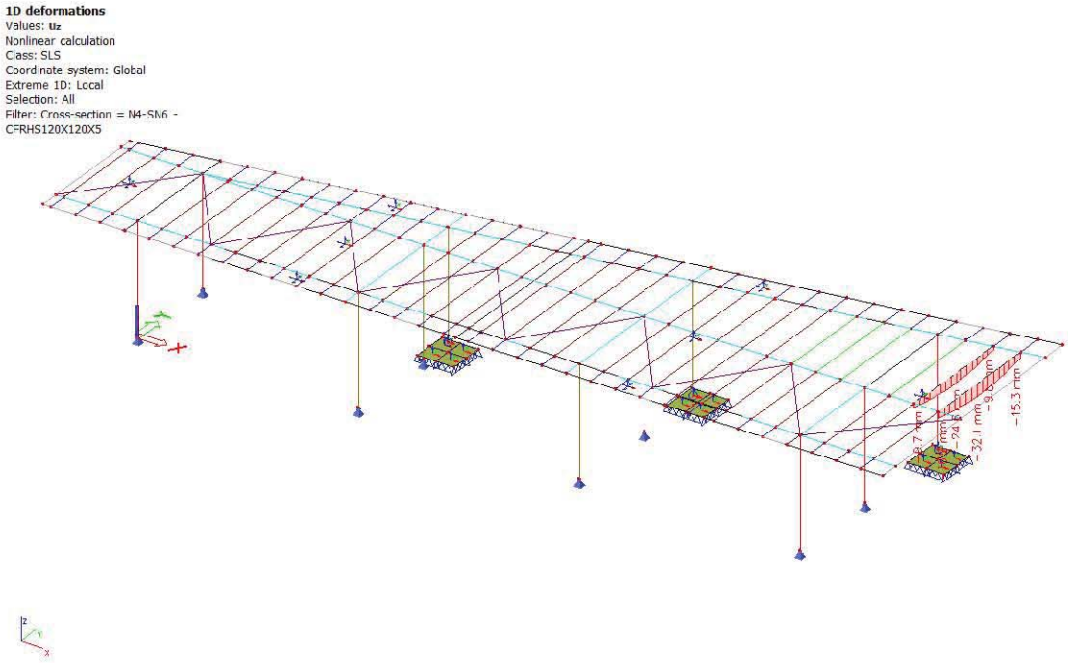
Nosilec HEA260

$$w_{vert,max,Q} = 6.7 \text{ mm} \leq w_{vert,dov,Q} = L/250 = 9000/250 = 36 \text{ mm}$$

Konzola HEA260

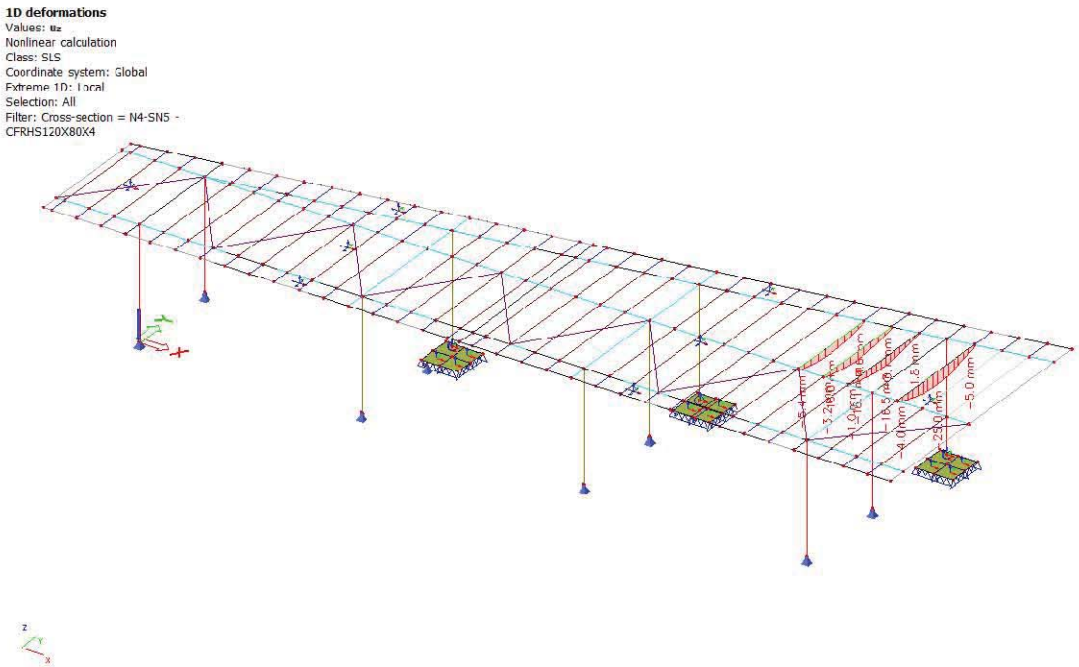
$$w_{vert,max,Q} = 22.5 \text{ mm} \leq w_{vert,dov,Q} = 2xL/250 = 2x3900/250 = 31.2 \text{ mm}$$

Sekundarni nosilci



L=4997 $w_{vert,max,Q}$ = 32.1-0.5x(15.3+16.2) = 16.3 mm

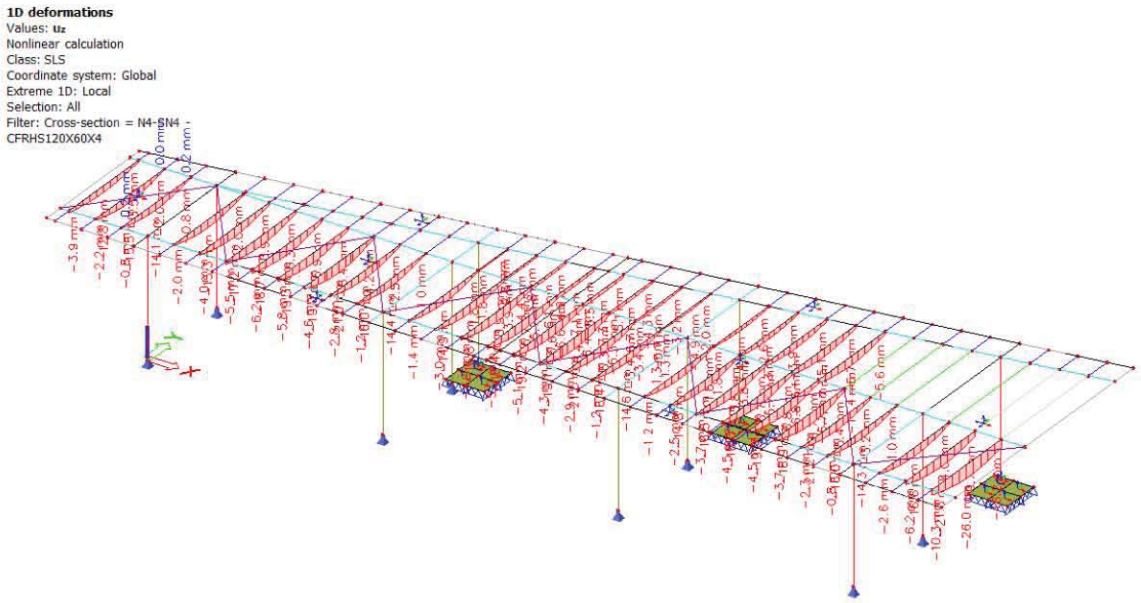
$\leq w_{vert,dov,Q}$ = L/250 = 4997/250 = 19.9 mm

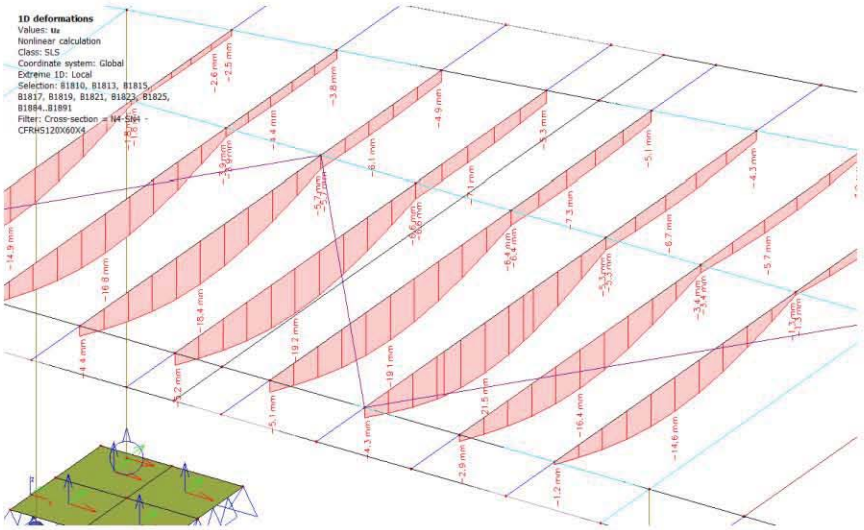


L=4562 $w_{vert,max,Q}$ = 25-0.5x(4+5) = 20.5 mm

$\approx w_{vert,dov,Q}$ = L/250 = 4652/250 = 18.6 mm

ker gre za sekundarni nosilec (strešno lego), bi ustrezal dovoljeni pomik L/200 = 23.3 mm





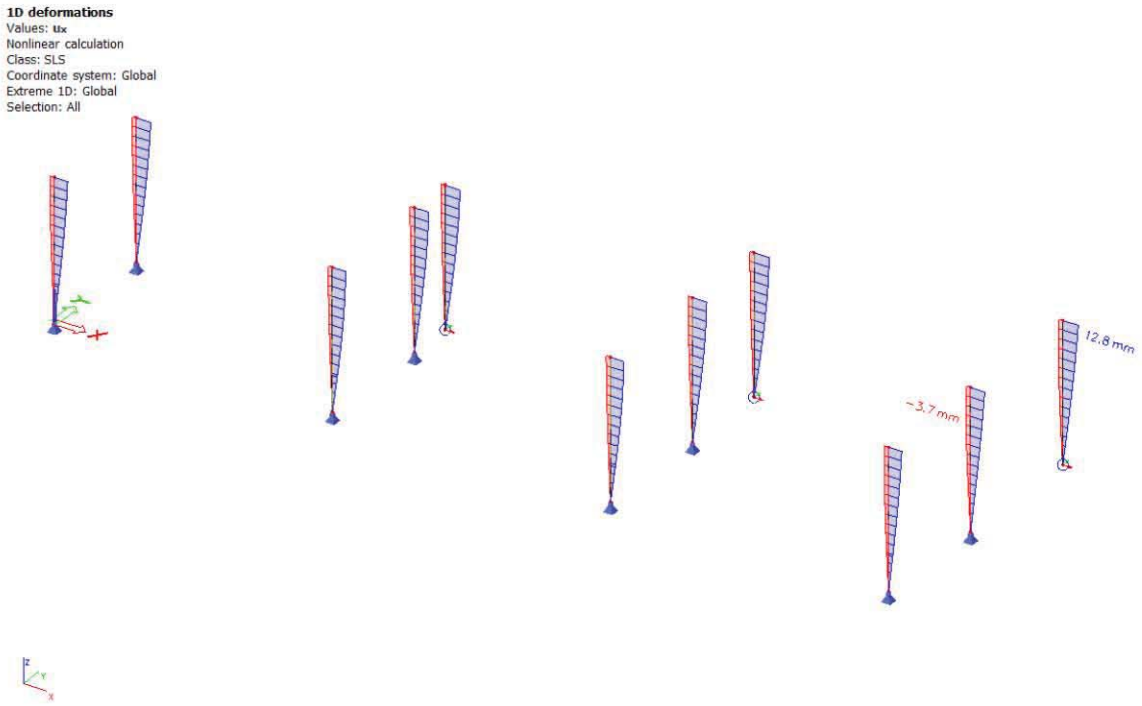
L=3980 $w_{vert,max,Q}$ = 21.5-0.5x(4.3+5.3) = 16.7 mm

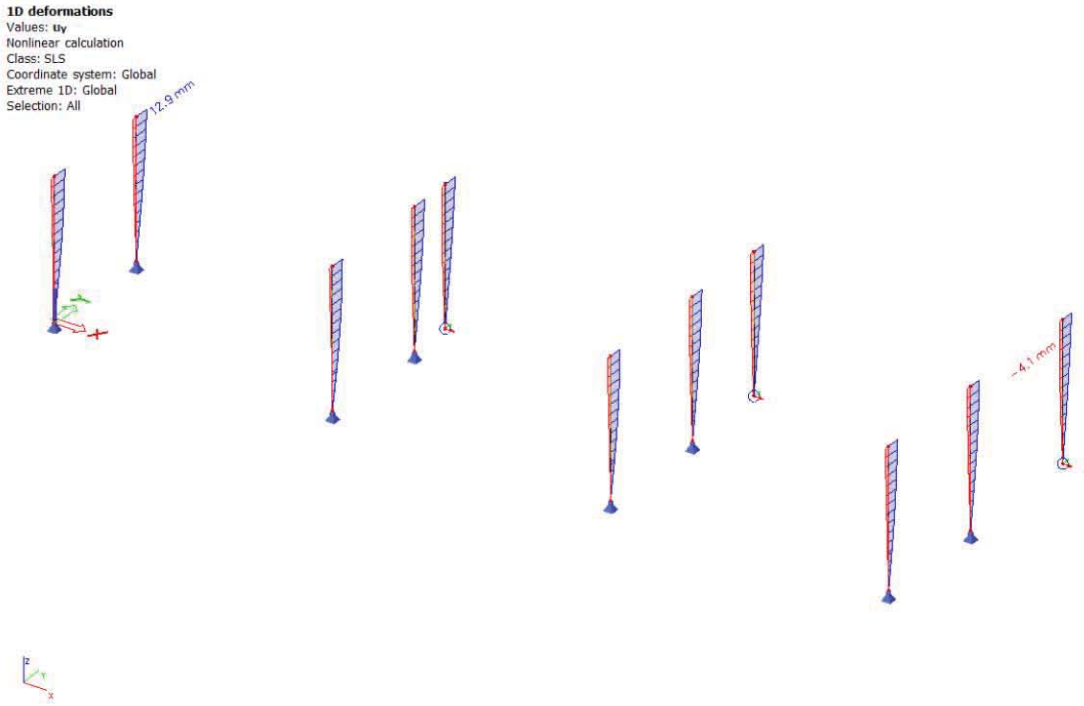
≈ $w_{vert,dov,Q}$ = L/250 = 3980/250 = 15.9 mm

ker gre za sekundarni nosilec (strešno lego), bi ustrezal dovoljeni pomik L/200 = 19.9 mm

Pri vseh sekundarnih noilcih smo kontrolirali relativne pomike.

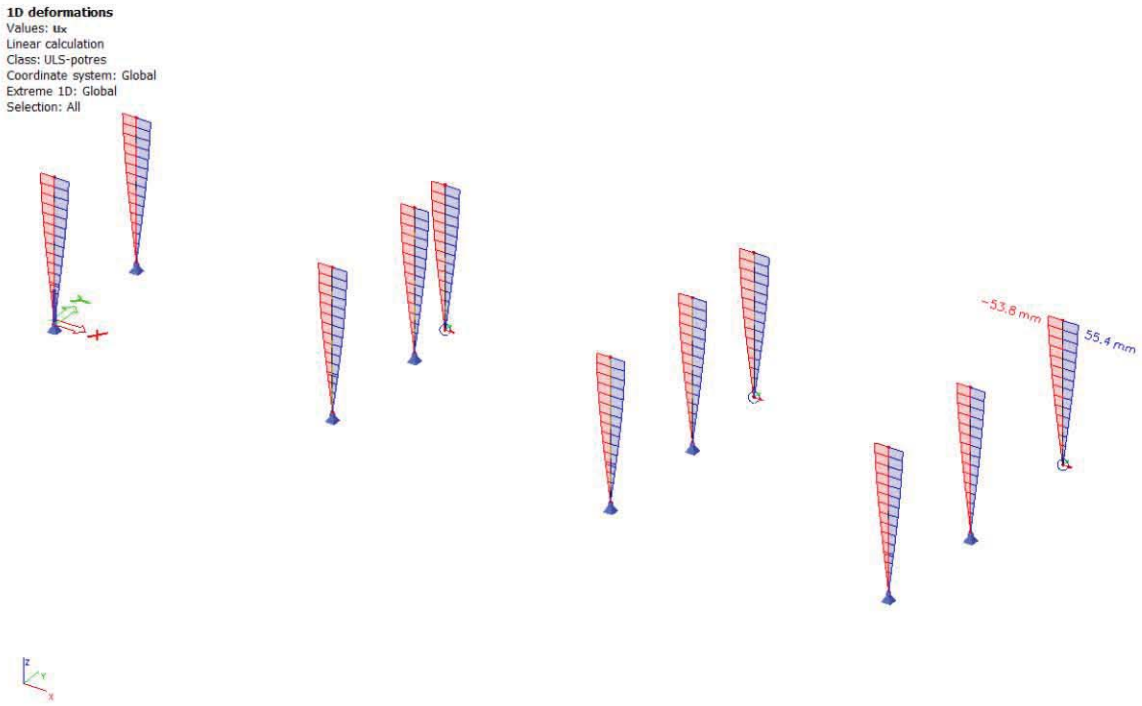
MSU – horizontalni pomiki

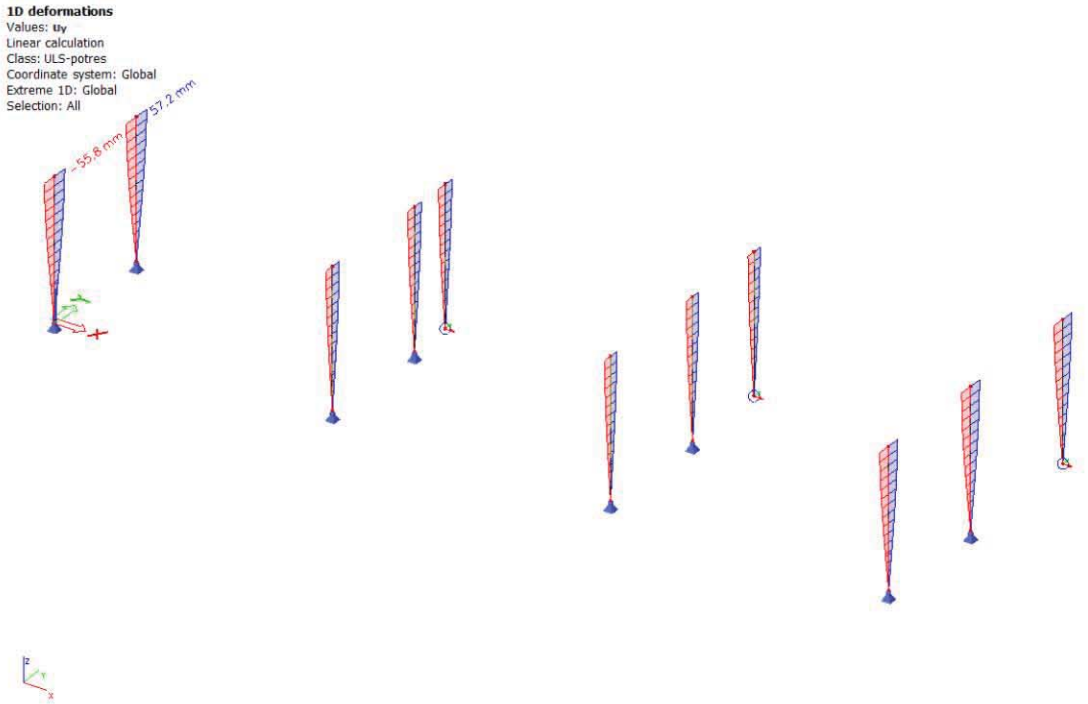




$$u_{hor,max,W} = 12.9 \text{ mm} \leq u_{hor,dov,W} = h/300 = 4450/150 = 30 \text{ mm}$$

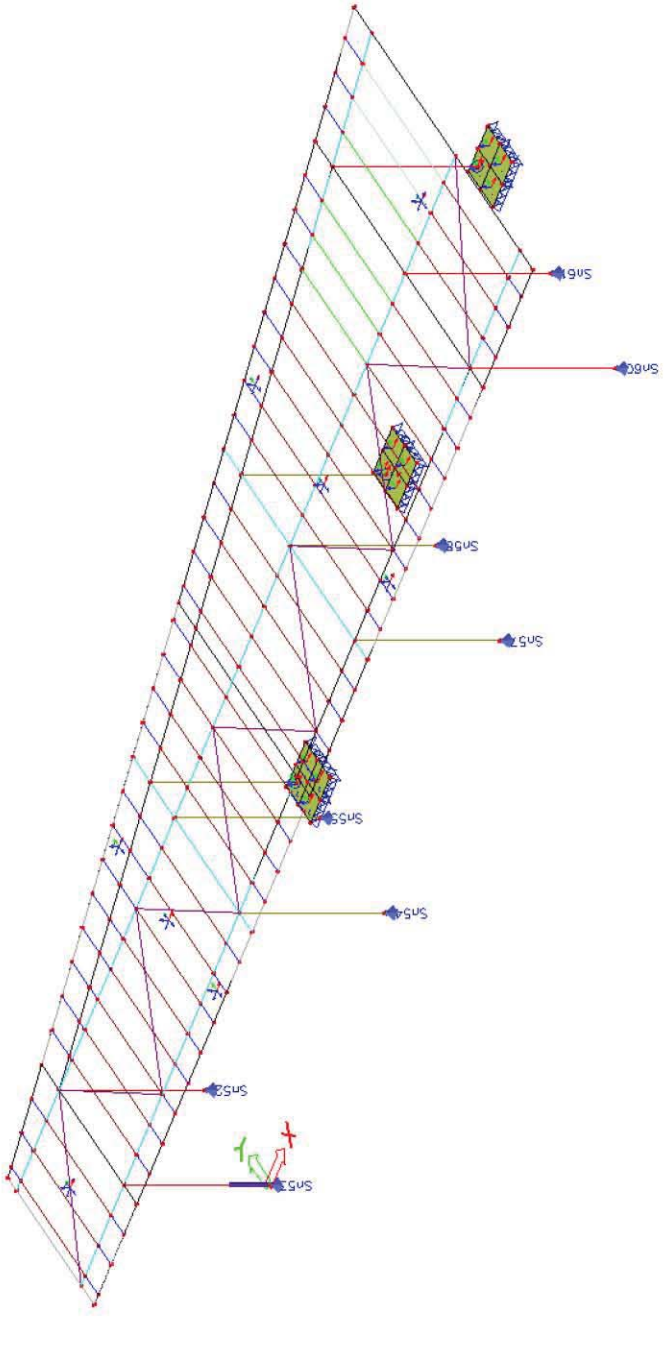
Potresna kombinacija





$U_{hor,max,E} = 1.5x57.2x0.5= 42.9 \text{ mm} \leq U_{hor,dov,E} = 0.010xh = 0.010x4600 = 46 \text{ mm}$

4. REAKCIJE



44. Reactions

Nonlinear calculation, Extreme : Global
Selection : All
Class : ULS

Support	Case	Rx [kN]	Ry [kN]	Rz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
Sn57/N1776	NC24	**-5.05**	-7.14	99.12	0.00	0.00	0.00
Sn61/N1784	NC51-s2	**4.95**	-0.28	93.41	0.00	0.00	0.00
Sn54/N1770	NC4	-0.84	**-14.48**	89.96	0.00	0.00	0.00
Sn52/N1768	NC27	0.01	**5.44**	76.64	0.00	0.00	0.00
Sn61/N1784	NC20	2.66	0.77	**-17.89**	0.00	0.00	0.00
Sn61/N1784	NC42	0.13	-3.29	**143.69**	0.00	0.00	0.00
Sn52/N1768	NC1	0.15	-0.87	99.73	**0.00**	**0.00**	**0.00**

45. Reactions

Nonlinear calculation, Extreme : Node
Selection : All
Class : ULS

Support	Case	Rx [kN]	Ry [kN]	Rz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
Sn52/N1768	NC28	**-4.40**	-0.55	-6.19	0.00	0.00	0.00
Sn52/N1768	NC16	**2.47**	-1.80	111.95	0.00	0.00	0.00
Sn52/N1768	NC21	0.09	**-6.49**	28.05	0.00	0.00	0.00
Sn52/N1768	NC27	0.01	**5.44**	76.64	0.00	0.00	0.00
Sn52/N1768	NC31	-0.35	4.77	**-12.42**	0.00	0.00	0.00
Sn52/N1768	NC35	0.66	-5.31	**121.93**	0.00	0.00	0.00
Sn52/N1768	NC1	0.15	-0.87	99.73	**0.00**	**0.00**	**0.00**
Sn53/N1769	NC28	**-4.52**	-3.54	-8.36	0.00	0.00	0.00
Sn53/N1769	NC16	**3.03**	-6.64	88.84	0.00	0.00	0.00
Sn53/N1769	NC4	0.18	**-11.57**	70.12	0.00	0.00	0.00
Sn53/N1769	NC31	-0.96	**1.49**	3.22	0.00	0.00	0.00
Sn53/N1769	NC30	-0.86	-6.54	**-10.71**	0.00	0.00	0.00
Sn53/N1769	NC18	0.67	-2.67	**95.02**	0.00	0.00	0.00
Sn53/N1769	NC1	0.12	-7.45	77.65	**0.00**	**0.00**	**0.00**
Sn54/N1770	NC24	**-5.01**	-6.72	88.75	0.00	0.00	0.00
Sn54/N1770	NC20	**2.55**	-7.79	7.79	0.00	0.00	0.00
Sn54/N1770	NC4	-0.84	**-14.48**	89.96	0.00	0.00	0.00
Sn54/N1770	NC50-s1	-2.94	**-0.87**	80.60	0.00	0.00	0.00
Sn54/N1770	NC30	-0.10	-9.73	**-11.52**	0.00	0.00	0.00
Sn54/N1770	NC18	-0.81	-4.77	**109.26**	0.00	0.00	0.00
Sn54/N1770	NC1	-0.88	-11.16	95.09	**0.00**	**0.00**	**0.00**
Sn55/N1772	NC15	**-4.53**	-1.76	93.86	0.00	0.00	0.00
Sn55/N1772	NC29	**2.54**	0.15	-7.01	0.00	0.00	0.00
Sn55/N1772	NC21	-0.16	**-5.26**	0.67	0.00	0.00	0.00
Sn55/N1772	NC27	-0.08	**3.94**	88.34	0.00	0.00	0.00
Sn55/N1772	NC30	0.05	-3.76	**-12.60**	0.00	0.00	0.00
Sn55/N1772	NC18	-0.44	2.36	**101.65**	0.00	0.00	0.00
Sn55/N1772	NC1	-0.36	-1.22	84.13	**0.00**	**0.00**	**0.00**
Sn57/N1776	NC24	**-5.05**	-7.14	99.12	0.00	0.00	0.00
Sn57/N1776	NC20	**2.60**	-6.36	-5.21	0.00	0.00	0.00
Sn57/N1776	NC4	-0.94	**-13.96**	87.98	0.00	0.00	0.00
Sn57/N1776	NC50-s1	-2.62	**-0.40**	78.08	0.00	0.00	0.00
Sn57/N1776	NC21	0.30	-9.52	**-9.90**	0.00	0.00	0.00
Sn57/N1776	NC27	-1.25	-4.44	**106.89**	0.00	0.00	0.00
Sn57/N1776	NC1	-0.99	-10.81	92.47	**0.00**	**0.00**	**0.00**
Sn58/N1778	NC15	**-5.02**	0.01	95.26	0.00	0.00	0.00
Sn58/N1778	NC29	**2.50**	-1.50	5.23	0.00	0.00	0.00
Sn58/N1778	NC26	-0.20	**-5.17**	113.27	0.00	0.00	0.00
Sn58/N1778	NC22	-0.39	**3.59**	-13.24	0.00	0.00	0.00
Sn58/N1778	NC21	-0.52	-3.92	**-15.91**	0.00	0.00	0.00
Sn58/N1778	NC42	-2.41	-1.75	**117.00**	0.00	0.00	0.00
Sn58/N1778	NC1	-0.56	-1.41	103.77	**0.00**	**0.00**	**0.00**

Support	Case	Rx [kN]	Ry [kN]	Rz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
Sn60/N1782	NC28	**-3.53**	-4.65	14.80	0.00	0.00	0.00
Sn60/N1782	NC16	**3.17**	-2.83	86.05	0.00	0.00	0.00
Sn60/N1782	NC44	-0.02	**-11.12**	82.60	0.00	0.00	0.00
Sn60/N1782	NC22	0.56	**0.91**	-0.60	0.00	0.00	0.00
Sn60/N1782	NC21	0.65	-5.68	**-9.70**	0.00	0.00	0.00
Sn60/N1782	NC27	0.13	-2.49	**108.68**	0.00	0.00	0.00
Sn60/N1782	NC1	0.60	-6.61	93.95	**0.00**	**0.00**	**0.00**
Sn61/N1784	NC19	**-3.35**	2.03	-14.69	0.00	0.00	0.00
Sn61/N1784	NC51-s2	**4.95**	-0.28	93.41	0.00	0.00	0.00
Sn61/N1784	NC44	1.92	**-6.83**	117.74	0.00	0.00	0.00
Sn61/N1784	NC22	0.45	**4.93**	-17.60	0.00	0.00	0.00
Sn61/N1784	NC20	2.66	0.77	**-17.89**	0.00	0.00	0.00
Sn61/N1784	NC42	0.13	-3.29	**143.69**	0.00	0.00	0.00
Sn61/N1784	NC1	1.98	-1.52	123.65	**0.00**	**0.00**	**0.00**

46. Reactions

Linear calculation
Class: ULS-potres
System: Global
Extreme: Global
Selection: All
Nodal reactions

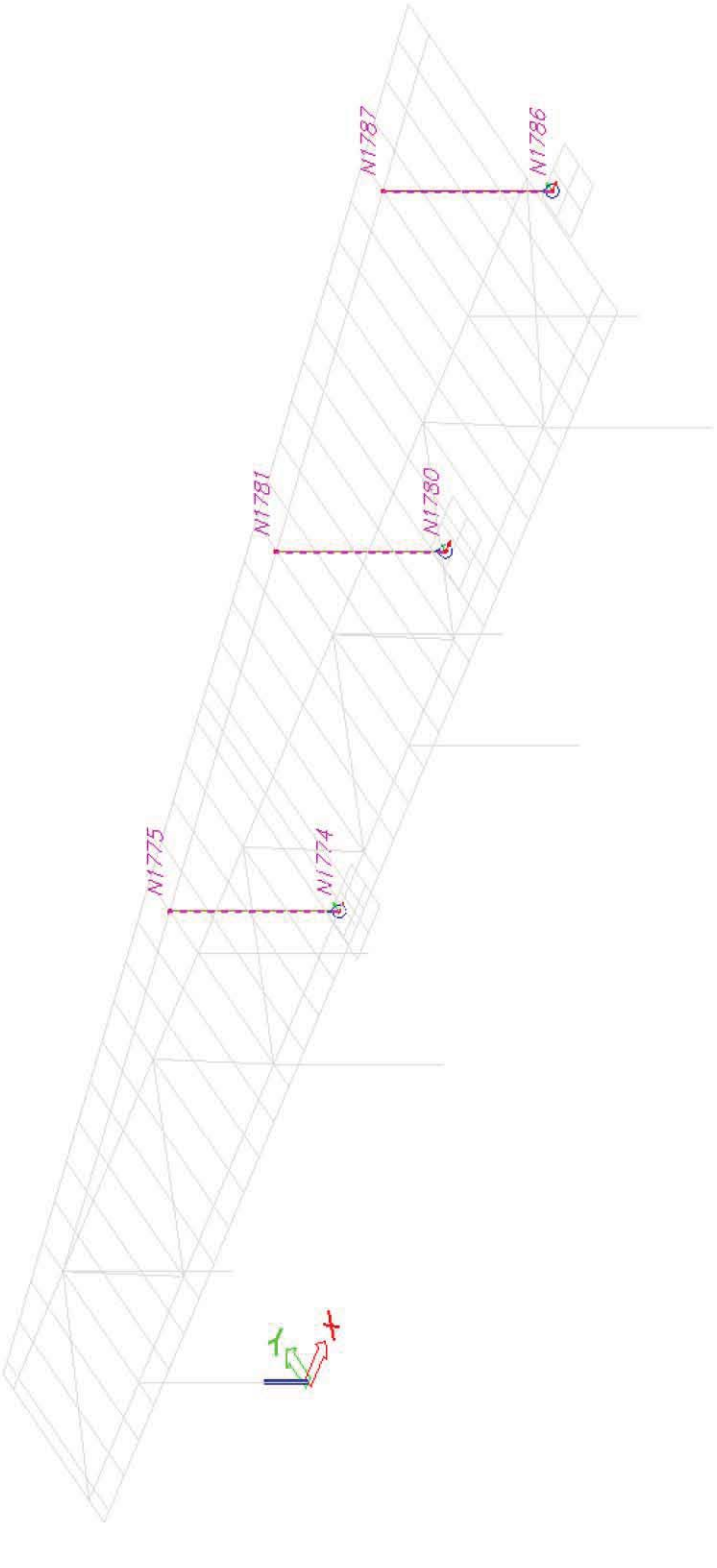
Name	Case	R_x [kN]	R_y [kN]	R_z [kN]	M_x [kNm]	M_y [kNm]	M_z [kNm]	e_x [mm]	e_y [mm]
Sn57/N1776	potres 2/1	**-15.12**	4.34	20.31	0.00	0.00	0.00	0.0	0.0
Sn58/N1778	potres 3/2	**14.50**	-5.90	27.89	**0.00**	**0.00**	**0.00**	0.0	0.0
Sn61/N1784	potres 6/3	5.61	**-19.32**	28.46	0.00	0.00	0.00	0.0	0.0
Sn61/N1784	potres 7/4	-4.01	**19.11**	44.06	0.00	0.00	0.00	0.0	0.0
Sn53/N1769	potres 7/4	-7.65	-19.00	**-14.06**	0.00	0.00	0.00	0.0	0.0
Sn52/N1768	potres 6/3	5.27	18.77	**75.78**	0.00	0.00	0.00	0.0	0.0

47. Reactions

Linear calculation
Class: ULS-potres
System: Global
Extreme: Mesh
Selection: All
Nodal reactions

Name	Case	R_x [kN]	R_y [kN]	R_z [kN]	M_x [kNm]	M_y [kNm]	M_z [kNm]	e_x [mm]	e_y [mm]
Sn52/N1768	potres 3/1	**13.05**	7.17	56.85	**0.00**	**0.00**	**0.00**	0.0	0.0
Sn52/N1768	potres 7/2	-5.44	**-18.40**	**-10.35**	0.00	0.00	0.00	0.0	0.0
Sn52/N1768	potres 6/3	5.27	**18.77**	**75.78**	0.00	0.00	0.00	0.0	0.0
Sn52/N1768	potres 2/4	**-13.22**	-6.80	8.58	0.00	0.00	**0.00**	0.0	0.0
Sn53/N1769	potres 3/1	**13.16**	5.96	50.58	**0.00**	**0.00**	**0.00**	0.0	0.0
Sn53/N1769	potres 7/2	-7.65	**-19.00**	**-14.06**	0.00	0.00	0.00	0.0	0.0
Sn53/N1769	potres 6/3	7.39	**17.92**	**68.58**	0.00	0.00	0.00	0.0	0.0
Sn53/N1769	potres 2/4	**-13.42**	-7.04	3.93	0.00	0.00	**0.00**	0.0	0.0
Sn54/N1770	potres 3/1	**14.49**	-4.01	17.23	**0.00**	**0.00**	**0.00**	0.0	0.0
Sn54/N1770	potres 6/3	7.88	**-10.50**	**8.66**	0.00	0.00	0.00	0.0	0.0
Sn54/N1770	potres 7/2	-8.35	**9.48**	**51.54**	0.00	0.00	0.00	0.0	0.0
Sn54/N1770	potres 2/4	**-14.96**	2.99	42.98	0.00	0.00	**0.00**	0.0	0.0
Sn55/N1772	potres 3/1	**14.38**	-4.00	15.01	**0.00**	**0.00**	**0.00**	0.0	0.0
Sn55/N1772	potres 6/3	5.76	**-11.60**	**3.52**	0.00	0.00	0.00	0.0	0.0
Sn55/N1772	potres 7/2	-5.97	**11.96**	**56.62**	0.00	0.00	0.00	0.0	0.0
Sn55/N1772	potres 2/4	**-14.58**	4.36	45.13	0.00	0.00	**0.00**	0.0	0.0
Sn57/N1776	potres 3/1	**14.47**	-5.13	39.34	**0.00**	**0.00**	**0.00**	0.0	0.0
Sn57/N1776	potres 6/3	7.82	**-9.44**	**47.24**	0.00	0.00	0.00	0.0	0.0
Sn57/N1776	potres 7/2	-8.46	**8.65**	**12.41**	0.00	0.00	0.00	0.0	0.0
Sn57/N1776	potres 2/4	**-15.12**	4.34	20.31	0.00	0.00	**0.00**	0.0	0.0
Sn58/N1778	potres 3/1	**14.50**	-5.90	27.89	**0.00**	**0.00**	**0.00**	0.0	0.0

Name	Case	R_x [kN]	R_y [kN]	R_z [kN]	M_x [kNm]	M_y [kNm]	M_z [kNm]	e_x [mm]	e_y [mm]
Sn58/N1778	potres 6/3	5.71	**-11.19**	**25.23**	0.00	0.00	0.00	0.0	0.0
Sn58/N1778	potres 7/2	-6.25	**11.08**	**36.45**	0.00	0.00	0.00	0.0	0.0
Sn58/N1778	potres 2/4	**-15.04**	5.79	33.79	0.00	0.00	**0.00**	0.0	0.0
Sn60/N1782	potres 3/1	**13.23**	-8.87	6.14	**0.00**	**0.00**	**0.00**	0.0	0.0
Sn60/N1782	potres 6/3	7.71	**-15.80**	**2.93**	0.00	0.00	0.00	0.0	0.0
Sn60/N1782	potres 7/2	-7.11	**14.93**	**59.74**	0.00	0.00	0.00	0.0	0.0
Sn60/N1782	potres 2/4	**-12.63**	8.00	56.53	0.00	0.00	**0.00**	0.0	0.0
Sn61/N1784	potres 6/3	5.61	**-19.32**	28.46	0.00	0.00	0.00	0.0	0.0
Sn61/N1784	potres 7/2	-4.01	**19.11**	44.06	**0.00**	**0.00**	**0.00**	0.0	0.0
Sn61/N1784	potres 3/1	**12.74**	-10.92	**24.67**	0.00	0.00	0.00	0.0	0.0
Sn61/N1784	potres 2/4	**-11.13**	10.71	**47.85**	0.00	0.00	**0.00**	0.0	0.0


N1787
N1786
N1781
N1780
N1775
N1774

48. Connection forces

Nonlinear calculation, Extreme : Global
Selection : All
Class : ULS

Case	Connection	Node	Beams	Rx [kN]	Ry [kN]	Rz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
NC25	FC3	N1786	B1626	**-4.90**	0.21	-124.37	0.00	0.00	0.02
NC15	FC2	N1780	B1623	**6.50**	-0.41	-77.56	**0.00**	0.00	-0.01
NC18	FC3	N1786	B1626	-1.66	**-6.10**	-94.05	0.00	0.00	-0.02
NC30	FC3	N1786	B1626	-0.59	**5.08**	-20.59	0.00	0.00	-0.01
NC42	FC3	N1786	B1626	0.80	1.91	**-133.15**	0.00	0.00	0.01
NC22	FC3	N1786	B1626	0.03	-3.95	**14.06**	0.00	0.00	-0.01
NC42	FC1	N1774	B1620	3.43	-1.02	-60.83	**0.00**	0.00	0.02
NC36	FC3	N1786	B1626	-1.23	-5.50	-82.45	0.00	**0.00**	-0.02
NC21	FC1	N1774	B1620	0.52	4.48	-24.17	0.00	**0.00**	-0.02
NC36	FC2	N1780	B1623	0.87	-3.62	-66.11	0.00	0.00	**-0.02**
NC43	FC3	N1786	B1626	-3.81	1.89	-109.02	0.00	0.00	**0.02**

49. Connection forces

Nonlinear calculation, Extreme : Node
Selection : All
Class : ULS

Case	Connection	Node	Beams	Rx [kN]	Ry [kN]	Rz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
NC29	FC1	N1774	B1620	**-2.24**	-0.27	1.82	0.00	0.00	0.01
NC15	FC1	N1774	B1620	**5.84**	0.95	-84.71	0.00	0.00	-0.01
NC27	FC1	N1774	B1620	0.08	**-5.41**	-53.85	0.00	0.00	0.00
NC21	FC1	N1774	B1620	0.52	**4.48**	-24.17	0.00	**0.00**	-0.02
NC17	FC1	N1774	B1620	1.77	4.21	**-96.63**	0.00	0.00	-0.01
NC31	FC1	N1774	B1620	-0.15	-3.58	**13.34**	0.00	0.00	0.00
NC42	FC1	N1774	B1620	3.43	-1.02	-60.83	**0.00**	0.00	0.02
NC33	FC1	N1774	B1620	4.28	1.26	-87.17	**0.00**	0.00	-0.01
NC18	FC1	N1774	B1620	0.59	-4.13	-69.40	0.00	**0.00**	-0.02
NC39	FC1	N1774	B1620	0.78	3.54	-33.79	0.00	0.00	**-0.02**
NC41	FC1	N1774	B1620	0.94	-1.27	-60.92	0.00	0.00	**0.02**
NC25	FC2	N1780	B1623	**-2.83**	-0.36	-97.47	0.00	0.00	0.01
NC15	FC2	N1780	B1623	**6.50**	-0.41	-77.56	**0.00**	0.00	-0.01
NC18	FC2	N1780	B1623	0.51	**-4.76**	-72.91	0.00	**0.00**	-0.02
NC26	FC2	N1780	B1623	1.03	**4.23**	**-104.08**	0.00	0.00	0.00
NC22	FC2	N1780	B1623	0.49	-3.12	**11.02**	0.00	0.00	-0.01
NC42	FC2	N1780	B1623	3.38	1.07	-98.90	**0.00**	0.00	0.01
NC17	FC2	N1780	B1623	1.96	3.11	-86.28	0.00	**0.00**	-0.01
NC36	FC2	N1780	B1623	0.87	-3.62	-66.11	0.00	0.00	**-0.02**
NC47	FC2	N1780	B1623	-1.97	1.14	-28.53	0.00	0.00	**0.02**
NC25	FC3	N1786	B1626	**-4.90**	0.21	-124.37	0.00	0.00	0.02
NC19	FC3	N1786	B1626	**4.12**	-1.58	9.34	0.00	0.00	-0.01
NC18	FC3	N1786	B1626	-1.66	**-6.10**	-94.05	0.00	0.00	-0.02
NC30	FC3	N1786	B1626	-0.59	**5.08**	-20.59	0.00	0.00	-0.01
NC42	FC3	N1786	B1626	0.80	1.91	**-133.15**	**0.00**	0.00	0.01
NC22	FC3	N1786	B1626	0.03	-3.95	**14.06**	0.00	0.00	-0.01
NC43	FC3	N1786	B1626	-3.81	1.89	-109.02	**0.00**	0.00	**0.02**
NC36	FC3	N1786	B1626	-1.23	-5.50	-82.45	0.00	**0.00**	**-0.02**
NC4	FC3	N1786	B1626	-0.85	3.84	-119.20	0.00	**0.00**	-0.01

50. Connection forces

Linear calculation, Extreme : Global
Selection : All
Class : ULS-potres

Case	Connection	Node	Beams	Rx [kN]	Ry [kN]	Rz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
potres 2/3	FC2	N1780	B1623	**-14.89**	3.88	-7.90	0.00	0.00	0.05

Case	Connection	Node	Beams	Rx [kN]	Ry [kN]	Rz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
potres 3/4	FC2	N1780	B1623	**15.47**	-4.78	-46.27	0.00	0.00	-0.05
potres 6/1	FC3	N1786	B1626	6.26	**-15.04**	-12.32	0.00	0.00	-0.08
potres 7/2	FC3	N1786	B1626	-7.61	**13.97**	-58.14	0.00	0.00	0.08
potres 6/1	FC1	N1774	B1620	5.93	-10.95	**-67.47**	**0.00**	**0.00**	-0.07
potres 7/2	FC1	N1774	B1620	-5.26	9.58	**22.61**	**0.00**	**0.00**	0.07
potres 6/1	FC2	N1780	B1623	7.48	-9.57	-51.28	0.00	0.00	**-0.08**
potres 7/2	FC2	N1780	B1623	-6.89	8.66	-2.89	0.00	0.00	**0.08**

51. Connection forces

Linear calculation, Extreme : Node
Selection : All
Class : ULS-potres

Case	Connection	Node	Beams	Rx [kN]	Ry [kN]	Rz [kN]	Mx [kNm]	My [kNm]	Mz [kNm]
potres 2/3	FC1	N1774	B1620	**-12.57**	2.78	-1.77	0.00	0.00	0.04
potres 3/4	FC1	N1774	B1620	**13.25**	-4.15	-43.09	0.00	0.00	-0.04
potres 6/1	FC1	N1774	B1620	5.93	**-10.95**	**-67.47**	**0.00**	**0.00**	**-0.07**
potres 7/2	FC1	N1774	B1620	-5.26	**9.58**	**22.61**	**0.00**	**0.00**	**0.07**
potres 2/3	FC2	N1780	B1623	**-14.89**	3.88	-7.90	0.00	0.00	0.05
potres 3/4	FC2	N1780	B1623	**15.47**	-4.78	-46.27	0.00	0.00	-0.05
potres 6/1	FC2	N1780	B1623	7.48	**-9.57**	**-51.28**	**0.00**	**0.00**	**-0.08**
potres 7/2	FC2	N1780	B1623	-6.89	**8.66**	**-2.89**	**0.00**	**0.00**	**0.08**
potres 2/3	FC3	N1786	B1626	**-13.90**	7.37	-48.70	**0.00**	0.00	0.04
potres 3/4	FC3	N1786	B1626	**12.54**	-8.44	-21.77	0.00	0.00	-0.04
potres 6/1	FC3	N1786	B1626	6.26	**-15.04**	**-12.32**	0.00	**0.00**	**-0.08**
potres 7/2	FC3	N1786	B1626	-7.61	**13.97**	**-58.14**	0.00	**0.00**	**0.08**

5. AB TEMELJI

Del tega načrta so tudi novi AB temelji, ki so izven območja podpiranja jeklenih stebrov z AB konstrukcjo podhoda

V okviru analize je bi upoštevan vertikalni modul podajnosti tal 45000 kN/m^3.

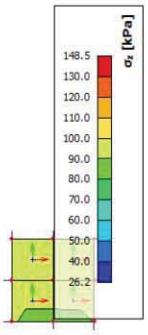
Vodneprepustni beton
C30/37, PV-II, XC2, XD3-odporen proti solem

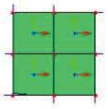
Armatura S500B

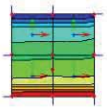
Kontaktne napetosti v temeljnih tleh

Maksimalne kontaktne napetosti R_d/A potd temelji pri ULS (faktrorirana obtežba) in pri potresnih obtežnih kombinacijah znašajo največ 150 kN/m^2 in ne presegajo maksimalnih dovoljenih napetosti 370 kN/m^2.

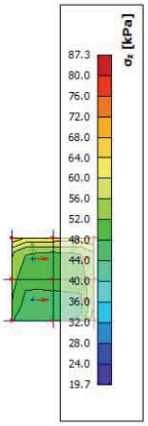
2D contact stresses
Values: σ_z
Nonlinear calculation
Class: ULS
Extreme: Global
Selection: All
Location: In nodes avg.. System: LCS
mesh element

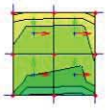


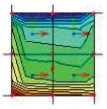




2D contact stresses
Values: σ_z
Linear calculation
Class: ULS-potres
Extreme: Global
Selection: All
Location: In nodes avg.. System: LCS
mesh element





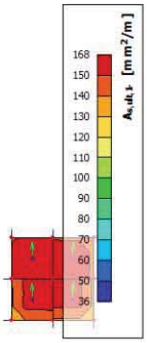


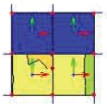
Armatura

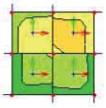
Temelji z členkasto priključenimi stebri

1.5 x 1.5 x 0.8 m

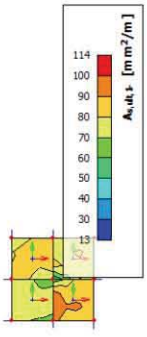
Reinforcement design (ULS+SLS)
Values: $A_{s,ult,1}$-
Nonlinear calculation
Class: ULS
Extreme: Global
Selection: All
Location: In nodes avg. on macro.
System: LCS mesh element

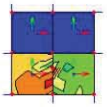




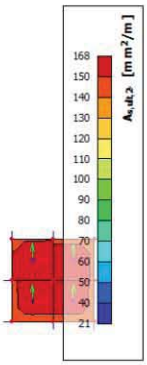


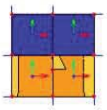
Reinforcement design (ULS+SLS)
Values: $A_{s,ult,1}$-
Linear calculation
Class: ULS-potres
Extreme: Global
Selection: All
Location: In nodes avg. on macro.
System: LCS mesh element

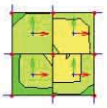




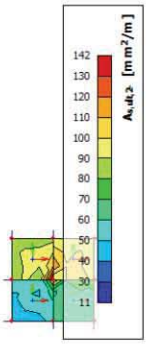
Reinforcement design (ULS+SLS)
Values: $A_{s,ult,2}$-
Nonlinear calculation
Class: ULS
Extreme: Global
Selection: All
Location: In nodes avg. on macro.
System: LCS mesh element

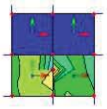


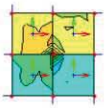




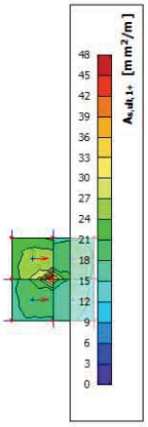
Reinforcement design (ULS+SLS)
Values: $A_{s,ult,2}$-
Linear calculation
Class: ULS-potres
Extreme: Global
Selection: All
Location: In nodes avg. on macro.
System: LCS mesh element

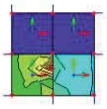


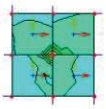




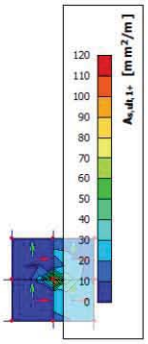
Reinforcement design (ULS+SLS)
Values: $A_{s,ult,1+}$
Nonlinear calculation
Class: ULS
Extreme: Global
Selection: All
Location: In nodes avg. on macro.
System: LCS mesh element

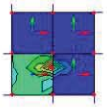


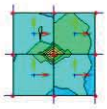


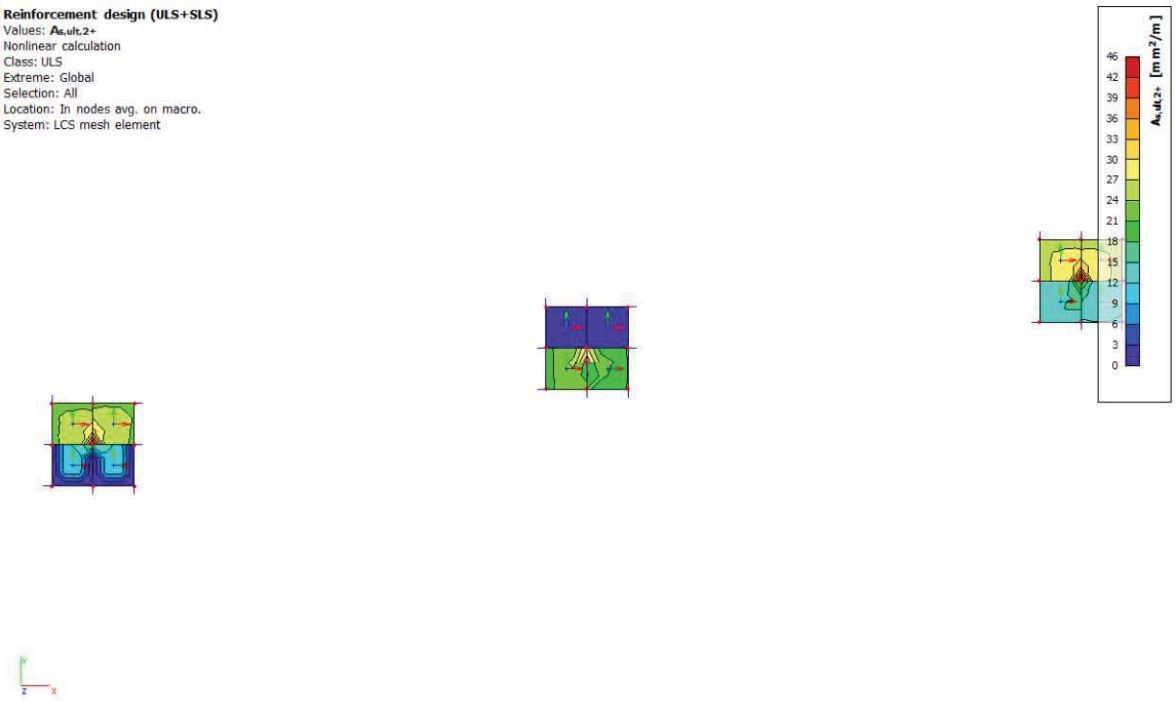


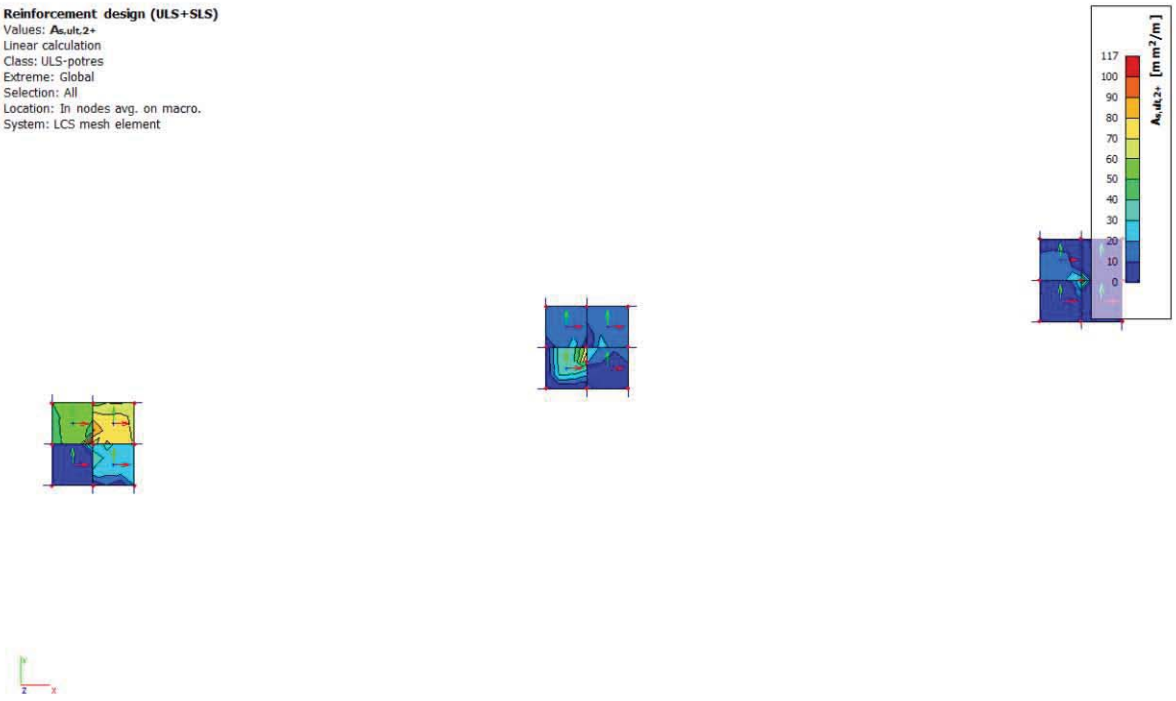
Reinforcement design (ULS+SLS)
Values: $A_{s,ult,1+}$
Linear calculation
Class: ULS-potres
Extreme: Global
Selection: All
Location: In nodes avg. on macro.
System: LCS mesh element











Izberem armaturo zgoraj in spodaj v obeh smereh +/- ϕ14/15cm, $A_{s,dej}$ = 10.2 cm^2/m

6. LESENA KRITINA

OSB3 vodoodporna plošča D=25mm

L = cca 1.0 m , nosilec preko dveh ali več polj (2xL, 3xL,...)

$q_{Ed,MSU}$ = 0.55+1.20 = 1.75 kN/m^2

AGEPAN® OSB/3 | TECHNISCHE DATEN

Zulässige Flächenlast q_{max} [kN/m²]
Zweifeldträger beidseitig belastet, Durchbiegungsbeschränkung l/300

	12	15	18	22	25
l (m)			Dicke (in mm)		
0,20	22,01	34,41	47,41	70,85	91,52
0,25	14,06	21,99	30,30	45,30	58,52
0,30	9,74	15,24	21,01	31,42	40,59
0,35	7,14	11,18	15,41	23,05	29,78
0,40	5,45	8,54	11,77	17,61	22,77
0,45	4,22	6,72	9,28	13,89	17,96
0,50	3,06	5,43	7,50	11,23	14,52
0,55	2,28	4,47	6,18	9,25	11,97
0,60	1,74	3,45	5,17	7,76	10,04
0,625	1,53	3,04	4,76	7,14	9,24
0,65	1,35	2,69	4,39	6,59	8,53
0,70	1,07	2,14	3,74	5,66	7,33
0,75	0,86	1,72	3,02	4,92	6,37
0,80	0,69	1,40	2,47	4,30	5,58
0,833	0,60	1,23	2,18	3,96	5,13
0,90	0,46	0,96	1,70	3,17	4,38
0,95	0,38	0,80	1,43	2,68	3,91
1,00	0,32	0,67	1,21	2,28	3,39

Max. zul. Flächenlast q_{max} gemäß Spannungsnachweis/Gebrauchstauglichkeit l = vorh. Unterstützungsabstand

7. DETAJLI

7.1. Sidranje KC220/10 in KC220/8

Členkasti priključek na območju obstoječe konstrukcije podhoda/stopnišča in nove temelje

www.hilti.com

Profis Anchor 2.8.8

Company:		Page:	1
Specifier:		Project:	Litija-Nadstreški
Address:		Fastening Point:	
Phone I Fax:	|	Date:	15/04/2021
E-Mail:			

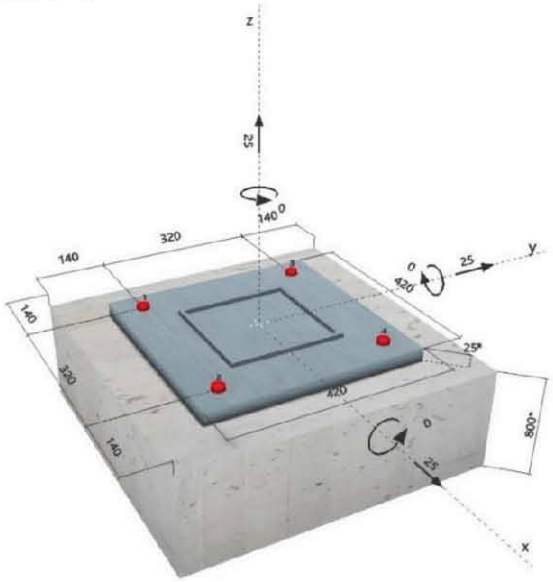
Specifier's comments: Sidranje KC220/220 - clenkast prikljucek - AB konstrukcija podhoda

1 Input data

Anchor type and size:	**HIT-HY 150 MAX + HIT-V (5.8) M24**
Return period (service life in years):	50
Effective embedment depth:	$h_{ef,act}$ = 300 mm ($h_{ef,limit}$ = - mm)
Material:	5.8
Approval No.:	ETA 08/0352
Issued I Valid:	25/06/2018 | -
Proof:	Design method ETAG BOND (EOTA TR 029)
Stand-off installation:	e_b = 0 mm (no stand-off); t = 25 mm
Baseplate:	l_x x l_y x t = 420 mm x 420 mm x 25 mm; (Recommended plate thickness: not calculated
Profile:	Square hollow, 220 x 220 x 8,8; (L x W x T) = 220 mm x 220 mm x 9 mm
Base material:	uncracked concrete, C25/30, $f_{c,cube}$ = 30.00 N/mm²; h = 800 mm, Temp. short/long: 40/24 °C
Installation:	**hammer drilled hole, Installation condition: Dry**
Reinforcement:	Reinforcement spacing < 150 mm (any Ø) or < 100 mm (Ø <= 10 mm) with longitudinal edge reinforcement d >= 12 + close mesh (stirrups, hangers) s <= 100 Reinforcement to control splitting according to EOTA TR 029, 5.2.2.6 present.

R - The anchor calculation is based on a rigid baseplate assumption.

Geometry [mm] & Loading [kN, kNm]



Input data and results must be checked for agreement with the existing conditions and for plausibility!
PROFIS Anchor (c) 2003-2009 Hilti AG, FL-9494 Schaan Hilti is a registered Trademark of Hilti AG, Schaan

Company:
Specifier:
Address:
Phone I Fax:
E-Mail:

Page: 2
Project: Litija-Nadstreški
Fastening Point:
Date: 15/04/2021

2 Proof I Utilisation (Governing Cases)

		Design values [kN]		Utilisation	
Loading	**Proof**	**Load**	**Capacity**	**β_N / β_V [%]**	**Status**
Tension	Concrete cone failure	25.000	137.479	19 / -	OK
Shear	Concrete edge failure in direction x+	27.951	48.057	- / 59	OK

Loading	**β_N**	**β_V**	**α**	**Utilisation $\beta_{N,V}$ [%]**	**Status**
Combined tension and shear loads	0.182	0.582	1.5	53	OK

3 Warnings

- Please consider all details and hints/warnings given in the detailed report!

Fastening meets the design criteria!

4 Remarks; Your Cooperation Duties

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Input data and results must be checked for agreement with the existing conditions and for plausibility!
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7.2. Spoj stebra KC220/HEA260

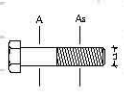
8xM24 HV 10.9

Detail D1.2: Bolted moment resistance joint 1 / 2

KC220/HEA260 | SŽ PP Litija | Nadstrešek 1 in 4 | **Plate**

Bolts		d(cm)	d_0 (cm)	A_s(cm^2)	A(cm^2)
	M24	2.4	2.6	3.53	4.52
grade		10.9			
f_{ub}(kN/cm^2)		100			

grade 235
s (cm)= 2.5
f_u(kN/cm^2)= 36



shear plane: 1 — 1 - share plane A_S; 2 - share plane A
γ_{M0}= 1.00
γ_{M2}= 1.25

factor: 0.5 — 0,6 for shear plane A
0,6 for ductility anchors (4.6, 5.6, 8.8) - share plane A_S
0,5 for nonductility anchors (4.8, 5.8, 6.8, 10.9) - share plane A_S

Shear resistance: $F_{v,Rd} = 0{,}6(0{,}5)*f_{ub}*A_s(A)/\gamma_{M2}$ $F_{v,Ed} / F_{v,Rd} < 1{,}0$
$F_{v,Rd}$ = 141.2 kN

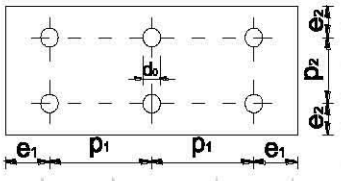
interaction V - M
Tension resistance $F_{t,Rd} = 0{,}9*f_{ub}*A_s/\gamma_{M2}$ $F_{t,Ed} / F_{t,Rd} < 1{,}0$ $(F_{v,Ed} / F_{v,Rd})+(F_{t,Ed} / F_{t,Rd})/1{,}4 < 1{,}0$
$F_{t,Rd}$ = 254.2 kN

Bearing resistance $F_{b,Rd} = k_1*\alpha_b*f_u*d*t/\gamma_{M2}$ $F_{b,Ed} / F_{b,Rd} < 1{,}0$
$F_{b,Rd}$ = 220.3 kN

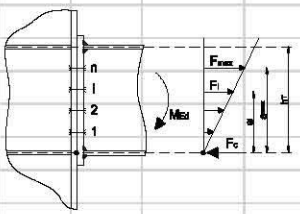
		usual values		I choose
e_1=2*d_0	e_1 (cm)=	5.20	e_1 (cm)=	4.00
p_1=3*d_0	p_1 (cm)=	7.80	p_1 (cm)=	8.00
e_2=1,5*d_0	e_2 (cm)=	3.90	e_2 (cm)=	4.00
p_2=3*d_0	p_2 (cm)=	7.80	p_2 (cm)=	8.00

	in loading direction		orthogonal to loading direction			
outter anch →	α_d=e_1/3d_0	$\alpha_{d,outter}$= 0.51	k_1=min(2,8*e_2/d_0-1,7≤2,5; 1,4*p_2/d_0-1,7≤2,5)			$k_{1,outter}$= 2.50
inner ancho →	α_d=p_1/3d_0 - 1/4	$\alpha_{d,inner}$= 0.78	k_1=1,4*p_2/d_0-1,7≤ 2,5			$k_{1,inner}$= 2.50
		α_d= 0.51	α_b=min(α_d ; f_{ub}/f_U ; 1,0)	α_b=	0.51	k_1= 2.50

load direction ← →



num. of bolts for transfering tension and shear laod					$n_{vij,N,V}$=	8					2 / 2
Connection load					load of maximal loaded bolt						
$M_{Ed,y}$=	13500	kNcm			$F_{t,Ed,M}$=	161.42	kN		check		
N_{Ed} =	40	kN		(+) tension	$F_{t,Ed,N}$=	5.00	kN		$F_{t,Ed\ My+N}/F_{t,Rd}$=	0.655	OK
$V_{Ed,z}$ =	40	kN			$F_{v,Ed}$=	5.00	kN		$F_{v,Ed}/F_{v,Rd}$=	0.035	OK
									interaction =	0.503	OK
									$F_{v,Ed}/F_{b,Rd}$=	0.023	OK
num. of bolts in line		$n_{vij,v\,vrsti}$ =	2	(for 4 bolts in line w e take 3,6 "due to prying force")							
lines	a_i (cm)	a_i^2 (cm^2)									
1	3.50	12.3									
2	18.50	342.3									
3	30.00	900.0									
4	0.0	0.0									
5	0.0	0.0									
6	0.0	0.0									
7	0.0	0.0									
8	0.0	0.0									
9	0.0	0.0									
10	0.0	0.0									
11	0.0	0.0									
12	0.0	0.0									
$\sum a_i^2$=	1254.5	cm^2									
a_{max}=	30	cm									
Maximum bending load capacity of bolts											
$M_{Rd,vija.}$=	21256	kNcm									
Obojstranski koti zvari				a = 0.6 x t		polnonosilni					
dvosni upogib		M1=	13500								
		1	x	0.655							
		M2=	6500								
		1	x	0.315							
		vsota		**0.970**	OK						

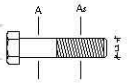


7.3. Montažni spoj nosilca HEA260

Detail D1.3: Bolted moment resistance joint

1 / 2

HEA260, HEB260			SŽ PP Litija			Nadstrešek 1 in 4		Plate	
Bolts		d(cm)	d_0(cm)	A_s(cm^2)	A(cm^2)			grade	235
	M27	2.7	3.0	4.59	5.73			s (cm)=	2.5
grade		10.9						f_u(kN/cm^2)=	36
f_{ub}(kN/cm^2)		100							
shear plane		1	1 - share plane A_S					γ_{M0}=	1.00
			2 - share plane A					γ_{M2}=	1.25
factor		0.5	0,6 for shear plane A						
			0,6 for ductility anchors (4.6, 5.6, 8.8) - share plane A_S						
			0,5 for nonductility anchors (4.8, 5.8, 6.8, 10.9) - share plane A_S						

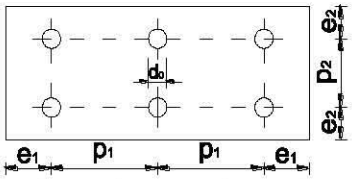


Shear resistance:	$F_{v,Rd} = 0{,}6(0{,}5)*f_{ub}*A_s(A)/\gamma_{M2}$			$F_{v,Ed} / F_{v,Rd} < 1{,}0$	
	$F_{v,Rd}$ =	183.6	kN		
				interaction V - M	
Tension resistance	$F_{t,Rd} = 0{,}9*f_{ub}*A_s/\gamma_{M2}$		$F_{t,Ed} / F_{t,Rd} < 1{,}0$	$(F_{v,Ed} / F_{v,Rd})+(F_{t,Ed} / F_{t,Rd})/1{,}4 < 1{,}0$	
	$F_{t,Rd}$ =	330.5	kN		
Bearing resistance	$F_{b,Rd} = k_1*\alpha_b*f_u*d*t/\gamma_{M2}$		$F_{b,Ed} / F_{b,Rd} < 1{,}0$		
	$F_{b,Rd}$ =	247.9	kN		

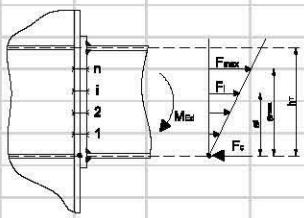
		usual values			I choose
$e_1=2*d_0$	e_1(cm)=	6.00	e_1(cm)=	4.00	
$p_1=3*d_0$	p_1(cm)=	9.00	p_1(cm)=	8.00	
$e_2=1{,}5*d_0$	e_2(cm)=	4.50	e_2(cm)=	4.00	
$p_2=3*d_0$	p_2(cm)=	9.00	p_2(cm)=	8.00	

		in loading direction			orthogonal to loading direction			
outter anch	→	$\alpha_d=e_1/3d_0$	$\alpha_{d,outter}$=	0.44	$k_1=\min(2{,}8*e_2/d_0-1{,}7\le 2{,}5;\ 1{,}4*p_2/d_0-1{,}7\le 2{,}5)$	$k_{1,outter}$=	2.03	
inner ancho	→	$\alpha_d=p_1/3d_0$ - 1/4	$\alpha_{d,inner}$=	0.64	$k_1=1{,}4*p_2/d_0-1{,}7\le 2{,}5$	$k_{1,inner}$=	2.50	
			α_d=	0.51	$\alpha_0=\min(\alpha_d;\ f_{ub}/f_u;\ 1{,}0)$	α_b=	0.51	k_1= 2.50

load direction ← →



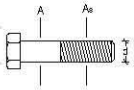
num. of bolts for transfering tension and shear laod						$n_{vij,N,V}$=	8				2 / 2
Connection load					load of maximal loaded bolt						
$M_{Ed,y}$=	20000	kNcm			$F_{t,Ed,M}$=	268.20	kN		check		
N_{Ed} =	40	kN	(+) tension		$F_{t,Ed,N}$=	5.00	kN		$F_{t,Ed\ My+N}/F_{t,Rd}$=	0.827	OK
$V_{Ed,z}$ =	125	kN			$F_{v,Ed}$=	15.63	kN		$F_{v,Ed}/F_{v,Rd}$=	0.085	OK
									interaction =	0.676	OK
									$F_{v,Ed}/F_{b,Rd}$=	0.063	OK
num. of bolts in line		$n_{vij,v\ vrsti}$ =	3.6	(for 4 bolts in line we take 3,6 "due to prying force")							
lines	a_i (cm)	a_i^2 (cm^2)									
1	7.50	56.3									
2	17.50	306.3									
3	0.00	0.0									
4	0.0	0.0									
5	0.0	0.0									
6	0.0	0.0									
7	0.0	0.0									
8	0.0	0.0									
9	0.0	0.0									
10	0.0	0.0									
11	0.0	0.0									
12	0.0	0.0									
Σa_i^2=	362.5	cm^2									
a_{max}=	17.5	cm									
Maximum bending load capacity of bolts											
$M_{Rd,vija}$ =	24644	kNcm									
Obojstranski koti zvari				a = 0.6 x t		polnonosilni					



7.4. Spoj NPU260

Čelni momentni spoj 4xM20 HV10.9

Detail D1.4: Bolted moment resistance joint 1 / 2

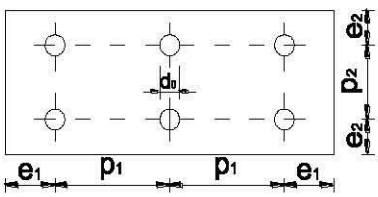
UNP260			SŽ PP Litija			Nadstrešek 1 in 4		**Plate**	
Bolts		d(cm)	d_0 (cm)	$As(cm^2)$	$A(cm^2)$			grade	235
	M20	2.0	2.2	2.45	3.14			s (cm)=	2.5
grade		10.9						$f_u(kN/cm^2)$=	36
$f_{ub}(kN/cm^2)$		100							
shear plane		1	1 - share plane A_S					γ_{M0}=	1.00
			2 - share plane A					γ_{M2}=	1.25
factor		0.5	0,6 for shear plane A						
			0,6 for ductility anchors (4.6, 5.6, 8.8) - share plane A_S						
			0,5 for nonductility anchors (4.8, 5.8, 6.8, 10.9) - share plane A_S						

Shear resistance:	$F_{v,Rd} = 0,6(0,5)*f_{ub}*A_s(A)/\gamma_{M2}$			$F_{v,Ed} / F_{v,Rd} < 1,0$		
	$F_{v,Rd}$ =	98.0	kN			
					interaction V - M	
Tension resistance	$F_{t,Rd} = 0,9*f_{ub}*A_s/\gamma_{M2}$			$F_{t,Ed} / F_{t,Rd} < 1,0$	$(F_{v,Ed} / F_{v,Rd})+(F_{t,Ed} / F_{t,Rd})/1,4 < 1,0$	
	$F_{t,Rd}$ =	176.4	kN			
Bearing resistance	$F_{b,Rd} = k_1*\alpha_b*f_u*d*t/\gamma_{M2}$			$F_{b,Ed} / F_{b,Rd} < 1,0$		
	$F_{b,Rd}$ =	183.6	kN			

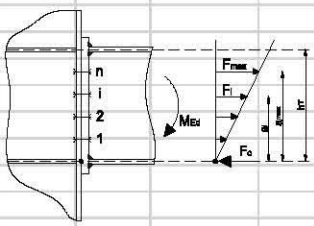
		usual values		I choose	
$e_1=2*d_o$	e_1 (cm)=	4.40	e_1 (cm)=	4.00	
$p_1=3*d_o$	p_1 (cm)=	6.60	p_1 (cm)=	8.00	
$e_2=1,5*d_o$	e_2 (cm)=	3.30	e_2 (cm)=	4.00	
$p_2=3*d_o$	p_2 (cm)=	6.60	p_2 (cm)=	8.00	

		in loading direction			orthogonal to loading direction			
outter ancho	→	$\alpha_d=e_1/3d_o$	$\alpha_{d,outter}$=	0.61	$k_1=min(2,8*e_2/d_o-1,7\leq 2,5;\ 1,4*p_2/d_o-1,7\leq 2,5)$	$k_{1,outter}$=	2.50	
inner ancho	→	$\alpha_d=p_1/3d_o$ - 1/4	$\alpha_{d,inner}$=	0.96	$k_1=1,4*p_2/d_o-1,7\leq 2,5$	$k_{1,inner}$=	2.50	
			α_d=	0.51	$\alpha_b=min(\alpha_d;\ f_{ub}/f_u;\ 1,0)$	α_b=	0.51	k_1= 2.50

load direction ← →



num. of bolts for transfering tension and shear laod					$n_{vij,N,V}$=	4					2 / 2
Connection load				load of maximal loaded bolt							
$M_{Ed,y}$=	4000	kNcm		$F_{t,Ed,M}$=	91.74	kN		check			
N_{Ed} =	40	kN	(+) tension	$F_{t,Ed,N}$=	10.00	kN		$F_{t,Ed\ My+N}/F_{t,Rd}$=	0.577	OK	
$V_{Ed,z}$ =	40	kN		$F_{v,Ed}$=	10.00	kN		$F_{v,Ed}/F_{v,Rd}$=	0.102	OK	
								interaction =	0.514	OK	
								$F_{v,Ed}/F_{b,Rd}$=	0.054	OK	
num. of bolts in line		$n_{vij,vvrsti}$ =	2	(for 4 bolts in line we take 3,6 "due to prying force")							
lines	a_i (cm)	a_i^2 (cm^2)									
1	6.00	36.0									
2	20.00	400.0									
3	0.00	0.0									
4	0.0	0.0									
5	0.0	0.0									
6	0.0	0.0									
7	0.0	0.0									
8	0.0	0.0									
9	0.0	0.0									
10	0.0	0.0									
11	0.0	0.0									
12	0.0	0.0									
Σa_i^2=	436.0	cm^2									
a_{max}=	20	cm									
Maximum bending load capacity of bolts											
$M_{Rd,vija.}$=	7691	kNcm									
Obojstranski koti zvari				a = 0.6 x t			polnonosilni				



Kontinuirani priključek UNP 260 na HEA260 s čela

Prevzema samo strižne obremenitve
V_{Ed} = 2x40 = 80 kN

4 x M20 8.8 konstruktivno

7.5. Členkasti spoji sekundarnih nosilcev

- **KC120/5, PC120/80/4, PC120/60/4**

V_{Ed} = 15 kN
4xM16 8.8

- **KC60/4**

V_{Ed} = 5 kN
2xM16 8.8

Nosilnost enega vijaka M16 8.8

natezna	$F_{t,Rd}$ = 90.4 kN
strižna	$F_{v,Rd}$ = 60.3 kN

5 Risbe

ZG1000	0205.00	007.1276	G	

POSAMEZNI ELEMENTI

JEKLENA KONSTRUKCIJA	material: S 235 J2	
NADSTRESEK 1		Index:
	Signed by:	

Position	Count	Name	Length	Weight	Total
17	1,00000	RQ 220x10	4175	264,0	264,0
17	1,00000	RQ 220x10	4180	264,4	264,4
17	2,00000	RQ 220x8	4175	215,1	430,3
17	1,00000	RQ 220x8	4185	215,6	215,6
17	1,00000	RQ 220x8	4190	215,9	215,9
17	3,00000	RQ 220x12.5	4345	331,1	993,3
17	8,00000	RQ 220x8	4180	215,4	1723,1
17	2,00000	RQ 260x12.5	4345	399,2	798,4
51	40,00000	M24 5.6 + HILTI HIT HY 200	400	1,4	56,8
51	40,00000	Gewindestange-M24	1195	4,2	169,7
51	16,00000	M24 5.6 + HILTI HIT HY 200	600	2,1	34,1
93	120,00000	PLATE 15x80	80	0,8	90,4
127	10,00000	PLATE 20x420	420	27,7	276,9
127	3,00000	PLATE 25x420	420	34,6	103,9
127	2,00000	PLATE 25x470	470	43,4	86,7
240	4,00000	PLATE 25x420	440.0019	36,3	145,1
	2,00000	HE 260 A	33690.8008	2297,7	4595,4
	1,00000	HE 260 A	5410.5645	369,0	369,0
	1,00000	HE 260 A	10745.5342	732,8	732,8
	1,00000	HE 260 A	12270.832	836,9	836,9
	1,00000	HE 260 A	12122.4033	826,7	826,7
	1,00000	HE 260 A	15121.2969	1031,3	1031,3
	1,00000	HE 260 A	7000	477,4	477,4
	2,00000	HE 260 A	12402.5117	845,9	1691,7
	1,00000	HE 260 A	3227.2212	220,1	220,1
	1,00000	HE 260 A	3150	214,8	214,8
	1,00000	HE 260 A	3078.7871	210,0	210,0
	1,00000	HE 260 A	3004.5701	204,9	204,9
	1,00000	HE 260 A	7802.4111	532,1	532,1
	1,00000	HE 260 A	14229.0762	970,4	970,4
	1,00000	HE 260 B	11349.6514	1055,5	1055,5
	2,00000	RD 24	6384.2617	22,7	45,3
	2,00000	RD 24	6176.4038	21,9	43,9
	4,00000	RD 24	6178.4995	21,9	87,8
	2,00000	RD 24	7425.7495	26,4	52,7
	2,00000	RD 24	4882.1182	17,3	34,7
	2,00000	RD 24	4488.6812	15,9	31,9
	2,00000	RD 24	5070.292	18,0	36,0

POSAMEZNI ELEMENTI

JEKLENA KONSTRUKCIJA	*material:* S 235 J2	
NADSTRESEK 1		*Index:*
	Signed by:	

Position	Count	Name	Length	Weight	Total
	4,00000	RD 24	5746.4263	20,4	81,6
	2,00000	RD 24	5074.3628	18,0	36,0
	6,00000	RD 24	4485.3491	15,9	95,6
	2,00000	RD 24	4913.3804	17,4	34,9
	19,00000	RQ 60x4	708	4,9	92,8
	9,00000	RQ 60x4	1039.3146	7,2	64,5
	14,00000	RQ 60x4	808	5,6	78,0
	19,00000	RQ 60x4	818	5,6	107,2
	4,00000	RQ 60x4	1246.7839	8,6	34,4
	3,00000	RQ 120x5	5110.75	91,2	273,6
	9,00000	RQ 120x5	5102.75	91,1	819,5
	1,00000	RQ 140x5	25163.6738	528,0	528,0
	1,00000	RQ 140x5	35804.25	751,3	751,3
	9,00000	RQ 140x5	5394	113,2	1018,7
	1,00000	RQ 140x5	10624.8262	223,0	223,0
	11,00000	RQ 140x5	5102.75	107,1	1177,8
	4,00000	RR 120x60x4	3590.75	38,3	153,2
	29,00000	RR 120x60x4	3583.25	38,2	1108,5
	1,00000	U 260	33866.0469	1283,5	1283,5
	1,00000	U 260	9445	358,0	358,0
	1,00000	U 260	5600.5645	212,3	212,3
	1,00000	U 260	4745.0244	179,8	179,8
	1,00000	U 260	11155.7285	422,8	422,8
	1,00000	U 260	12351.2617	468,1	468,1
	1,00000	U 260	9433.0068	357,5	357,5
	1,00000	U 260	6446.2837	244,3	244,3
	1,00000	U 260	29694.918	1125,4	1125,4
	1,00000	U 260	6989.9883	264,9	264,9
	1,00000	U 260	16256.9766	616,1	616,1
	1,00000	U 260	3166.5383	120,0	120,0

·izvedbeni razred EXC 2
·Konstrukcijsko jeklo S235J2
·Konstrukcijsko jeklo S235JR - šablone
·vijaki 10.9 po SIST EN 14399
- vse vijačne zveze izvesti z dvema podložkama 10.9
- 50% prednapeto
·vijaki 8.8 po SIST EN 15048-1
- vse vijačne zveze izvesti z dvema podložkama 8.8
- čvrsto priviti

68 parts / Whole Weight : 32501,55 kg / Paint Area : 745,75 m²

celotna teža + dodatek 25% zvari, vijaki... : 40626,93775 kg

POSAMEZNI ELEMENTI

JEKLENA KONSTRUKCIJA	material: S 235 J2	
NADSTRESEK 2		Index:
	Signed by:	

Position	Count	Name	Length	Weight	Total
6	4,00000	IPE 180	608.2624	11,4	45,7
7	91,00000	L 80x8	628.1341	6,1	552,2
8	4,00000	IPE 180	1296.8606	24,4	97,5
9	4,00000	IPE 180	1303.5035	24,5	98,0
10	4,00000	IPE 240	2475.4792	76,0	304,0
11	4,00000	IPE 240	2899	89,0	356,0
12	2,00000	U 240	2899	96,2	192,5
14	2,00000	U 240	2899	96,2	192,5
17	10,00000	RQ 220x12.5	4440	338,3	3383,3
20	2,00000	RQ 60x5	6779.999	57,4	114,9
21	13,00000	IPE 240	7921.0068	243,2	3161,3
21	13,00000	IPE 240	7981.314	245,0	3185,3
22	13,00000	IPE 240	7941.6582	243,8	3169,5
23	13,00000	IPE 240	7960.6626	244,4	3177,1
24	13,00000	U 240	7900.7358	262,3	3410,0
24	13,00000	U 240	8001.0571	265,6	3453,3
36	28,00000	PLATE 10x217	2428.417	34,2	958,9
41	34,00000	RQ 60x5	304.2701	2,6	87,6
43	91,00000	L 80x8	341.2351	3,3	300,0
44	91,00000	L 80x8	341.235	3,3	300,0
45	4,00000	RQ 60x5	424.2701	3,6	14,4
46	4,00000	IPE 240	402.8991	12,4	49,5
49	28,00000	IPE 240	890	27,3	765,0
50	28,00000	U 240	890	29,5	827,3
51	80,00000	Gewindestange-M24	1195	4,2	339,4
51	8,00000	M24 5.6 + HILTI HIT HY 200	600	2,1	17,0
51	16,00000	M24 5.6 + HILTI HIT HY 200	400	1,4	22,7
51	8,00000	Gewindestange-M24	1000	3,6	28,4
62	52,00000	RO 26.9x3.2	1356.8518	2,6	133,3
63	52,00000	RO 26.9x3.2	1363.5037	2,6	134,0
65	4,00000	IPE 240	1608.9595	49,4	197,6
66	14,00000	BRFL 160x20	1668.7728	41,9	586,9
68	14,00000	BRFL 160x20	1668.7728	41,9	586,9
72	14,00000	BRFL 500x20	1708.2024	134,1	1877,3
83	56,00000	BRFL 160x20	2430.7124	61,1	3419,3
84	56,00000	BRFL 160x20	2431.438	61,1	3420,4
85	52,00000	RD 16	2842.2554	4,5	233,5
86	10,00000	RQ 220x12.5	4440	338,3	3383,3

POSAMEZNI ELEMENTI

JEKLENA KONSTRUKCIJA	material:		
			Index:
	Signed by:		

Position	Count	Name	Length	Weight	Total
86	1,00000	RQ 220x12.5	4465.3267	340,3	340,3
86	1,00000	RQ 220x12.5	4479.1768	341,3	341,3
86	1,00000	RQ 220x12.5	4450.7017	339,1	339,1
86	1,00000	RQ 220x12.5	4441.4893	338,4	338,4
86	1,00000	RQ 220x12.5	4555.3267	347,1	347,1
86	1,00000	RQ 220x12.5	4569.1768	348,2	348,2
86	1,00000	RQ 220x12.5	4880.7017	371,9	371,9
86	1,00000	RQ 220x12.5	4871.4893	371,2	371,2
88	2,00000	RQ 60x5	6779.999	57,4	114,9
93	264,00000	PLATE 15x80	80	0,8	199,0
100	182,00000	PLATE 8x82	140	0,7	131,3
105	56,00000	PLATE 12x120	155	1,8	98,1
106	22,00000	PLATE 10x150	180	2,1	46,6
107	20,00000	PLATE 20x150	180	4,2	84,8
108	4,00000	PLATE 8x120	181.8939	1,4	5,5
109	16,00000	PLATE 10x191	195	2,9	46,7
110	28,00000	PLATE 6x175	200	1,6	46,2
111	4,00000	PLATE 8x125	204.9673	1,6	6,4
112	56,00000	PLATE 12x120	209.4526	2,4	132,6
113	4,00000	PLATE 8x85	240	1,3	5,1
114	114,00000	PLATE 40x140	240	10,6	1202,7
115	224,00000	PLATE 40x150	240	11,3	2532,1
116	112,00000	PLATE 50x204	261.0315	20,9	2340,9
118	8,00000	PLATE 30x310	310	22,6	181,1
121	4,00000	PLATE 8x177	364.2701	4,0	16,2
127	20,00000	PLATE 20x420	420	27,7	553,9
131	28,00000	PLATE 10x217	2428.417	34,2	958,9
240	8,00000	PLATE 25x420	440.0019	36,3	290,1
	28,00000	Corrugated Bar 10x257	1700.6931	25,2	704,7
	28,00000	IPE 240	890	27,3	765,0
	26,00000	RD 16	3226.709	5,1	132,4
	26,00000	RD 16	3241.394	5,1	133,0
	52,00000	RD 16	3421.8254	5,4	280,8
	26,00000	RD 16	3204.0061	5,1	131,5
	26,00000	RD 16	3199.2813	5,0	131,3
	10,00000		175	1,0	10,3
	20,00000		160	0,0	0,0
	20,00000		160	0,0	0,1

POSAMEZNI ELEMENTI

JEKLENA KONSTRUKCIJA	*material:*		
			Index:
	Signed by:		

Position	Count	Name	Length	Weight	Total
	20,00000		160	0,0	0,1
	20,00000		160	0,0	0,0
	2,00000		63.9389	9,9	19,8
	2,00000		153.0551	2,0	4,0
	2,00000		151.6208	0,0	0,0
	264,00000		23.9384	0,0	0,1
	176,00000		23.9384	0,1	14,3

·izvedbeni razred EXC 2
·Konstrukcijsko jeklo S235J2
·Konstrukcijsko jeklo S235JR - šablone
·vijaki 10.9 po SIST EN 14399
- vse vijačne zveze izvesti z dvema podložkama 10.9
- 50% prednapeto
·vijaki 8.8 po SIST EN 15048-1
- vse vijačne zveze izvesti z dvema podložkama 8.8
- čvrsto priviti

83 parts / Whole Weight : 56693,91 kg / Paint Area : 1229,42 m²

celotna teža + dodatek 3% zvari, vijaki... : 58394,73070 kg

POSAMEZNI ELEMENTI

JEKLENA KONSTRUKCIJA	material: S 235 J2		
NADSTRESEK 3			Index:
	Signed by:		

Position	Count	Name	Length	Weight	Total
2	36,00000	RO63x5	373.2375	2,7	96,1
2	36,00000	RO63x5	338.2	2,4	87,1
3	20,00000	U 240	960	31,9	637,4
4	18,00000	RS 16	2629.145	4,1	74,7
4	18,00000	RS 16	2639.1545	4,2	75,0
4	18,00000	RS 16	2624.2195	4,1	74,5
5	18,00000	RS 16	2655.2522	4,2	75,4
5	36,00000	RS 16	2651.6516	4,2	150,6
6	8,00000	IPE 240	2794.9756	85,8	686,4
7	4,00000	U 240	2799.969	93,0	371,8
8	4,00000	RS 16	2823.5513	4,5	17,8
9	4,00000	RS 16	2844.417	4,5	18,0
11	10,00000	RQ 220x8	4205	221,7	2216,7
12	9,00000	IPE 240	7916.644	243,0	2187,4
12	9,00000	IPE 240	7944.7949	243,9	2195,1
12	9,00000	IPE 240	7936.5752	243,7	2192,9
12	9,00000	IPE 240	7924.8633	243,3	2189,6
13	9,00000	U 240	7919.0522	262,9	2366,2
13	9,00000	U 240	7961.9766	264,3	2379,0
16	116,00000	napenjalec m16	350	0,6	68,1
19	20,00000	FL 150x25	1786.4904	52,6	1051,8
21	10,00000	RQ 220x8	4205	221,7	2216,7
22	2,00000	U 240	3749.9136	124,5	249,0
23	1,00000	PLATE 10x144	145.7509	1,5	1,5
23	10,00000	PLATE 10x128	144.3094	1,3	13,1
23	11,00000	PLATE 10x132	148.583	1,5	16,3
23	9,00000	PLATE 10x148	153.2941	1,7	15,3
23	9,00000	PLATE 10x144	149.4197	1,5	13,7
23	80,00000	navojna palica M20	1000	2,5	196,8
24	36,00000	PLATE 10x105	137.2	1,1	39,3
25	108,00000	PLATE 10x105	137.2	1,1	122,3
27	40,00000	PLATE 12x140	145	1,9	76,5
28	41,00000	PLATE 10x120	145.7131	1,1	45,2
29	18,00000	PLATE 10x124	149.0327	1,4	24,5
31	18,00000	PLATE 10x122	161.7131	1,5	26,4
32	36,00000	PLATE 10x100	390	3,1	110,2
32	108,00000	PLATE 10x100	170	1,3	144,1
33	40,00000	FL 150x20	170	4,0	160,1

POSAMEZNI ELEMENTI

JEKLENA KONSTRUKCIJA	*material:*		
NADSTRESEK 3			*Index:*
	Signed by:		

Position	Count	Name	Length	Weight	Total
34	232,00000	PLATE 10x90	190	1,2	281,9
35	160,00000	PLATE 15x140	200	3,3	527,5
36	4,00000	PLATE 10x122	222.2242	1,6	6,6
37	4,00000	PLATE 10x121	236.465	1,8	7,0
38	2,00000	PLATE 10x129	240	2,4	4,9
38	2,00000	PLATE 10x130	240	2,4	4,9
38	20,00000	PLATE 25x400	399.9847	31,4	627,9
39	8,00000	PLATE 10x150	240	2,8	22,6
39	80,00000	PLATE 15x65	65	0,5	39,8
40	53,00000	PLATE 25x130	240	6,1	323,3
40	27,00000	PLATE 25x129	240	6,1	164,7
41	160,00000	PLATE 30x150	240	8,5	1356,5
42	80,00000	PLATE 40x160	240	12,1	964,6
43	20,00000	PLATE 15x205	250	3,9	77,6
44	20,00000	PLATE 10x205	250	4,0	80,5
45	40,00000	PLATE 15x140	250	4,1	164,9
46	20,00000	PLATE 15x180	250	5,3	106,0
47	20,00000	PLATE 15x205	250	6,0	120,7
48	36,00000	PLATE 10x121	258.9689	2,3	84,3
49	36,00000	PLATE 10x121	285.2256	2,6	93,7
50	40,00000	PLATE 10x210	340	5,0	201,7
51	40,00000	PLATE 10x210	340	5,1	203,0
54	20,00000	PLATE 35x400	550	60,4	1208,9
54	2,00000	PLATE 35x330	550	49,9	99,7
55	10,00000	PLATE 25x550	600	64,8	647,6
56	4,00000	FL 150x20	510	12,0	48,0
56	76,00000	FL 150x20	840	19,8	1503,4
57	40,00000	PLATE 10x200	915.5	14,0	561,4
58	20,00000	PLATE 10x195	1740	23,4	468,4

·izvedbeni razred EXC 2
·Konstrukcijsko jeklo S235J2
·Konstrukcijsko jeklo S235JR - šablone
·vijaki 10.9 po SIST EN 14399
- vse vijačne zveze izvesti z dvema podložkama 10.9
- 50% prednapeto
·vijaki 8.8 po SIST EN 15048-1
- vse vijačne zveze izvesti z dvema podložkama 8.8
- čvrsto priviti

67 parts / Whole Weight : 32684,97 kg / Paint Area : 767,98 m²

celotna teža + dodatek 3% zvari, vijaki... : 33665,52343 kg

POSAMEZNI ELEMENTI

JEKLENA KONSTRUKCIJA	material: S 235 J2	
NADSTRESEK 4		Index:
	Signed by:	

Position	Count	Name	Length	Weight	Total
17	6,00000	RQ 220x8	4390	226,2	1357,3
17	5,00000	RQ 220x10	4390	277,6	1388,2
51	44,00000	M24 5.6 + HILTI HIT HY 200	400	1,4	62,5
127	11,00000	PLATE 20x420	420	27,7	304,6
	1,00000	HE 260 A	33920.5352	2313,4	2313,4
	1,00000	HE 260 A	5853.6812	399,2	399,2
	1,00000	HE 260 A	34119.2773	2326,9	2326,9
	1,00000	HE 260 A	7335.9258	500,3	500,3
	1,00000	HE 260 A	8839.4014	602,8	602,8
	1,00000	HE 260 A	10325.8379	704,2	704,2
	1,00000	HE 260 A	31472.0078	2146,4	2146,4
	6,00000	RD 24	4983.7271	17,7	106,2
	12,00000	RD 24	4981.6162	17,7	212,3
	2,00000	RD 24	5185.4966	18,4	36,8
	1,00000	RD 24	5211.9355	18,5	18,5
	1,00000	RD 24	5443.9585	19,3	19,3
	30,00000	RQ 60x4	801.25	5,5	165,8
	1,00000	RQ 60x4	691.6497	4,8	4,8
	1,00000	RQ 60x4	829.0689	5,7	5,7
	1,00000	RQ 60x4	969.2596	6,7	6,7
	27,00000	RQ 60x4	1079.058	7,4	201,0
	1,00000	RQ 120x5	4840.062	86,4	86,4
	1,00000	RQ 120x5	4998.8608	89,2	89,2
	1,00000	RR 120x60x4	7826.3394	83,5	83,5
	1,00000	RR 120x60x4	7660.5239	81,7	81,7
	1,00000	RR 120x60x4	7487.0454	79,9	79,9
	1,00000	RR 120x60x4	7321.23	78,1	78,1
	1,00000	RR 120x60x4	7155.4146	76,3	76,3
	1,00000	RR 120x60x4	5661.7295	60,4	60,4
	1,00000	RR 120x60x4	5834.9438	62,2	62,2
	1,00000	RR 120x60x4	5993.3604	63,9	63,9
	1,00000	RR 120x60x4	6159.4399	65,7	65,7
	1,00000	RR 120x60x4	6325.2554	67,5	67,5
	1,00000	RR 120x60x4	6490.6011	69,2	69,2
	1,00000	RR 120x60x4	6664.1958	71,1	71,1
	1,00000	RR 120x60x4	6822.7012	72,8	72,8
	1,00000	RR 120x60x4	4107	43,8	43,8
	1,00000	RR 120x60x4	4335.2666	46,2	46,2

POSAMEZNI ELEMENTI

JEKLENA KONSTRUKCIJA	*material:*		
NADSTRESEK 4			*Index:*
	Signed by:		

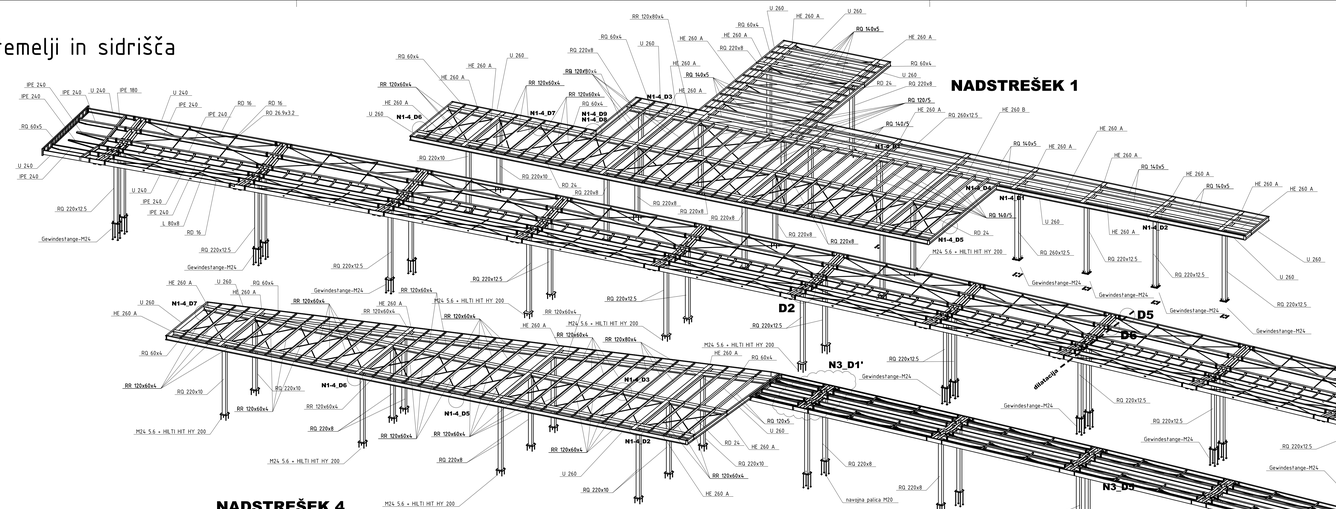
Position	Count	Name	Length	Weight	Total
	1,00000	RR 120x60x4	4501.082	48,0	48,0
	1,00000	RR 120x60x4	4667.1616	49,8	49,8
	1,00000	RR 120x60x4	4832.9771	51,6	51,6
	1,00000	RR 120x60x4	5005.7217	53,4	53,4
	1,00000	RR 120x60x4	5171.9175	55,2	55,2
	1,00000	RR 120x60x4	5330.4229	56,9	56,9
	1,00000	RR 120x60x4	3980.75	42,5	42,5
	8,00000	RR 120x60x4	3973.25	42,4	339,1
	1,00000	RR 120x80x4	4343.1362	51,8	51,8
	1,00000	RR 120x80x4	4177.2319	49,8	49,8
	1,00000	RR 120x80x4	4010.9353	47,8	47,8
	1,00000	RR 120x80x4	4674.3848	55,7	55,7
	1,00000	U 260	5468.4961	207,3	207,3
	1,00000	U 260	34024.8203	1289,5	1289,5
	1,00000	U 260	34489.6211	1307,2	1307,2
	1,00000	U 260	545.78	20,7	20,7
	1,00000	U 260	11100.9072	420,7	420,7

·izvedbeni razred EXC 2
·Konstrukcijsko jeklo S235J2
·Konstrukcijsko jeklo S235JR - šablone
·vijaki 10.9 po SIST EN 14399
- vse vijačne zveze izvesti z dvema podložkama 10.9
- 50% prednapeto
·vijaki 8.8 po SIST EN 15048-1
- vse vijačne zveze izvesti z dvema podložkama 8.8
- čvrsto priviti

55 parts / Whole Weight : 18227,80 kg / Paint Area : 413,14 m²

celotna teža + dodatek 25% zvari, vijaki... : 22784,74688 kg

temelji in sidrišča



- izvedbeni razred EXC 2
- Konstrukcijsko jeklo S235J2
- Konstrukcijsko jeklo S235JR - šablone
- vijaki 10.9 po SIST EN 14399
  - vse vijačne zveze izvesti z dvema podlagama 10,9
  - 50% predinopetni
- vijaki 8.8 po SIST EN 15048-1
  - vse vijačne zveze izvesti z dvema podlagama 8,8
  - 0vrtalo pilotš

- Ozemljitev temeljev se izvede skladno s projektom ozemljitve

OPOMBE:
- mere kontrolirati in po potrebi prilagoditi pri montaži na terenu
- pri izdelavi jeklene konstr. upoštevati tudi ostalo projektno dok. (umišlanimi načrti, načrti temeljenja, gradbeni načrti)
- izdelavo in montažo nosilne jeklene konstrukcije mora biti v skladu z SIST EN 1090-2 : 2008
- Vsi sočelni zvari K,½"V ,"..." morajo biti izvedeni s prevarilnijo korena
- Varilne deformacije predvidi izvajalec
- vsi nezvočeni zvari so a=5,7 + 1mm
  (1mm = tolerija pločevina v teoju)
- se nezvočeni zvari pri obojestranskem varanju so a=3,5 + 1mm
  (1mm = tolerija pločevina v teoju)
- vse zvare plahviti

OPOMBE:
-PRED IZVEDBO VSE MERE PREVERITI IN IZDELATI DELAVNIŠKO DOKUMENTACIJO
-ZA POZICIJO LUKENJ ZA ELEKTRIČNE INŠTALACIJE GLEJ NAČRT ELEKTRIČNIH INŠTALACIJ

Datum	Ime izmenjave	Podpis
	Ime izmenjave	Podpis

VODJA PROJEKTANT: TIRING

PROJEKTIVE IN SVETOVANJE: d.o.o., Tržaška cesta 19, 1000 Ljubljana, TELEFAX: (01)562 32 50

PROJEKTANT NAČRTA: h i š a, Hišni inženiring & svetovanje, d.o.o., Ulica Jaka Platiše 4, 1, Ljubljana

NAROČNIK: RS Ministrstvo za infrastrukturo, Direkcija RS za infrastrukturo, Tržaška cesta 19, 1000 Ljubljana

OBJEKT: **Ureditev železniške postaje Litija**

NAČRT: 2/2 Jeklena konstrukcija nadstreška

PRILOGA: NOVI PERONSKI NADSTREŠEKI DISPOZICIJA - 3D SHEMA

FAZA	IZVEDBENI NAČRT
PROJEKT ID.	ŠIFRA PROJ.
8513	105/21
ODG. VODJA PROJEKTA	IN. ZB.
L. ŠOŠO, mag.inž.prom., dipl.inž.grad.	G-4643
ODG. PROJEKTANT	IN. ZB.
dr. Leon HLADNIK, u.dig.	G-0296
ODGOVOREN:	
Rok SEVŠEK, inž.gradb.	
DATUM	
marec 2021	
MERILO	PRILOGA ŠT.
1:100	1

ZG1000	0205.00	007.1276	G.455	

DISPOZICIJA - POSTAJA LITIJA
temelji in sidrišča

DETAJL DS1''
M 1:20

DETAJL DS1'
ZA STEBRU KOSNI GLAVA TEMELJA TEGA SISTEM SIDRANJA KOT DS1'

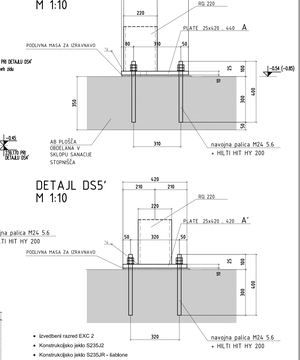
DETAJL DS1
M 1:20

DETAJL DS2
M 1:20

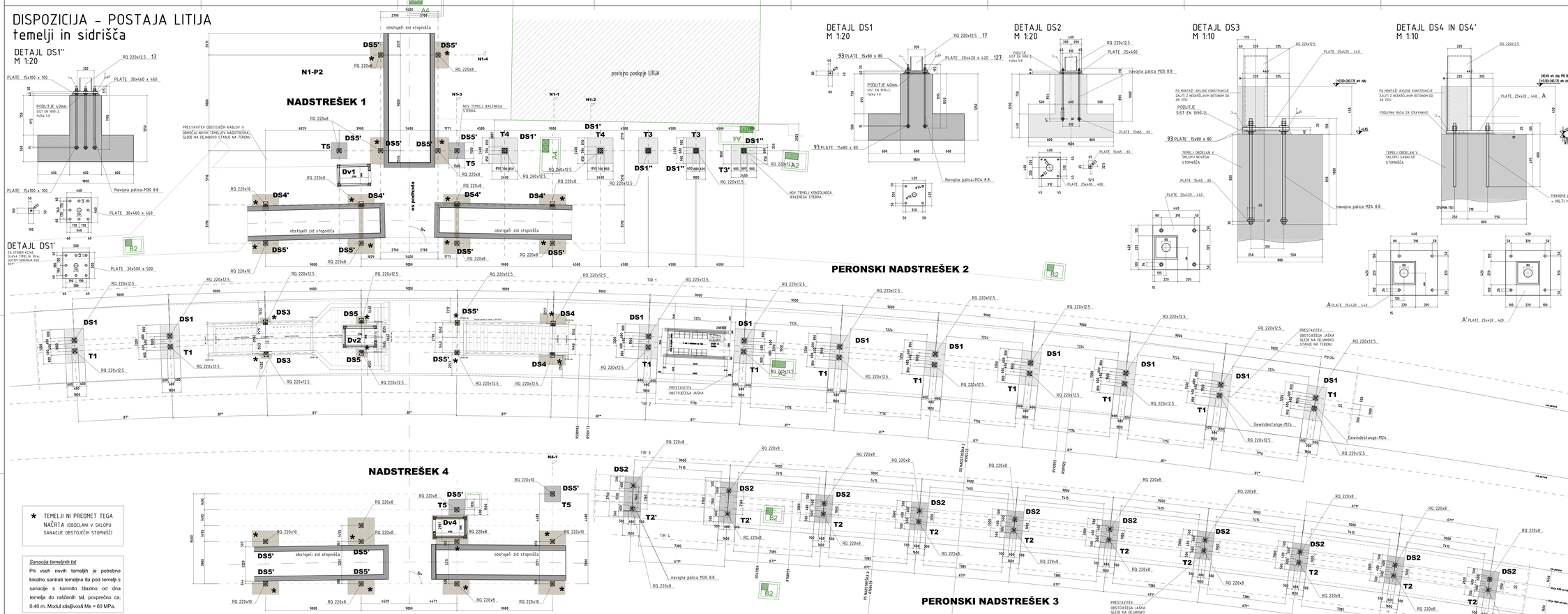
DETAJL DS3
M 1:10

DETAJL DS4 IN DS4'
M 1:10

DETAJL DS5
M 1:10



DETAJL DS5'
M 1:10



★ TEMELJI NI PREDMET TEGA NAČRTA (OBDELANI V SKLOPU SANACIJE OBSTOJEČIH STOPNIŠČ)

Sanacija temeljnih tal

Pri vseh novih temeljih je potrebno lokalno sanirati temeljna tla pod temelji s sanacije s kamnito blazino od dna temelja do načenih tal, povprečno ca. 0.40 m. Modul stisljivosti Me = 60 MPa.

- izvedbeni razred EXC 2
- Konstrukcijsko jeklo S235J0
- Konstrukcijsko jeklo S235JR+ šablone
- vijaki 10.9 po SIST EN 14399
  - vse objelne zveze izvedi z dvema podlo¾kama 10.9
  - + dvojni prihil
- vijaki 8.8 po SIST EN 15048-1
  - vse objelne zveze izvedi z dvema podlo¾kama 8.8
  - + dvojni prihil

- Oznmljtev temeljev se izvede skladno s projektom oznmljtve

OPOMBE:
– mere kontrolirati in po potrebi prilagoditi pri montaži na terenu
– pri izdelavi jeklene konstr. upoštevati tudi ostalo projektno dok. (arhitekturni načrti, načrti tehnologij, gradbeni načrti)
– izdelavo in montažo jeklene konstrukcije mora biti v skladu z SIST EN 1090-2 : 2008
– Vis sodelavi zvari K,TC2 , dvoslj bili izvedeni s prevalnjki konavi
– Varilne deformacije predvidi izvajalec
– vsi nezvedeni zvari so a=0,7 x tmin.
(tmin = tanjša plo¾evina v spoju)
– vsi nezvedeni zvari obodnikarskem varjenj so a=0,3 x tmin.
(tmin = tanjša plo¾evina v spoju)
– vse cevne palnvidi

OPOMBE:
-PRED IZVEDBO VSE MERE PREVERITI IN IZDELATI DELAVNIŠKO DOKUMENTACIJO
-ZA PODJLO LUKENJ ZA ELEKTRIČNE INŠTALACIJE GLEJ NAČRT ELEKTRIČNIH INŠTALACIJ

2/2

Datum:	Ime, priimek:	Podpis:	
Datum:	Ime, priimek:	Podpis:	

Izdelovalec dokumentacije: TIRING d.o.o., Ljubljana, Mirnska c. 11, 1000 Ljubljana, tel.: 01 542 20 00

TIRING

h i š a
HIŠA INŽENIRSKIH STORITEV d.o.o.
Cesta prvih borcev 4, 1 000 Ljubljana

Naročnik: RS Ministrstvo za infrastrukturo, Direkcija RS za infrastrukturo, Tržaška cesta 19, 1000 Ljubljana

Objekt: IZVEDBENI NAČRT

Številka načrta: 8513

Številka projekta: 105/21

Odg. vodja projektov: mag. inž. arh. L. ŠOŠO, inž.grad.prom., dipl.ing. G-4843

Odg. projektant: Uredilev železniške postaje Litija dr. Leon HLADNIK, u.dig. G-0256

Odgovorni vodja: Rok SEVŠEK, inž.grad. G-6276

Načrt: 2/2 Jeklena konstrukcija nadstreška

Datum: marec 2021

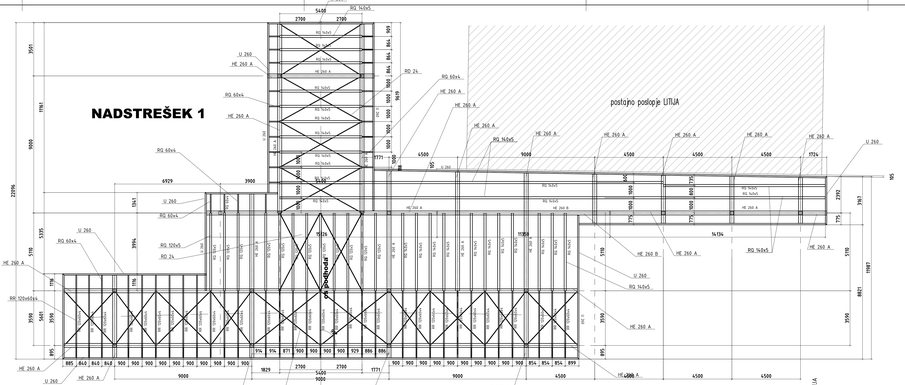
Faza: NOVI PERONSKI NADSTREŠKI DISPOZICIJA - TLORIS SIDRIŠČ

Merilo: 1:100

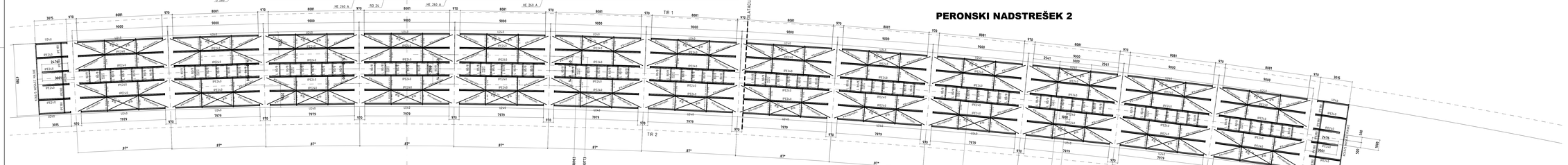
Načrt št.: 2

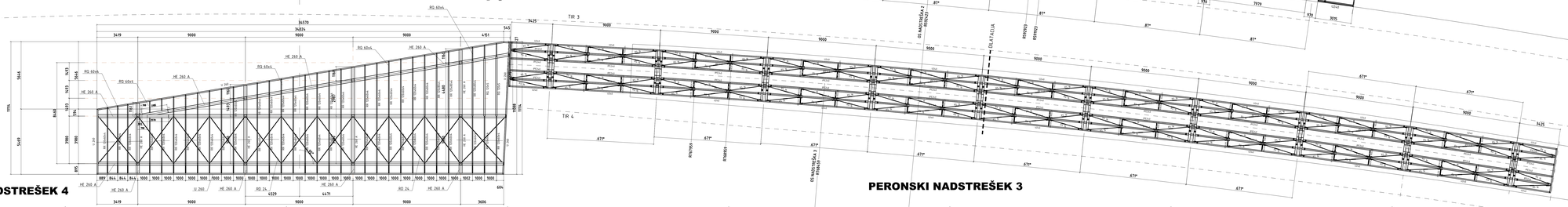
ZG1000	0205.00	007.1276	G.402	

DISPOZICIJA TLORIS



VSA HORIZONTALNA ZAVETROVANJA M24 NA NADSTREŠKU 1 IN 4 IZVESTI Z NAPENJALKAMI.





- izvedbeni razred EXC 2
- Konstrukcijsko jeklo S235J2
- Konstrukcijsko jeklo S235JR – šatkone
- vijaki 10.9 po SIST EN 14399
  - vse vijačne zveze izvesti z dvema podložkama 10.9
  - 50% predmontaže
- vijaki 8.8 po SIST EN 15048-1
  - vse vijačne zveze izvesti z dvema podložkama 8.8
  - brez predmontaže
- Ozemljitev temeljev se izvede skladno s projektom ozemljitve

OPOMBE:
- mere kontrolirati in po potrebi prilagoditi pri montaži na terenu
- pri izdelavi jeklene konstr. upoštevati tudi ostalo projektno dok. (arhitekturni načrti, načrti temeljenja, gradbeni načrti)
- izdelavo in montažo jeklene jeklene konstrukcije mora biti v skladu s SIST EN 1090-2+A1
- ko sidrni vijaki 4.12.17 , morajo biti izvedeni s previsnitvijo konusa
- Vrstne deformacije gradnji (svojim)
  - za neposredni zvar so a=0,7 x tmin
  (tmin = tanjša stebrena v spoj)
  - za neposredni zvar pri dvojnostranski varanji so a=0,5 x tmin
  (tmin = tanjša stebrena v spoj)
  - vse cevi zaključi

OPOMBE:
-PRED IZVEDBO VSE MERE PREVERITI IN IZDELATI DELAVNIŠKO DOKUMENTACIJO
-ZA POZICIJO LUKENJ ZA ELEKTRIČNE INŠTALACIJE GLEJ NAČRT ELEKTRIČNIH INŠTALACIJ

2/2

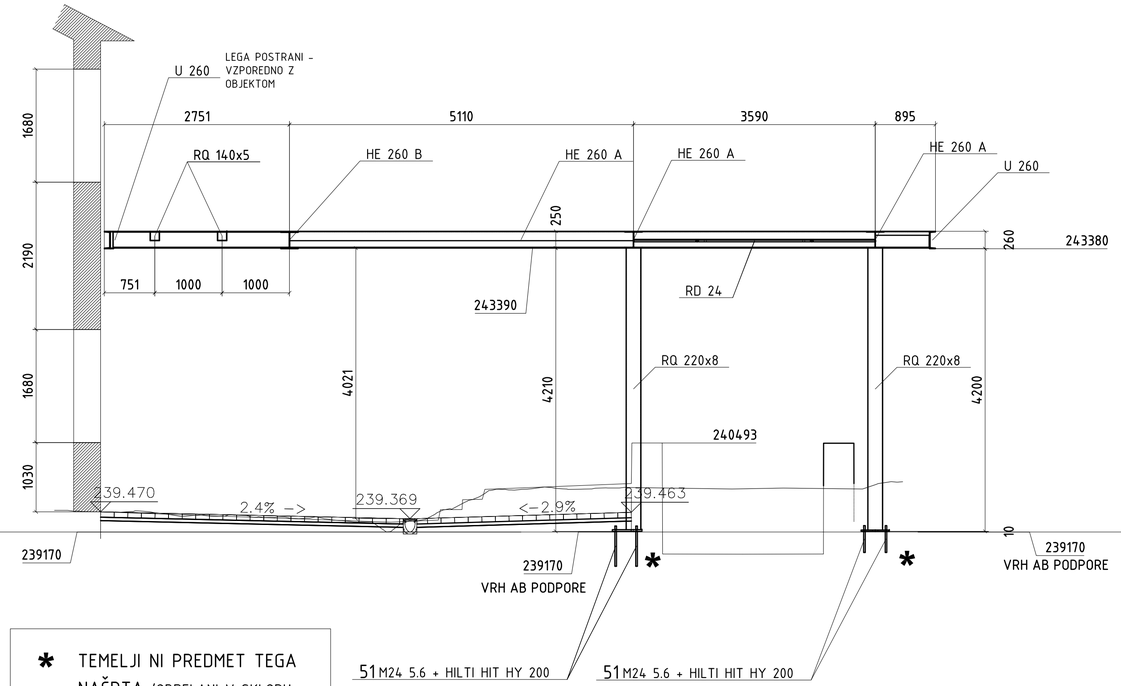
Datum	Opis sprememb		Podpis
Datum			Podpis

Izdelovalec: TIRING	Projektna dokumentacija: h i g a arhitektonski biro d.o.o. Ljubljana
Naročnik: RS Ministrstvo za infrastrukturo Direkcija RS za infrastrukturo Tržaška cesta 19, 1000 Ljubljana	Faza: IZVEDBENI NAČRT
Objekt: **Ureditev železniške postaje Litija**	Številka načrta: 8513 / Številka PZI: 105021
	Odg. vodja projektov: L. ŠOŠO, mag.kit.prom., dipl.inž.grad. / G-4843
	Odg. projektant: dr. Leon HLADNIK, u.dig. / G-0256
	Sodelavec: Rok SEVŠEK, inž.grad.
Načrt: 2/2 Jeklena konstrukcija nadstreška	Datum: marec 2021
Načrt: NOV PERONSKI NADSTREŠEK DISPOZICIJA - TLORIS	Merilo: 1:100 / Načrt št.: 3

ZG1000	0205.00	007.1276	G.402	

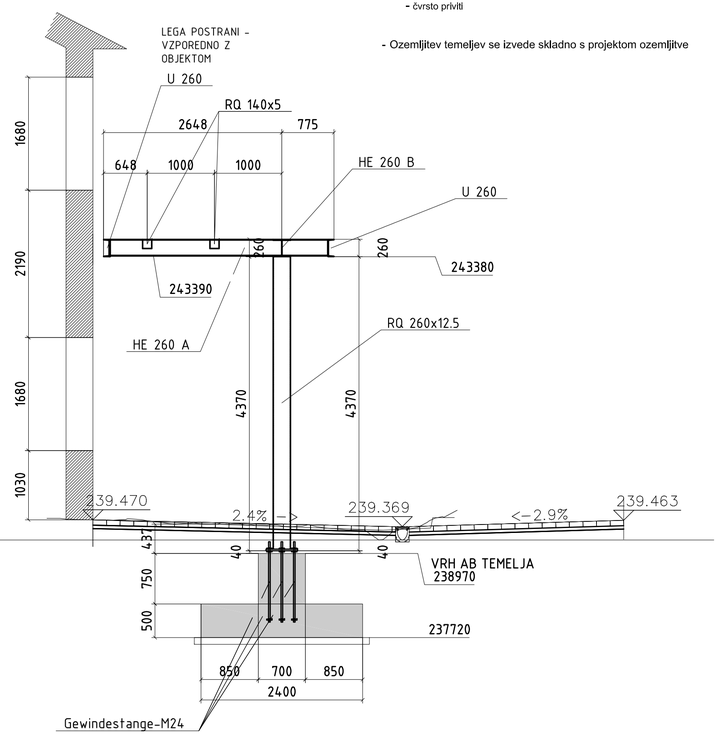
NADSTREŠEK 1 - PREČNI PREREZ

N1-1



* TEMELJI NI PREDMET TEGA NAČRTA (OBDELANI V SKLOPU SANACIJE OBSTOJEČIH STOPNIŠČ)

N1-2



- izvedbeni razred EXC 2
- Konstrukcijsko jeklo S235J2
- Konstrukcijsko jeklo S235JR - šablone
- vijaki 10.9 po SIST EN 14399
  - vse vijačne zveze izvesti z dvema podložkama 10.9
  - 50% prednapeto
- vijaki 8.8 po SIST EN 15048-1
  - vse vijačne zveze izvesti z dvema podložkama 8.8
  - čvrsto privliti

- Ozemljitev temeljev se izvede skladno s projektom ozemljitve

OPOMBE:
- mere kontrolirati in po potrebi prilagoditi pri montaži na terenu
- pri izdelavi jeklene konstr. upoštevati tudi ostalo projektno dok. (arhitekturni načrti, načrti temeljenja, gradbeni načrti)
- izdelava in montaža nosilne jeklene konstrukcije mora biti v skladu z SIST EN 1090-2 : 2008
- Vsi sočelni zvari K, ▽, V.... morajo biti izvedeni s prevaritvijo korena
- Varilne deformacije predvidi izvajalec
- vsi neoznačeni zvari so a=0,7 x tmin (tmin = tanjša pločevina v spoju)
- vsi neoznačeni zvari pri obojestranskem varjenju so a=0,5 x tmin (tmin = tanjša pločevina v spoju)
- vse zvare pobrusiti

OPOMBE:

-PRED IZVEDBO VSE MERE PREVERITI IN IZDELATI DELAVNIŠKO DOKUMENTACIJO

-ZA POZICIJO LUKENJ ZA ELEKTRIČNE INŠTALACIJE GLEJ NAČRT ELEKTRIČNIH INŠTALACIJ

2/2

DATUM	OPIS SPREMEMBE	PODPIS

VODILNI PROJEKTANT

TIRING

PODJETJE ZA ŽELEZNIŠKI INŽENIRING, D.O.O.
MOTNICA 11
1236 TRZIN
TEL/FAX 01/562 35 55

PROJEKTANT NAČRTA

hiša
NAČRTOVANJE IN SVETOVANJE, D.O.O.
Ukmarjeva ulica 4, Ljubljana

NAROČNIK

RS Ministrstvo za infrastrukturo
Direkcija RS za infrastrukturo
Tržaška cesta 19, 1000 Ljubljana

FAZA: IZVEDBENI NAČRT

PROJEKT ŠT.: 8513

NAČRT ŠT.: 105/21

OBJEKT

Ureditev železniške postaje Litija

ODG. VODJA PROJEKTA: L. ŠOŠO, mag.inž.prom., dipl.inž.grad. G-4643

ODG. PROJEKTANT: dr. Leon HLADNIK, u.dig. G-0296

OBDELAL: Rok SEVŠEK, inž.gradb.

NAČRT: 2/2 Jeklena konstrukcija nadstreška

DATUM: marec 2021

RISBA: NOV PERONSKI NADSTREŠEK 1 PREČNI PREREZ

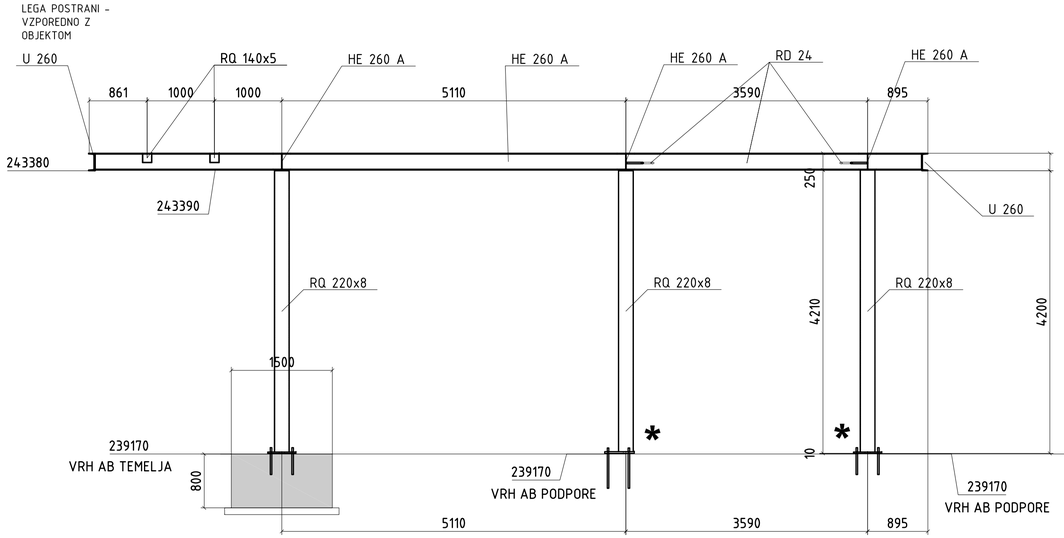
MERILO: 1:50

RISBA ŠT.: 4

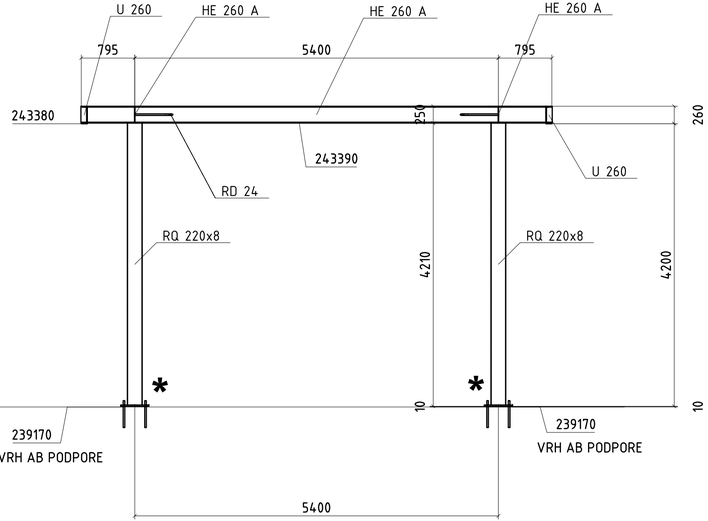
ZG1000	0205.00	007.1276	G.432	

NADSTREŠEK 1 - PREČNI PREREZ

N1-3



N1-4



* TEMELJI NI PREDMET TEGA NAČRTA (OBDELANI V SKLOPU SANACIJE OBSTOJEČIH STOPNIŠČ)

- izvedbeni razred EXC 2
- Konstrukcijsko jeklo S235J2
- Konstrukcijsko jeklo S235JR - šablone
- vijaki 10.9 po SIST EN 14399
  - vse vijačne zveze izvesti z dvema podložkama 10.9
  - 50% prednapeto
- vijaki 8.8 po SIST EN 15048-1
  - vse vijačne zveze izvesti z dvema podložkama 8.8
  - čvrsto priviti

- Ozemljitev temeljev se izvede skladno s projektom ozemljitve

OPOMBE:
- mere kontrolirati in po potrebi prilagoditi pri montaži na terenu
- pri izdelavi jeklene konstr. upoštevati tudi ostalo projektno dok. (arhitekturni načrti, načrti temeljenja, gradbeni načrti)
- izdelava in montaža nosilne jeklene konstrukcije mora biti v skladu z SIST EN 1090-2 : 2008
- Vsi sočelni zvari K, ▽, V.... morajo biti izvedeni s prevaritvijo korena
- Varilne deformacije predvidi izvajalec
- vsi neoznačeni zvari so a=0,7 x tmin (tmin = tanjša pločevina v spoju)
- vsi neoznačeni zvari pri obojestranskem varjenju so a=0,5 x tmin (tmin = tanjša pločevina v spoju)
- vse zvare pobrusiti

OPOMBE:

-PRED IZVEDBO VSE MERE PREVERITI IN IZDELATI DELAVNIŠKO DOKUMENTACIJO

-ZA POZICIJO LUKENJ ZA ELEKTRIČNE INŠTALACIJE GLEJ NAČRT ELEKTRIČNIH INŠTALACIJ

2/2

DATUM	OPIS SPREMEMBE	PODPIS

VODILNI PROJEKTANT
TIRING
PODJETJE ZA ŽELEZNIŠKI INŽENIRING, D.O.O.
MOTNICA 11
1236 TRZIN
TEL/FAX 01/562 35 55

PROJEKTANT NAČRTA
hiša
NAČRTOVANJE IN SVETOVANJE, D.O.O.
Ukmarjeva ulica 4, Ljubljana

NAROČNIK
RS Ministrstvo za infrastrukturo
Direkcija RS za infrastrukturo
Tržaška cesta 19, 1000 Ljubljana

FAZA
IZVEDBENI NAČRT

OBJEKT
Ureditev železniške postaje Litija

PROJEKT ŠT. 8513 | NAČRT ŠT. 105/21

ODG. VODJA PROJEKTA: L. ŠOŠO, mag.inž.prom., dipl.inž.grad. G-4643

ODG. PROJEKTANT: dr. Leon HLADNIK, u.dig. G-0296

OBDELAL: Rok SEVŠEK, inž.gradb.

NAČRT: 2/2 Jeklena konstrukcija nadstreška

DATUM: marec 2021

RISBA: NOV PERONSKI NADSTREŠEK 1 PREČNI PREREZI

MERILO: 1:50

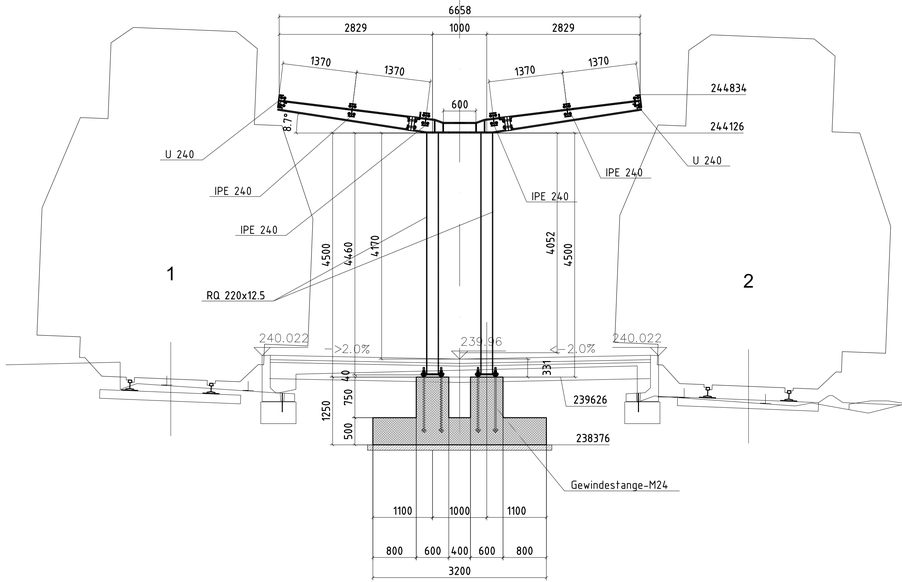
RISBA ŠT.: 5

ZG1000	0205.00	007.1276	G.432	

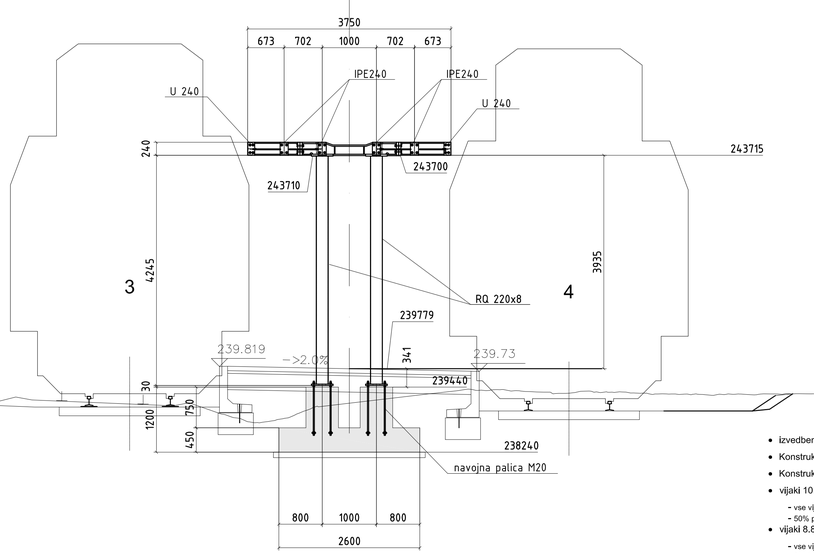
NADSTREŠEK 2 IN NADSTREŠEK 3 - PREČNI PREREZ

p14 (14) km534+654 (civ-534657)

NADSTREŠEK 2



NADSTREŠEK 3



- izvedbeni razred EXC 2
- Konstrukcijsko jeklo S235J2
- Konstrukcijsko jeklo S235JR - šablone
- vijaki 10.9 po SIST EN 14399
  - vse vijačne zveze izvesti z dvema podložkama 10.9
  - 50% prednapeto
- vijaki 8.8 po SIST EN 15048-1
  - vse vijačne zveze izvesti z dvema podložkama 8,8
  - čvrsto priviti

- Ozemljitev temeljev se izvede skladno s projektom ozemljitve

OPOMBE:
- mere kontrolirati in po potrebi prilagoditi pri montaži na terenu
- pri izdelavi jeklene konstr. upoštevati tudi ostalo projektno dok. (arhitekturni načrti, načrti temeljenja, gradbeni načrti)
- izdelava in montaža nosilne jeklene konstrukcije mora biti v skladu z SIST EN 1090-2 : 2008
- Vsi sočelni zvari K,▽,▽,... morajo biti izvedeni s prevaritvijo korena
- Varilne deformacije predvidi izvajalec
- vsi neoznačeni zvari so a=0,7 x tmin (tmin = tanjša pločevina v spoju)
- vsi neoznačeni zvari pri obojestranskem varjenju so a=0,5 x tmin (tmin = tanjša pločevina v spoju)
- vse zvare pobrusiti

OPOMBE:

-PRED IZVEDBO VSE MERE PREVERITI IN IZDELATI DELAVNIŠKO DOKUMENTACIJO

-ZA POZICIJO LUKENJ ZA ELEKTRIČNE INŠTALACIJE GLEJ NAČRT ELEKTRIČNIH INŠTALACIJ

2/2

DATUM	OPIS SPREMEMBE	PODPIS

VODILNI PROJEKTANT
TIRING

PODJETJE ZA ŽELEZNIŠKI INŽENIRING, D.O.O.
MOTNICA 11
1236 TRZIN
TELEFAX 01/562 35 55

PROJEKTANT NAČRTA
hiša
NAČRTOVALNE REŠEVTOVANJE, D.O.O.
Ukmarjeva ulica 4, Ljubljana

NAROČNIK
RS Ministrstvo za infrastrukturo
Direkcija RS za infrastrukturo
Tržaška cesta 19, 1000 Ljubljana

FAZA
IZVEDBENI NAČRT

PROJEKT ŠT. 8513
NAČRT ŠT. 105/21

OBJEKT
Ureditev železniške postaje Litija

ODG. VODJA PROJEKTA L. ŠOŠO, mag.inž.prom., dipl.inž.grad. G-4643
ODG. PROJEKTANT dr. Leon HLADNIK, u.dig. G-0296
OBDELAL Rok SEVŠEK, inž.gradb.

NAČRT 2/2 Jeklena konstrukcija nadstreška

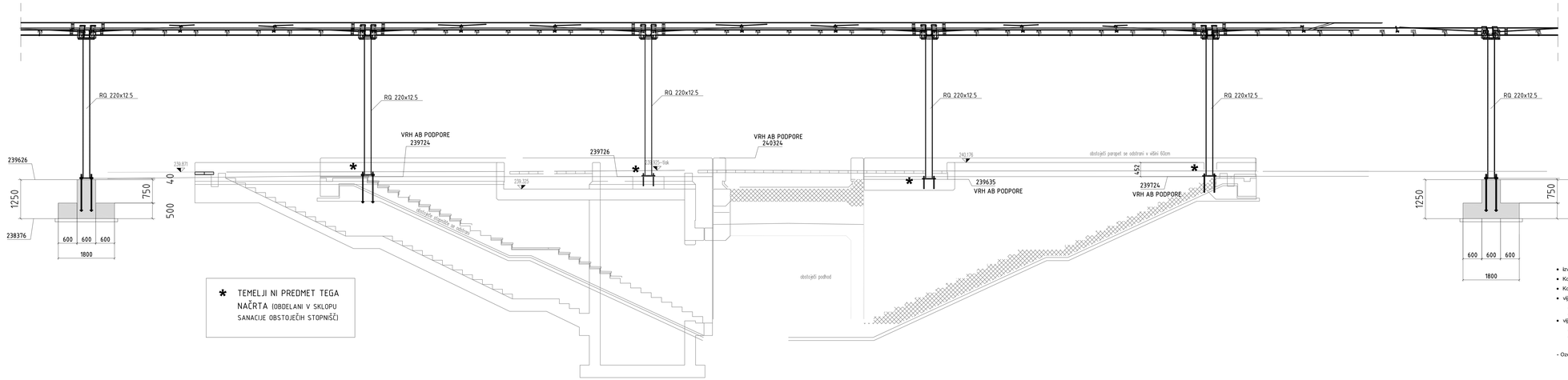
DATUM marec 2021

RISBA NOV PERONSKI NADSTREŠEK PREČNI PREREZ

MERILO 1:50
RISBA ŠT. 6

ZG1000	0205.00	007.1276	G.432	

NADSTREŠEK 2 - VZDOLŽNE VIŠINE NA DELU STOPNIŠČ



* TEMELJI NI PREDMET TEGA NAČRTA (OBDELANI V SKLOPU SANACIJE OBSTOJEČIH STOPNIŠČ)

- Izvedbeni razred EXC 2
- Konstrukcijsko jeklo S235J2
- Konstrukcijsko jeklo S235JR - šablone
- vijaki 10.9 po SIST EN 14399
  - vse vijačne zveze izvesti z dvema podločkama 10,9 + 50% prednapeto
- vijaki 8.8 po SIST EN 15048-1
  - vse vijačne zveze izvesti z dvema podločkama 8,8 + čvrsto prileganje

- Ozemljitev temeljev se izvede skladno s projektom ozemljitve

OPOMBE:
- mere kontrolirati in po potrebi prilagoditi pri montaži na terenu
- pri izdelavi jeklene konstr. upoštevati tudi ostalo projektno dok. (arhitekturni načrti, načrti temeljenja, gradbeni načrti)
- izdelava in montaža nosilne jeklene konstrukcije mora biti v skladu z SIST EN 1090-2 : 2008
- Vsi sočelni zvari K,▽,▽ ... morajo biti izvedeni s prevarilnjo korena
- Varilne deformacije preskiti izvajalec
- vsi nezvočeni zvari so a=0,7 x tmin (tmin = tanjša plošovina v spoju)
- vsi nezvočeni zvari pri dosjetnikom varjenju so a=0,5 x tmin (tmin = tanjša plošovina v spoju)
- vse zvare zabrusiti

OPOMBE:
-PRED IZVEDBO VSE MERE PREVERITI IN IZDELATI DELAVNIŠKO DOKUMENTACIJO
-ZA POZICIJO LUKENJ ZA ELEKTRIČNE INŠTALACIJE GLEJ NAČRT ELEKTRIČNIH INŠTALACIJ

2/2

DATUM	OPIS SPREMEMBE	PODPIS

VODILNI PROJEKTANT:
PODJETJE ZA ŽELEZNIŠKO PROMETNO ELEKTRONIKO MOTNIK
1236 TRZIN
TEL/FAX: 01/562 20 50

PROJEKTANT NAČRTA:
hiša NADSTREŠKI, KLJUČAVNICE, D.O.O.
Ulrikar pova ulica 4, L, Ljubljana

NAROČNIK:
RS Ministrstvo za infrastrukturo
Direkcija RS za infrastrukturo
Tržaška cesta 19, 1000 Ljubljana

OBJEKT:
Ureditev železniške postaje Litija

NAČRT:
2/2 Jeklena konstrukcija nadstrešnica

PRILOGA:
NOV PERONSKI NADSTREŠEK 2
VZDOLŽNI PREREZ NA OBMOČJU PODHODA

FAZA:
IZVEDBENI NAČRT

PROJEKT ŠT.: 8513
NAČRT ŠT.: 105/21

ODG. VODJA PROJEKTA: L. ŠOŠO, mag.inž.prom., dipl.inž.grad. G-4643
ŠT. ZI:

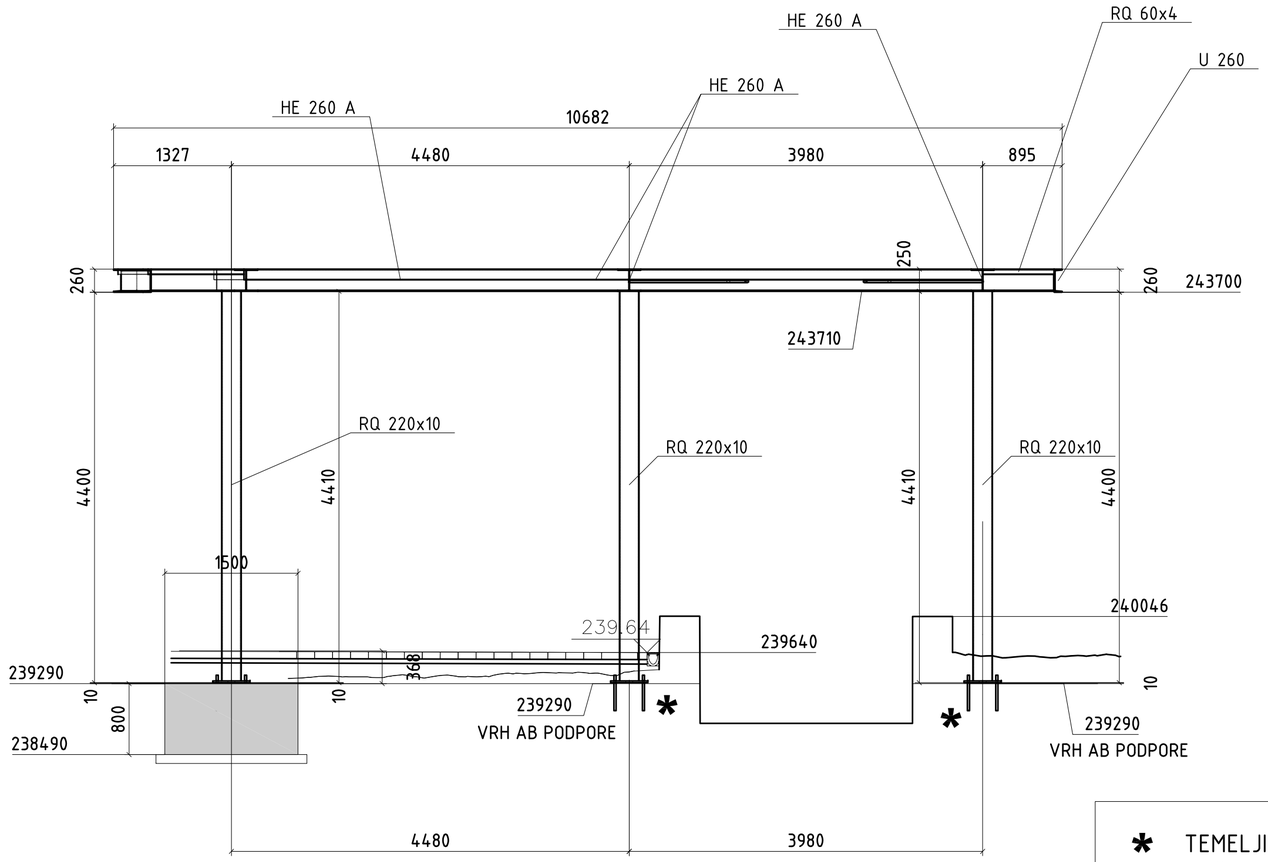
ODG. PROJEKTANT: dr. Leon HLADNIK, u.dlg. G-0296
ŠT. ZI:

OVERIL/A: Rok SEVŠEK, inž.gradb.
DATUM: marec 2021

MERILO: 1:50
PRILOGA ŠT.: 7

ZG1000	0205.00	007.1276	G.441	

NADSTREŠEK 4 - PREČNI PREREZ N4-1



* TEMELJI NI PREDMET TEGA NAČRTA (OBDELANI V SKLOPU SANACIJE OBSTOJEČIH STOPNIŠČ)

2/2

DATUM	OPIS SPREMEMBE	PODPIS

VODILNI PROJEKTANT

PODJETJE ZA ŽELEZNIŠKI INŽENIRING, D.O.O.
MOTNICA 11
1236 TRZIN
TEL/FAX 01/562 35 55

PROJEKTANT NAČRTA

h i š a
NAČRTOVANJE IN SVETOVANJE, D.O.O.
Ukmarjeva ulica 4, Ljubljana

NAROČNIK

RS Ministrstvo za infrastrukturo
Direkcija RS za infrastrukturo
Tržaška cesta 19, 1000 Ljubljana

FAZA

IZVEDBENI NAČRT

PROJEKT ŠT.: 8513
NAČRT ŠT.: 105/21

OBJEKT

Ureditev železniške postaje Litija

ODG. VODJA PROJEKTA: L. ŠOŠO, mag.inž.prom., dipl.inž.grad. — ID. ŠT.: G-4643

ODG. PROJEKTANT: dr. Leon HLADNIK, u.dig. — ID. ŠT.: G-0296

OBDELAL: Rok SEVŠEK, inž.gradb.

NAČRT: 2/2 Jeklena konstrukcija nadstreška

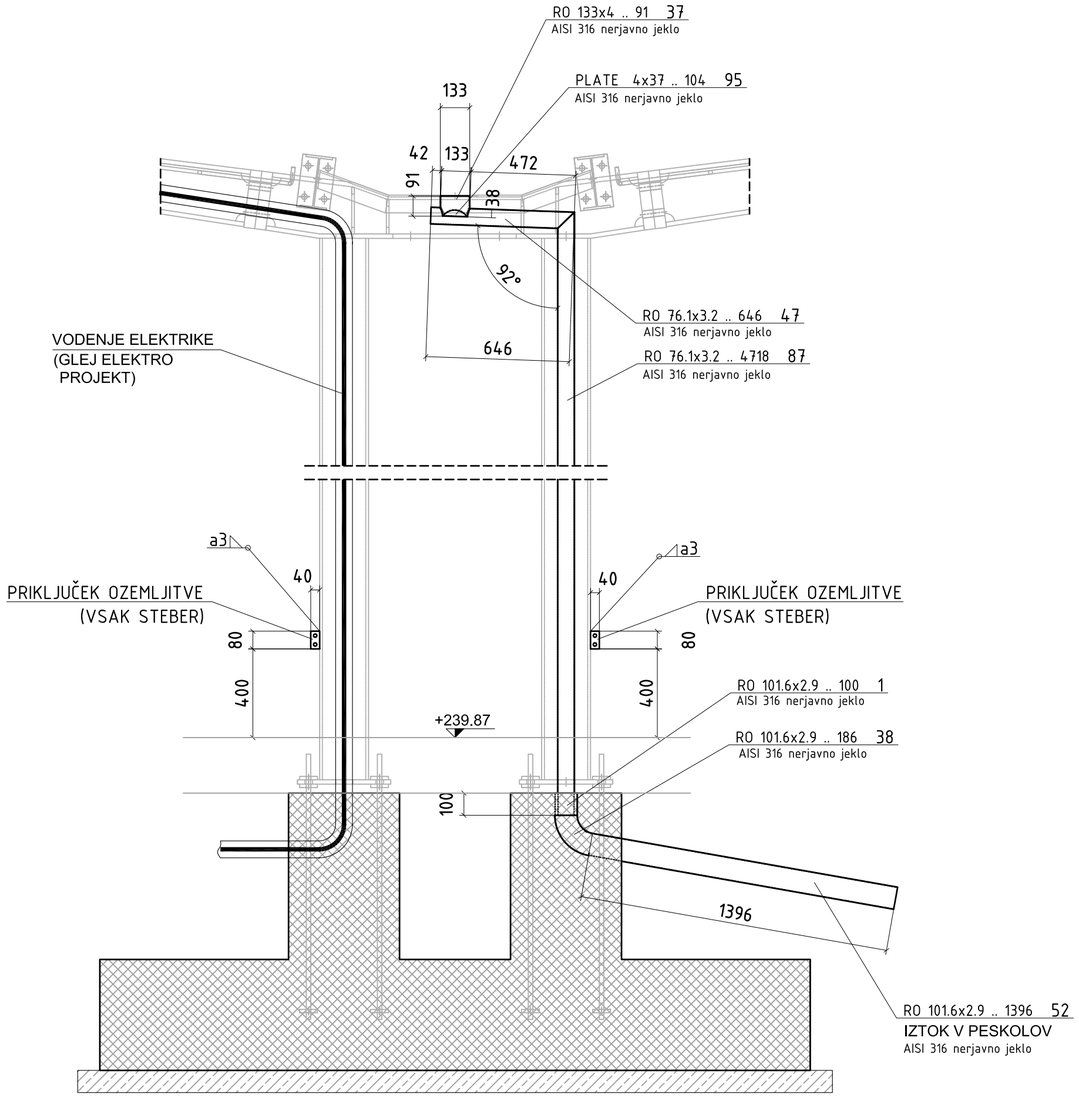
DATUM: marec 2021

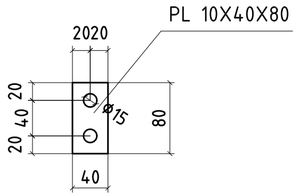
RISBA: NOV PERONSKI NADSTREŠEK 4
PREČNI PREREZ

MERILO: 1:50

RISBA ŠT.: 8

ZG1000	0205.00	007.1276	G.432	





OPOMBE:

- mere kontrolirati in po potrebi prilagoditi pri montaži na terenu
- pri izdelavi jeklene konstr. upoštevati tudi ostalo projektno dok. (arhitekturni načrti, načrti temeljenja, gradbeni načrti)
- izdelava in montaža nosilne jeklene konstrukcije mora biti v skladu z SIST EN 1090-2 : 2008
- Vsi sočelni zvari K, ▽, ▽.... morajo biti izvedeni s prevaritvijo korena
- Varilne deformacije predvidi izvajalec
- vsi neoznačeni zvari so a=0,7 x tmin (tmin = tanjša pločevina v spoju)
- vsi neoznačeni zvari pri obojestranskem varjenju so a=0,5 x tmin (tmin = tanjša pločevina v spoju)
- vse zvare pobrusiti

OPOMBE:

-PRED IZVEDBO VSE MERE PREVERITI IN IZDELATI DELAVNIŠKO DOKUMENTACIJO

-ZA POZICIJO LUKENJ ZA ELEKTRIČNE INŠTALACIJE GLEJ NAČRT ELEKTRIČNIH INŠTALACIJ

2/2

DATUM	OPIS SPREMEMBE	PODPIS
		PODPIS

VODILNI PROJEKTANT

TIRING

PODJETJE ZA ŽELEZNIŠKI INŽENIRING, D.O.O.
MOTNICA 11
1236 TRZIN
TEL/FAX 01/562 35 55

PROJEKTANT NAČRTA

h i š a
NAČRTOVANJE IN SVETOVANJE, D.O.O.
Ukmarjeva ulica 4, Ljubljana

NAROČNIK

RS Ministrstvo za infrastrukturo
Direkcija RS za infrastrukturo
Tržaška cesta 19, 1000 Ljubljana

FAZA

IZVEDBENI NAČRT

OBJEKT

Ureditev železniške postaje Litija

PROJEKT ŠT. 8513

NAČRT ŠT. 105/21

ODG. VODJA PROJEKTA L. ŠOŠO, mag.inž.prom., dipl.inž.grad. ID. ŠT. G-4643

ODG. PROJEKTANT dr. Leon HLADNIK, u.dig. ID. ŠT. G-0296

OBDELAL Rok SEVŠEK, inž.gradb.

NAČRT 2/2 Jeklena konstrukcija nadstreška

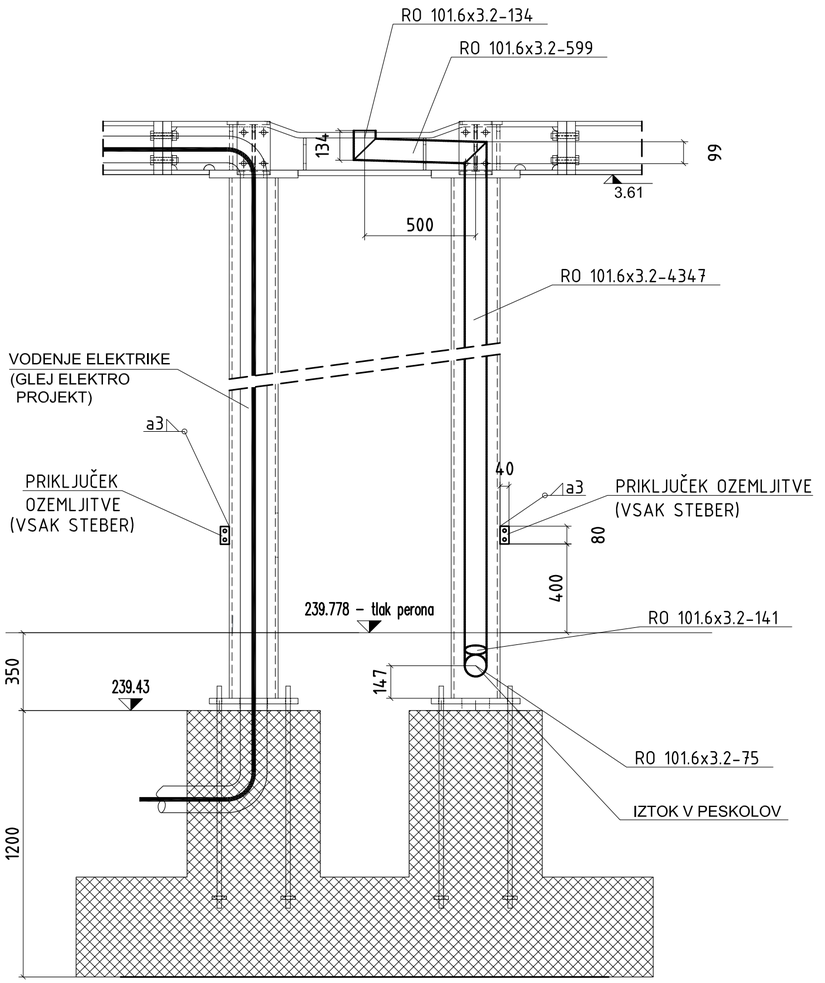
DATUM marec 2021

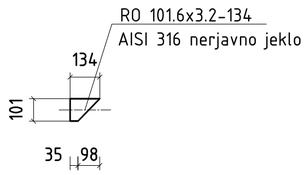
RISBA PERONSKI NADSTREŠEK 2
DETAJLI (odvodnja, el., ozemljitev)

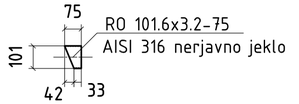
MERILO 1:20

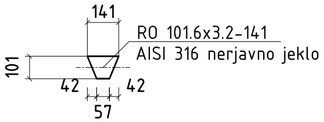
RISBA ŠT. 9

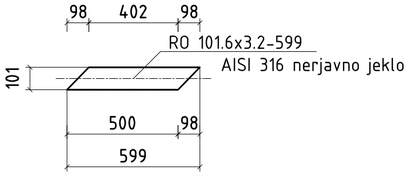
ZG1000	0205.00	007.1276	G.451	

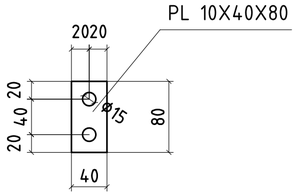


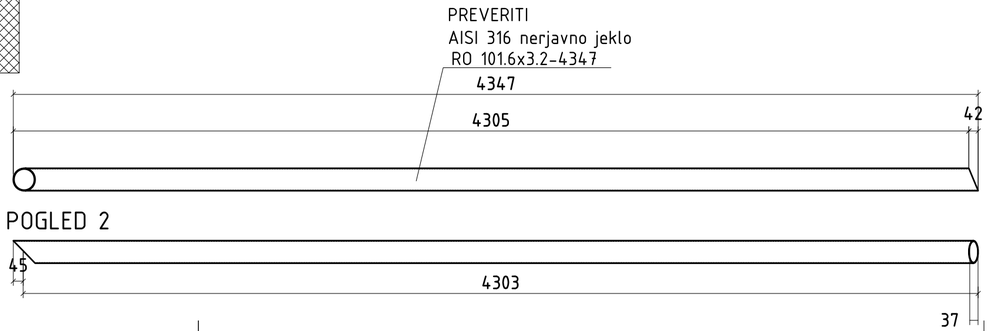












OPOMBE:

- mere kontrolirati in po potrebi prilagoditi pri montaži na terenu
- pri izdelavi jeklene konstr. upoštevati tudi ostalo projektno dok. (arhitekturni načrti, načrti temeljenja, gradbeni načrti)
- izdelava in montaža nosilne jeklene konstrukcije mora biti v skladu z SIST EN 1090-2 : 2008
- Vsi sočelni zvari K, ▽, ▽.... morajo biti izvedeni s prevaritvijo korena
- Varilne deformacije predvidi izvajalec
- vsi neoznačeni zvari so a=0,7 x tmin (tmin = tanjša pločevina v spoju)
- vsi neoznačeni zvari pri obojestranskem varjenju so a=0,5 x tmin (tmin = tanjša pločevina v spoju)
- vse zvare pobrusiti

OPOMBE:

-PRED IZVEDBO VSE MERE PREVERITI IN IZDELATI DELAVNIŠKO DOKUMENTACIJO

-ZA POZICIJO LUKENJ ZA ELEKTRIČNE INŠTALACIJE GLEJ NAČRT ELEKTRIČNIH INŠTALACIJ

2/2

DATUM	OPIS SPREMEMBE	PODPIS
		PODPIS

VODILNI PROJEKTANT

TIRING

PODJETJE ZA ŽELEZNIŠKI INŽENIRING, D.O.O.
MOTNICA 11
1236 TRZIN
TEL/FAX 01/562 35 55

PROJEKTANT NAČRTA

h i š a
NAČRTOVANJE IN SVETOVANJE, D.O.O.
Ukmarjeva ulica 4, Ljubljana

NAROČNIK

RS Ministrstvo za infrastrukturo
Direkcija RS za infrastrukturo
Tržaška cesta 19, 1000 Ljubljana

FAZA

IZVEDBENI NAČRT

OBJEKT

Ureditev železniške postaje Litija

PROJEKT ŠT. 8513

NAČRT ŠT. 105/21

ODG. VODJA PROJEKTA: L. ŠOŠO, mag.inž.prom., dipl.inž.grad. — ID. ŠT. G-4643

ODG. PROJEKTANT: dr. Leon HLADNIK, u.dig. — ID. ŠT. G-0296

OBDELAL: Rok SEVŠEK, inž.gradb.

NAČRT: 2/2 Jeklena konstrukcija nadstreška

DATUM: marec 2021

RISBA: PERONSKI NADSTREŠEK 3
DETAJLI (odvodnja, el., ozemljitev)

MERILO: 1:20

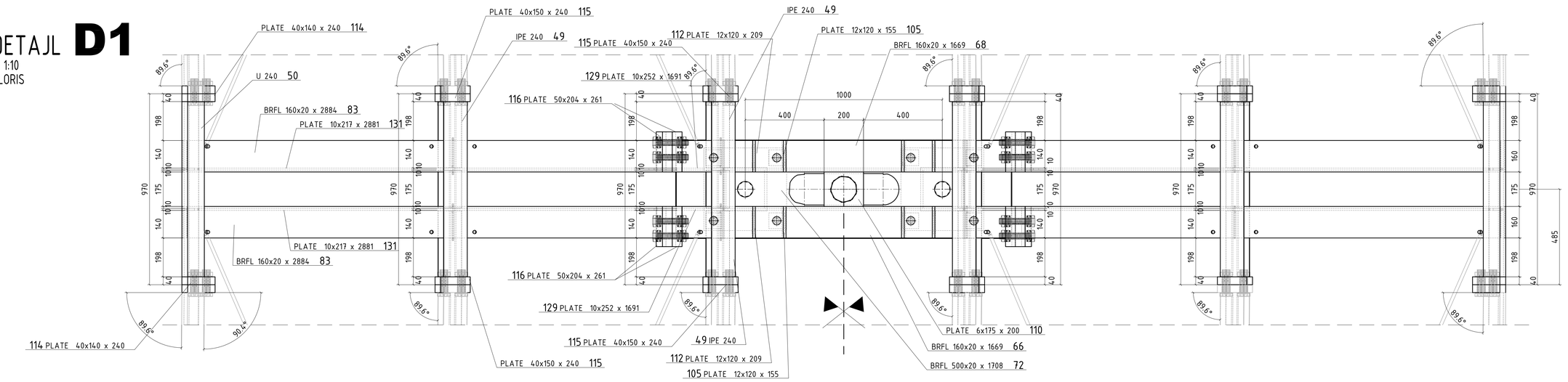
RISBA ŠT.: 10

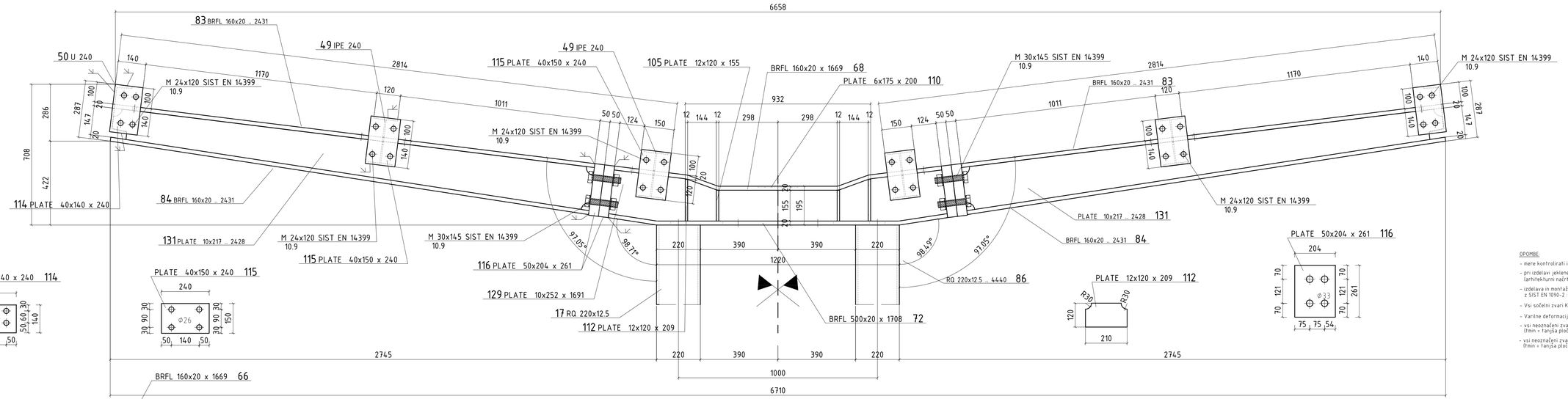
ZG1000	0205.00	007.1276	G.451	

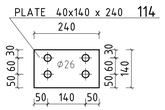
DETAJL **D1**

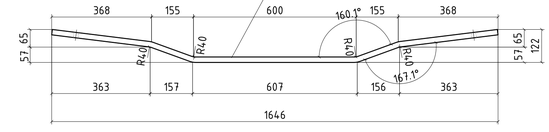
M 1:10

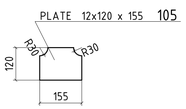
TLORIS

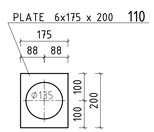


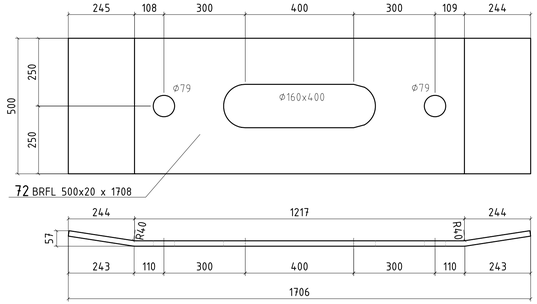


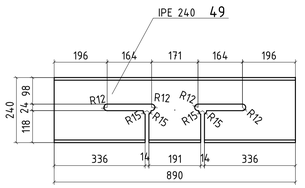


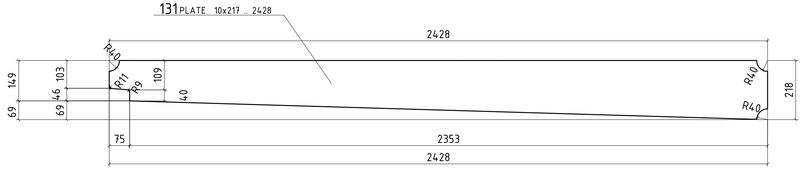


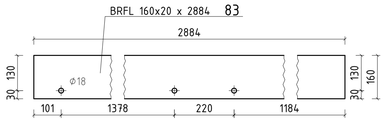


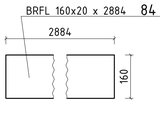


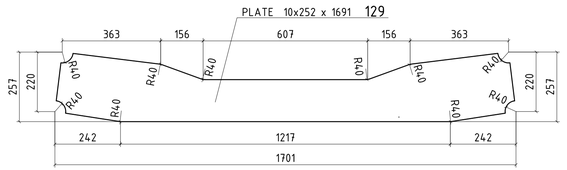












OPOMBE:

- mere kontrolirati in po potrebi prilagoditi pri montaži na terenu
- pri izdelavi jeklene konstr. upoštevati tudi ostalo projektno dok. (arhitekturni načrti, načrti temeljenja, gradbeni načrti)
- izdelava in montaža nosilne jeklene konstrukcije mora biti v skladu z SIST EN 1090-2 : 2008
- Vsi sočelni zvari K, ▽, ▽₂ ... morajo biti izvedeni s prevarilvijo korena
- Varilne deformacije predvidi izvajalec
- vsi neoznačeni zvari so a=0,7 x tmin (tmin = tanjša pločevina v spoju)
- vsi neoznačeni zvari pri obojestranskem varjenju so a=0,6 x tmin (tmin = tanjša pločevina v spoju)

2/2

DATUM	OPIS SPREMEMBE	PODPIS

VODILNI PROJEKTANT

TIRING

PODJETJE ZA ŽELEZNIŠKO INŽENIRING, D.O.O.
MOTNICA 11
1236 TRZIN
TELIFAX 01/562 35 55

PROJEKTANT NAČRTA

hiša
NAČRTOVANJE IN SVETOVANJE, D.O.O.
Ukmarjeva ulica 4, Ljubljana

NAROČNIK

RS Ministrstvo za infrastrukturo
Direkcija RS za infrastrukturo
Tržaška cesta 19, 1000 Ljubljana

FAZA: IZVEDBENI NAČRT

PROJEKT ŠT.: 8513 — NAČRT ŠT.: 105/21

OBJEKT

Ureditev železniške postaje Litija

ODG. VODJA PROJEKTA: L. ŠOŠO, mag.inž.prom., dipl.inž.grad. G-4643

ODG. PROJEKTANT: dr. Leon HLADNIK, u.dig. G-0296

OBDELAL: Rok SEVŠEK, inž.gradb.

DATUM: marec 2021

NAČRT: 2/2 Jeklena konstrukcija nadstreška

RISBA: PERONSKI NADSTREŠEK 2 DETAJL D1

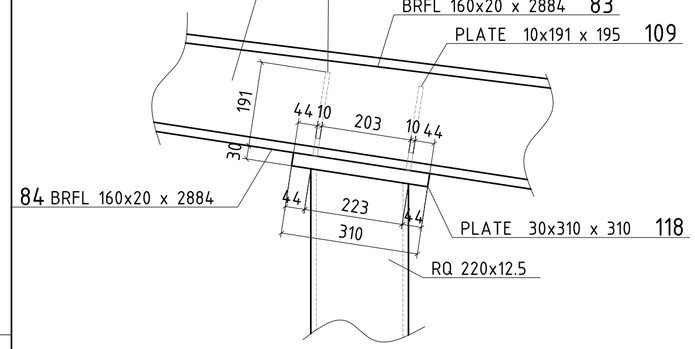
MERILO: 1:10 — RISBA ŠT.: PN2_D1

ZG1000	0205.00	007.1276	G.451	

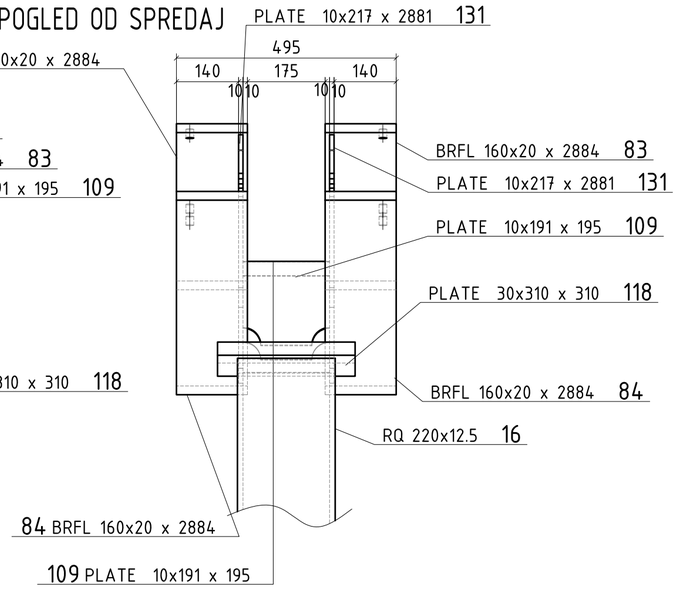
DETAJL **D2**

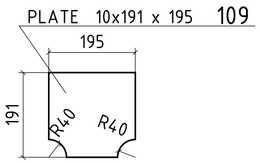
M 1:10

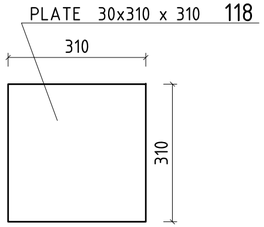
POGLED S STRANI



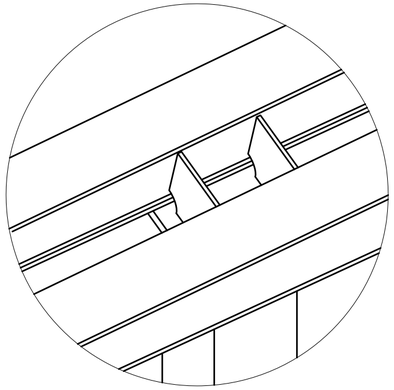
POGLED OD SPREDAJ







3D



OPOMBE:

- mere kontrolirati in po potrebi prilagoditi pri montaži na terenu
- pri izdelavi jeklene konstr. upoštevati tudi ostalo projektno dok. (arhitekturni načrti, načrti temeljenja, gradbeni načrti)
- izdelava in montaža nosilne jeklene konstrukcije mora biti v skladu z SIST EN 1090-2 : 2008
- Vsi sočelni zvari K, ▽, V....morajo biti izvedeni s prevaritvijo korena
- Varilne deformacije predvidi izvajalec
- vsi neoznačeni zvari so a=0,7 x tmin (tmin = tanjša pločevina v spoju)
- vsi neoznačeni zvari pri obojestranskem varjenju so a=0,6 x tmin (tmin = tanjša pločevina v spoju)

2/2

DATUM	OPIS SPREMEMBE	PODPIS

VODILNI PROJEKTANT

TIRING

PODJETJE ZA ŽELEZNIŠKI INŽENIRING, D.O.O.
MOTNICA 11
1236 TRZIN
TEL/FAX 01/562 35 55

PROJEKTANT NAČRTA

h i š a
NAČRTOVANJE IN SVETOVANJE, D.O.O.
Ukmarjeva ulica 4, Ljubljana

NAROČNIK

RS Ministrstvo za infrastrukturo
Direkcija RS za infrastrukturo
Tržaška cesta 19, 1000 Ljubljana

FAZA

IZVEDBENI NAČRT

OBJEKT

Ureditev železniške postaje Litija

PROJEKT ŠT.	NAČRT ŠT.
8513	105/21

ODG. VODJA PROJEKTA	ID. ŠT.
L. ŠOŠO, mag.inž.prom., dipl.inž.grad.	G-4643

ODG. PROJEKTANT	ID. ŠT.
dr. Leon HLADNIK, u.dig.	G-0296

OBDELAL: Rok SEVŠEK, inž.gradb.

NAČRT: 2/2 Jeklena konstrukcija nadstreška

DATUM: marec 2021

RISBA: PERONSKI NADSTREŠEK 2
DETAJL D2

MERILO: 1:10

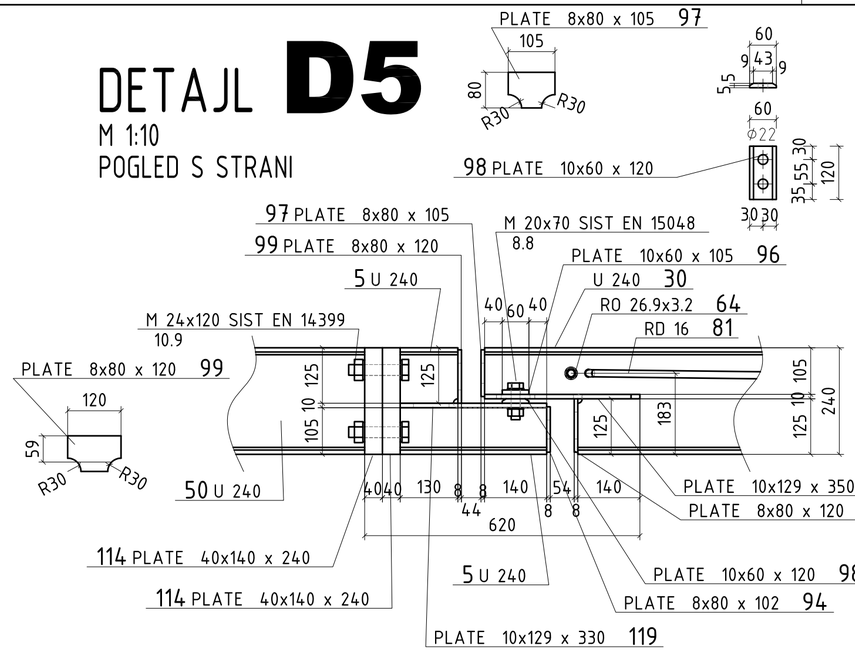
RISBA ŠT.: PN2_D2

ZG1000	0205.00	007.1276	G.451	

DETAJL D5

M 1:10

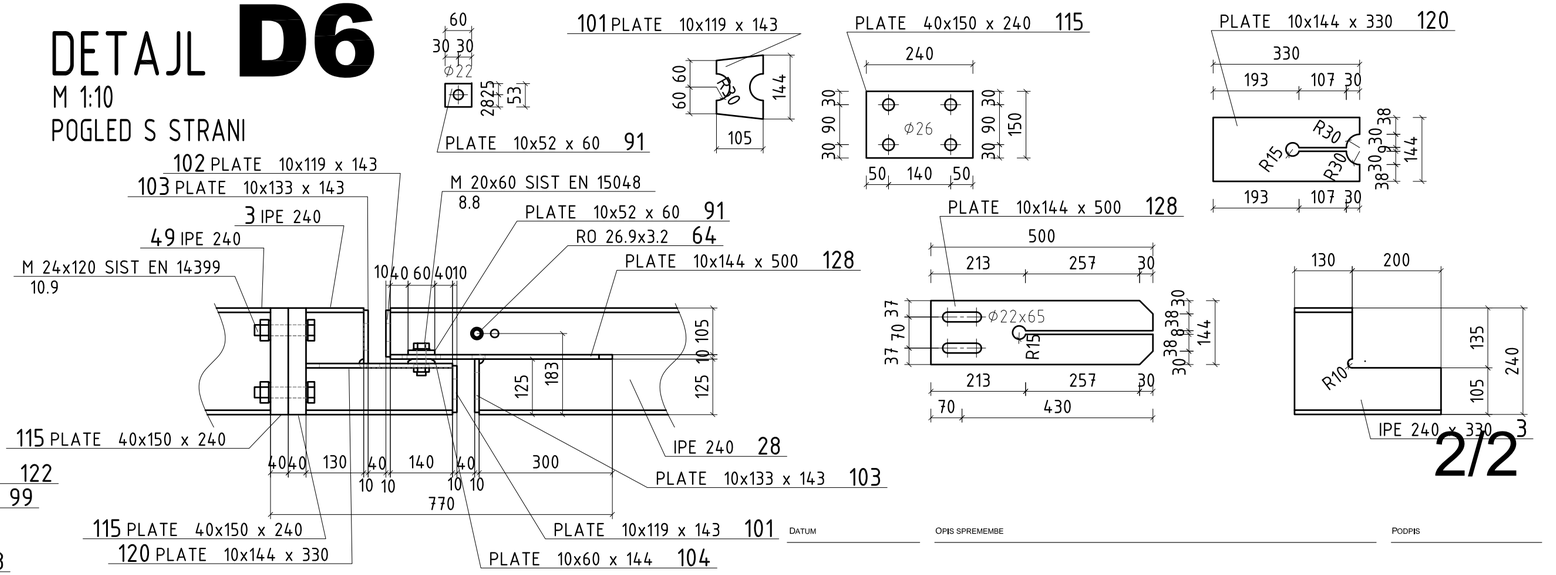
POGLED S STRANI



DETAJL D6

M 1:10

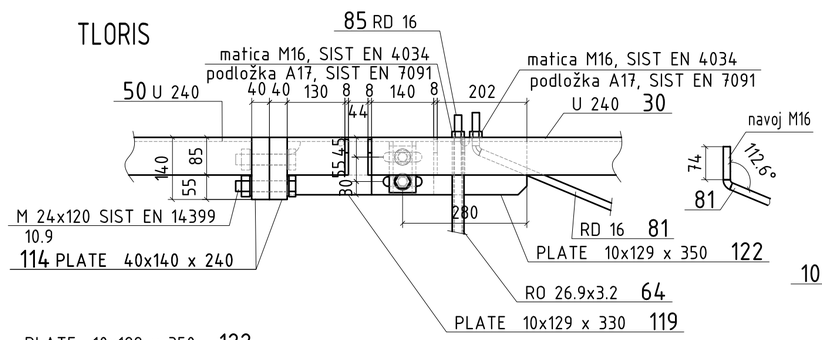
POGLED S STRANI



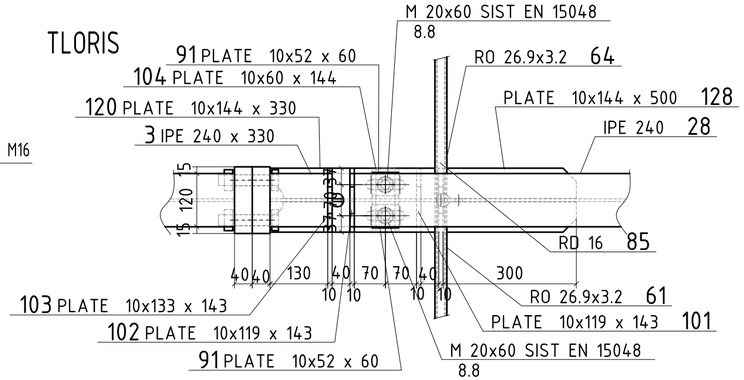
2/2

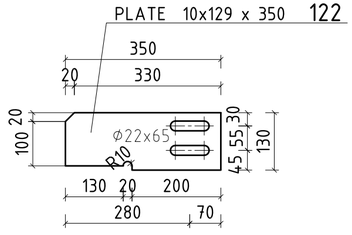
DATUM	OPIS SPREMEMBE	PODPIS

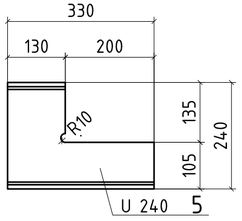
TLORIS

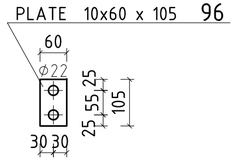


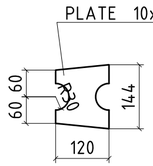
TLORIS

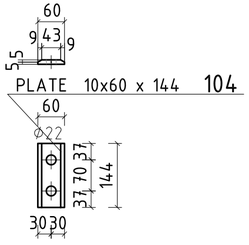










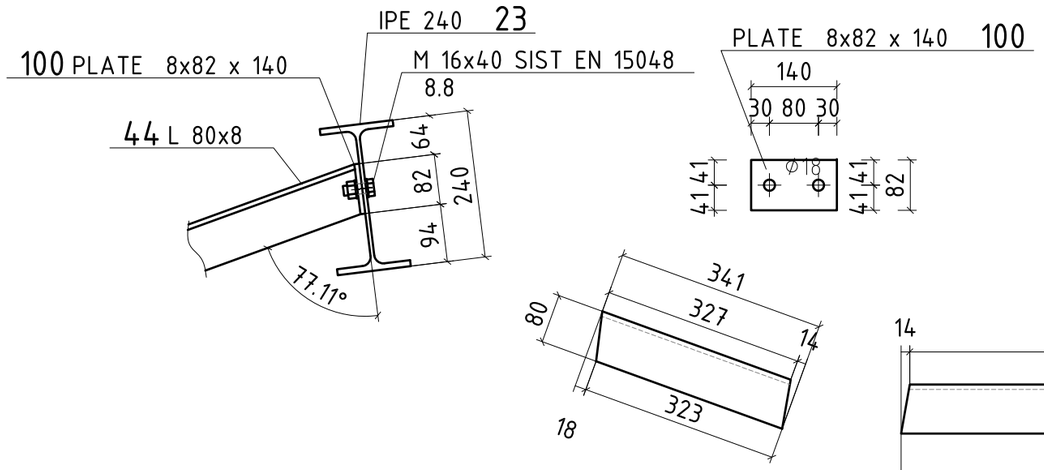


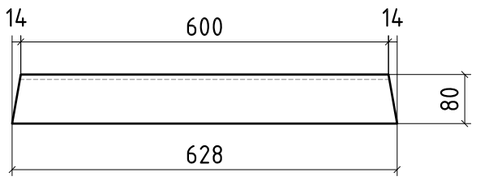
VODILNI PROJEKTANT	PODJETJE ZA ŽELEZNIŠKI INŽENIRING, D.O.O. MOTNICA 11 1236 TRZIN TEL/FAX 01/562 35 55	PROJEKTANT NAČRTA
TIRING		h i š a NAČRTOVANJE IN SVETOVANJE, D.O.O. Ukmarjeva ulica 4, Ljubljana

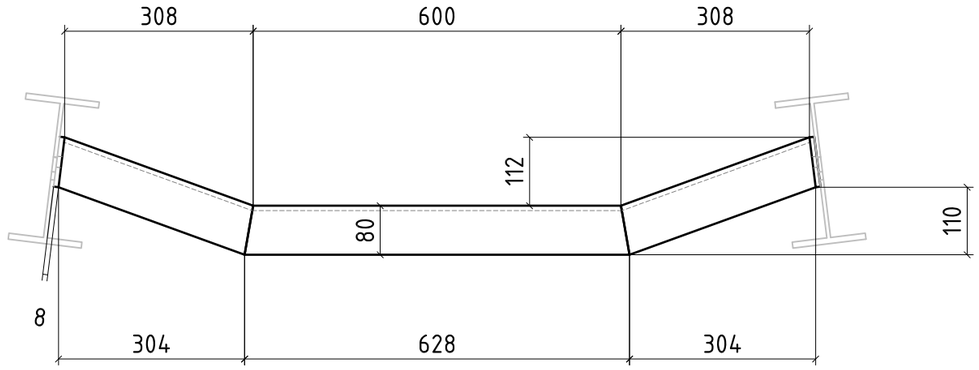
NAROČNIK	FAZA
RS Ministrstvo za infrastrukturo Direkcija RS za infrastrukturo Tržaška cesta 19, 1000 Ljubljana	IZVEDBENI NAČRT
PROJEKT ŠT. 8513	NAČRT ŠT. 105/21
OBJEKT	ODG. VODJA PROJEKTA L. ŠOŠO, mag.inž.prom., dipl.inž.grad.
Ureditev železniške postaje Litija	ID. ŠT. G-4643
	ODG. PROJEKTANT dr. Leon HLADNIK, u.dig. ID. ŠT. G-0296
	OBDELAL Rok SEVŠEK, inž.gradb.
NAČRT 2/2 Jeklena konstrukcija nadstreška	DATUM marec 2021
RISBA PERONSKI NADSTREŠEK 2 DETAJL D5, D6	MERILO 1:10 RISBA ŠT. PN2_D3

ZG1000	0205.00	007.1276		

DETAJL **D7**
M 1:10



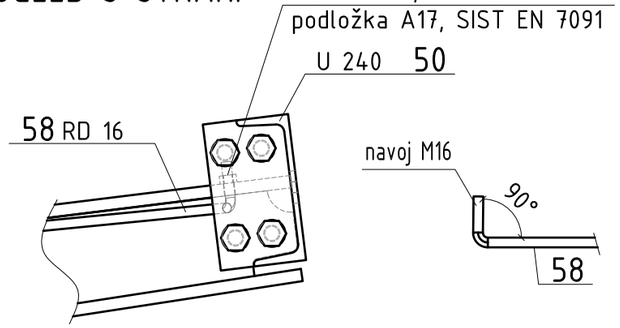




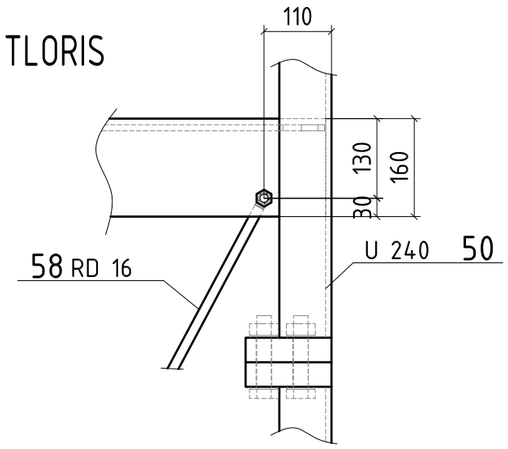
2/2

DETAJL **D8**
M 1:10

POGLED S STRANI



TLORIS



DATUM	OPIS SPREMEMBE	PODPIS

VODILNI PROJEKTANT

TIRING

PODJETJE ZA ŽELEZNIŠKI INŽENIRING, D.O.O.
MOTNICA 11
1236 TRZIN
TEL/FAX 01/562 35 55

PROJEKTANT NAČRTA

hiša
NAČRTOVANJE IN SVETOVANJE, D.O.O.
Ukmarjeva ulica 4, Ljubljana

NAROČNIK

RS Ministrstvo za infrastrukturo
Direkcija RS za infrastrukturo
Tržaška cesta 19, 1000 Ljubljana

FAZA

IZVEDBENI NAČRT

PROJEKT ŠT. 8513

NAČRT ŠT. 105/21

OBJEKT

Ureditev železniške postaje Litija

ODG. VODJA PROJEKTA — ID. ŠT.
L. ŠOŠO, mag.inž.prom., dipl.inž.grad. G-4643

ODG. PROJEKTANT — ID. ŠT.
dr. Leon HLADNIK, u.dig. G-0296

OBDELAL
Rok SEVŠEK, inž.gradb.

NAČRT
2/2 Jeklena konstrukcija nadstreška

DATUM
marec 2021

RISBA
PERONSKI NADSTREŠEK 2
DETAJL D7, D8

MERILO
1:10

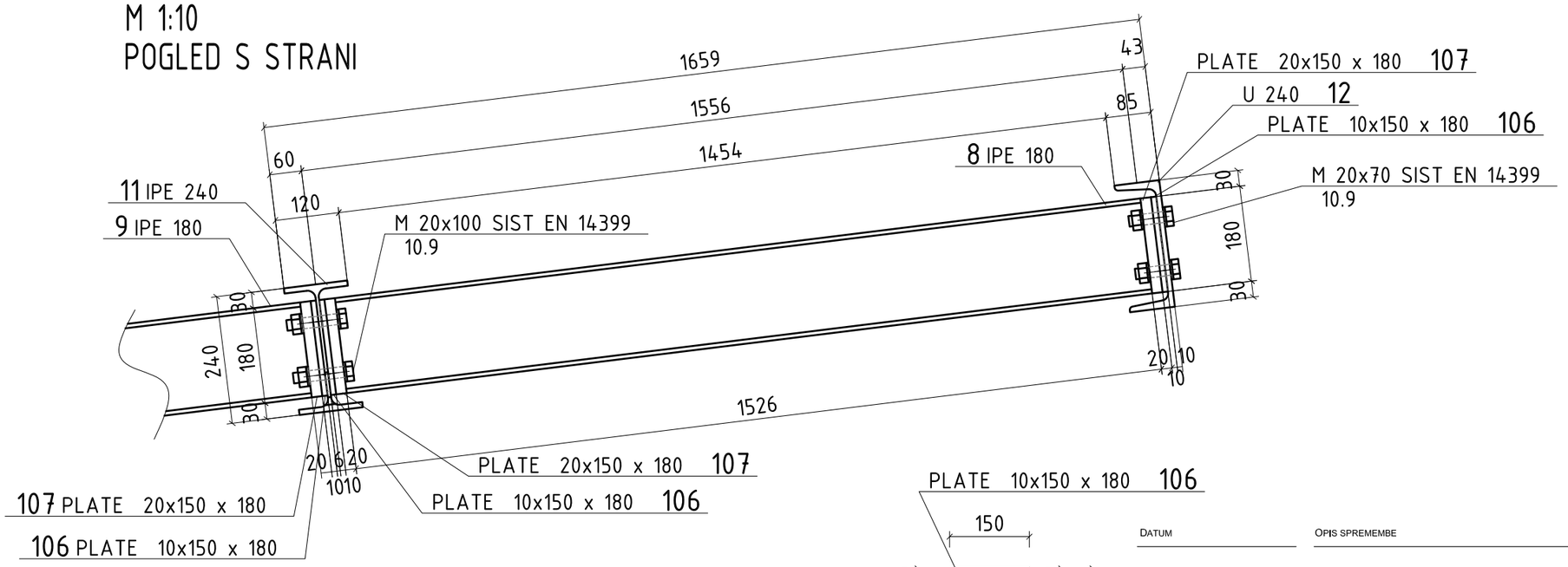
RISBA ŠT.
PN2_D4

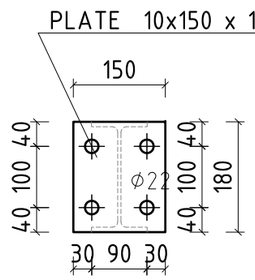
ZG1000	**0205.00**	**007.1276**	**G.451**	

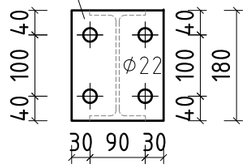
DETAJL **D9**

M 1:10

POGLED S STRANI







2/2

DATUM	OPIS SPREMEMBE	PODPIS

VODILNI PROJEKTANT

PODJETJE ZA ŽELEZNIŠKI INŽENIRING, D.O.O.
MOTNICA 11
1236 TRZIN
TEL/FAX 01/562 35 55

PROJEKTANT NAČRTA

h i š a
NAČRTOVANJE IN SVETOVANJE, D.O.O.
Ukmarjeva ulica 4, Ljubljana

NAROČNIK

RS Ministrstvo za infrastrukturo
Direkcija RS za infrastrukturo
Tržaška cesta 19, 1000 Ljubljana

FAZA

IZVEDBENI NAČRT

PROJEKT ŠT. 8513

NAČRT ŠT. 105/21

OBJEKT

Ureditev železniške postaje Litija

ODG. VODJA PROJEKTA L. ŠOŠO, mag.inž.prom., dipl.inž.grad. ID. ŠT. G-4643

ODG. PROJEKTANT dr. Leon HLADNIK, u.dig. ID. ŠT. G-0296

OBDELAL Rok SEVŠEK, inž.gradb.

NAČRT 2/2 Jeklena konstrukcija nadstreška

DATUM marec 2021

RISBA PERONSKI NADSTREŠEK 2
DETAJL D9

MERILO 1:10

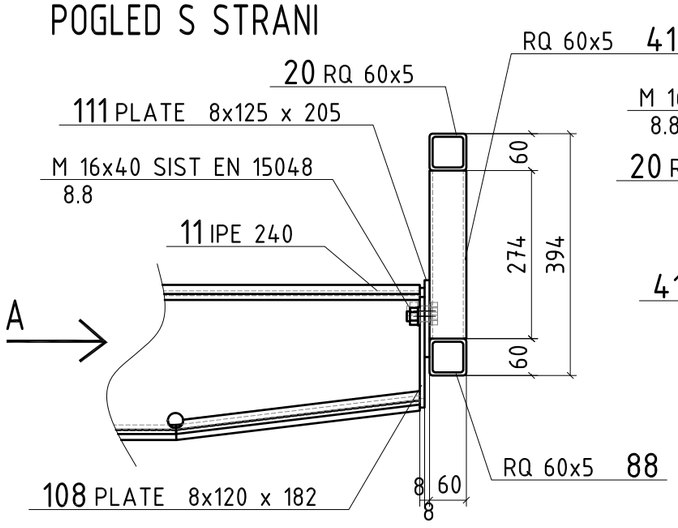
RISBA ŠT. PN2_D5

ZG1000	**0205.00**	**007.1276**	**G.451**	

DETAJL **D10**

M 1:10

POGLED S STRANI



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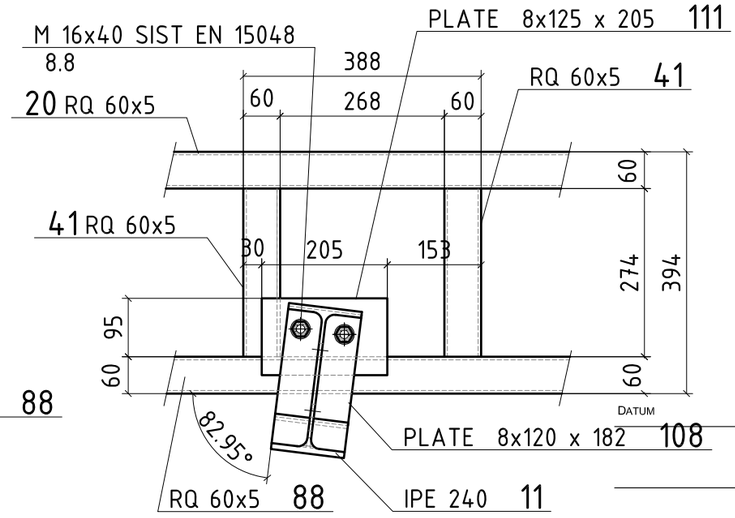


profil odrezati in zavariti

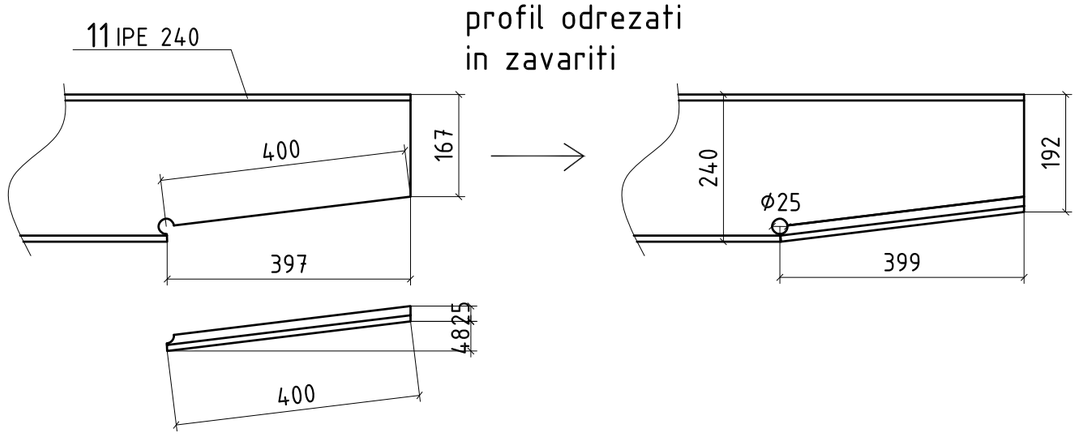


PLATE 8x120 x 182 108

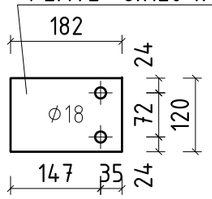
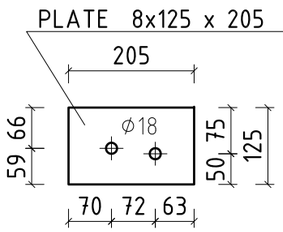


PLATE 8x125 x 205 111



2/2

DATUM	OPIS SPREMEMBE	PODPIS

VODILNI PROJEKTANT

TIRING

PODJETJE ZA ŽELEZNIŠKI INŽENIRING, D.O.O.
MOTNICA 11
1236 TRZIN
TEL/FAX 01/562 35 55

PROJEKTANT NAČRTA

hiša
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Ukmarjeva ulica 4, Ljubljana

NAROČNIK

RS Ministrstvo za infrastrukturo
Direkcija RS za infrastrukturo
Tržaška cesta 19, 1000 Ljubljana

FAZA

IZVEDBENI NAČRT

PROJEKT ŠT. 8513

NAČRT ŠT. 105/21

OBJEKT

Ureditev železniške postaje Litija

ODG. VODJA PROJEKTA — ID. ŠT.
L. ŠOŠO, mag.inž.prom., dipl.inž.grad. G-4643

ODG. PROJEKTANT — ID. ŠT.
dr. Leon HLADNIK, u.dig. G-0296

OBDELAL
Rok SEVŠEK, inž.gradb.

NAČRT
2/2 Jeklena konstrukcija nadstreška

DATUM
marec 2021

RISBA
PERONSKI NADSTREŠEK 2
DETAJL D10

MERILO 1:10

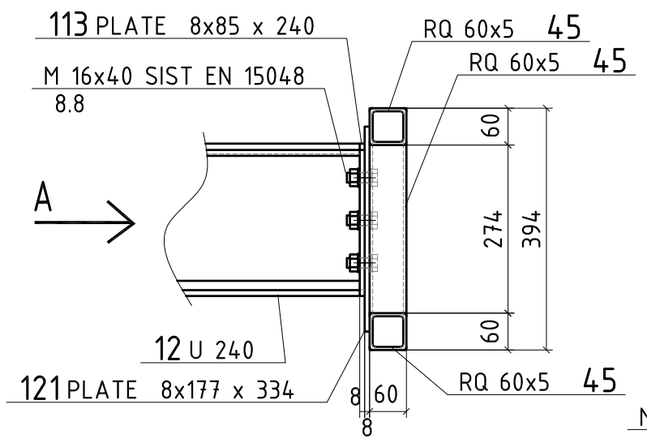
RISBA ŠT. PN2_D6

ZG1000	**0205.00**	**007.1276**	**G.451**	

DETAJL D11

M 1:10

POGLED S STRANI



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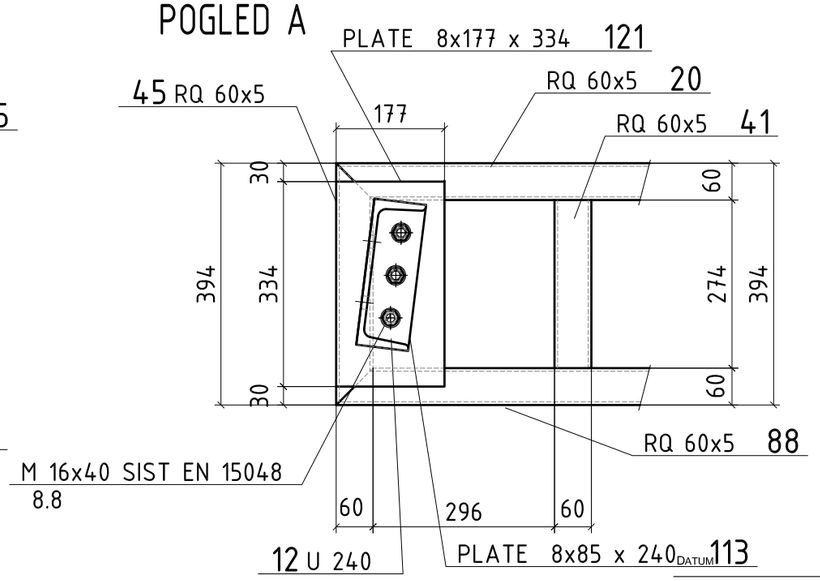

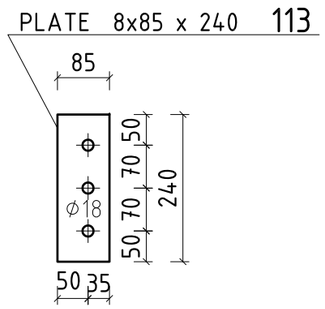

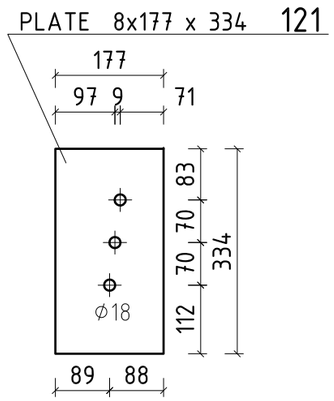

OPIS SPREMEMBE	PODPIS

2/2

VODILNI PROJEKTANT

TIRING

PODJETJE ZA ŽELEZNIŠKI INŽENIRING, D.O.O.
MOTNICA 11
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TEL/FAX 01/562 35 55

PROJEKTANT NAČRTA

hiša
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Ukmarjeva ulica 4, Ljubljana

NAROČNIK

RS Ministrstvo za infrastrukturo
Direkcija RS za infrastrukturo
Tržaška cesta 19, 1000 Ljubljana

FAZA

IZVEDBENI NAČRT

OBJEKT

Ureditev železniške postaje Litija

PROJEKT ŠT.	NAČRT ŠT.
8513	105/21

ODG. VODJA PROJEKTA	ID. ŠT.
L. ŠOŠO, mag.inž.prom., dipl.inž.grad.	G-4643

ODG. PROJEKTANT	ID. ŠT.
dr. Leon HLADNIK, u.dig.	G-0296

OBDELAL

Rok SEVŠEK, inž.gradb.

NAČRT

2/2 Jeklena konstrukcija nadstreška

DATUM

marec 2021

RISBA

PERONSKI NADSTREŠEK 2
DETAJL D11

MERILO

1:10

RISBA ŠT.

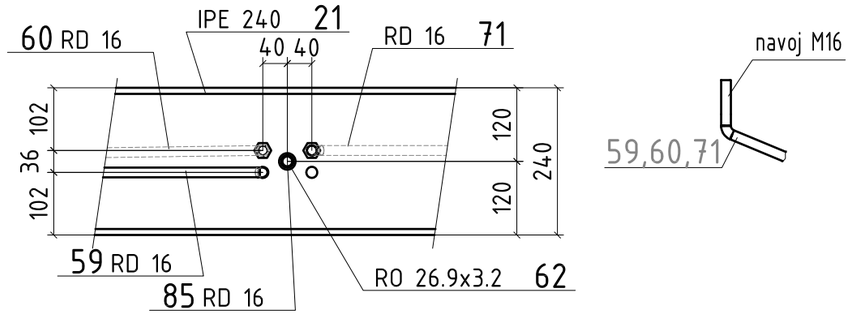
PN2_D7

ZG1000	0205.00	007.1276	G.451	

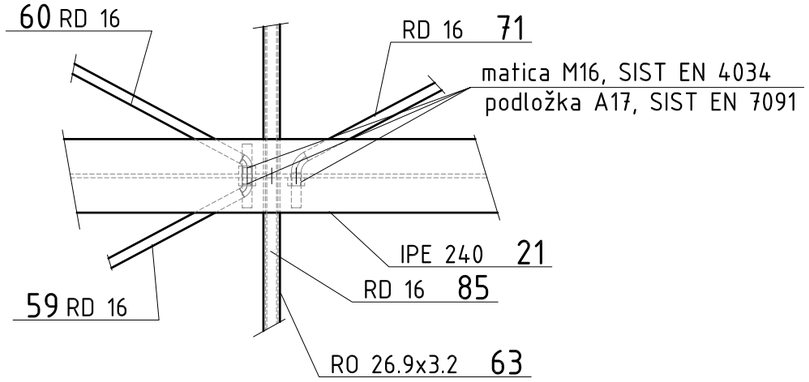
DETAJL **D12**

M 1:10

POGLED S STRANI



TLORIS



2/2

DATUM	OPIS SPREMEMBE	PODPIS

VODILNI PROJEKTANT

PODJETJE ZA ŽELEZNIŠKI INŽENIRING, D.O.O.
MOTNICA 11
1236 TRZIN
TEL/FAX 01/562 35 55

PROJEKTANT NAČRTA

h i š a
NAČRTOVANJE IN SVETOVANJE, D.O.O.
Ukmarjeva ulica 4, Ljubljana

NAROČNIK

RS Ministrstvo za infrastrukturo
Direkcija RS za infrastrukturo
Tržaška cesta 19, 1000 Ljubljana

FAZA

IZVEDBENI NAČRT

PROJEKT ŠT. 8513

NAČRT ŠT. 105/21

OBJEKT

Ureditev železniške postaje Litija

ODG. VODJA PROJEKTA L. ŠOŠO, mag.inž.prom., dipl.inž.grad. ID. ŠT. G-4643

ODG. PROJEKTANT dr. Leon HLADNIK, u.dig. ID. ŠT. G-0296

OBDELAL Rok SEVŠEK, inž.gradb.

NAČRT 2/2 Jeklena konstrukcija nadstreška

DATUM marec 2021

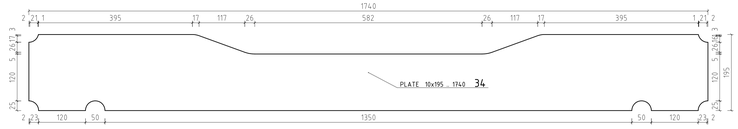
RISBA PERONSKI NADSTREŠEK 2
DETAJL D12

MERILO 1:10

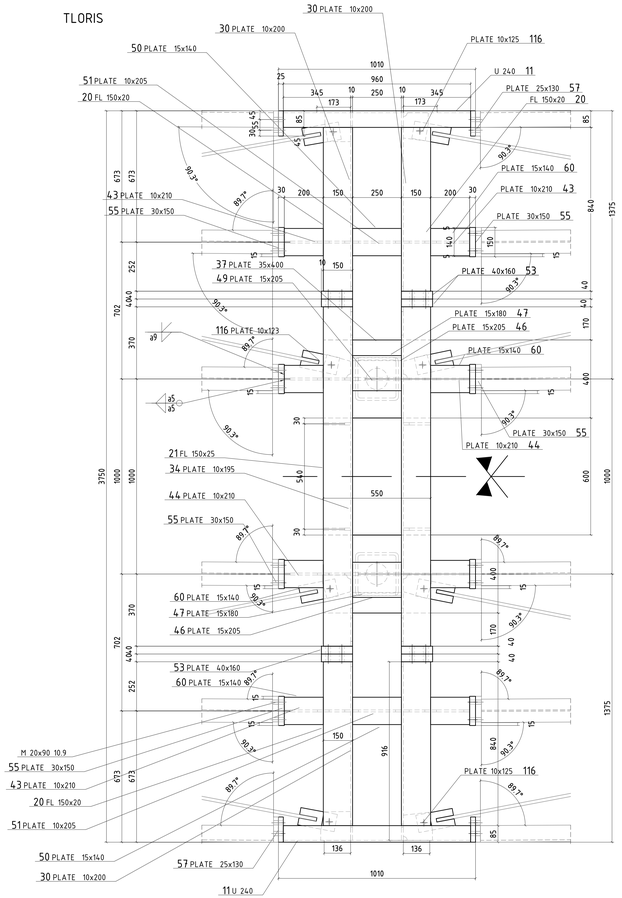
RISBA ŠT. PN2_D8

ZG1000	**0205.00**	**007.1276**	**G.451**	

DETAJL **N3_D1**
M 1:10



TLORIS



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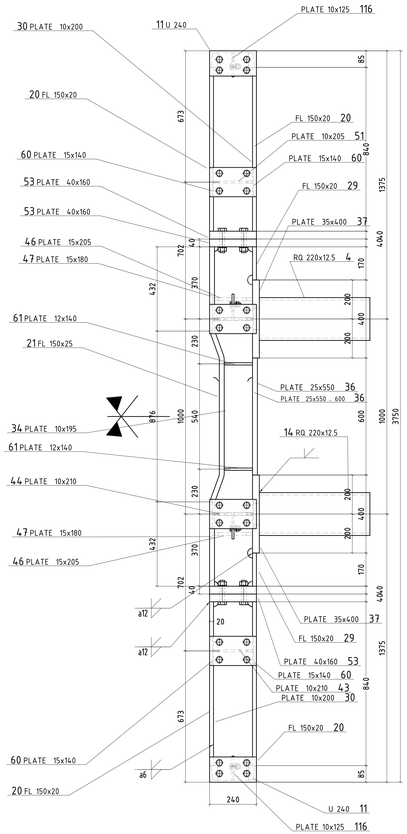
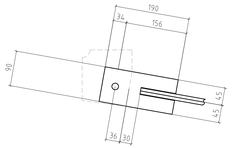
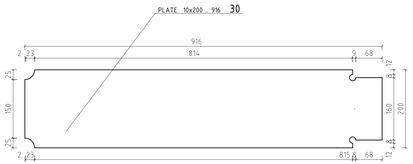
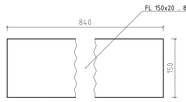
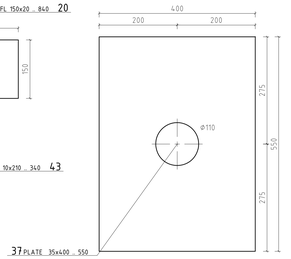


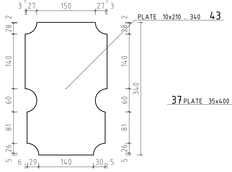


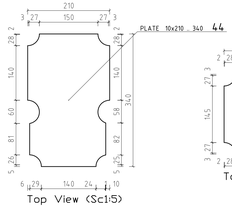
SISTEM ZAVETROVANJ.
PRIKLJUČNE PLOČEVINE PRILAGAJATI
GLEDE NA GEOMETRIJO KONSTRUKCIJE

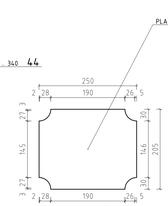


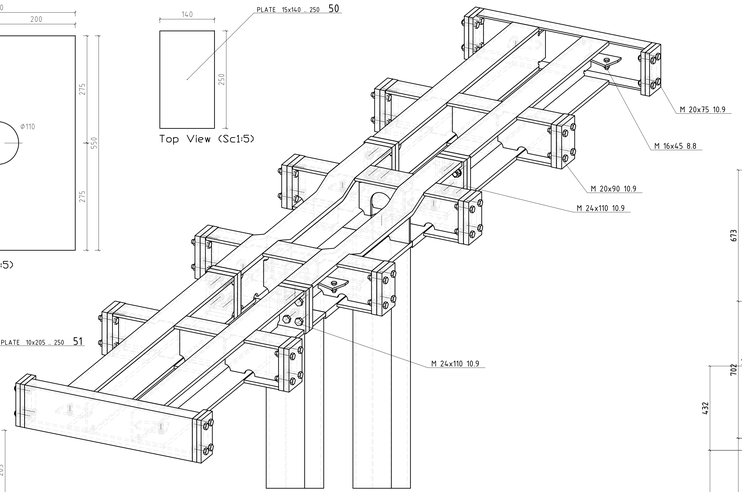


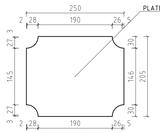


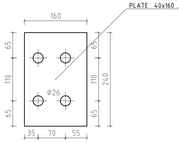


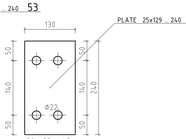


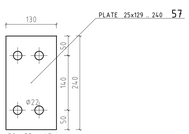


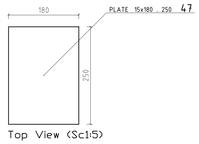


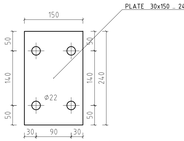


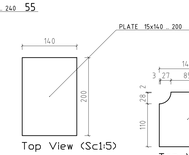


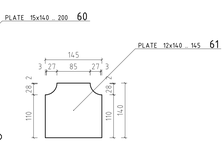


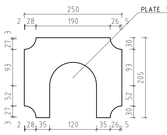


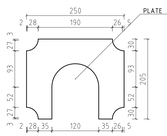


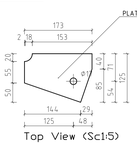




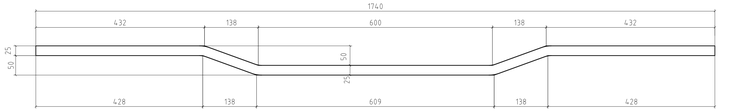




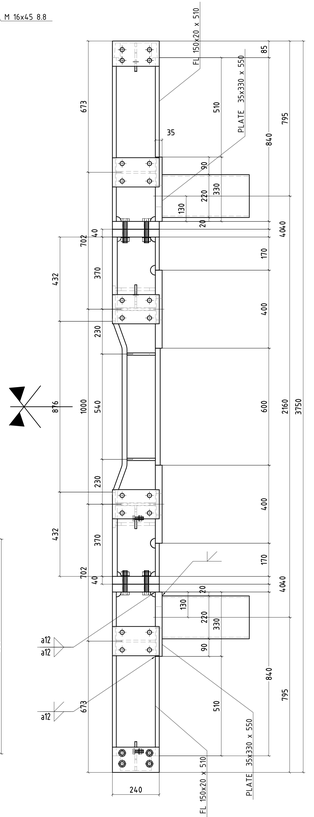


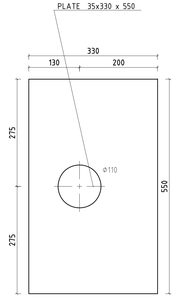


PRIKLJUČNE PLOČEVINE PRILAGAJATI
GLEDE NA GEOMETRIJO KONSTRUKCIJE



DETAJL **N3_D1'**
M 1:10
ZAMAKNJEN STEBER - OZNAČENE SAMO RAZLIKE NA OSNOVNI PREREZ





- izvedbeni razred EXC 2
- Konstrukcijsko jeklo S235J2
- Konstrukcijsko jeklo S235JR- šablone
- vijaki 10.9 po SIST EN 14399
  - vse vijačne zveze izvesti z dvema podložkama 10.9
  - 50% predmontaže
- vijaki 8.8 po SIST EN 15048-1
  - vse vijačne zveze izvesti z dvema podložkama 8.8
  - čvrsto priviti

- Ozemljitev temeljev se izvede skladno s projektom ozemljitve

OPOMBE:
- mere kontrolirati in po potrebi prilagoditi pri montaži na terenu
- pri izdelavi jeklene konstr. upoštevati tudi ostalo projektno dok. (arhitektumi načrti, načrti temeljenja, gradbeni načrti)
- izdelavo in montažo nosilne jeklene konstrukcije mora biti v skladu z SIST EN 1090-2 : 2008
- Vsi sočelni zvari K, ▽, ▽ ... morajo biti izvedeni s prevaritvijo korena
- Varilne deformacije predvidi izvajalec
- vsi nezaznačeni zvari so a=0,7 x tmin
  (tmin = tanjša pločevina v spoju)
- vsi nezaznačeni zvari pri obojestranskem varjenju so a=0,5 x tmin
  (tmin = tanjša pločevina v spoju)
- vse zvare pobrusiti

2/2

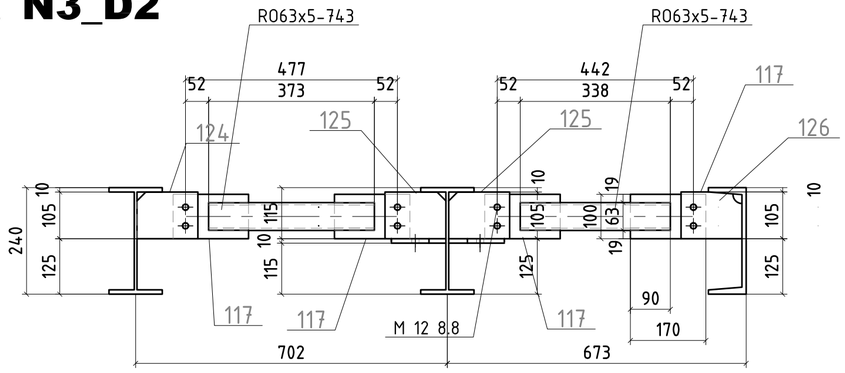
DATUM	ŽIG IN PODPIS	PODPIS

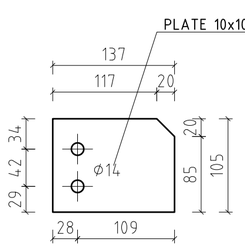
NOSILEC PROJEKTANT: ~~TIRING~~ PROJEKTE ZA ŽELEZNIŠKO, KOMUNALNO IN CESTNO TEHNIKO, D.O.O. PIVOVNA 1 - 11 1236 TRZIN TELEFON: (01)563 19 15	PROJEKTANT NAČRTA: hiša NAČRTOVANJE IN SVETOVANJE, D.O.O. Litostrojska cesta 6, 1, Ljubljana
NAROČNIK: RS Ministrstvo za infrastrukturo Direkcija RS za infrastrukturo Tržaška cesta 19, 1000 Ljubljana	FAZA: IZVEDBENI NAČRT PROJEKT ŠT.: 8513 NAČRT ŠT.: 105/21
ŠIFRA:	DOG. VODJA PROJEKTA: L. Sošo, mag.inž.prom., dipl.inž.grad. G-4443
OBJEKT: **Ureditev železniške postaje Litija**	DOG. PROJEKTANT: dr. Leon HLADNIK, u.dig. G-0296
	RISAL: Rok SEVŠEK, inž.gradb.
NAČRT: 2/2 Jeklena konstrukcija nadstreška	DATUM: marec 2021
RISBA: PERONSKI NADSTREŠEK 3 DETAJL N3_D1	MERILO: 1:10 RISBA ŠT.: PN3_D1

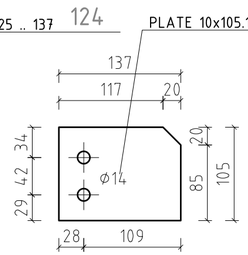
ZG1000	0205.00	007.1276	G.451	

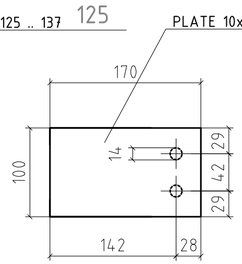
DETAJL **N3_D2**
M 1:10

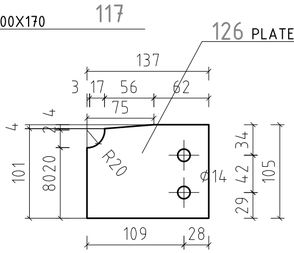
PREREZ





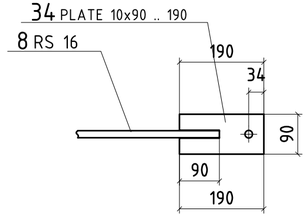


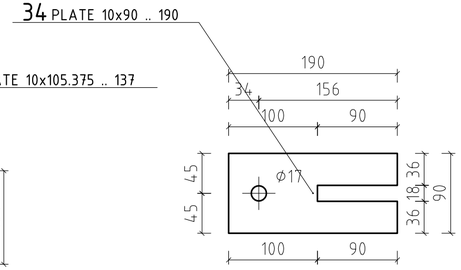




DETAJL **N3_D5**
M 1:10

PREREZ





OPOMBE:
- mere kontrolirati in po potrebi prilagoditi pri montaži na terenu
- pri izdelavi jeklene konstr. upoštevati tudi ostalo projektno dok. (arhitekturni načrti, načrti temeljenja, gradbeni načrti)
- izdelava in montaža nosilne jeklene konstrukcije mora biti v skladu z SIST EN 1090-2 : 2008
- Vsi sočelni zvari K, ▽, ▽.... morajo biti izvedeni s prevaritvijo korena
- Varilne deformacije predvidi izvajalec
- vsi neoznačeni zvari so a=0,7 x tmin (tmin = tanjša pločevina v spoju)
- vsi neoznačeni zvari pri obojestranskem varjenju so a=0,5 x tmin (tmin = tanjša pločevina v spoju)
- vse zvare pobrusiti

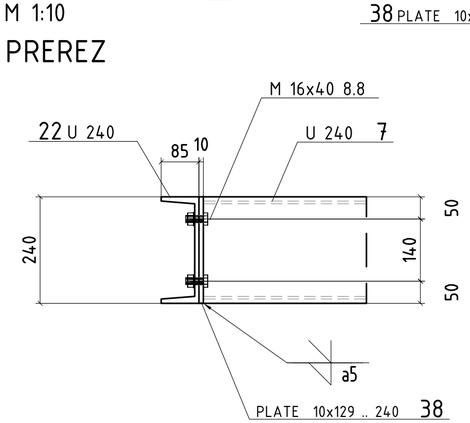
- izvedbeni razred EXC 2
- Konstrukcijsko jeklo S235J2
- Konstrukcijsko jeklo S235JR- šablone
- vijaki 10.9 po SIST EN 14399
  - vse vijačne zveze izvesti z dvema podložkama 10.9
  - 50% prednapetje
- vijaki 8.8 po SIST EN 15048-1
  - vse vijačne zveze izvesti z dvema podložkama 8.8
  - čvrsto priviti

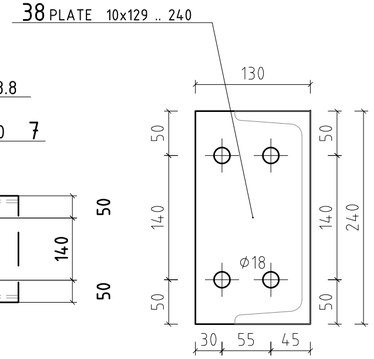
- Ozemljitev temeljev se izvede skladno s projektom ozemljitve

DATUM	OPIS SPREMEMBE	PODPIS

DETAJL **N3_D3**
M 1:10

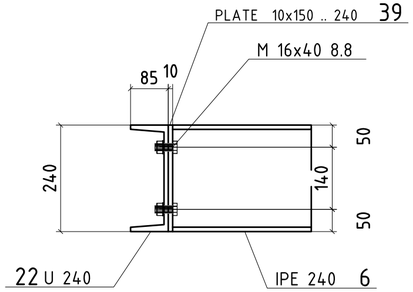
PREREZ

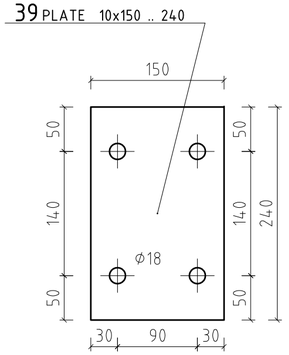




DETAJL **N3_D4**
M 1:10

PREREZ





VODILNI PROJEKTANT

TIRING

PODJETJE ZA ŽELEZNIŠKI INŽENIRING, D.O.O.
MOTNICA 11
1236 TRZIN
TEL/FAX 01/562 35 55

PROJEKTANT NAČRTA

hiša
NAČRTOVANJE IN SVETOVANJE, D.O.O.
Ukmarjeva ulica 4, Ljubljana

NAROČNIK

RS Ministrstvo za infrastrukturo
Direkcija RS za infrastrukturo
Tržaška cesta 19, 1000 Ljubljana

FAZA: IZVEDBENI NAČRT

PROJEKT ŠT.: 8513

NAČRT ŠT.: 105/21

OBJEKT

Ureditev železniške postaje Litija

ODG. VODJA PROJEKTA: L. ŠOŠO, mag.inž.prom., dipl.inž.grad. — ID. ŠT.: G-4643

ODG. PROJEKTANT: dr. Leon HLADNIK, u.dig. — ID. ŠT.: G-0296

OBDELAL: Rok SEVŠEK, inž.gradb.

NAČRT: 2/2 Jeklena konstrukcija nadstreška

DATUM: marec 2021

RISBA: PERONSKI NADSTREŠEK 3
DETAJLI 2, 3, 4, 5

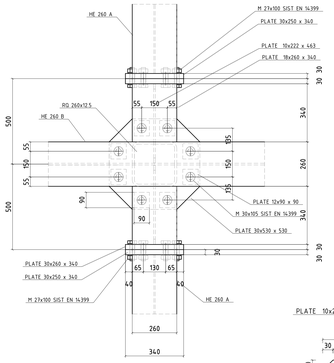
MERILO: 1:10, 5

RISBA ŠT.: PN3_D2

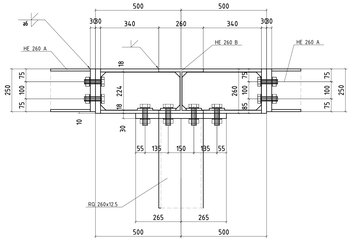
ZG1000	0205.00	007.1276	G.451	

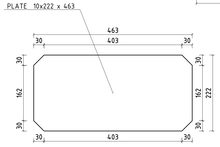
DETAJL **N1-4_D1**
M 1:10

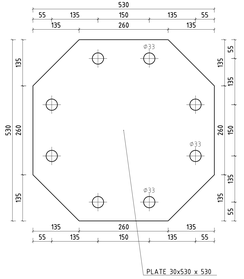
TLORIS

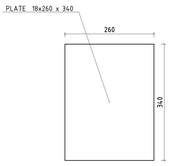


POGLED



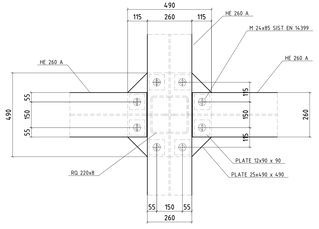


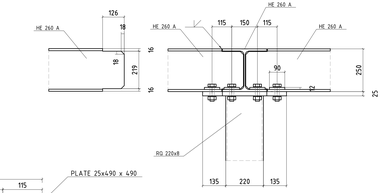


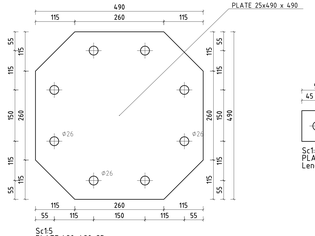


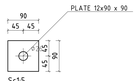
DETAJL **N1-4_D2**
M 1:10

TLORIS







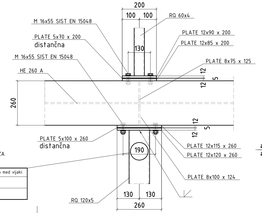


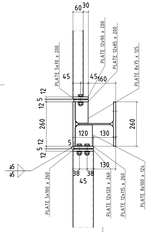
Sc1:5
PLATE 90x90x12
Length:90

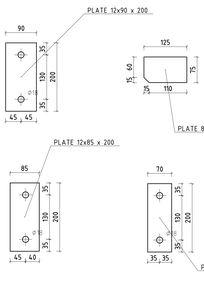
Sc1:5
PLATE 490x490x25
Length:490

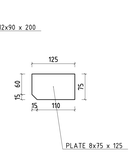
DETAJL **N1-4_D3**
M 1:10

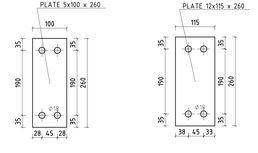
TLORIS

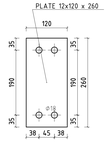








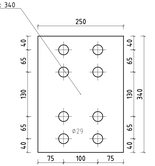




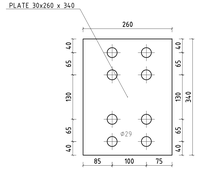
ENAK SISTEM STIKA ZA PROFILE

profil	razdalja med vijaki
RG 120x80x4	150mm
RG 120x60x4	130mm

PLOČEVINA ZA STIKOVANJE PROFILOV HEA260

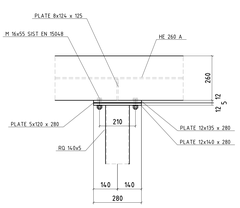


PLOČEVINA ZA STIKOVANJE PROFILOV HEA260 NA HEB260



DETAJL **N1-4_D4**
M 1:10

TLORIS



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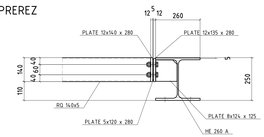
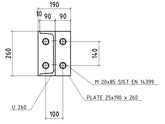


DETAJL **N1-4_D5**
M 1:10

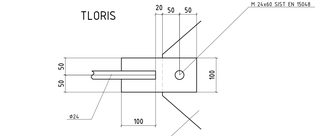
POGLED

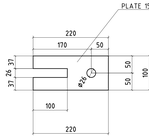


Sc1:5
PLATE 260x190x25
Length:260

DETAJL **N1-4_D7**
M 1:10

TLORIS





DETAJL **N1-4_D6**
M 1:10

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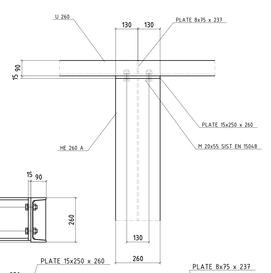
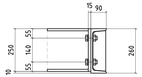
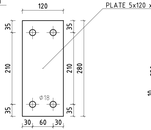




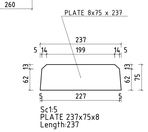


Sc1:5
PLATE 280x140x12
Length:280

Sc1:5
PLATE 280x135x12
Length:280

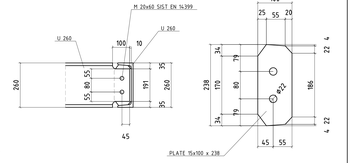
Sc1:5
PLATE 280x120x5
Length:280

Sc1:5
PLATE 260x250x15
Length:260

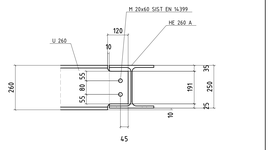


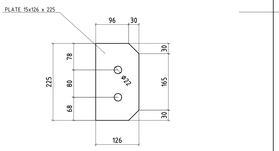
Sc1:5
PLATE 237x75x8
Length:237

DETAJL **N1-4_D8**
M 1:10



DETAJL **N1-4_D9**
M 1:10





- izvedbeni razred EXC 2
- Konstrukcijsko jeklo S235J2
- Konstrukcijsko jeklo S235JR- šablone
- vijaki 10.9 po SIST EN 14399
  - vse vijačne zveze izvesti z dvema podlockama 10.9 – 50% prednapetje
- vijaki 8.8 po SIST EN 15048-1
  - vse vijačne zveze izvesti z dvema podlockama 8.8 – čvrsto priviti

- Ozemljitev temeljev se izvede skladno s projektom ozemljitve

OPOMBE:
– mere kontrolirati in po potrebi prilagoditi pri montaži na terenu
– pri izdelavi jeklene konstr. upoštevati tudi ostalo projektno dok. (arhitektumi načrti, načrti temeljenja, gradbeni načrti)
– izdelavo in montažo nosilne jeklene konstrukcije mora biti v skladu z SIST EN 1090–2 : 2008
– Vsi sodelni zvari A,▽,▽ – morajo biti izvedeni s prevarilnjo korena
– Varilne deformacije previdi izvajalec
– vsi nezvezdani zvari so a=0,7 * tmin
(tmin = tanjša pločevina v spoju)
– vsi nezvezdani zvari pri objestranskem varjenju so a=0,5 * tmin
(tmin = tanjša pločevina v spoju)
– vse zveze pobrusiti

2/2

Datum	Ime stranke	Podpis

ZG1000	0205.00	007.1276	G.451	

Nosilec naloge: TRING TRING

Projektant načrta: hisa, Hočevarjeva ul. 6, 1234 Mengeš, Ukmarjeva ulica 4, 1, Ljubljana

Investitor: RS Ministrstvo za infrastrukturo, Direkcija RS za infrastrukturo, Tržaška cesta 19, 1000 Ljubljana

Projekt: **Ureditev železniške postaje Litija**

Načrt: 2/2 Jeklena konstrukcija nadstreška

Faza: PERONSKI NADSTREŠEK 3, DETAJL N3_D1

Vrsta projekta: IZVEDBENI NAČRT

Projekt št.: 8513 | Načrt št.: 105/21

Vod. projekta: L. ŠUŠO, razvijalec, dipl.inž.grad. | G-4463

Pooblaščeni inž.: dr. Leon HLADNIK, u.dig. | G-0296

Odgovorni: Rok SEVŠEK, mš.grad.

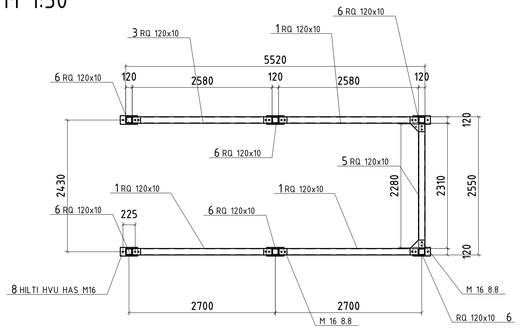
Datum: marec 2021

Merilo: 1:10

Načrt št.: N1-4_1

ZAVETIŠČE

TLORIS, SIDRANJA
M 1:50



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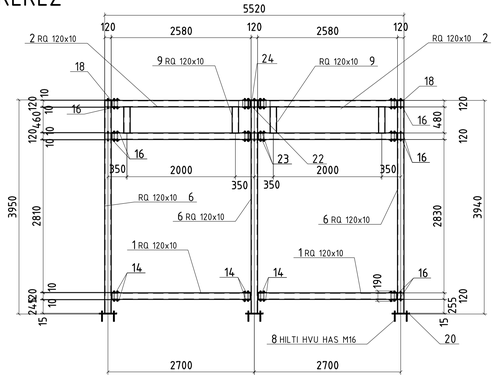
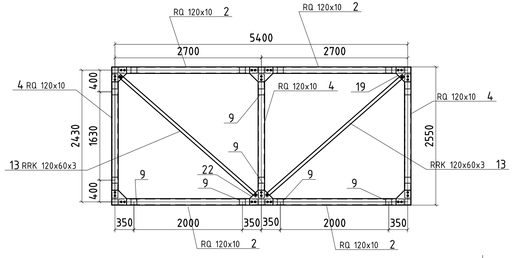
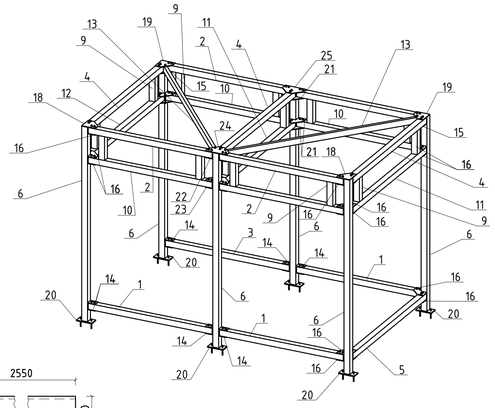
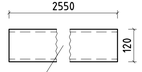


TLORIS, STREHA

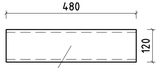


3D SHEMA

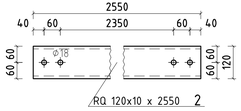




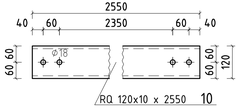
Pos 1 Front View (Sc1:10)



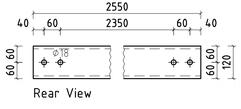
Pos 9 Front View (Sc1:10)



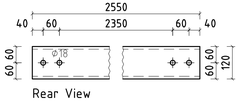
Pos 2 Front View (Sc1:10)



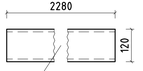
Pos 10 Front View (Sc1:10)



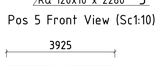
Rear View



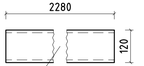
Rear View



Pos 5 Front View (Sc1:10)



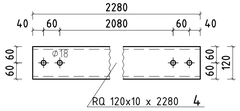
Pos 6 Front View (Sc1:10)



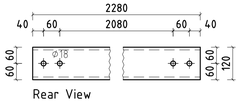
Pos 11 Front View (Sc1:10)

Pos 3 Front View (Sc1:10)

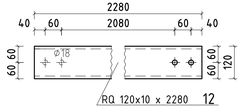
Rear View



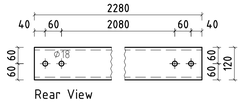
Pos 4 Front View (Sc1:10)



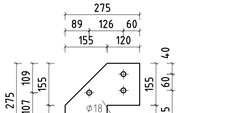
Rear View



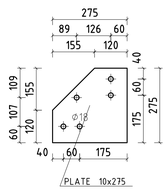
Pos 12 Front View (Sc1:10)



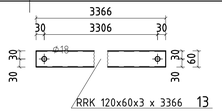
Rear View



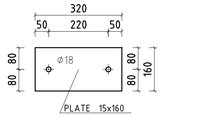
Pos 15 Sc1:10



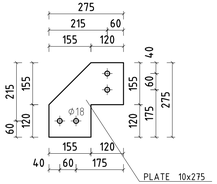
Pos 19 Sc1:10



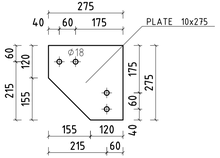
Pos 13 Top View (Sc1:10)



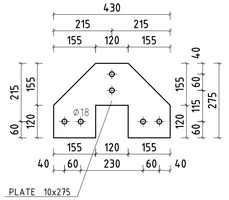
Pos 20 Sc1:10



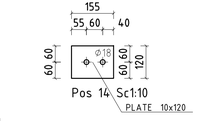
Pos 16 Sc1:10



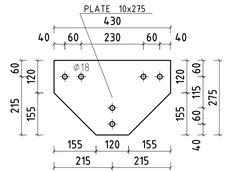
Pos 18 Sc1:10



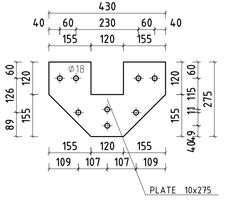
Pos 21 Sc1:10



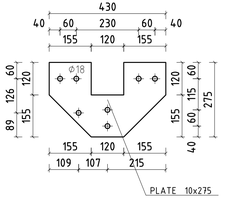
Pos 14 Sc1:10



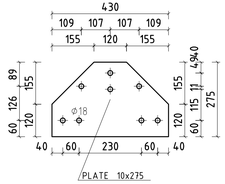
Pos 25 Sc1:10



Pos 22 Sc1:10



Pos 23 Sc1:10



Pos 24 Sc1:10

POS	NUMBER	NAME	LENGTH	WEIGHT	TOTAL W
1	3	RQ 120x10	2550	81.1	243.3
2	4	RQ 120x10	2550	81.1	324.4
3	1	RQ 120x10	2550	81.1	81.1
4	3	RQ 120x10	2280	72.5	217.5
5	1	RQ 120x10	2280	72.5	72.5
6	6	RQ 120x10	3925	124.8	748.9
7	82	Gewindestange-M16	190	0.3	24.6
8	12	HILTI HVU HAS M16	190	0.3	3.6
9	14	RQ 120x10	480	15.3	213.7
10	4	RQ 120x10	2550	81.1	324.4
11	2	RQ 120x10	2280	72.5	145.0
12	1	RQ 120x10	2280	72.5	72.5
13	2	RRK 120x60x3	3366	27.0	53.9
14	12	PLATE 155x120x10	155	1.5	17.5
15	4	PLATE 275x275x10	275	3.9	15.5
16	12	PLATE 275x275x10	275	3.9	46.4
18	2	PLATE 275x275x10	275	5.0	10.0
19	2	PLATE 275x275x10	275	5.0	10.0
20	6	PLATE 320x160x15	320	6.0	36.2
21	3	PLATE 430x275x10	430	6.3	18.8
22	1	PLATE 430x275x10	430	6.3	6.3
23	2	PLATE 430x275x10	430	6.3	12.5
24	1	PLATE 430x275x10	430	7.4	7.4
25	1	PLATE 430x275x10	430	7.4	7.4
	164	Scheibe A 17 DIN125	0	0.0	0.0
	164	Mu 16 DIN 934	0	0.0	0.0
Weight of 509 Parts 3 % Addition 2795 kg					

- izvedbeni razred EXC 2
- Konstrukcijsko jeklo S235J2
- Konstrukcijsko jeklo S235JR - šablone
- vijaki 10.9 po SIST EN 14399
  - vse vijačne zveze izvesti z dvema podložkama 10.9
  - 50% prednapeto
- vijaki 8.8 po SIST EN 15048-1
  - vse vijačne zveze izvesti z dvema podložkama 8.8
  - čvrsto priviti

- Ozemljitev temeljev se izvede skladno s projektom ozemljitve

OPOMBE:
- mere kontrolirati in po potrebi prilagoditi pri montaži na terenu
- pri izdelavi jeklene konstr. upoštevati tudi ostalo projektno dok. (arhitekturni načrti, načrti temeljenja, gradbeni načrti)
- izdelava in montaža nosilne jeklene konstrukcije mora biti v skladu z SIST EN 1090-2 : 2008
- Vsi sočelni zvari K, ▽, ▽ .... morajo biti izvedeni s prevaritvijo korena
- Varilne deformacije predvidi izvajalec
- vsi neoznačeni zvari so a=0,7 x tmin (tmin = tanjša pločevina v spoju)
- vsi neoznačeni zvari pri obojestranskem varjenju so a=0,5 x tmin (tmin = tanjša pločevina v spoju)
- vse zvare pobrusiti

DATUM | OPIS SPREMEMBE | PODPIS

VODILNI PROJEKTANT
TIRING
PODJETJE ZA ŽELEZNIŠKO INŽENIRING, D.O.O.
MOTNIKA 11
1236 TRZIN
TELIFAX 01/562 35 55

PROJEKTANT NAČRTA
h i š a
NAČRTOVANJE IN SVETOVANJE, D.O.O.
Ulkarjeva ulica 4, Ljubljana

NAROČNIK
RS Ministrstvo za infrastrukturo
Direkcija RS za infrastrukturo
Tržaška cesta 19, 1000 Ljubljana

OBJEKT
Ureditev železniške postaje Litija

NAČRT
2/2 Jeklena konstrukcija nadstreška

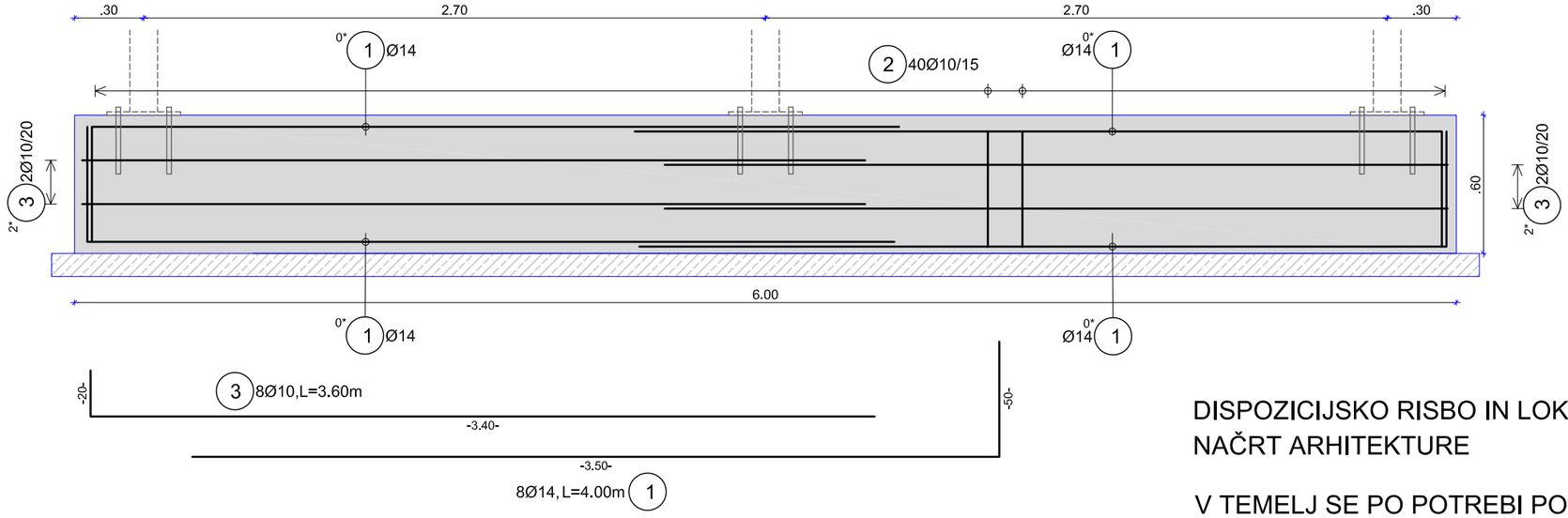
RISBA
ZAVETIŠČE
DISPOZICIJA, 3D, DETAJLI

FAZA: IZVEDBENI NAČRT
PROJEKT ŠT.: 8513 | NAČRT ŠT.: 105/21
ODG. VODJA PROJEKTA: L. ŠOŠO, mag.inž.prom., dipl.inž.grad. G-4643
ODG. PROJEKTANT: dr. Leon HLADNIK, u.dig. G-0296
OBDELAL: Rok SEVŠEK, inž.gradb.
DATUM: marec 2021
MERILO: 1:50,10 | RISBA ŠT.: ZA_1

ZG1000	0205.00	007.1276	G.402	

2/2

VZDOLŽNI PREREZ



DISPOZICIJSKO RISBO IN LOKACIJO TEMELJEV, GLEDATI NAČRT ARHITEKTURE

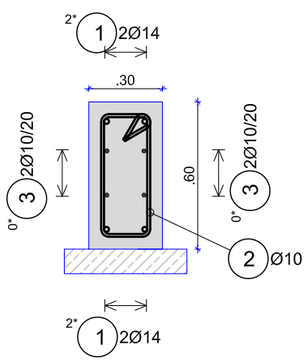
V TEMELJ SE PO POTREBI POLOŽI PVC CEV ZA POLAGANJE NAPAJALNEGA KABLA. PO ELEKTRO PROJEKTU

VODONEPREPUSNI BETON: C30/37, PV-II, XC4, XF3, zaščitni sloj=5cm

PODLOŽNI BETON: C12/15

JEKLO ZA ARMIRANJE: S500B

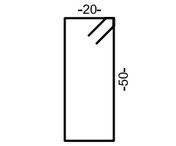
PREČNI PREREZ



IZVLEČEK ARMATURE - ZA EN TEMELJ
(IZVESTI 2 KOM.)

B A R S C H E D U L E Steelgrade: S500B

Pos.	No.	d	Length	D10	D14
1	8	14	4.00		32.00
2	40	10	1.70	68.00	
3	8	10	3.60	28.80	
Total lengths				96.80	32.00
kg / m				D10 0.617	D14 1.210
kg / d				59.726	38.720
Total weight (kg)				98.446	



2 40Ø10,L=1.70m

VODILNI PROJEKTANT
TIRING
PODJETJE ZA ŽELEZNIŠKI INŽENIRING, D.O.O.
MOTNICA 11
1236 TRZIN
TEL/FAX 01/562 35 55

PROJEKTANT NAČRTA
h i š a
NAČRTOVANJE IN SVETOVANJE, D.O.O.
Ukmarjeva ulica 4, Ljubljana

NAROČNIK
RS Ministrstvo za infrastrukturo
Direkcija RS za infrastrukturo
Tržaška cesta 19, 1000 Ljubljana

FAZA
IZVEDBENI NAČRT

PROJEKT ŠT. 8513
NAČRT ŠT. 105/21

OBJEKT
Ureditev železniške postaje Litija

ODG. VODJA PROJEKTA L. ŠOŠO, mag.inž.prom., dipl.inž.grad. ID. ŠT. G-4643

ODG. PROJEKTANT dr. Leon HLADNIK, u.dig. ID. ŠT. G-0296

OBDELAL Rok SEVŠEK, inž.gradb.

NAČRT
2/2 Jeklena konstrukcija nadstreška

DATUM
marec 2021

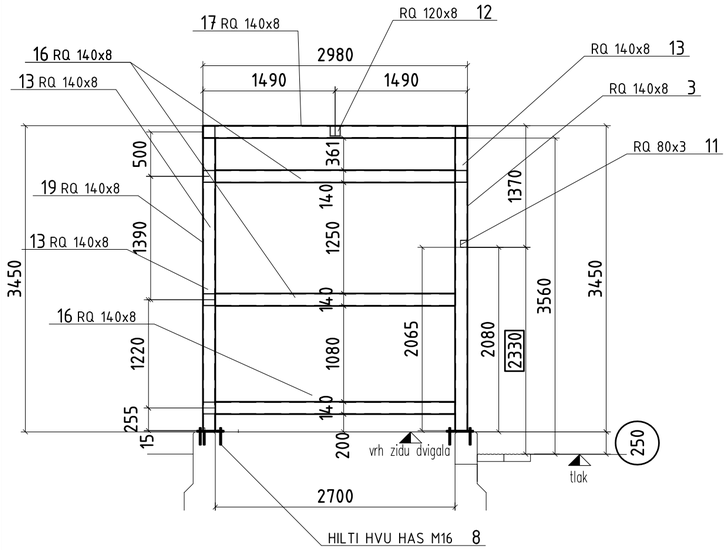
RISBA
Opažno armaturni načrt
PASOVNI TEMELJ ZAVETIŠČA

MERILO 1:25

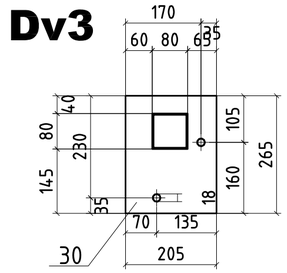
RISBA ŠT. Z-A1

ZG1000	0205.00	007.1276	G.471	

PREREZ



Dv3



DVIGALO - nadstrešek dv2
za 1 kom:

POS	NUMBER	NAME	LENGTH	WEIGHT	TOTAL W.
3	1	RQ 140x8	3295	103.6	103.6
8	14	HILTI HVU HAS M16	190	0.3	4.2
11	1	RQ 80x3	1600	11.3	11.3
12	1	RQ 120x8	1600	42.3	42.3
13	4	RQ 140x8	1600	50.3	201.2
14	2	RQ 140x8	1880	59.1	118.2
16	6	RQ 140x8	2700	84.9	509.2
17	2	RQ 140x8	2980	93.7	187.3
19	3	RQ 140x8	3295	103.6	310.7
30	1	PLATE 265x205x15	265	6.4	6.4
32	1	PLATE 300x255x15	300	8.6	8.6
33	3	PLATE 300x300x15	300	9.5	28.6
15a	1	RQ 80x3	2065	14.6	14.6
		Weight of 40 Parts 3 % Addition 1593 kg			

izvesti 3 kom

DVIGALO DV1=DV4, DVIGALAO DV2 JE ZRCALNO ENAKO DVIGALU DV1. GLEJ DISPOZICIJO

- izvedbeni razred EXC 2
- Konstrukcijsko jeklo S235J2
- Konstrukcijsko jeklo S235JR - šablone
- vijaki 10.9 po SIST EN 14399
  - vse vijačne zveze izvesti z dvema podložkama 10.9
  - 50% prednapeto
- vijaki 8.8 po SIST EN 15048-1
  - vse vijačne zveze izvesti z dvema podložkama 8.8
  - čvrsto priviti

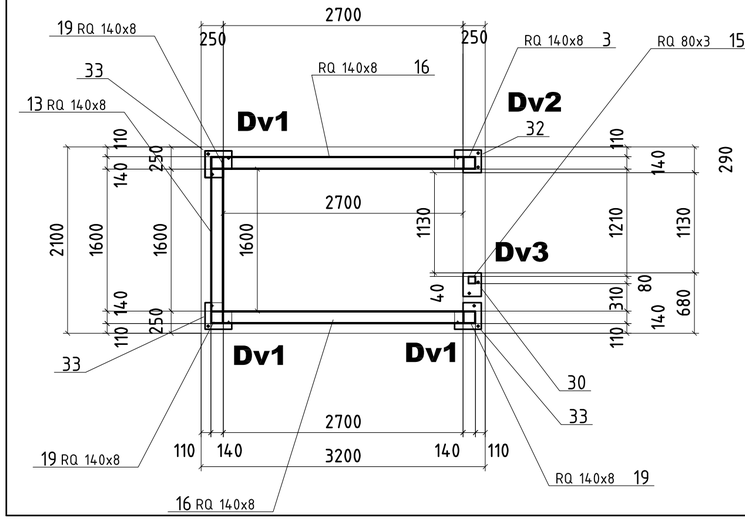
- Ozemljitev temeljev se izvede skladno s projektom ozemljitve

OPOMBE:
- mere kontrolirati in po potrebi prilagoditi pri montaži na terenu
- pri izdelavi jeklene konstr. upoštevati tudi ostalo projektno dok. (arhitekturni načrti, načrti temeljenja, gradbeni načrti)
- izdelava in montaža nosilne jeklene konstrukcije mora biti v skladu z SIST EN 1090-2 : 2008
- Vsi sočelni zvari K, ▽, V.... morajo biti izvedeni s prevaritvijo korena
- Varilne deformacije predvidi izvajalec
- vsi neoznačeni zvari so a=0,7 x tmin (tmin = tanjša pločevina v spoju)
- vsi neoznačeni zvari pri obojestranskem varjenju so a=0,5 x tmin (tmin = tanjša pločevina v spoju)
- vse zvare pobrusiti

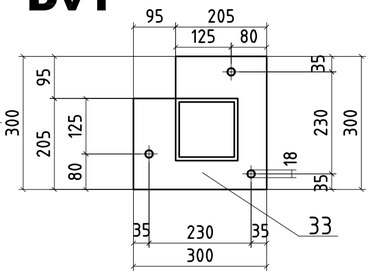
2/2

DATUM	OPIS SPREMEMBE	PODPIS

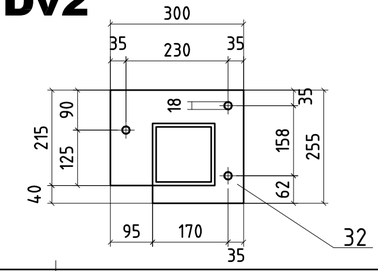
TLORIS - DVIGALO DV2
M 1:50



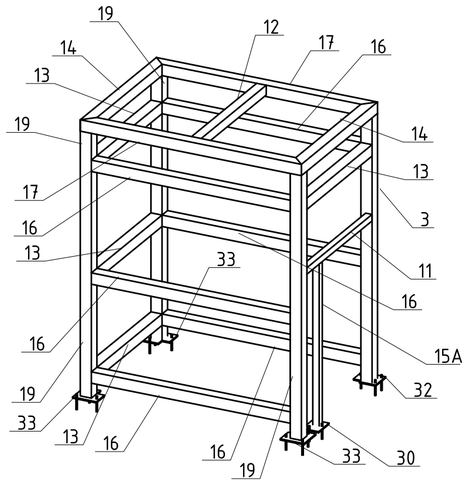
Dv1



Dv2



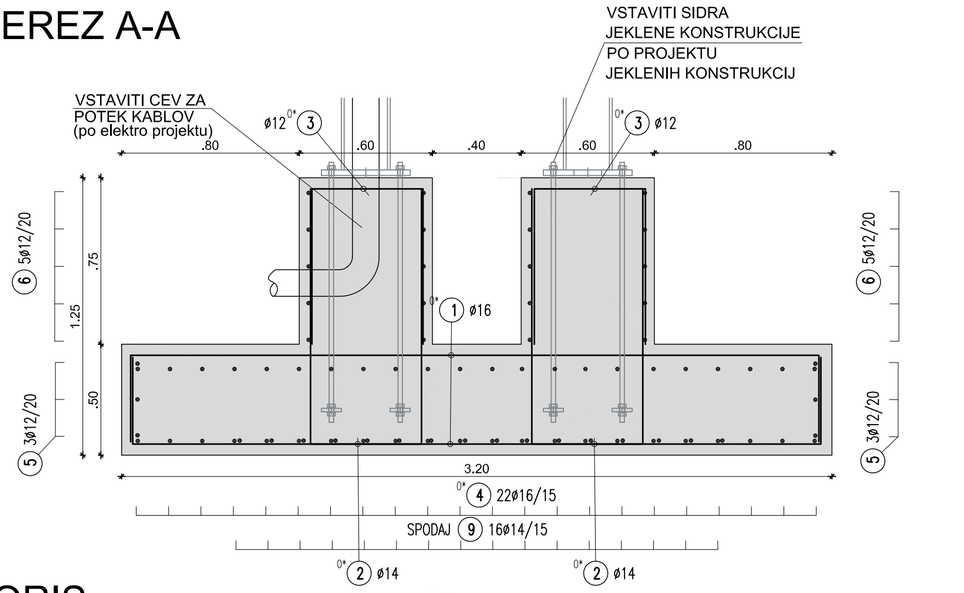
3D SHEMA
DVIGALO DV2



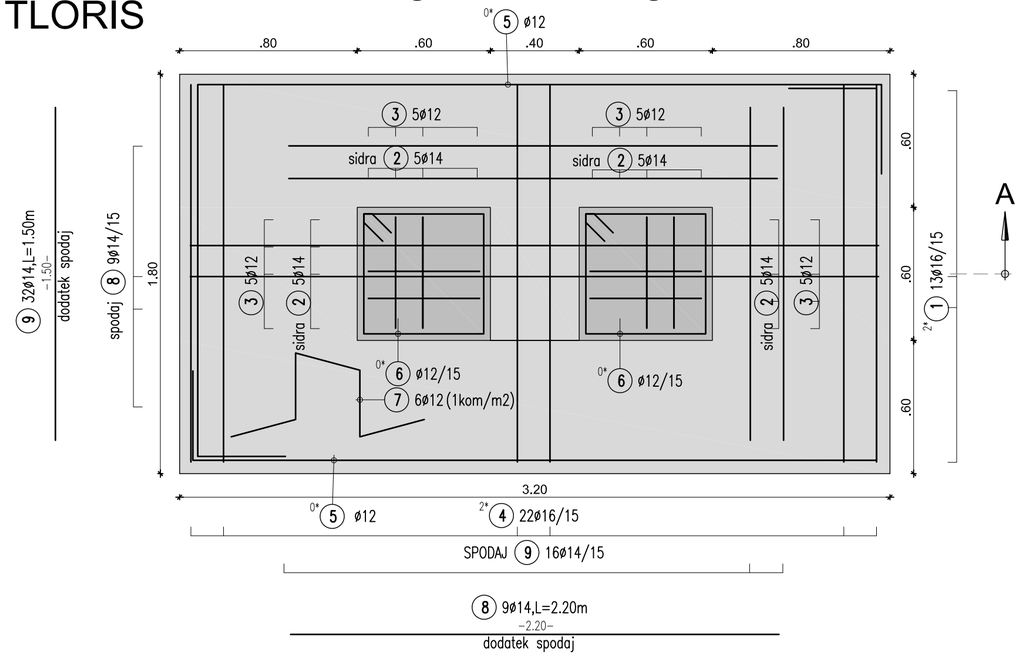
VODILNI PROJEKTANT: TIRING	PODJETJE ZA ŽELEZNIŠKI INŽENIRING, D.O.O. MOTNICA 11 1236 TRZIN TEL/FAX 01/562 35 55	PROJEKTANT NAČRTA: hiša, NAČRTOVANJE IN SVETOVANJE, D.O.O. Ukmarjeva ulica 4, Ljubljana		
NAROČNIK: RS Ministrstvo za infrastrukturo, Direkcija RS za infrastrukturo, Tržaška cesta 19, 1000 Ljubljana		FAZA: IZVEDBENI NAČRT		
		PROJEKT ŠT.: 8513	NAČRT ŠT.: 105/21	
OBJEKT: **Ureditev železniške postaje Litija**		ODG. VODJA PROJEKTA: L. ŠOŠO, mag.inž.prom., dipl.inž.grad.	ID. ŠT.: G-4643	
		ODG. PROJEKTANT: dr. Leon HLADNIK, u.dig.	ID. ŠT.: G-0296	
		OBDELAL: Rok SEVŠEK, inž.gradb.		
NAČRT: 2/2 Jeklena konstrukcija nadstreška		DATUM: marec 2021		
RISBA: DVIGALO - DISPOZICIJA, PREREZI, DETAJLI		MERILO: 1:50, 10	RISBA ŠT.: DVG_1	

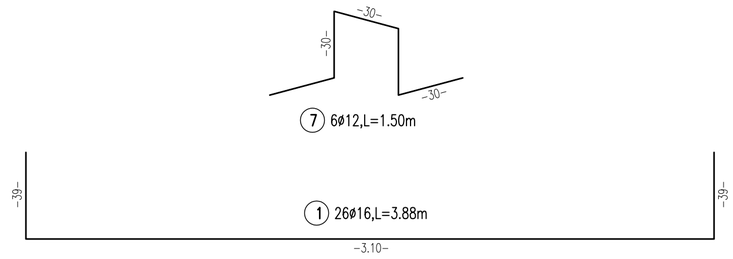
ZG1000	0205.00	007.1276	G.402	

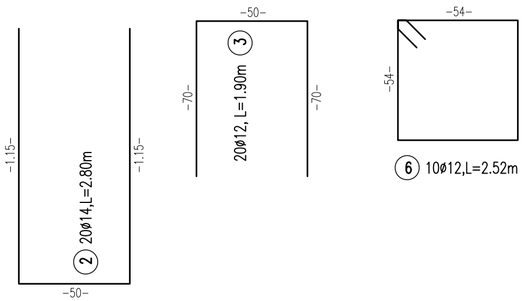
PREREZ A-A

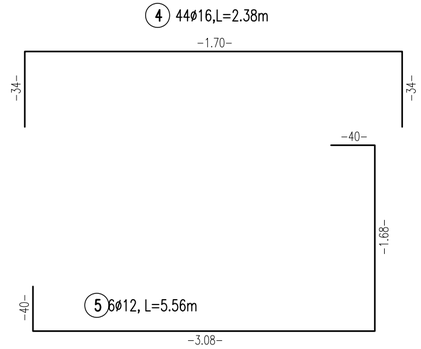


TLORIS









V TEMELJ SE POLOŽI PVC CEV ZA POLAGANJE
NAPAJALNEGA KABLA

VODONEPREPUSNI BETON: C30/37, PV-II, XC4, XF3, za ščitni sloj=5cm
PODLOŽNI BETON: C12/15
JEKLO ZA ARMIRANJE: S500B

BAR SCHEDULE Steelgrade: 500S

Pos.	No.	d	Length	D12	D14	D16
1	26	16	3.88			100.88
2	20	14	2.80		56.00	
3	20	12	1.90	38.00		
4	44	16	2.38			104.72
5	6	12	5.56	33.36		
6	10	12	2.52	25.20		
7	6	12	1.50	9.00		
8	9	14	2.20		19.80	
9	32	14	1.50		48.00	
Total lengths				105.56	123.80	205.60
kg / m				D12 0.888	D14 1.210	D16 1.580
kg / d				93.737	149.798	324.848
Total weight (kg)				568.383		

Pos.	Comment:
8	dodatek spodaj
9	dodatek spodaj

temelj T1

2/2

VODILNI PROJEKTANT

TIRING

PODJETJE ZA ŽELEZNIŠKI INŽENIRING, D.O.O.
MOTNICA 11
1236 TRZIN
TEL/FAX 01/562 35 55

PROJEKTANT NAČRTA

hiša
NAČRTOVANJE IN SVETOVANJE, D.O.O.
Ukmarjeva ulica 4, Ljubljana

NAROČNIK

RS Ministrstvo za infrastrukturo
Direkcija RS za infrastrukturo
Tržaška cesta 19, 1000 Ljubljana

FAZA

IZVEDBENI NAČRT

OBJEKT

Ureditev železniške postaje Litija

PROJEKT ŠT. 8513

NAČRT ŠT. 105/21

ODG. VODJA PROJEKTA: L. ŠOŠO, mag.inž.prom., dipl.inž.grad. ID. ŠT. G-4643

ODG. PROJEKTANT: dr. Leon HLADNIK, u.dig. ID. ŠT. G-0296

OBDELAL: Rok SEVŠEK, inž.gradb.

NAČRT: 2/2 Jeklena konstrukcija nadstreška

DATUM: marec 2021

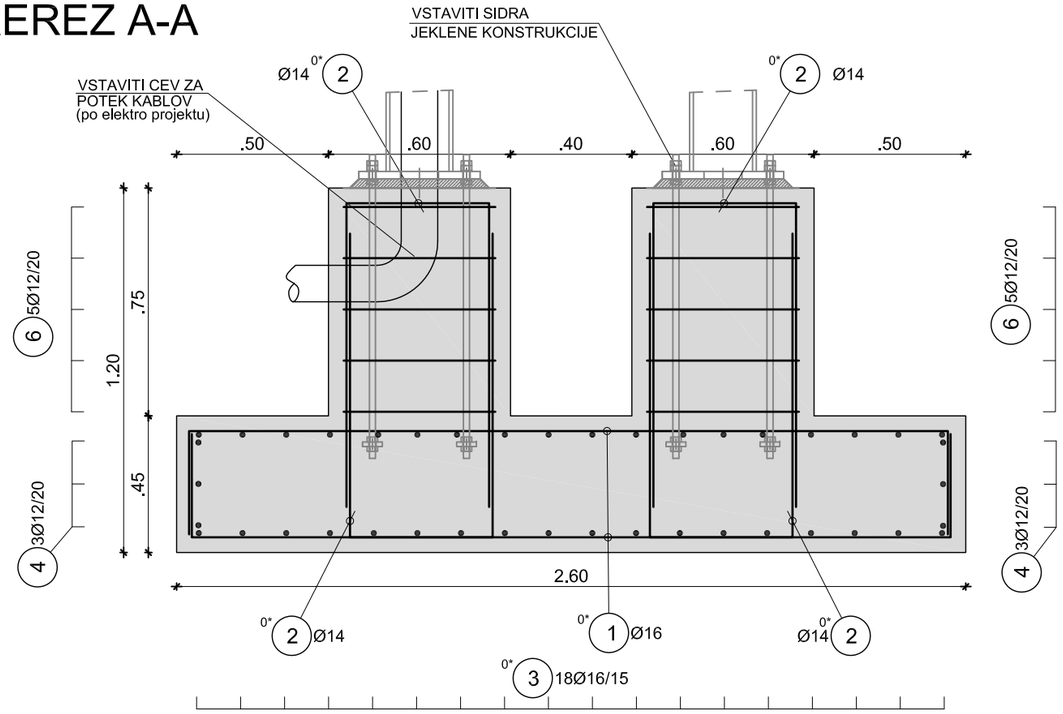
RISBA: Opažno armaturni načrt
TEMELJ T1

MERILO: 1:20

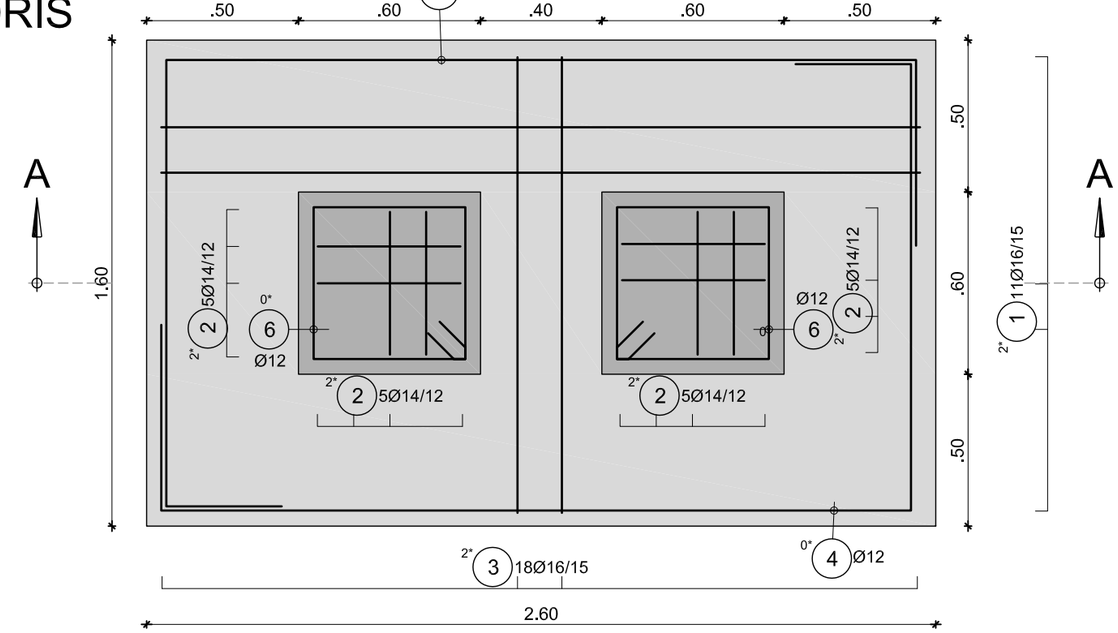
RISBA ŠT. A1

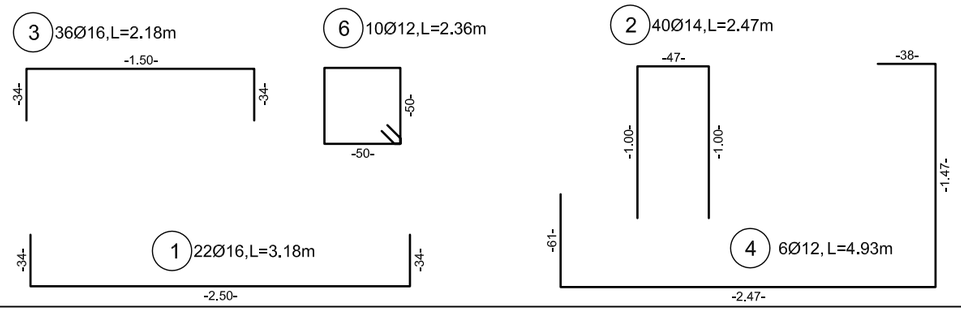
ZG1000	0205.00	007.1276	G.471	

PREREZ A-A



TLORIS





B A R S C H E D U L E Steelgrade: S500B

Pos.	No.	d	Length	D12	D14	D16
1	22	16	3.18			69.96
2	40	14	2.47		98.80	
3	36	16	2.18			78.48
4	6	12	4.93	29.58		
6	10	12	2.36	23.60		
Total lengths				53.18	98.80	148.44
kg / m				D12 0.888	D14 1.210	D16 1.580
kg / d				47.224	119.548	234.535
Total weight (kg)				401.307		

V TEMELJ SE POLOŽI PVC CEV ZA POLAGANJE
NAPAJALNEGA KABLA

VODONEPREPUSNI BETON: C30/37, PV-II, XC4, XF3, zaščitni sloj=5cm
PODLOŽNI BETON: C12/15
JEKLO ZA ARMIRANJE: S500B

temelj T2

2/2

VODILNI PROJEKTANT
TIRING
PODJETJE ZA ŽELEZNIŠKI INŽENIRING, D.O.O.
MOTNICA 11
1236 TRZIN
TEL/FAX 01/562 35 55

PROJEKTANT NAČRTA
hiša
NAČRTOVANJE IN SVETOVANJE, D.O.O.
Ukmarjeva ulica 4, Ljubljana

NAROČNIK
RS Ministrstvo za infrastrukturo
Direkcija RS za infrastrukturo
Tržaška cesta 19, 1000 Ljubljana

FAZA
IZVEDBENI NAČRT

PROJEKT ŠT. 8513
NAČRT ŠT. 105/21

OBJEKT
Ureditev železniške postaje Litija

ODG. VODJA PROJEKTA
L. ŠOŠO, mag.inž.prom., dipl.inž.grad.
ID. ŠT. G-4643

ODG. PROJEKTANT
dr. Leon HLADNIK, u.dig.
ID. ŠT. G-0296

OBDELAL
Rok SEVŠEK, inž.gradb.

NAČRT
2/2 Jeklena konstrukcija nadstreška

DATUM
marec 2021

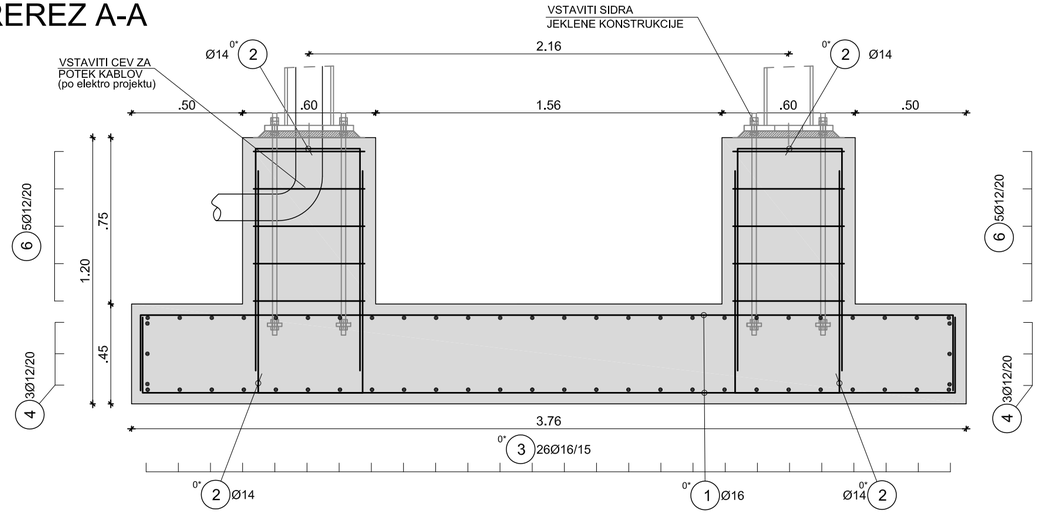
RISBA
Opažno armaturni načrt
TEMELJ T2

MERILO
1:20

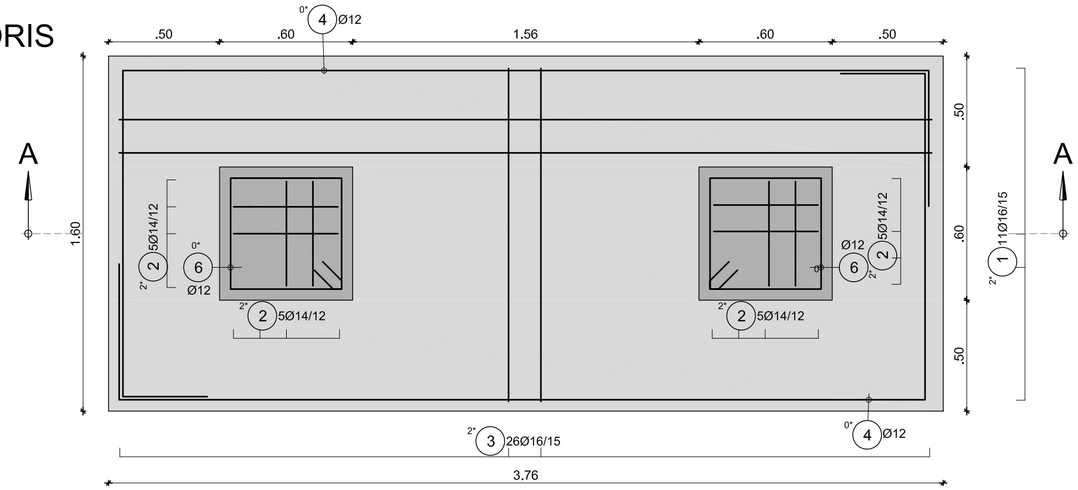
RISBA ŠT.
A2

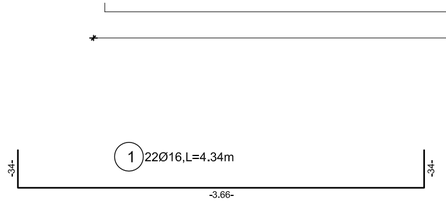
ZG1000	0205.00	007.1276	G.471	

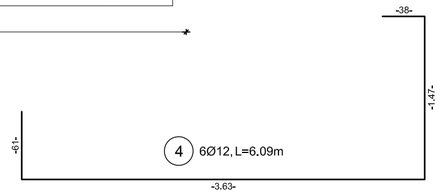
PREREZ A-A

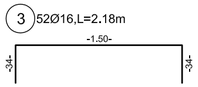


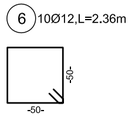
TLORIS

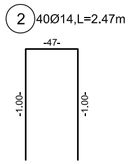












B A R S C H E D U L E Steelgrade: S500B

Pos.	No.	d	Length	D12	D14	D16
1	22	16	4.34			95.48
2	40	14	2.47		98.80	
3	52	16	2.18			113.36
4	6	12	6.09	36.54		
6	10	12	2.36	23.60		
Total lengths				60.14	98.80	208.84
kg / m				D12 0.888	D14 1.210	D16 1.580
kg / d				53.404	119.548	329.967
Total weight (kg)				502.919		

V TEMELJ SE POLOŽI PVC CEV ZA POLAGANJE
NAPAJALNEGA KABLA

VODONEPREPUSNI BETON: C30/37, PV-II, XC4, XF3, za ščitni sloj=5cm
PODLOŽNI BETON: C12/15
JEKLO ZA ARMIRANJE: S500B

temelj T2'

2/2

VODILNI PROJEKTANT

TIRING

PODJETJE ZA ŽELEZNIŠKI INŽENIRING, D.O.O.
MOTNICA 11
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PROJEKTANT NAČRTA

hiša
NAČRTOVANJE IN SVETOVANJE, D.O.O.
Ukmarjeva ulica 4, Ljubljana

NAROČNIK

RS Ministrstvo za infrastrukturo
Direkcija RS za infrastrukturo
Tržaška cesta 19, 1000 Ljubljana

FAZA

IZVEDBENI NAČRT

OBJEKT

Ureditev železniške postaje Litija

PROJEKT ŠT.: 8513

NAČRT ŠT.: 105/21

ODG. VODJA PROJEKTA: L. ŠOŠO, mag.inž.prom., dipl.inž.grad.

ID. ŠT.: G-4643

ODG. PROJEKTANT: dr. Leon HLADNIK, u.dig.

ID. ŠT.: G-0296

OBDELAL: Rok SEVŠEK, inž.gradb.

NAČRT: 2/2 Jeklena konstrukcija nadstreška

DATUM: marec 2021

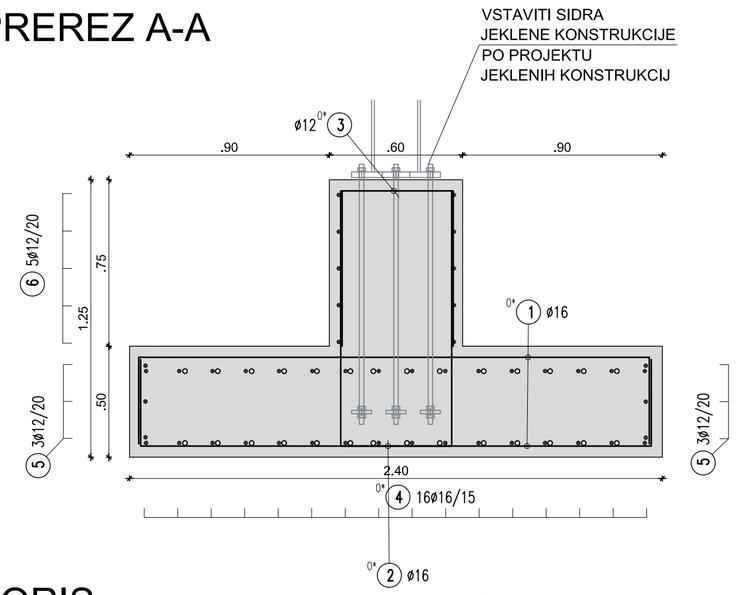
RISBA: Opažno armaturni načrt
TEMELJ T2'

MERILO: 1:20

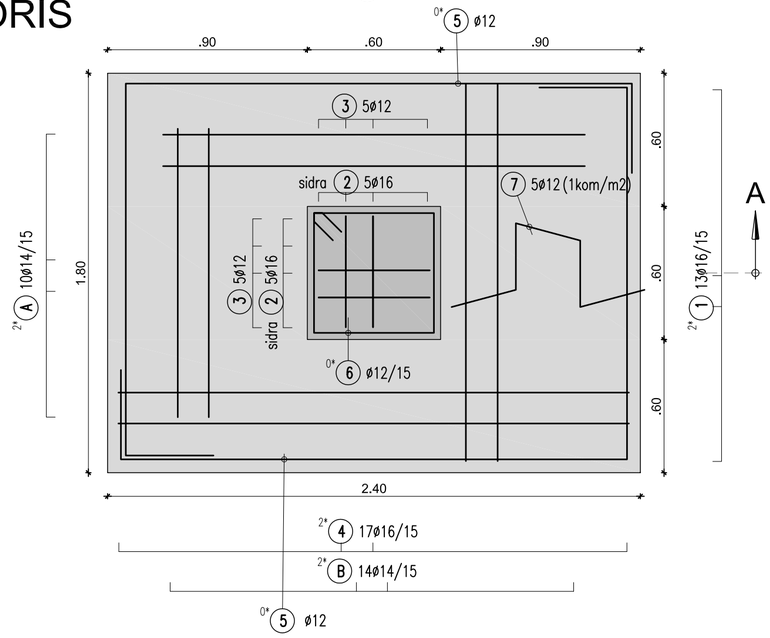
RISBA ŠT.: A3

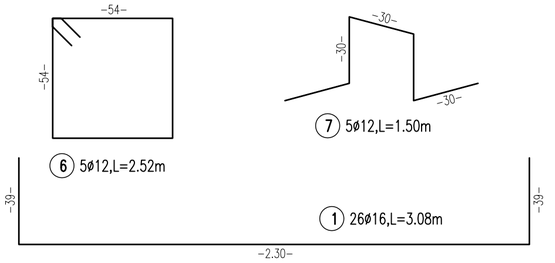
ZG1000	0205.00	007.1276	G.471	

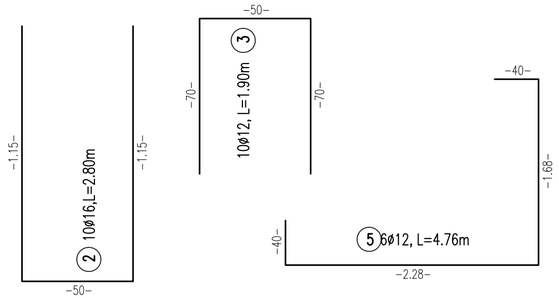
PREREZ A-A

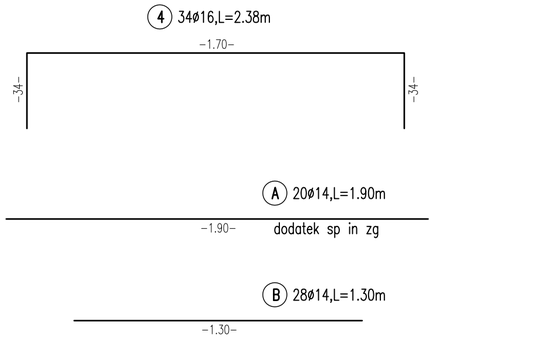


TLORIS









V TEMELJ SE POLOŽI PVC CEV ZA POLAGANJE NAPAJALNEGA KABLA

VODONEPREPUSNI BETON: C30/37, PV-II, XC4, XF3, za ščitni sloj=5cm
PODLOŽNI BETON: C12/15
JEKLO ZA ARMIRANJE: S500B

BAR SCHEDULE Steelgrade: 500S

Pos.	No.	d	Length	D12	D14	D16
B	28	14	1.30		36.40	
A	20	14	1.90		38.00	
1	26	16	3.08			80.08
2	10	16	2.80			28.00
3	10	12	1.90	19.00		
4	34	16	2.38			80.92
5	6	12	4.76	28.56		
6	5	12	2.52	12.60		
7	5	12	1.50	7.50		
Total lengths				67.66	74.40	189.00
kg / m				D12 0.888	D14 1.210	D16 1.580
kg / d				60.082	90.024	298.620
Total weight (kg)				448.726		

Pos.	Comment:
B	dodatek sp in zg
A	dodatek sp in zg

temelj T3

2/2

VODILNI PROJEKTANT
TIRING
PODJETJE ZA ŽELEZNIŠKI INŽENIRING, D.O.O.
MOTNICA 11
1236 TRZIN
TEL/FAX 01/562 35 55

PROJEKTANT NAČRTA
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NAČRTOVANJE IN SVETOVANJE, D.O.O.
Ukmarjeva ulica 4, Ljubljana

NAROČNIK
RS Ministrstvo za infrastrukturo
Direkcija RS za infrastrukturo
Tržaška cesta 19, 1000 Ljubljana

FAZA
IZVEDBENI NAČRT

PROJEKT ŠT. 8513
NAČRT ŠT. 105/21

OBJEKT
Ureditev železniške postaje Litija

ODG. VODJA PROJEKTA L. ŠOŠO, mag.inž.prom., dipl.inž.grad. ID. ŠT. G-4643

ODG. PROJEKTANT dr. Leon HLADNIK, u.dig. ID. ŠT. G-0296

OBDELAL Rok SEVŠEK, inž.gradb.

NAČRT 2/2 Jeklena konstrukcija nadstreška

DATUM marec 2021

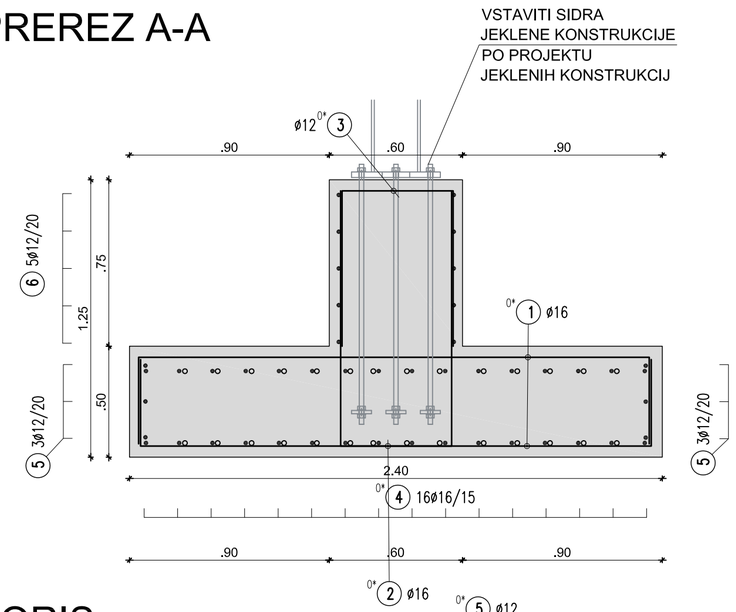
RISBA Opažno armaturni načrt TEMELJ T3

MERILO 1:20

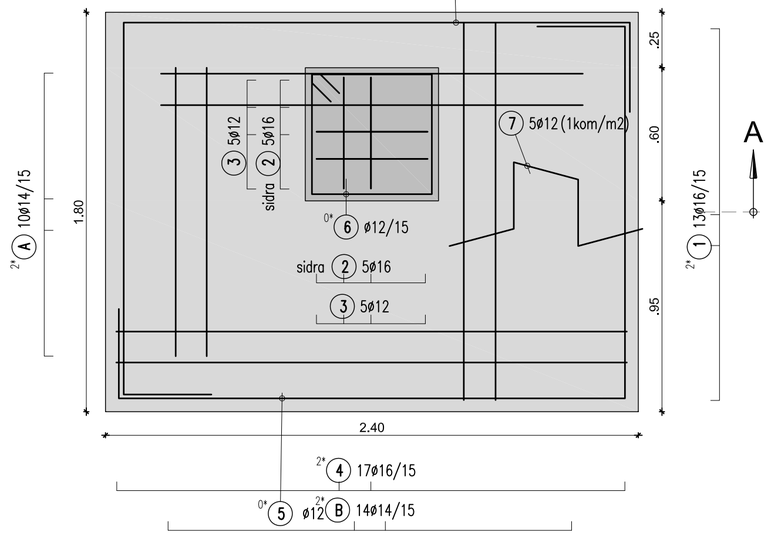
RISBA ŠT. A4

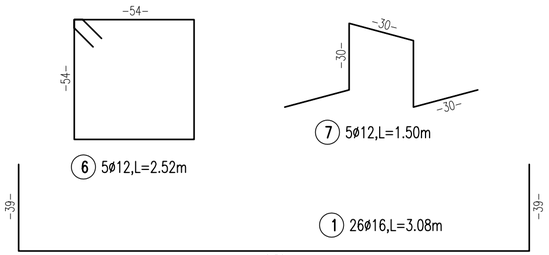
ZG1000	0205.00	007.1276	G.471	

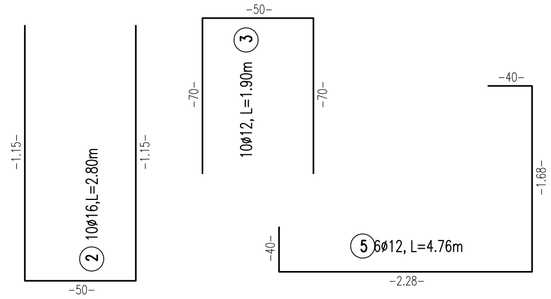
PREREZ A-A

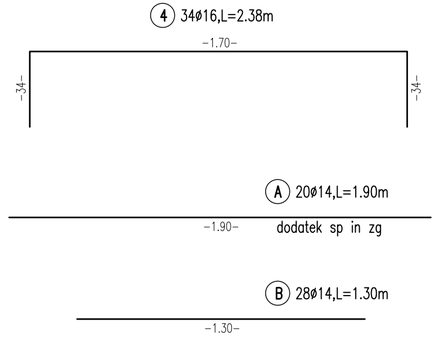


TLORIS









V TEMELJ SE POLOŽI PVC CEV ZA POLAGANJE NAPAJALNEGA KABLA

VODONEPREPUSNI BETON: C30/37, PV-II, XC4, XF3, za ščitni sloj=5cm
PODLOŽNI BETON: C12/15
JEKLO ZA ARMIRANJE: S500B

BAR SCHEDULE Steelgrade: 500S

Pos.	No.	d	Length	D12	D14	D16
B	28	14	1.30		36.40	
A	20	14	1.90		38.00	
1	26	16	3.08			80.08
2	10	16	2.80			28.00
3	10	12	1.90	19.00		
4	34	16	2.38			80.92
5	6	12	4.76	28.56		
6	5	12	2.52	12.60		
7	5	12	1.50	7.50		
Total lengths				67.66	74.40	189.00
kg / m				D12 0.888	D14 1.210	D16 1.580
kg / d				60.082	90.024	298.620
Total weight (kg)				448.726		

Pos.	Comment:
B	dodatek sp in zg
A	dodatek sp in zg

temelj T3'

2/2

VODILNI PROJEKTANT

TIRING

PODJETJE ZA ŽELEZNIŠKI INŽENIRING, D.O.O.
MOTNICA 11
1236 TRZIN
TEL/FAX 01/562 35 55

PROJEKTANT NAČRTA

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NAČRTOVANJE IN SVETOVANJE, D.O.O.
Ukmarjeva ulica 4, Ljubljana

NAROČNIK

RS Ministrstvo za infrastrukturo
Direkcija RS za infrastrukturo
Tržaška cesta 19, 1000 Ljubljana

FAZA

IZVEDBENI NAČRT

OBJEKT

Ureditev železniške postaje Litija

PROJEKT ŠT. 8513

NAČRT ŠT. 105/21

ODG. VODJA PROJEKTA: L. ŠOŠO, mag.inž.prom., dipl.inž.grad. ID. ŠT. G-4643

ODG. PROJEKTANT: dr. Leon HLADNIK, u.dig. ID. ŠT. G-0296

OBDELAL: Rok SEVŠEK, inž.gradb.

NAČRT: 2/2 Jeklena konstrukcija nadstreška

DATUM: marec 2021

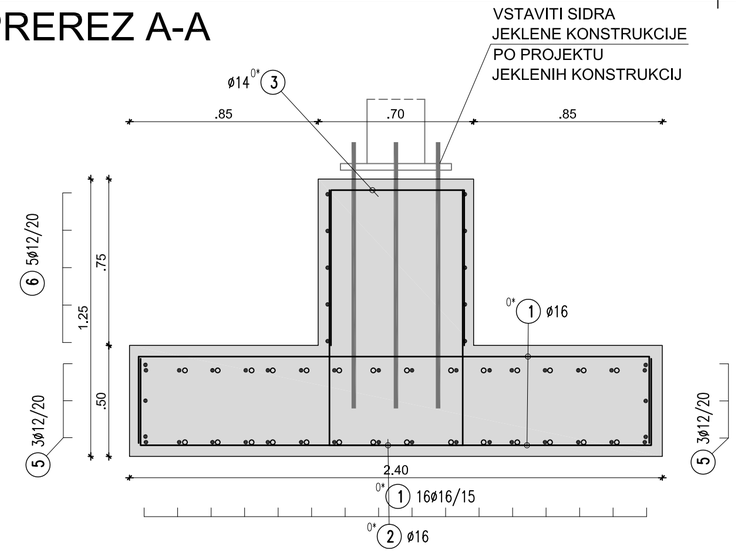
RISBA: Opažno armaturni načrt TEMELJ T3'

MERILO: 1:20

RISBA ŠT. A5

ZG1000	0205.00	007.1276	G.471	

PREREZ A-A



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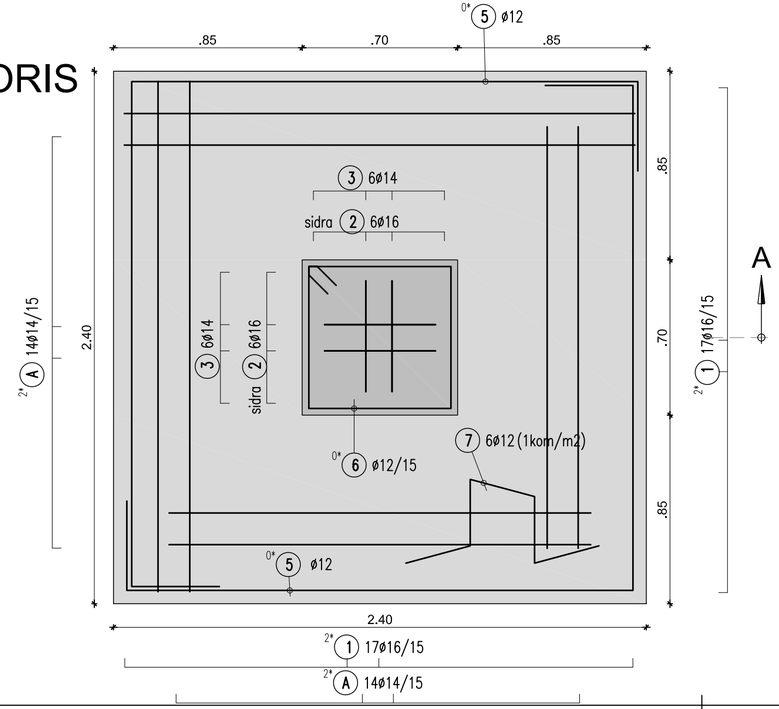

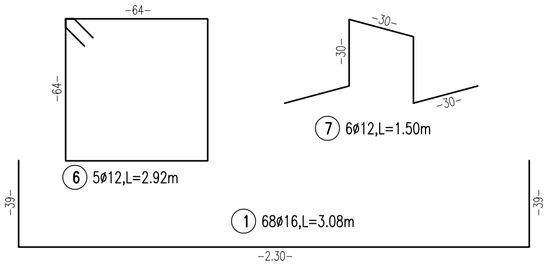

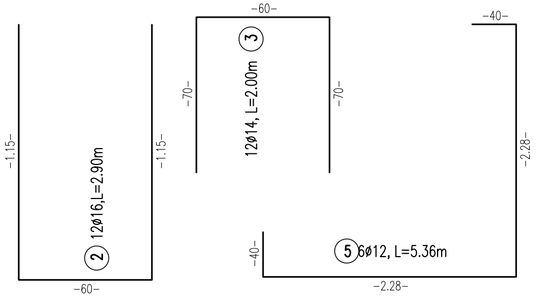

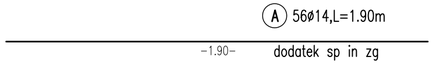

V TEMELJ SE POLOŽI PVC CEV ZA POLAGANJE NAPAJALNEGA KABLA

VODONEPREPUSNI BETON: C30/37, PV-II, XC4, XF3, za ščitni sloj=5cm
PODLOŽNI BETON: C12/15
JEKLO ZA ARMIRANJE: S500B

BAR SCHEDULE Steelgrade: 500S

Pos.	No.	d	Length	D12	D14	D16
A	56	14	1.90		106.40	
1	68	16	3.08			209.44
2	12	16	2.90			34.80
3	12	14	2.00		24.00	
5	6	12	5.36	32.16		
6	5	12	2.92	14.60		
7	6	12	1.50	9.00		
Total lengths				55.76	130.40	244.24
kg / m				D12 0.888	D14 1.210	D16 1.580
kg / d				49.515	157.784	385.899
Total weight (kg)				593.198		

Pos. Comment:
A dodatek sp in zg

temelj T4

2/2

VODILNI PROJEKTANT

TIRING

PODJETJE ZA ŽELEZNIŠKI INŽENIRING, D.O.O.
MOTNICA 11
1236 TRZIN
TEL/FAX 01/562 35 55

PROJEKTANT NAČRTA

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NAČRTOVANJE IN SVETOVANJE, D.O.O.
Ukmarjeva ulica 4, Ljubljana

NAROČNIK

RS Ministrstvo za infrastrukturo
Direkcija RS za infrastrukturo
Tržaška cesta 19, 1000 Ljubljana

FAZA

IZVEDBENI NAČRT

PROJEKT ŠT. 8513

NAČRT ŠT. 105/21

OBJEKT

Ureditev železniške postaje Litija

ODG. VODJA PROJEKTA L. ŠOŠO, mag.inž.prom., dipl.inž.grad. ID. ŠT. G-4643

ODG. PROJEKTANT dr. Leon HLADNIK, u.dig. ID. ŠT. G-0296

OBDELAL Rok SEVŠEK, inž.gradb.

NAČRT 2/2 Jeklena konstrukcija nadstreška

DATUM marec 2021

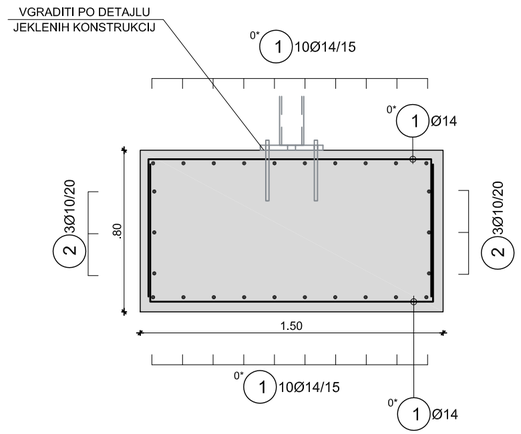
RISBA Opažno armaturni načrt TEMELJ T4

MERILO 1:20

RISBA ŠT. A6

ZG1000	0205.00	007.1276	G.471	

TOČKOVNI TEMELJ
PREREZ A-A



B A R S C H E D U L E Steelgrade: S500B

Pos.	No.	d	Length	D14
1	40	14	2.76	110.40

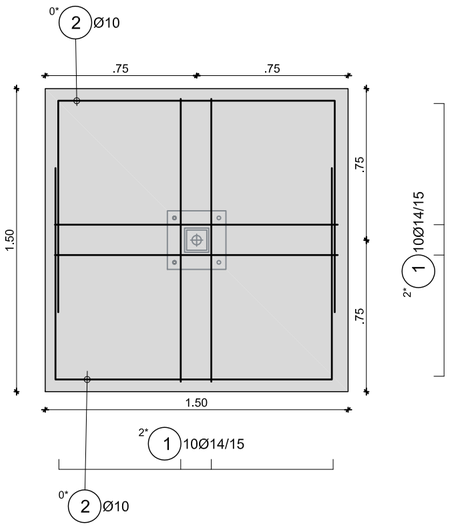
Total lengths	110.40
kg / m	D14 1.210
kg / d	133.584
Total weight (kg)	133.584

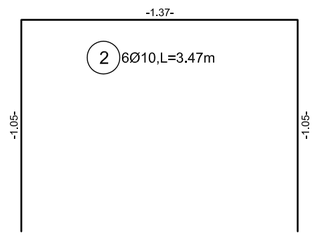
B A R S C H E D U L E Steelgrade: 500S

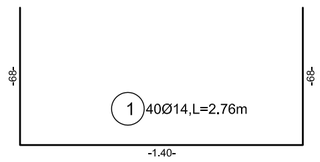
Pos.	No.	d	Length	D10
2	6	10	3.47	20.82

Total lengths	20.82
kg / m	D10 0.617
kg / d	12.846
Total weight (kg)	12.846

TLORIS







VODONEPREPUSNI BETON: C30/37, PV-II, XC4, XF3, zaščitni sloj=5cm
PODLOŽNI BETON: C12/15
JEKLO ZA ARMIRANJE: S500B

temelj T5

2/2

VODILNI PROJEKTANT

TIRING

PODJETJE ZA ŽELEZNIŠKI INŽENIRING, D.O.O.
MOTNICA 11
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TEL/FAX 01/562 35 55

PROJEKTANT NAČRTA

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NAČRTOVANJE IN SVETOVANJE, D.O.O.
Ukmarjeva ulica 4, Ljubljana

NAROČNIK

RS Ministrstvo za infrastrukturo
Direkcija RS za infrastrukturo
Tržaška cesta 19, 1000 Ljubljana

FAZA

IZVEDBENI NAČRT

PROJEKT ŠT. 8513

NAČRT ŠT. 105/21

OBJEKT

Ureditev železniške postaje Litija

ODG. VODJA PROJEKTA: L. ŠOŠO, mag.inž.prom., dipl.inž.grad. ID. ŠT. G-4643

ODG. PROJEKTANT: dr. Leon HLADNIK, u.dig. ID. ŠT. G-0296

OBDELAL: Rok SEVŠEK, inž.gradb.

NAČRT: 2/2 Jeklena konstrukcija nadstreška

DATUM: marec 2021

RISBA: Opažno armaturni načrt
TEMELJ T5

MERILO: 1:25

RISBA ŠT.: A7

ZG1000	**0205.00**	**007.1276**	**G.471**	