

OBRAZAC 1

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³ Mjesto građenja, planski dokument, urbanistička parcela, katastarska parcela

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⁵ Naziv privrednog društva, pravnog lica odnosno preduzetnika koji je izradio tehničku dokumentaciju

⁶ Ime odgovornog lica u privrednom društvu, pravnom licu odnosno ime i prezime preduzetnika

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1. TEHNIČKI OPIS

1.1 UVOD

Za potrebe Investitora urađen je glavni projekat konstrukcije dnevnog centra za djecu sa smetnjama u razvoju. Dokazana je statička sigurnost konstrukcije i urađena sva grafička dokumentacija neophodna za nivo glavnog projekta.

Prilikom statičkom proračuna korišćene su zakonske regulative, standardi, elaborati:

- Pravilnik o tehničkim normativima za beton i armirani beton (PBAB)
- Pravilnik o tehničkim normativima za izgradnju objekata visokogradnje u seizmičkim područjima (PIOVSP '81)
- Osnove projektovanja građevinskih konstrukcija – Korisna opterećenja stambenih i javnih zgrada (JUS U.C7.121)

Objekat je spratnosti P+1. Osnova prizemne etaže je nepravilnog oblika bruto površine cca 440m² a sprata cca 510m². Spratna visina etaža je h=4.0m.

Osnovni statički sistem čine AB ramovi u oba pravca, sa stubovima i platnima debljine d=25cm, odnosno d=35cm i gredama debljine b=35, odnosno b=25cm, visine (od h=60 do h=146cm). Konstrukcija je nepravilna u osnovi pa u istoj nije bilo moguće izbjeći torziju. Prihvatanje ove sile je obezbjeđeno jakim vertikalnim konstruktivnim elementima i odgovarajućom količinom armature.

Krov je ravan prohodan, odnosno zeleni, na AB ploči debljine d=16cm. Međuspratna tavanica je takođe AB ploča debljine d=16cm.

Objekat je fundiran na temelnoj ploči debljine d=40cm. Krutost posteljice je usvojena na osnovu geomehaničkog elaborata kao odnos slijeganja i dopuštenog napona.

Sva predviđena rješenja i proračuni su u skladu sa važećim propisima i pravilima struke. Predmetna konstrukcija osigurava funkcionalnu, pouzdanu, sigurnu i trajnu građevinu. Proračunati su svi mjerodavni elementi konstrukcije. Detaljni armaturni planovi dati su u grafičkom dijelu projekta. Za svako odstupanje od projekta potrebna je saglasnost Projektanta i Investitora. Za vrijeme izvođenja radova potrebna je stalno prisustvo nadzornog inženjera, stalni geodetski nadzor, te povremeni projektantski nadzor.

1.2. PRORAČUN I DIMENZIONISANJE

Statički proračun je sproveden pomoću programa »Tower 7« baziranog na metodi konačnih elemenata. Konstrukcija je modelirana kao prostorni-3D sistem, sastavljen od površinskih i linijskih konačnih elemenata, krutosti određenih na osnovu stvarnih geometrijskih karakteristika, sa odgovarajućim karakteristikama materijala.

Dimenzionisanje AB elemenata je sprovedeno po metodi granične nosivosti za najnepovoljnije kombinacije opterećenja, a sve po pravilniku za BAB 87.

1.3. MATERIJALI ZA KONSTRUKCIJU

Svi potrebni materijali i njihovi sastojci moraju odgovarati zahtjevima važećih propisa, normi i pravila struke. Ukratko će se navesti osnovna svojstva i zahtjevi za beton i betonski čelik za glavne konstruktivne elemente.

1.3.1. Beton

Za sve noseće elemente predviđen je beton MB 30. Projekat betona za sve konstruktivne elemente i njihove monolitne spojeve treba da izradi Izvođač i dostavi ga na saglasnost Projektantu. U njemu treba precizno definisati:

- fizičko-mehanička svojstva
- sastav (mješavinu)
- vodocementni faktor (konzistenciju)
- dodatke (superplastifikatori, ubrzivači i sl.)
- način proizvodnje, transporta i ugradnje
- način zbijanja (vibriranja)
- njegu
- obradu spojnica (nastavci betoniranja)
- posebne zahtjeve, specifičnosti i sl.

1.3.2. Betonski čelik

Koristi se betonski čelik B500B i MA 560/500. Zaštitni slojevi betona do armature iznose:

- 2.5 cm za temeljnu ploču,
- 2.5 cm za zidove, stubove i grede
- 2.0 cm za međuspratne tavanice

2. OPŠTI TEHNIČKI USLOVI ZA IZRADU KONSTRUKCIJE OBJEKTA

2.1 OPŠTE NAPOMENE

Predmetni projekat je urađen u skladu sa važećim zakonima, kojim su propisana tehnička svojstva bitna za objekat.

Sve radove treba da obavljaju za to stručno osposobljene osobe, uz stalni stručni nadzor. Prije prelaska na iduću fazu radova, potrebno je odobrenje nadzornog inženjera. Za svako odstupanje od projekta, potrebna je konsultacija Projektanta. Izvođač je dužan u potpunosti poštovati sve mjere osiguranja i kontrole kvaliteta. Svi upotrijebljeni materijali i svi izvedeni radovi treba da budu u skladu sa zahtjevima važećih normi, propisa i pravila struke.

2.2 ZEMLJANI RADOVI

Tokom radova na iskopima kontrolisati:

- da se iskop obavlja prema visinskim kotama iz projekta, te propisanim nagibima kosina iskopa (uzimajući u obzir geomehanička svojstva tla),
- da tokom rada ne dođe do potkopavanja ili oštećenja okolnih objekata ili okolnog tla,
- da se ne vrše nepotrebno povećani ili štetni iskopi,
- za vrijeme rada na iskopu pa do završetka svih radova na objektu Izvođač je dužan da osigura pravilnu odvodnju,
- ne smije se dozvoliti zadržavanje vode u iskopima,
- vrstu i karakteristiku temeljnog tla kontrolisati prema geotehničkom elaboratu (ukoliko u međuvremenu bude izrađen), a dubine i gabarite iskopa prema građevinskom projektu.

2.3 BETONSKI I ARMIRANOBETONSKI RADOVI

(i) Skele i oplata

Skele i oplata moraju biti izvedene tako da preuzmu opterećenje i uticaje u toku izvođenja radova, bez štetnih slijeganja i deformacija, sa obezbjeđenjem tačnosti predviđene projektom konstrukcije. Oplata mora biti takva da ne dozvoljava gubitak sastojaka betona za vrijeme betoniranja i sazrijevanja betona. Ona mora biti lako demontažna. Unutrašnje stranice moraju biti čiste i ravne, premazane sredstvima za onemogućavanje prijanjanja betona. Premaz za oplatu ne smije biti štetan za beton, armaturu i vezu betona sa armaturom, kao i za materijale koji se naknadno nanose na beton. Ne smije da mijenja boju površine betona koja je vidna.

Oplata se skida bez potresa i udara, kada je beton dovoljno očvrstnuo. Čvrstoća betona prilikom skidanja oplata mora biti:

- 30 % marke betona za stubove, zidove i vertikalne ivice greda
- 70 % marke betona kod ploča i donjih dijelova oplata greda
- 100 % marke betona ukoliko je betonski element opterećen u trenutku skidanja oplata.

Za nosive elemente, kod kojih je noseća dužina veća od 6.0 m, oplata se postavlja sa nadvišenjem od 1/1000 noseće dužine.

(ii) Armatura

Transport, skladištenje i ugradnja armature mora biti takva, da ne dolazi do oštećenja, zamašćenja, zaprljavanja i dodatne korozije armaturnih profila..

Armatura se savija u hladnom stanju, a nastavlja na način predviđen projektom. Ukoliko je nastavljano zavarivanjem, ono se sprovodi u svemu prema JUS C.K6.202. Zavarivanje gorionikom i kovanjem je zabranjeno. Provjera zavarljivosti se sprovodi na epruvetama.

Radi osiguranja projektovanog položaja, armatura se fiksira potrebnim brojem podmetača i graničnika odgovarajućeg tipa. Prije i u toku betoniranja moraju se obezbjediti propisane mjere zaštitnih slojeva betona.

Prije početka betoniranja mora se izvršiti pregled armature i zapisnički utvrditi:

- Prečnici, broj komada i geometrija ugrađene armature
- Učvršćenost armature u oplati
- Atestirane mehaničke karakteristike armature

(iii) Ugrađivanje betona

Beton se ugrađuje prema projektu betona. Ako se betoniranje prekida usred nepredviđenih okolnosti, moraju se preduzeti mjere za otklanjanje štetnosti nastavka betoniranja. Na mjestu prekida se mora odgovarajućim sredstvima obezbjediti prionjivost novog betona. Temperatura betona za ugrađivanje mora da se održi u intervalu od + 5°C, i do 30°C, bez obzira na meteorološke uslove. Beton se transportuje i ugrađuje u oplatu na način koji sprečava segregaciju i promjene u sastavu i svojstvima betona. Svježem betonu se ne smije dodavati voda. Visina slobodnog pada ne smije biti veća od 1.5m, u slučaju kada se posebno ne sprečava segregacija. Dužina razastiranja betona ne smije biti veća od 1.5m.. Naredni sloj se ugrađuje u vremenu koje obezbjeđuje spajanje sa prethodnim. Donji sloj se djelimično revibrira, prilikom ugradnje i vibriranja gornjeg sloja.

Njega ugrađenog betona

Nakon betoniranja beton mora biti zaštićen od:

Prebrzog isušivanja

Padavina i tekuće vode

Visokih i niskih temperatura

Vibracija i drugih mehaničkih uticaja koji mogu poremetiti prionjivost betona za armaturu ili na drugi način da utiču na oštećenje betona u fazi

očvrščavanja.

Njegovanje betona mora trajati minimalno sedam dana, ili koliko je potrebno da beton dostigne 60% projektovane čvrstoće.

Sastavili:

3. ANALIZA OPTEREĆENJA

1.PLOČE POS 100

1.1 Stalno opterećenje

sops.težina konstrukcije (računa Tower)	
cementni estrih (d=5cm)	1.00 kN/m ²
parket + lijepak	0.60 kN/m ²
hi+ti	0.15 kN/m ²
<u>gips sa podkonstr.</u>	<u>0.30kN/m²</u>

ukupno dodatno stalno opterećenje $g_1 = 2.25\text{kN/m}^2$

Usvojeno: $g_1 = 2.50 \text{ kN/m}^2$

1.2. Povremeno opterećenje (uvećano zbog namjene objekta)

Usvojeno: $p = 2.50 \text{ kN/m}^2$

2.PLOČA POS 100' (ZELENI KROV)

2.1 Stalno opterećenje

sops.težina konstrukcije (računa Tower)	
laki beton (dmax=11cm)	1.98 kN/m ²
supstrati	0.80 kN/m ²
slojevi	1.25 kN/m ²
hi+ti	0.10 kN/m ²
<u>gips sa podkonstr.</u>	<u>0.15kN/m²</u>

ukupno dodatno stalno opterećenje $g_1 = 4.28\text{kN/m}^2$

Usvojeno: $g_2 = 4.50 \text{ kN/m}^2$

2.2. Povremeno opterećenje

Usvojeno: $p = 1.50 \text{ kN/m}^2$

2.3. Snijeg

Usvojeno: $p = 0.50 \text{ kN/m}^2$

3.PLOČA POS 200

3.1 Stalno

sops.težina konstrukcije (računa Tower)

laki beton ($d_{max}=17\text{cm}$)

3.05 kN/m²

cementni estrih

1.00 kN/m²

pločice + lijepak

0.80 kN/m²

hi+ti

0.10 kN/m²

gips sa podkonstr.

0.15kN/m²

ukupno dodatno stalno opterećenje

$g_1 = 5.05 \text{ kN/m}^2$

Usvojeno: $g_3 = 5.50 \text{ kN/m}^2$

3.2. Povremeno opterećenje

Usvojeno: $p = 1.00 \text{ kN/m}^2$

3.3. Snijeg

Usvojeno: $p = 0.50 \text{ kN/m}^2$

4.AKTIVNI PRITISAK TLA NA ZIDOVE

$h=4.50 \text{ m}$

$\gamma = 20.00 \text{ kN/m}^3$ -težina tla

$\varphi = 20^\circ$ -ugao unutrašnjeg trenja tla

*kohezija je zanemarena

$$e_a = h \times \gamma \times k_a$$

$$k_a = \tan^2(45 - \varphi/2) = \tan^2(45 - 20/2) = 0.50$$

$$e_a = 4.50 \times 20.0 \times 0.50 = 45.00 \text{ kN /m}^2$$

4. STATIČKI PRORAČUN AB KONSTRUKCIJE

4.1 OSNOVNE KARAKTERISTIKE PRORAČUNSKOG MODELA

Šema nivoa

Naziv	z [m]	h [m]
-------	-------	-------

POS 200	8.50	4.00
POS 100	4.50	0.20
POS 100'	4.30	4.30

POS 000	0.00
---------	------

Tabela materijala

No	Naziv materijala	E[kN/m ²]	μ	γ [kN/m ³]	α [1/C]	Em[kN/m ²]	μ_m
1	Beton MB 30	3.150e+7	0.20	25.00	1.000e-5	3.150e+7	0.20

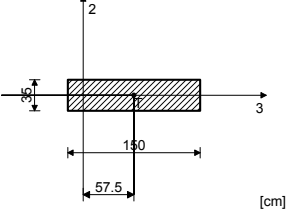
Setovi ploča

No	d[m]	e[m]	Materijal	Tip proračuna	Ortotropija	E2[kN/m ²]	G[kN/m ²]	α
<1>	0.350	0.175	1	Tanka ploča	Izotropna			
<2>	0.250	0.125	1	Tanka ploča	Izotropna			
<3>	0.200	0.100	1	Tanka ploča	Izotropna			
<4>	0.160	0.080	1	Tanka ploča	Izotropna			
<6>	0.210	0.105	1	Tanka ploča	Izotropna			

Setovi greda

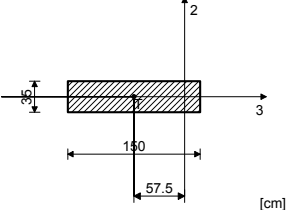
Set: 1 Presek: b/d=150/35, Fiktivna ekscentričnost

Mat.	A1	A2	A3	I1	I2	I3
1 - Beton MB 30	5.250e-1	4.375e-1	4.375e-1	1.829e-2	9.844e-2	5.359e-3



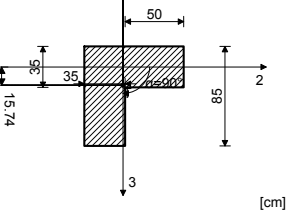
Set: 2 Presek: b/d=150/35, Fiktivna ekscentričnost

Mat.	A1	A2	A3	I1	I2	I3
1 - Beton MB 30	5.250e-1	4.375e-1	4.375e-1	1.829e-2	9.844e-2	5.359e-3

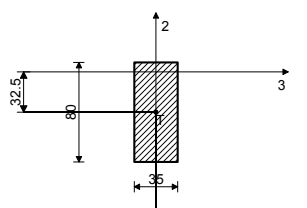


Set: 3 Presek: ~1 85/85, Fiktivna ekscentričnost

Mat.	A1	A2	A3	I1	I2	I3
1 - Beton MB 30	4.725e-1	3.320e-1	3.320e-1	1.929e-2	2.659e-2	2.659e-2



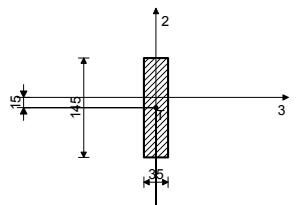
Set: 4 Presek: b/d=35/80, Fiktivna ekscentričnost



[cm]

Mat.	A1	A2	A3	I1	I2	I3
1 - Beton MB 30	2.800e-1	2.333e-1	2.333e-1	8.292e-3	2.858e-3	1.493e-2

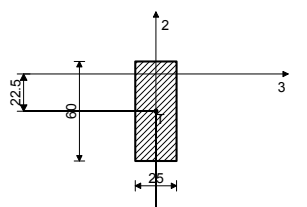
Set: 5 Presek: b/d=35/145, Fiktivna ekscentričnost



[cm]

Mat.	A1	A2	A3	I1	I2	I3
1 - Beton MB 30	5.075e-1	4.229e-1	4.229e-1	1.757e-2	5.181e-3	8.892e-2

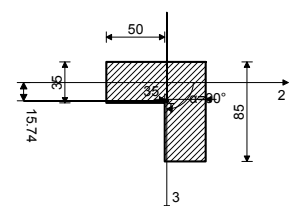
Set: 6 Presek: b/d=25/60, Fiktivna ekscentričnost



[cm]

Mat.	A1	A2	A3	I1	I2	I3
1 - Beton MB 30	1.500e-1	1.250e-1	1.250e-1	2.307e-3	7.812e-4	4.500e-3

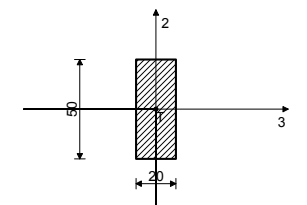
Set: 7 Presek: ~I 85/85, Fiktivna ekscentričnost



[cm]

Mat.	A1	A2	A3	I1	I2	I3
1 - Beton MB 30	4.725e-1	3.320e-1	3.320e-1	1.929e-2	2.659e-2	2.659e-2

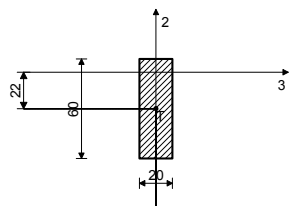
Set: 8 Presek: b/d=20/60, Fiktivna ekscentričnost



[cm]

Mat.	A1	A2	A3	I1	I2	I3
1 - Beton MB 30	1.000e-1	8.333e-2	8.333e-2	9.981e-4	3.333e-4	2.083e-3

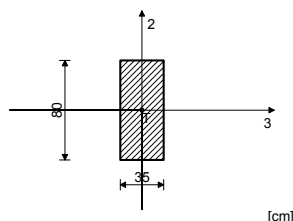
Set: 9 Presek: b/d=20/60, Fiktivna ekscentričnost



[cm]

Mat.	A1	A2	A3	I1	I2	I3
1 - Beton MB 30	1.200e-1	1.000e-1	1.000e-1	1.264e-3	4.000e-4	3.600e-3

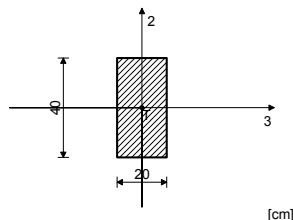
Set: 10 Presek: b/d=35/80, Fiktivna ekscentričnost



[cm]

Mat.	A1	A2	A3	I1	I2	I3
1 - Beton MB 30	2.800e-1	2.333e-1	2.333e-1	8.292e-3	2.858e-3	1.493e-2

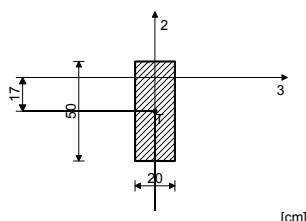
Set: 11 Presek: b/d=20/40, Fiktivna ekscentričnost



[cm]

Mat.	A1	A2	A3	I1	I2	I3
1 - Beton MB 30	8.000e-2	6.667e-2	6.667e-2	7.324e-4	2.667e-4	1.067e-3

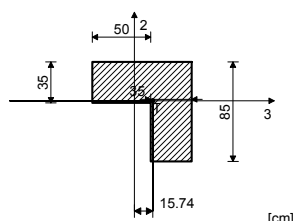
Set: 12 Presek: b/d=20/50, Fiktivna ekscentričnost



[cm]

Mat.	A1	A2	A3	I1	I2	I3
1 - Beton MB 30	1.000e-1	8.333e-2	8.333e-2	9.981e-4	3.333e-4	2.083e-3

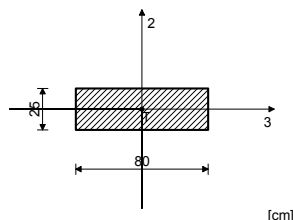
Set: 14 Presek: ~I 85/85, Fiktivna ekscentričnost



[cm]

Mat.	A1	A2	A3	I1	I2	I3
1 - Beton MB 30	4.725e-1	3.320e-1	3.320e-1	1.929e-2	2.659e-2	2.659e-2

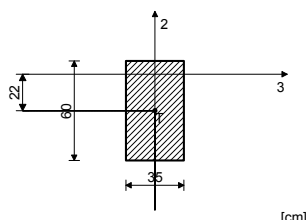
Set: 15 Presek: b/d=80/25, Fiktivna ekscentričnost



[cm]

Mat.	A1	A2	A3	I1	I2	I3
1 - Beton MB 30	2.000e-1	1.667e-1	1.667e-1	3.347e-3	1.067e-2	1.042e-3

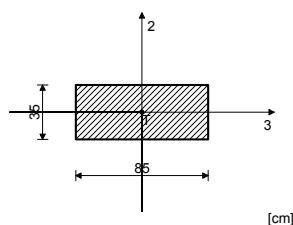
Set: 16 Presek: b/d=35/60, Fiktivna ekscentričnost



[cm]

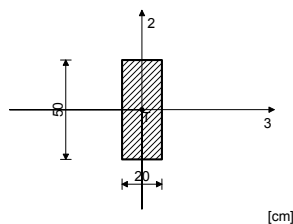
Mat.	A1	A2	A3	I1	I2	I3
1 - Beton MB 30	2.100e-1	1.750e-1	1.750e-1	5.454e-3	2.144e-3	6.300e-3

Set: 17 Presek: b/d=85/35, Fiktivna ekscentričnost



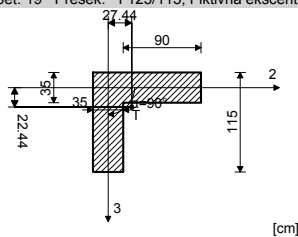
Mat.	A1	A2	A3	I1	I2	I3
1 - Beton MB 30	2.975e-1	2.479e-1	2.479e-1	9.004e-3	1.791e-2	3.037e-3

Set: 18 Presek: b/d=20/50, Fiktivna ekscentričnost



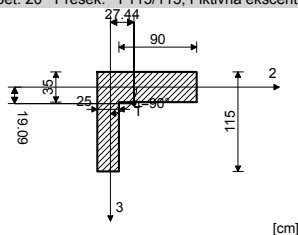
Mat.	A1	A2	A3	I1	I2	I3
1 - Beton MB 30	1.000e-1	8.333e-2	8.333e-2	9.981e-4	3.333e-4	2.083e-3

Set: 19 Presek: ~I 125/115, Fiktivna ekscentričnost



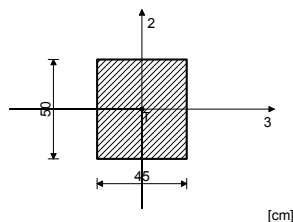
Mat.	A1	A2	A3	I1	I2	I3
1 - Beton MB 30	7.175e-1	4.332e-1	4.171e-1	2.930e-2	7.585e-2	9.440e-2

Set: 20 Presek: ~I 115/115, Fiktivna ekscentričnost



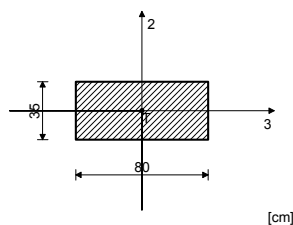
Mat.	A1	A2	A3	I1	I2	I3
1 - Beton MB 30	6.025e-1	3.740e-1	3.108e-1	2.060e-2	5.895e-2	7.246e-2

Set: 22 Presek: b/d=45/50, Fiktivna ekscentričnost



Mat.	A1	A2	A3	I1	I2	I3
1 - Beton MB 30	2.250e-1	1.875e-1	1.875e-1	7.047e-3	3.797e-3	4.687e-3

Set: 23 Presek: b/d=80/35, Fiktivna ekscentričnost



Mat.	A1	A2	A3	I1	I2	I3
1 - Beton MB 30	2.800e-1	2.333e-1	2.333e-1	8.292e-3	1.493e-2	2.858e-3

Setovi površinskih oslonaca

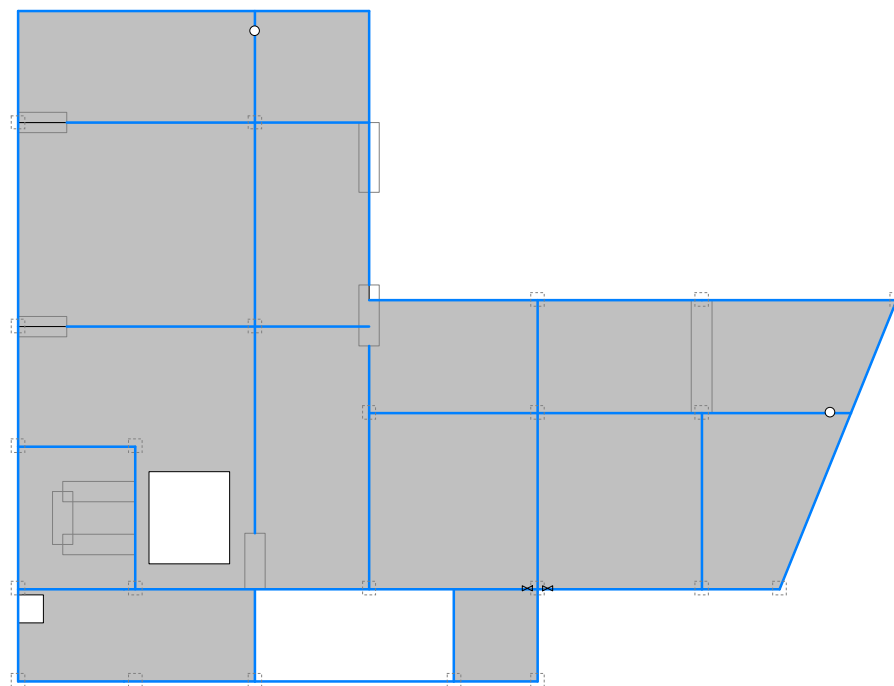
Set	K,R1	K,R2	K,R3
1	6.000e+4	6.000e+4	6.000e+4

Setovi linijskih oslonaca

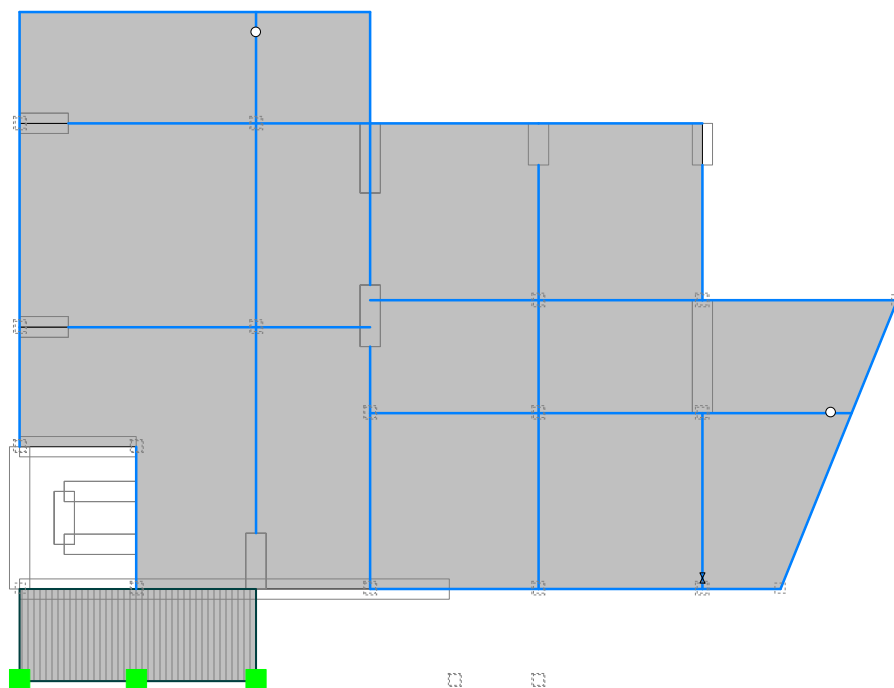
Set	K,R1	K,R2	K,R3	K,M1	Tlo [m]
1	1.000e+10	1.000e+10	1.000e+10	1.000e+10	
2	1.000e+10	1.000e+10	1.000e+10	1.000e+10	
3	1.000e+10	1.000e+10	1.000e+10	1.000e+10	

Setovi tacakastih oslonaca

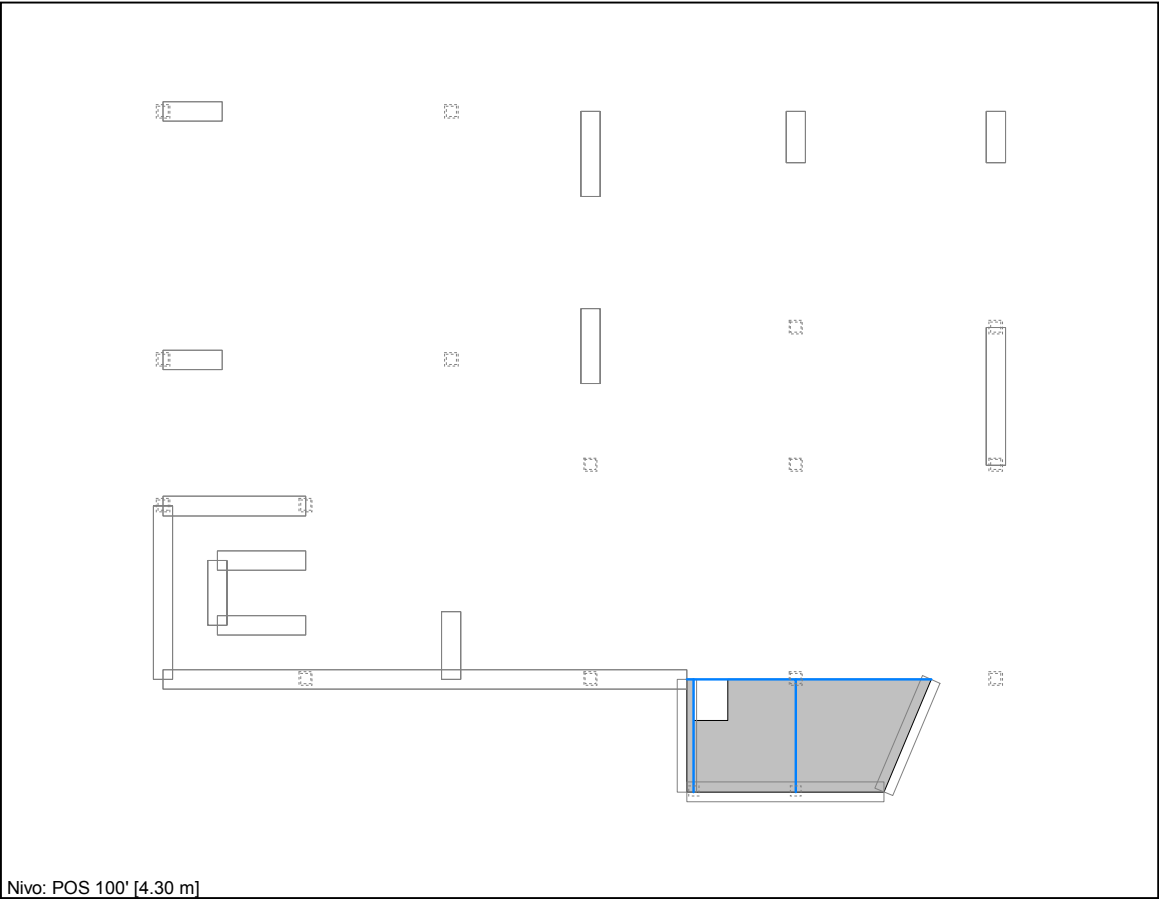
	K,R1	K,R2	K,R3	K,M1	K,M2	K,M3
1	1.000e+10	1.000e+10	1.000e+10	1.000e+10	1.000e+10	1.000e+10



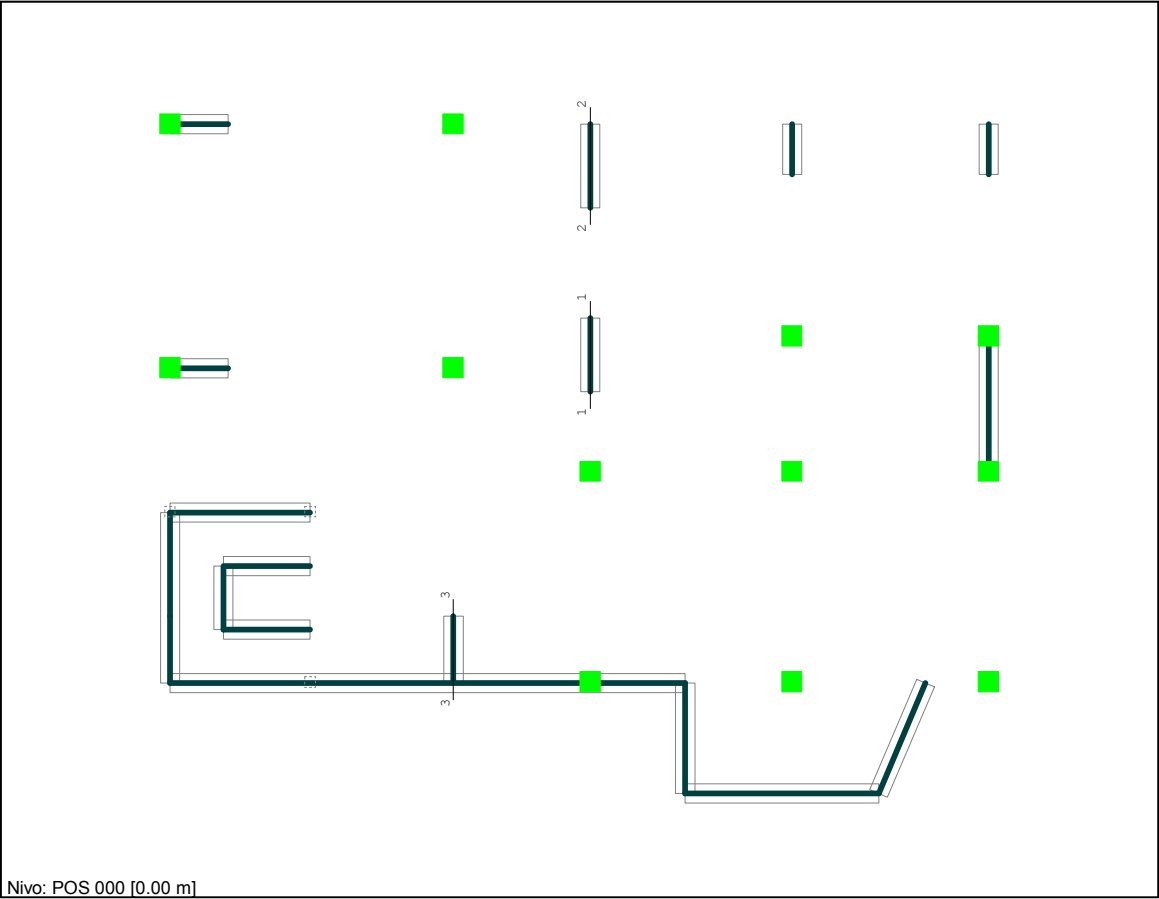
Nivo: POS 200 [18.50 m]



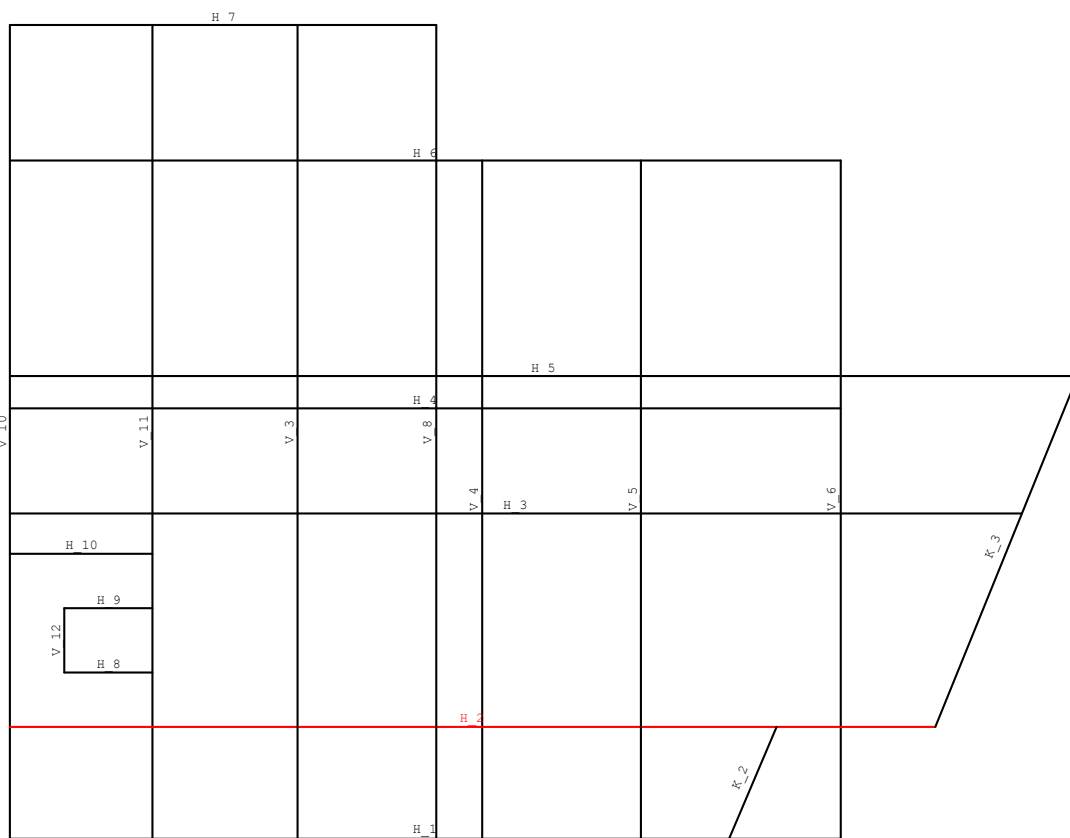
Nivo: POS 100 [4.50 m]

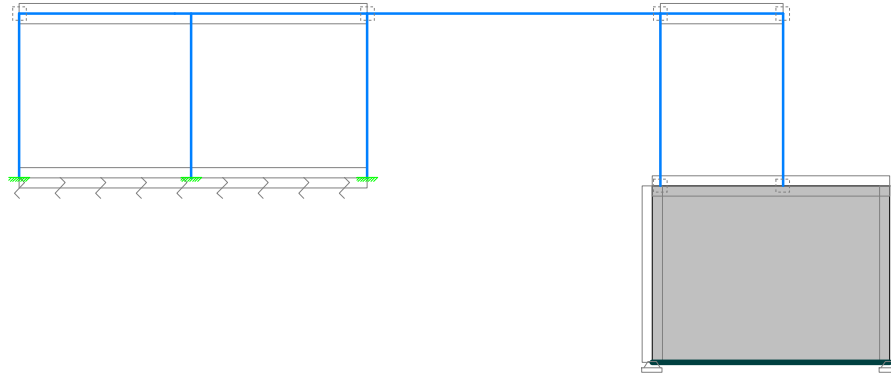


Nivo: POS 100' [4.30 m]

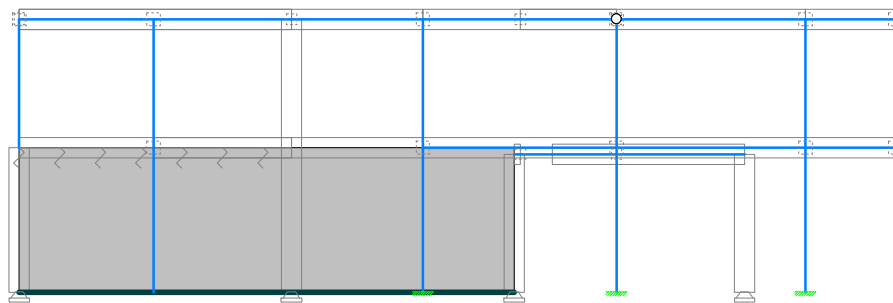


Nivo: POS 000 [0.00 m]

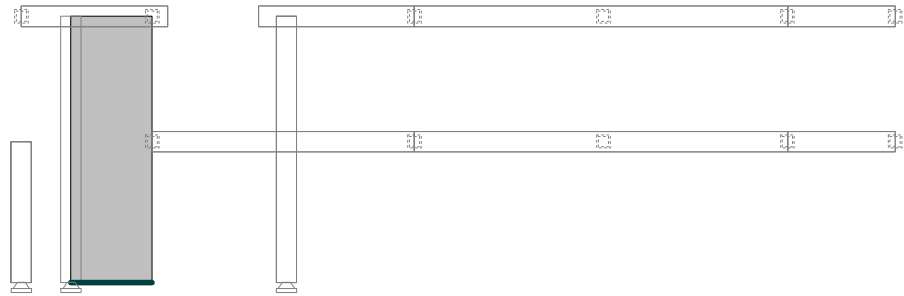




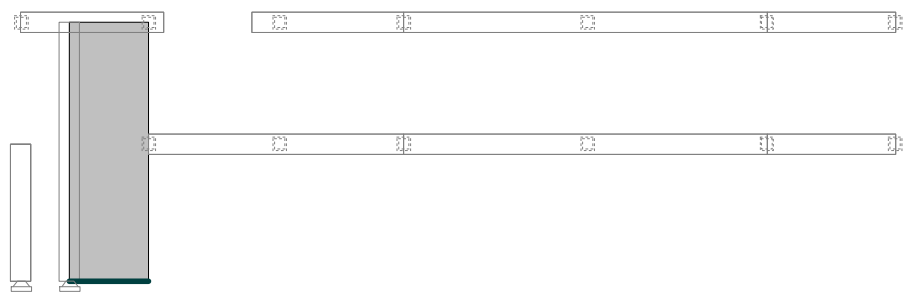
Ram: H_1



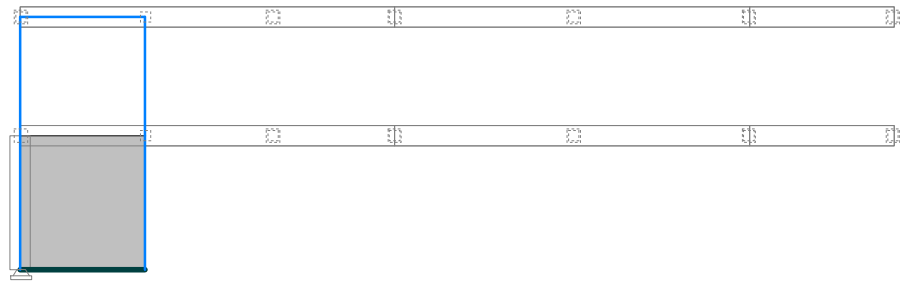
Ram: H_2



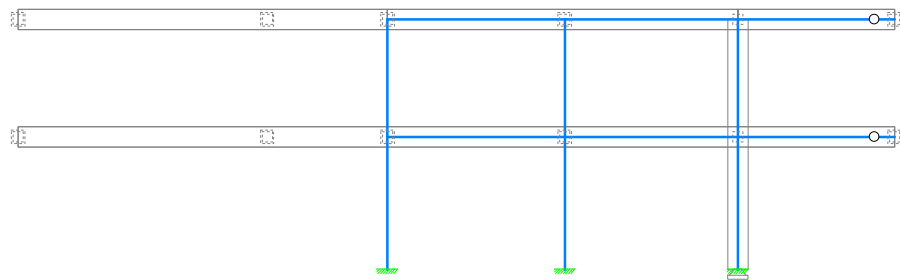
Ram: H 8



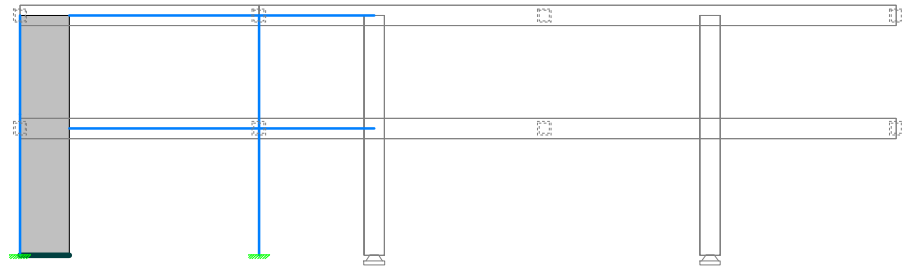
Ram: H 9



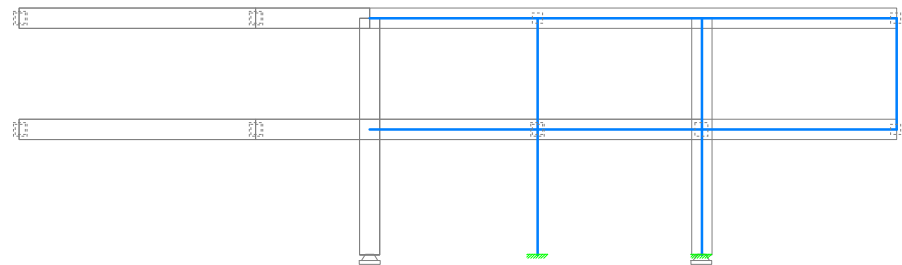
Ram: H_10



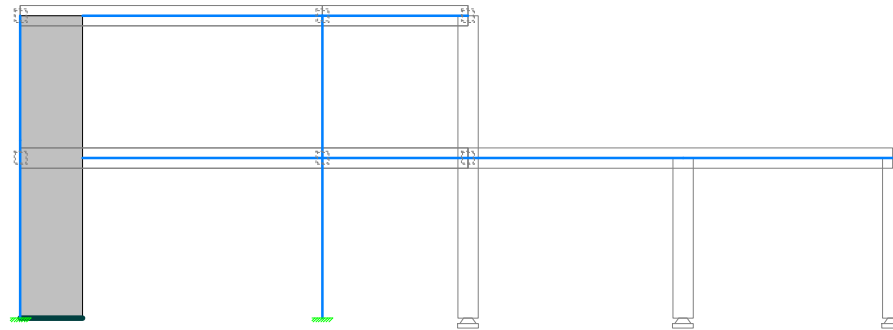
Ram: H_3



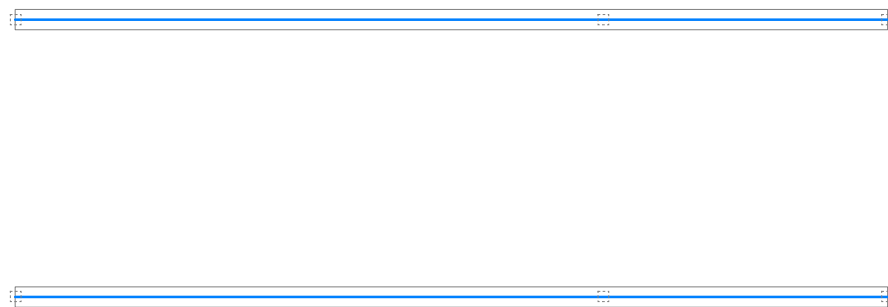
Ram: H_4



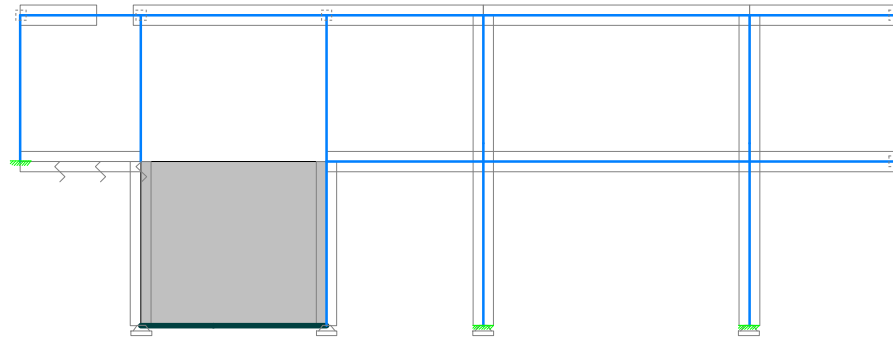
Ram: H_5



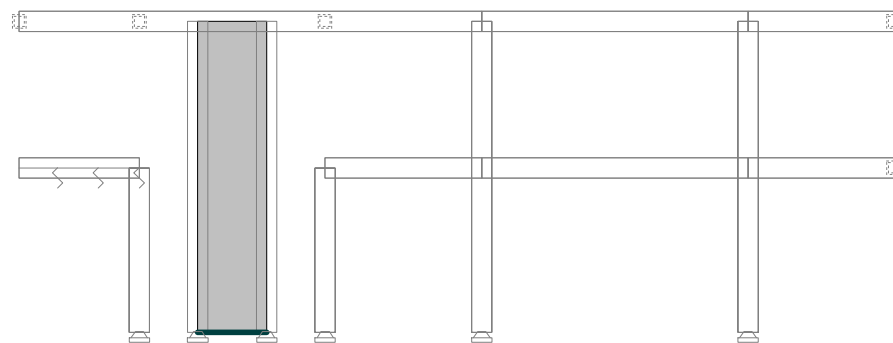
Ram: H 6



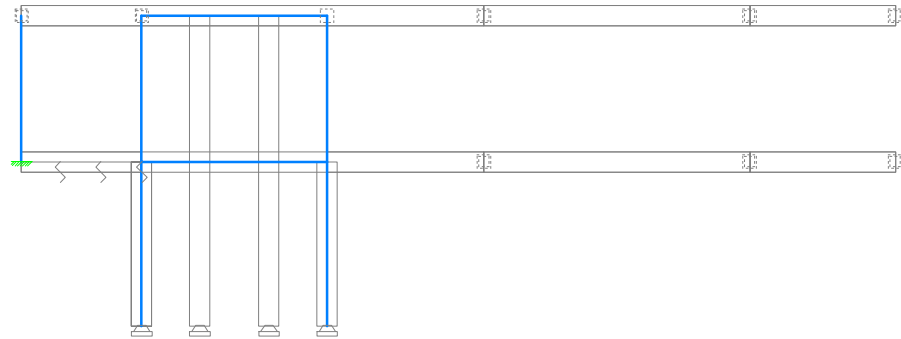
Ram: H 7



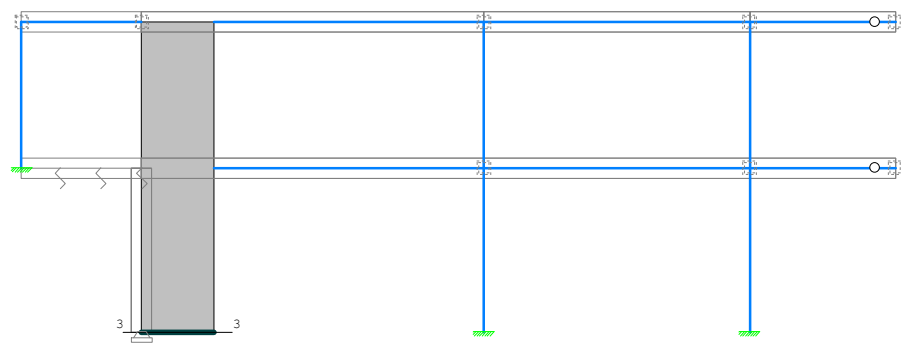
Ram: V_10



Ram: V_12

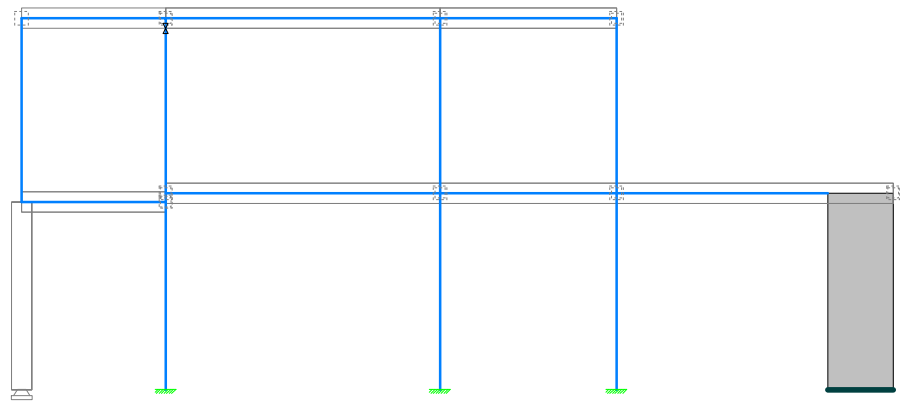


Ram: V_11

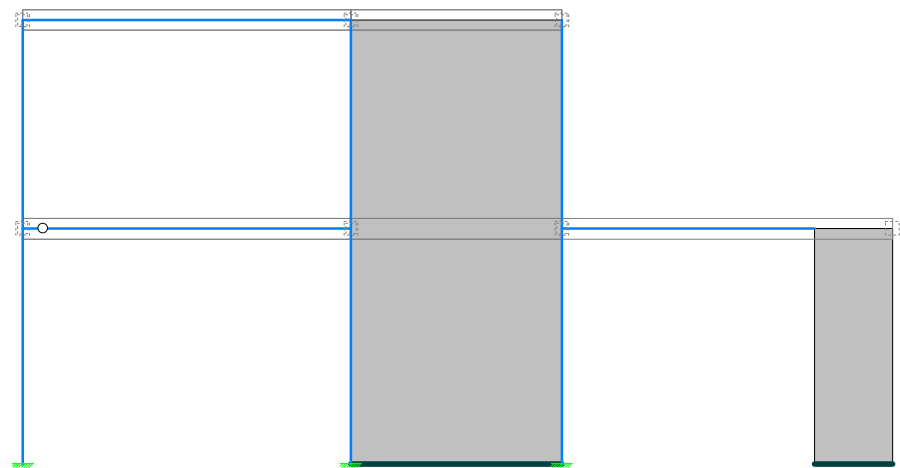


Ram: V_3

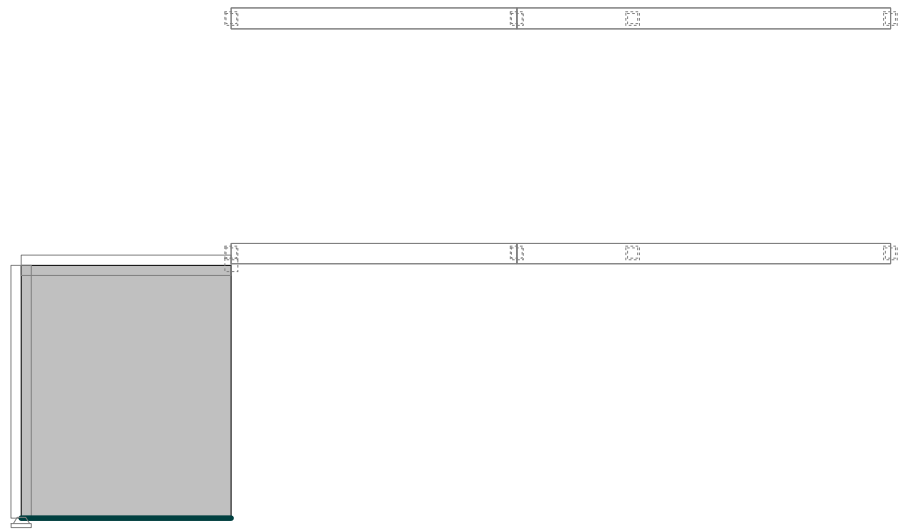




Ram: V_5



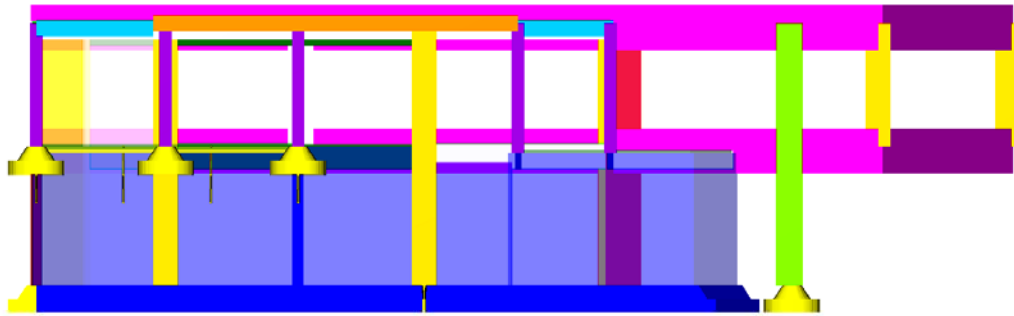
Ram: V_6



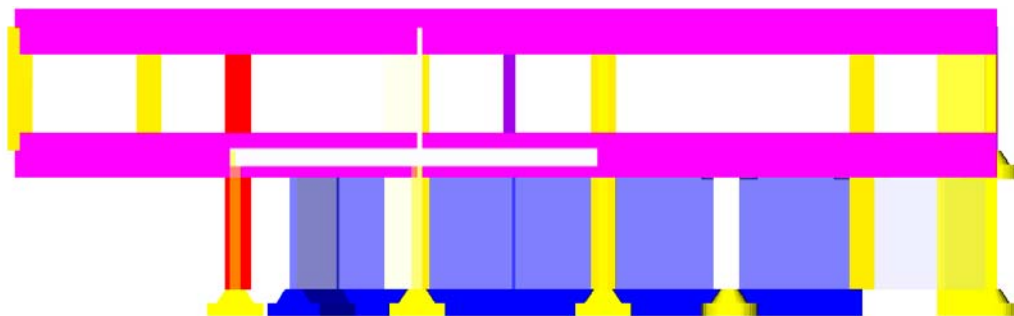
Ram: K 2



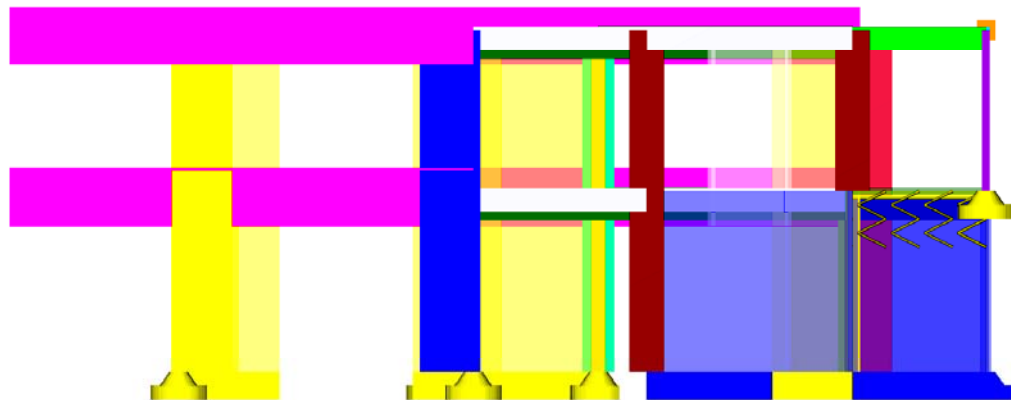
Ram: K 3



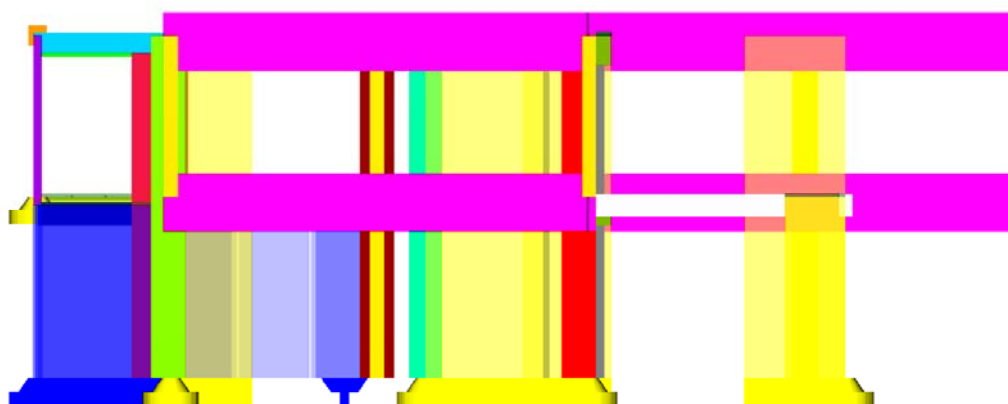
Izometrija (Front)



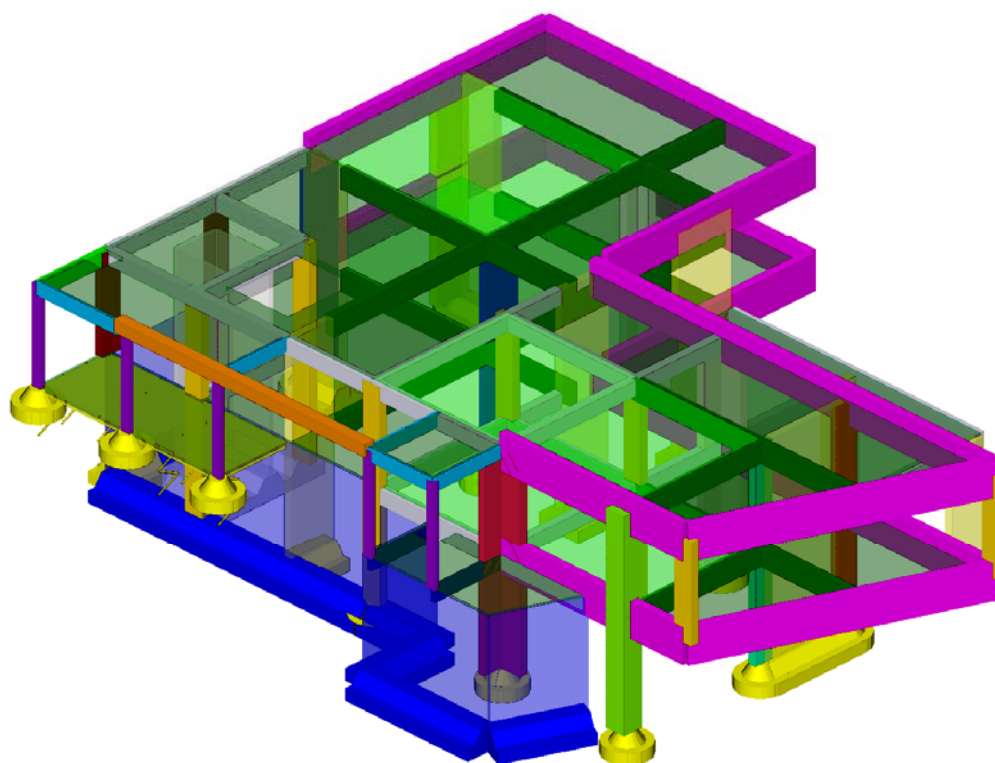
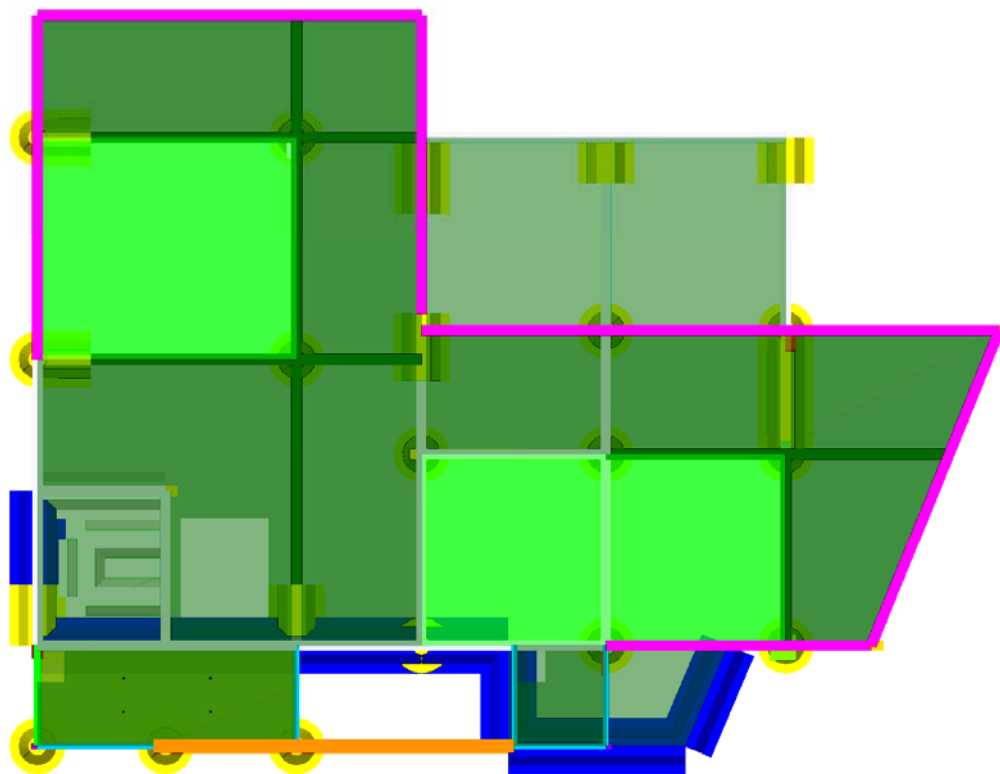
Izometrija (Back)



Izometrija (Left)



Izometrija (Right)

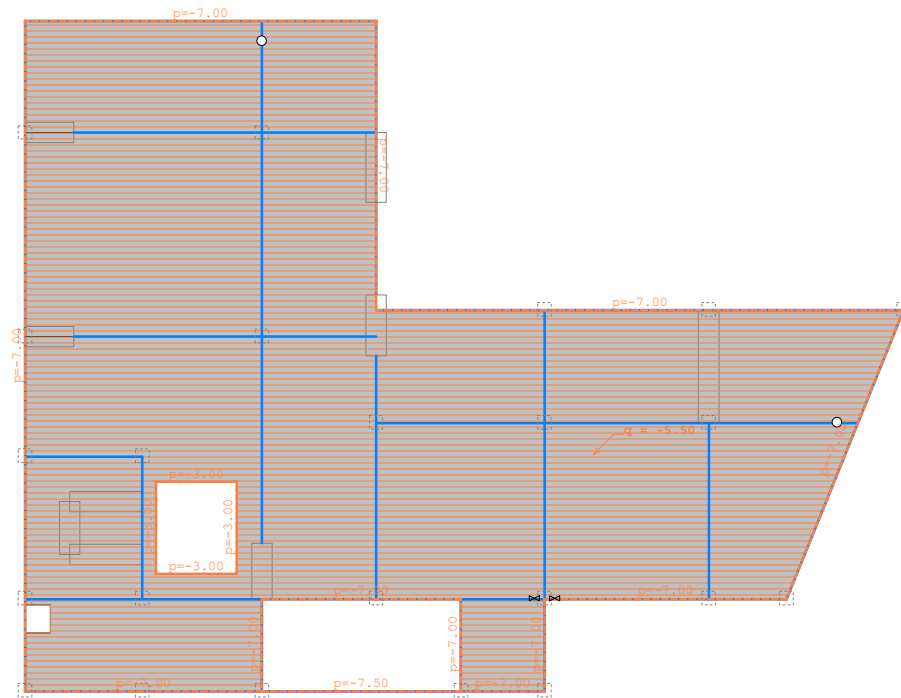


4.2 OPTEREĆENJE NA MODELU

Lista slučajeva opterećenja

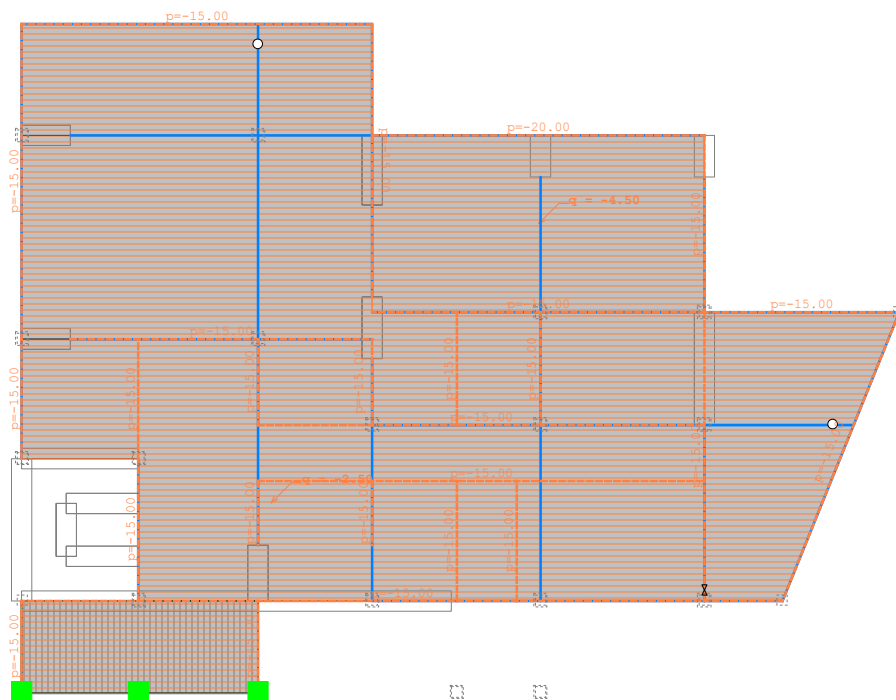
LC	Naziv	pX [kN]	pY [kN]	pZ [kN]
1	stalno (g)	0.00	7285.97	-18446.1
2	povremeno	0.00	0.00	-1807.75
3	snijeg	0.00	0.00	-275.24
4	Sx	1377.73	0.00	0.00
5	Sy	0.00	1377.73	0.00
6	Komb.: 1.6xI+1.8xII+1.8xIII	0.00	11657.6	-33263.2
7	Komb.: I+1.8xII+1.8xIII	0.00	7285.97	-22195.5
8	Komb.: 1.6xI+1.8xIII	0.00	11657.6	-30009.2
9	Komb.: 1.6xI+1.8xII	0.00	11657.6	-32767.7
10	Komb.: 1.3xI+0.65xII-1.3xIV	-1791.05	9471.76	-25155.0
11	Komb.: 1.3xI+0.65xII-1.3xV	0.00	7680.71	-25155.0
12	Komb.: 1.3xI+0.65xII+1.3xV	0.00	11262.8	-25155.0
13	Komb.: 1.3xI+0.65xII+1.3xIV	1791.05	9471.76	-25155.0
14	Komb.: I+0.65xII-1.3xIV	-1791.05	7285.97	-19621.2
15	Komb.: I+0.65xII-1.3xV	0.00	5494.92	-19621.2
16	Komb.: I+0.65xII+1.3xV	0.00	9077.02	-19621.2
17	Komb.: I+0.65xII+1.3xIV	1791.05	7285.97	-19621.2
18	Komb.: I+1.8xIII	0.00	7285.97	-18941.6
19	Komb.: I+1.8xII	0.00	7285.97	-21700.1
20	Komb.: 1.3xI-1.3xIV	-1791.05	9471.76	-23980.0
21	Komb.: 1.3xI-1.3xV	0.00	7680.71	-23980.0
22	Komb.: 1.3xI+1.3xV	0.00	11262.8	-23980.0
23	Komb.: 1.3xI+1.3xIV	1791.05	9471.76	-23980.0
24	Komb.: I-1.3xIV	-1791.05	7285.97	-18446.1
25	Komb.: I-1.3xV	0.00	5494.92	-18446.1
26	Komb.: I+1.3xV	0.00	9077.02	-18446.1
27	Komb.: I+1.3xIV	1791.05	7285.97	-18446.1
28	Komb.: 1.6xI	0.00	11657.6	-29513.8
29	Komb.: I	0.00	7285.97	-18446.1

Opt. 1: stalno (g)



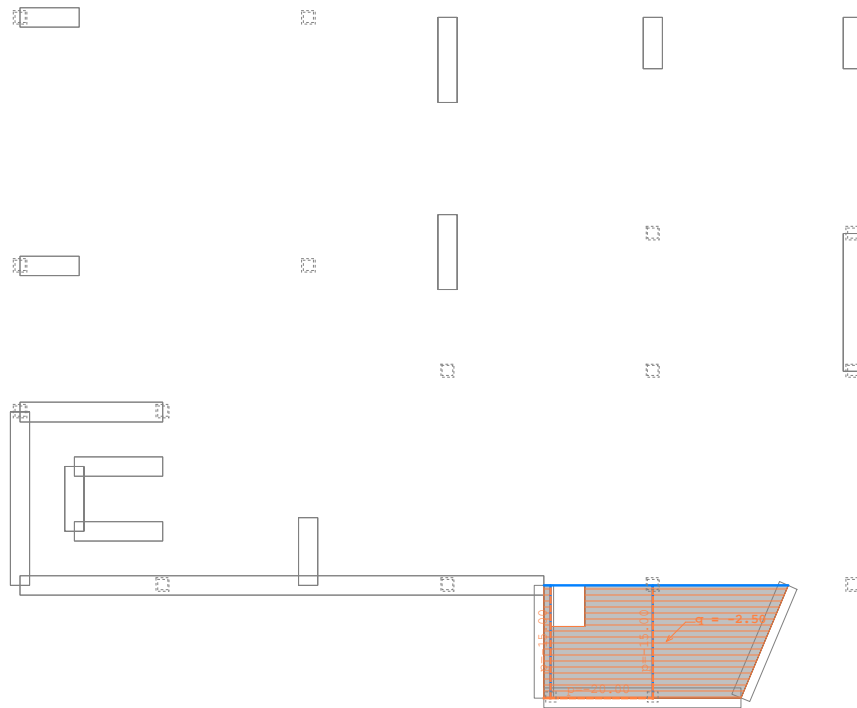
Nivo: POS 200 [8.50 m]

Opt. 1: stalno (g)



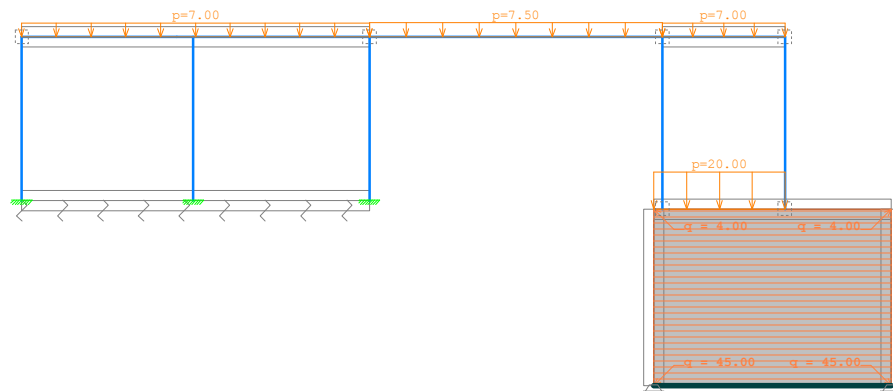
Nivo: POS 100 [4.50 m]

Opt. 1: stalno (g)



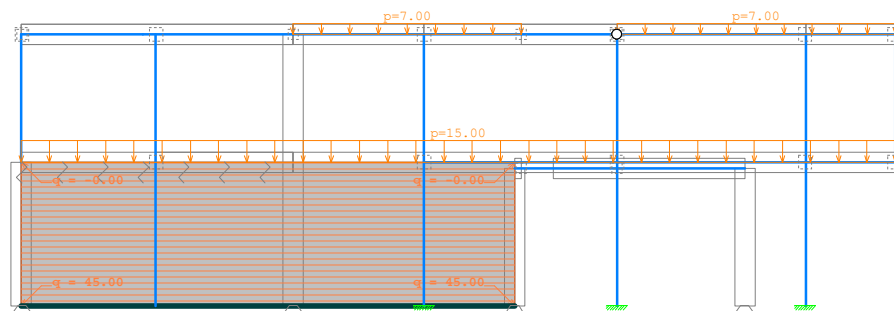
Nivo: POS 100' [4.30 m]

Opt. 1: stalno (g)



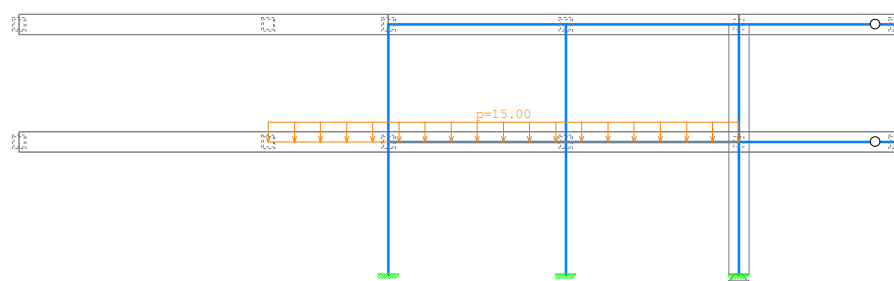
Ram: H 1

Opt. 1: stalno (g)



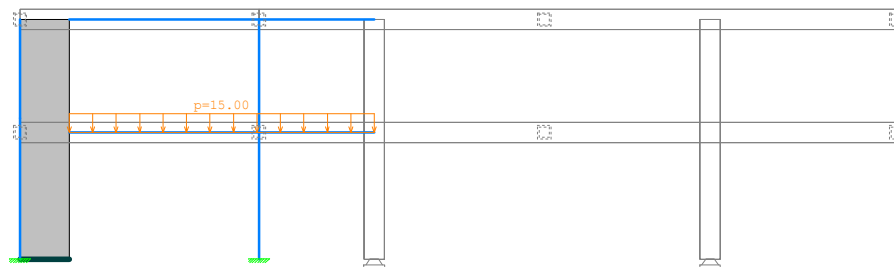
Ram: H 2

Opt. 1: stalno (g)



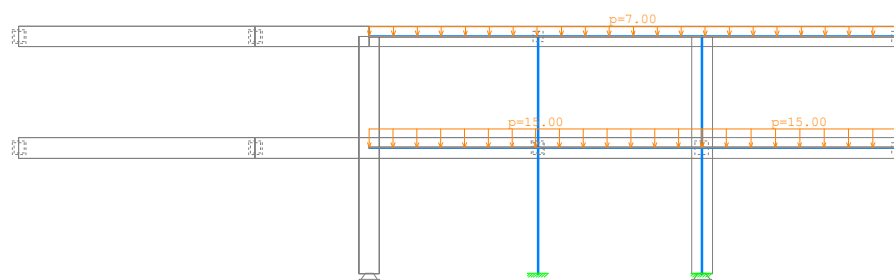
Ram: H 3

Opt. 1: stalno (g)



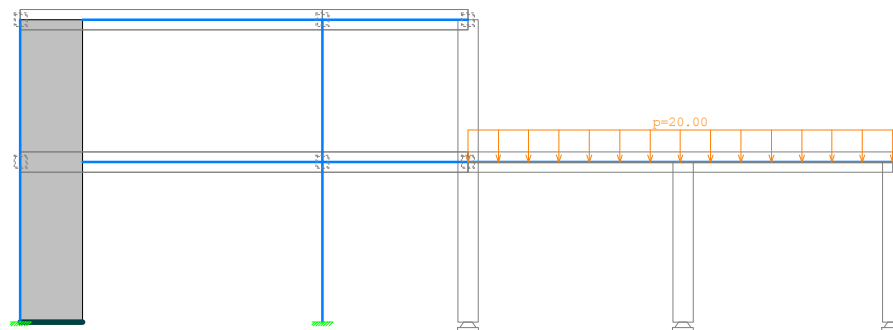
Ram: H_4

Opt. 1: stalno (g)



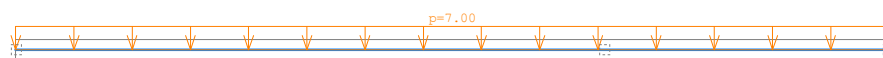
Ram: H_5

Opt. 1: stalno (g)



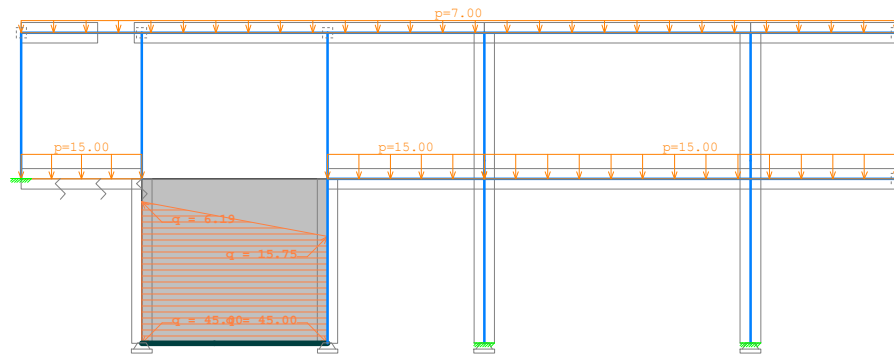
Ram: H_6

Opt. 1: stalno (g)



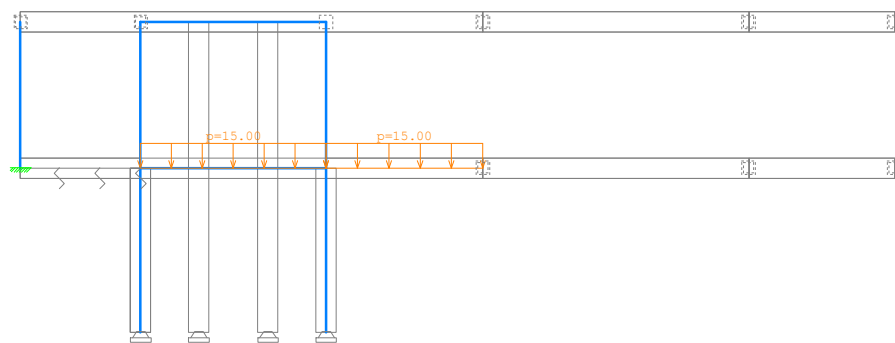
Ram: H_7

Opt. 1: stalno (g)



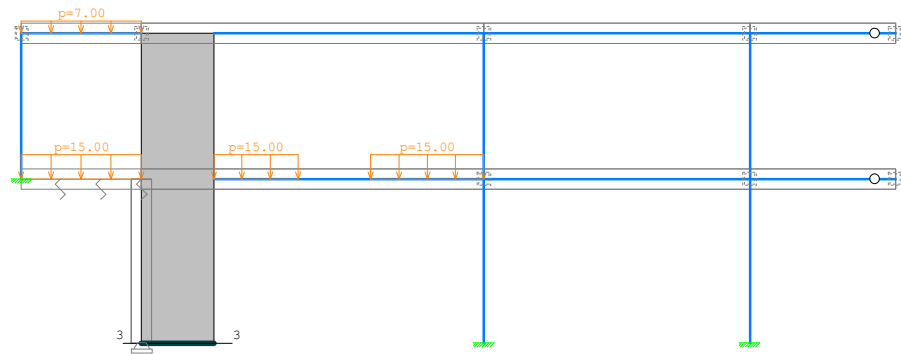
Ram: V_10

Opt. 1: stalno (g)



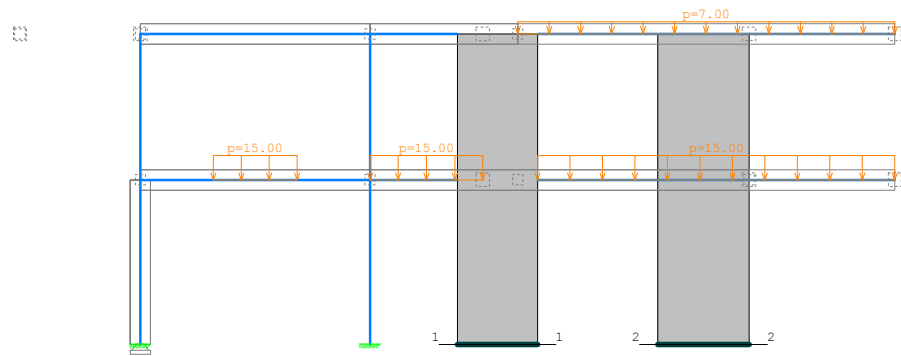
Ram: V_11

Opt. 1: stalno (g)



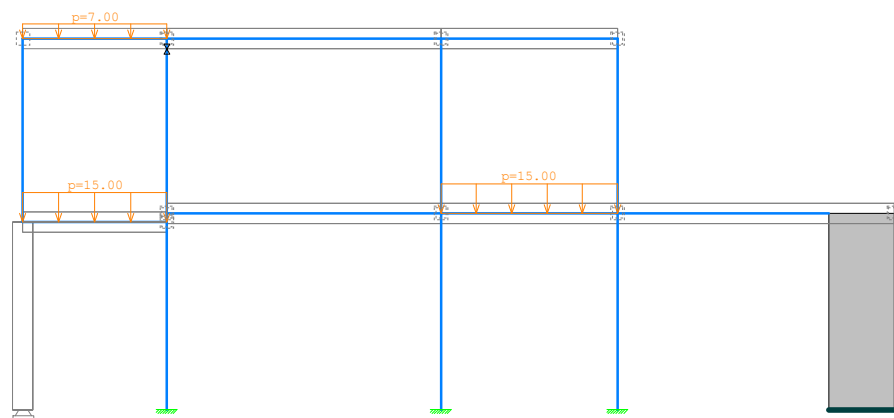
Ram: V_3

Opt. 1: stalno (g)



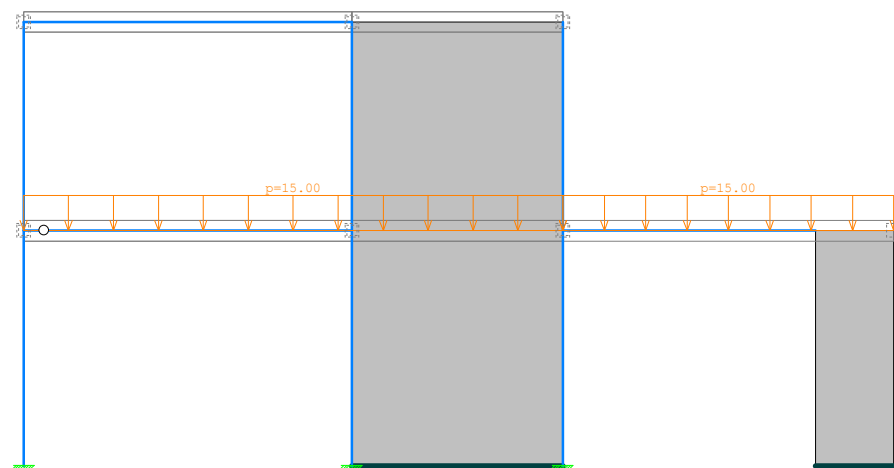
Ram: V_8

Opt. 1: stalno (g)



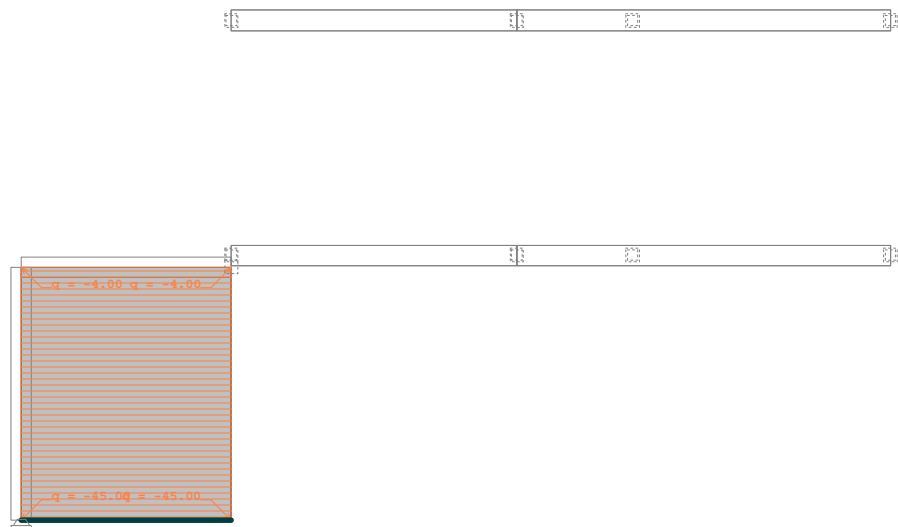
Ram: V_5

Opt. 1: stalno (g)



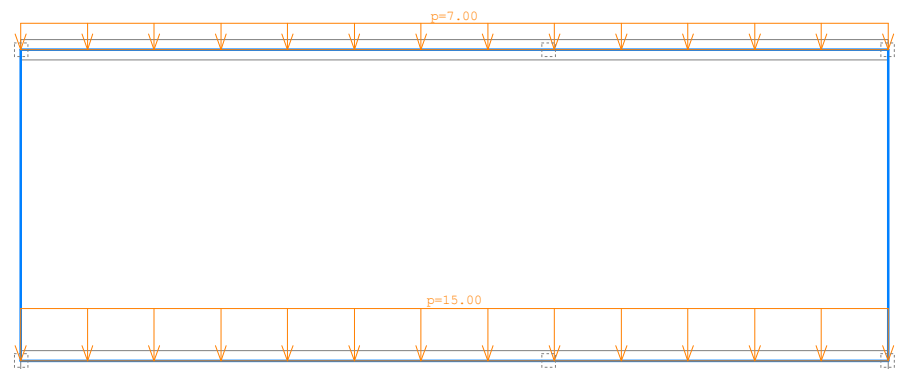
Ram: V_6

Opt. 1: stalno (g)



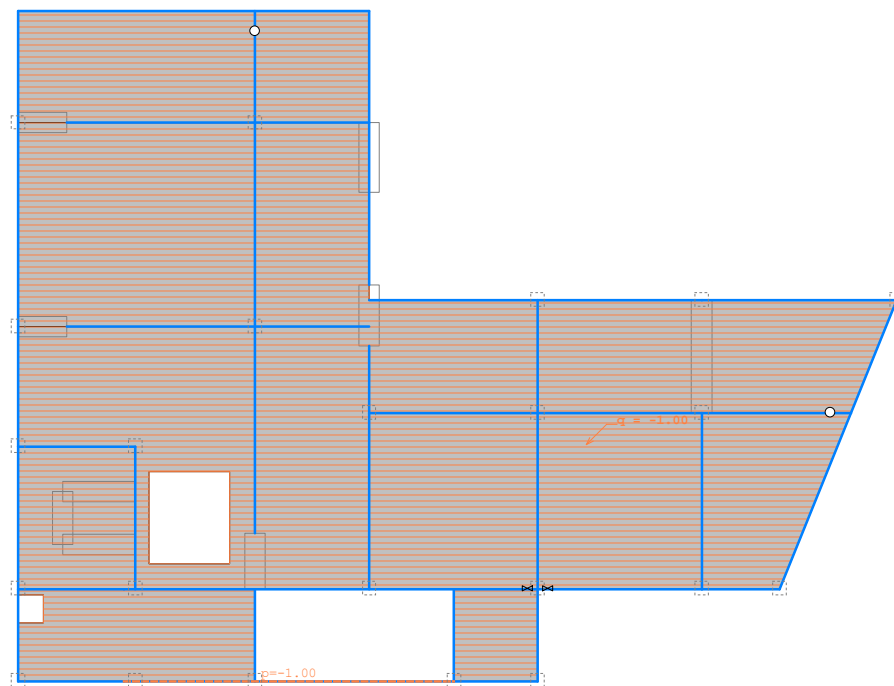
Ram: K 2

Opt. 1: stalno (g)



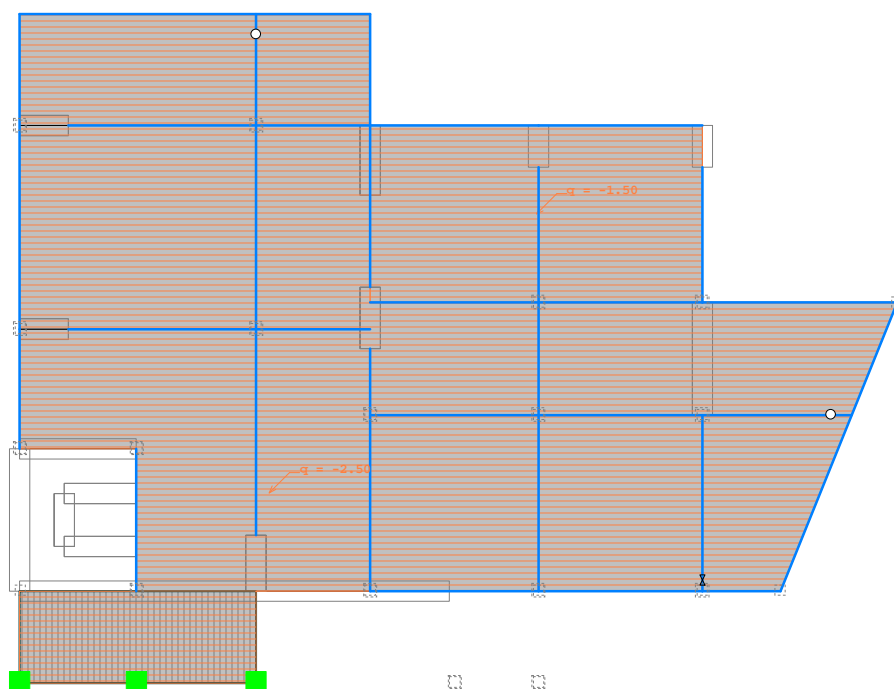
Ram: K 3

Opt. 2: povremeno



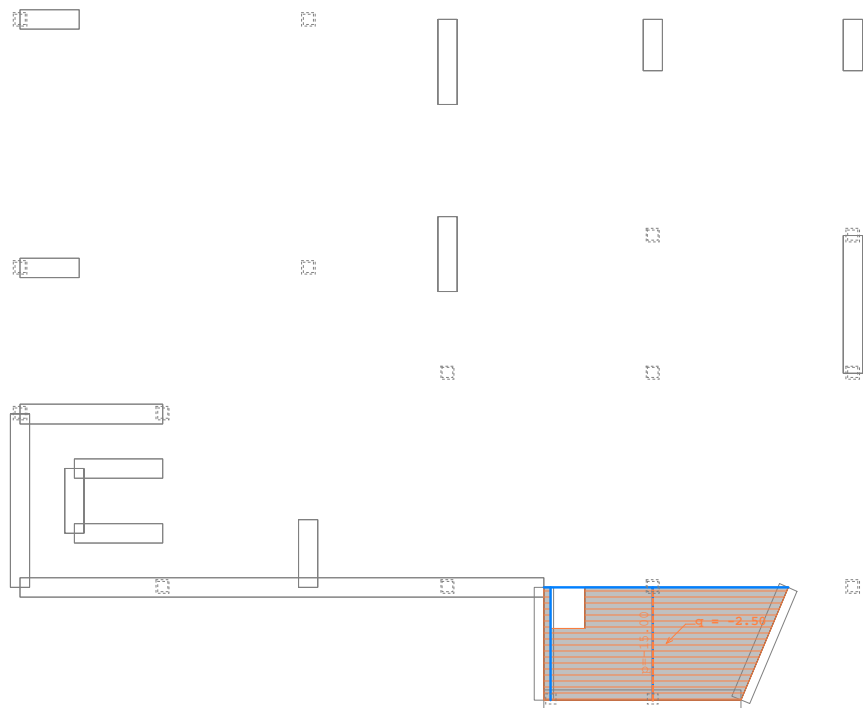
Nivo: POS 200 [8.50 m]

Opt. 2: povremeno



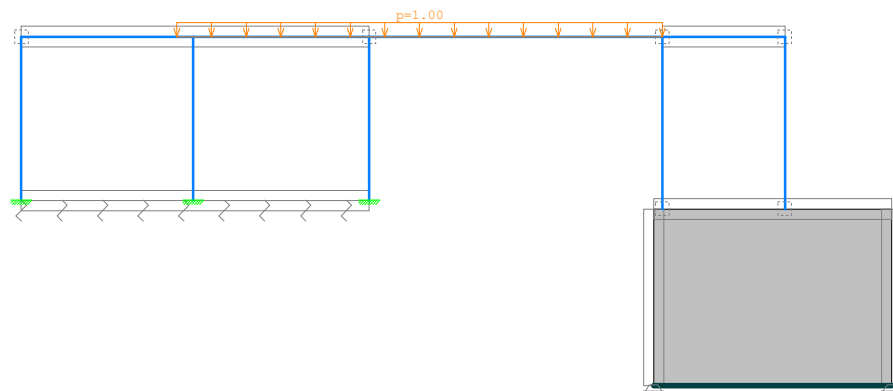
Nivo: POS 100 [4.50 m]

Opt. 2: povremeno



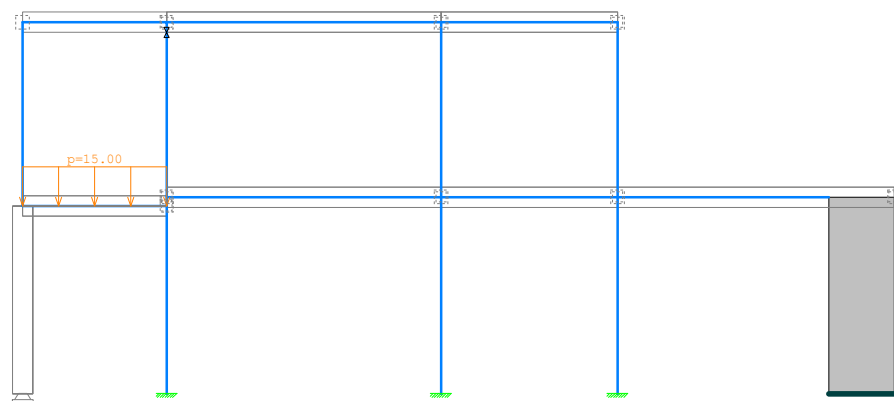
Nivo: POS 100' [4.30 m]

Opt. 2: povremeno



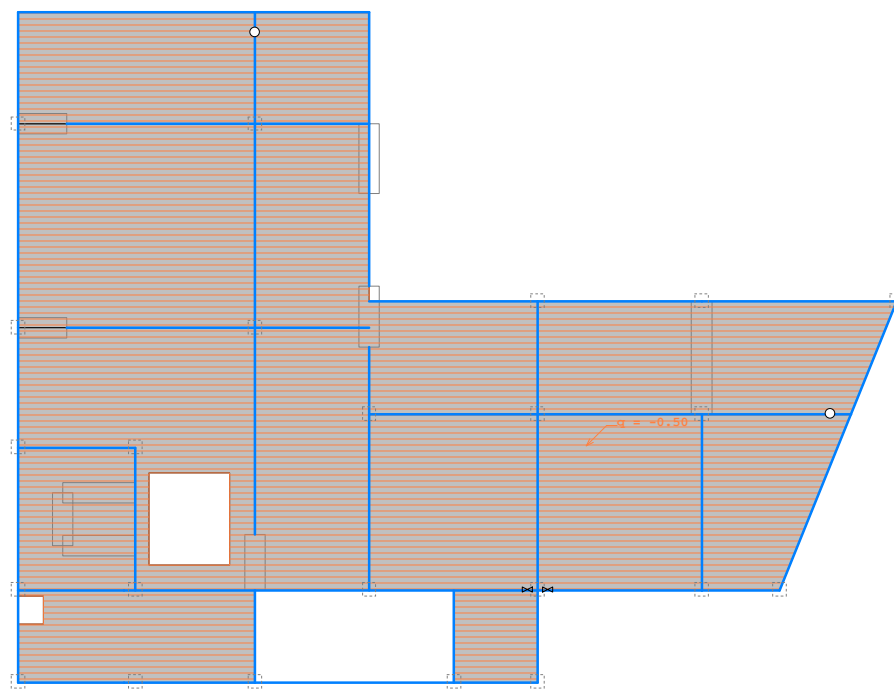
Ram: H 1

Opt. 2: povremeno



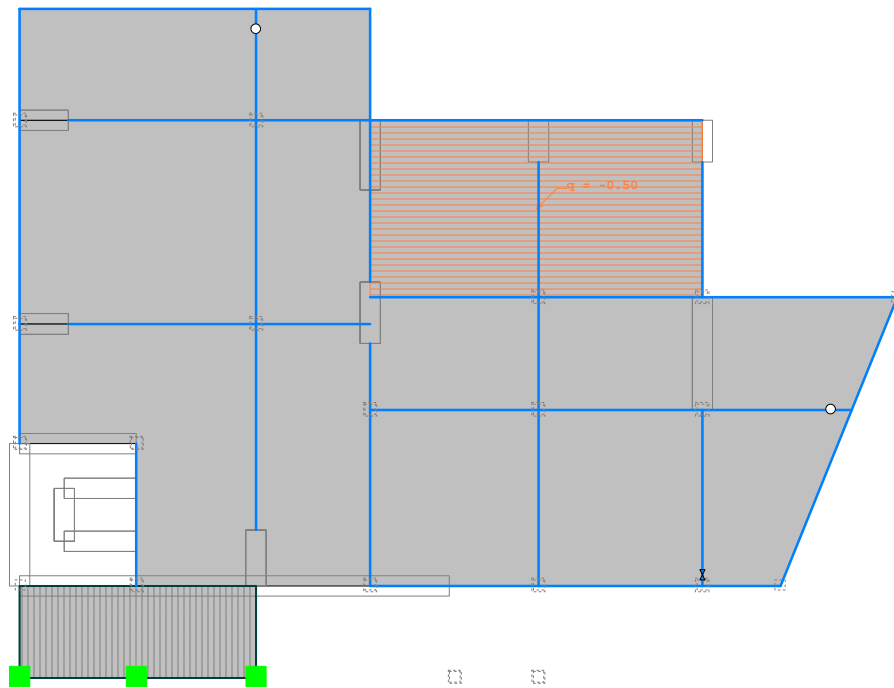
Ram: V_5

Opt. 3: snijeg



Nivo: POS 200 [8.50 m]

Opt. 3: snijeg



Nivo: POS 100 [4.50 m]

4.3 MODALNA ANALIZA

Raspored masa po visini objekta

Nivo	Z [m]	X [m]	Y [m]	Masa [T]	T/m ²
------	-------	-------	-------	----------	------------------

POS 200	8.50	12.80	11.04	778.16	1.68
POS 100	4.50	14.32	12.06	1030.45	1.99
POS 100'	4.30	13.34	5.63	156.82	5.29
POS 000	0.00	11.65	8.29	129.36	
Ukupno:	5.69	13.52	10.97	2094.79	

Položaj centara krutosti po visini objekta (približna metoda)

Nivo	Z [m]	X [m]	Y [m]
------	-------	-------	-------

POS 200	8.50	16.48	8.89
POS 100	4.50	12.74	4.39
POS 100'	4.30	11.26	2.94
POS 000	0.00	11.86	2.31

Periodi oscilovanja konstrukcije

No	T [s]	f [Hz]
----	-------	--------

1	0.1836	5.4467
2	0.1500	6.6666
3	0.1368	7.3101

4.4 SEIZMIČKI PRORAČUN

Seizmički proračun: JUS (Ekvivalentno statičko opterećenje)

Kategorija tla: II
 Seizmička zona: IX ($K_s = 0.100$)
 Kategorija objekta: II
 Vrsta konstrukcije: 1
 Kota ukleštenja: $Z_d = 0.00$ m

Ugao dejstva zemljotresa:

Naziv	T [sec]	α [°]
-------	---------	--------------

Sx	0.184	0.00
Sy	0.137	90.00

Raspored seizmičkih sila po visini objekta (Sx)

Nivo	Z [m]	S [kN]
------	-------	--------

POS 200	8.50	1112.5
POS 100	4.50	796.05
POS 100'	4.30	96.48
POS 000	0.00	20.71
	$\Sigma=$	2025.8

Raspored seizmičkih sila po visini objekta (Sy)

Nivo	Z [m]	S [kN]
POS 200	8.50	1112.5
POS 100	4.50	796.05
POS 100'	4.30	96.48
POS 000	0.00	20.71
	$\Sigma=$	2025.8

Raspored masa po visini objekta

Nivo	Z [m]	X [m]	Y [m]	Masa [T]	T/m ²
------	-------	-------	-------	----------	------------------

POS 200	8.50	12.80	11.04	778.16	1.68
POS 100	4.50	14.32	12.06	1030.45	1.99
POS 100'	4.30	13.34	5.63	156.82	5.29
POS 000	0.00	11.65	8.29	129.36	
Ukupno:	5.69	13.52	10.97	2094.79	

4.5 MULTIMODALNA ANALIZA (CENTAR KRUTOSTI, POMJERANJA)

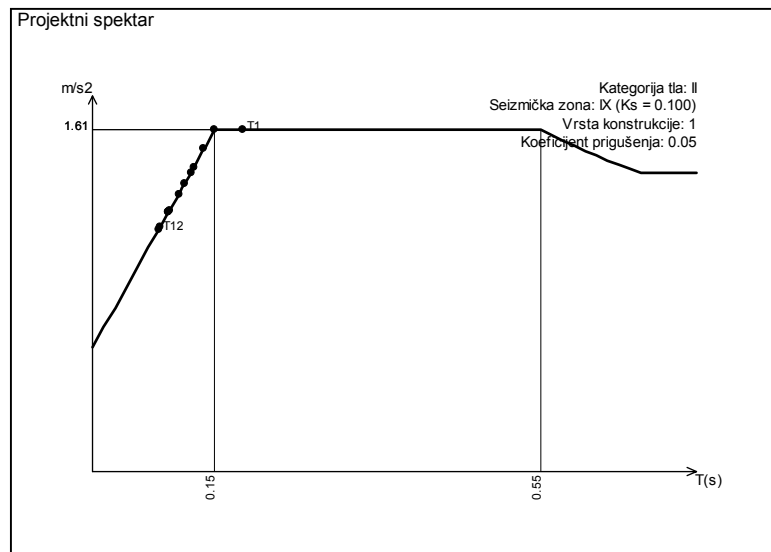
Seizmički proračun: JUS (Multi modalna analiza)

Kategorija tla: II
 Seizmička zona: IX ($K_s = 0.100$)
 Vrsta konstrukcije: 1
 Koeficijent prigušenja: 0.05

Ugao dejstva zemljotresa:

Naziv	Ugao α [°]	k, α	$k, \alpha + 90^\circ$	K_z
-------	-------------------	-------------	------------------------	-------

Sx	0	1.000	0.000	0.000
Sy	90	0.000	1.000	0.000



Sx

Nivo	Z [m]	Ton 1			Ton 2			Ton 3		
		Px [kN]	Py [kN]	Pz [kN]	Px [kN]	Py [kN]	Pz [kN]	Px [kN]	Py [kN]	Pz [kN]
POS 200	8.50	1209.8	-21.25	-108.97	37.20	-59.64	50.16	2.07	-37.22	3.13
POS 100	4.50	533.59	-90.41	-137.43	68.10	-45.08	70.51	0.31	-14.79	8.30
POS 100'	4.30	28.16	-6.79	-0.36	3.21	-3.66	0.01	0.06	-1.30	0.01
POS 000	0.00	4.90	-0.19	-0.07	0.86	-0.29	0.06	0.01	-0.16	0.00
	Σ=	1776.5	-118.64	-246.84	109.38	-108.68	120.74	2.45	-53.47	11.45

Nivo	Z [m]	Ton 4			Ton 5			Ton 6		
		Px [kN]	Py [kN]	Pz [kN]	Px [kN]	Py [kN]	Pz [kN]	Px [kN]	Py [kN]	Pz [kN]
POS 200	8.50	242.26	159.67	27.29	12.17	-27.06	7.79	10.57	-34.95	13.08
POS 100	4.50	12.84	120.41	70.81	0.01	-6.04	-19.46	0.65	-14.35	-8.77
POS 100'	4.30	5.47	10.66	0.10	0.24	-0.61	-0.01	0.29	-1.31	-0.00
POS 000	0.00	0.44	1.01	0.04	0.01	-0.11	-0.00	0.02	-0.20	-0.00
	Σ=	261.00	291.76	98.23	12.43	-33.82	-11.68	11.53	-50.81	4.30

Nivo	Z [m]	Ton 7			Ton 8			Ton 9		
		Px [kN]	Py [kN]	Pz [kN]	Px [kN]	Py [kN]	Pz [kN]	Px [kN]	Py [kN]	Pz [kN]
POS 200	8.50	0.23	-1.54	-1.83	0.12	0.32	0.05	-0.01	-0.11	-0.10
POS 100	4.50	-0.20	-0.81	-0.22	0.13	0.10	3.57	0.02	-0.03	-0.65
POS 100'	4.30	-0.00	-0.07	-0.00	0.01	0.01	0.00	0.00	-0.01	-0.01
POS 000	0.00	-0.00	-0.01	-0.00	0.00	0.00	0.00	0.00	-0.00	-0.00
	Σ=	0.03	-2.44	-2.05	0.26	0.44	3.63	0.01	-0.15	-0.75

Nivo	Z [m]	Ton 10			Ton 11			Ton 12		
		Px [kN]	Py [kN]	Pz [kN]	Px [kN]	Py [kN]	Pz [kN]	Px [kN]	Py [kN]	Pz [kN]
POS 200	8.50	0.13	0.14	0.04	0.08	0.31	5.37	0.02	0.01	0.12
POS 100	4.50	-0.07	0.11	1.34	0.42	0.29	-2.19	-0.02	0.02	0.05
POS 100'	4.30	0.00	0.01	0.00	0.01	0.04	0.03	-0.00	0.00	0.00
POS 000	0.00	0.00	0.00	0.00	-0.00	0.00	0.00	-0.00	0.00	0.00
	Σ=	0.06	0.26	1.38	0.50	0.64	3.21	0.00	0.03	0.17

Sy

Nivo	Z [m]	Ton 1			Ton 2			Ton 3		
		Px [kN]	Py [kN]	Pz [kN]	Px [kN]	Py [kN]	Pz [kN]	Px [kN]	Py [kN]	Pz [kN]
POS 200	8.50	-	21.25	108.97	-37.20	59.64	-50.16	-2.07	37.22	-3.13
		1209.83								
POS 100	4.50	-533.59	90.41	137.43	-68.10	45.08	-70.51	-0.31	14.79	-8.30
POS 100'	4.30	-28.16	6.79	0.36	-3.21	3.66	-0.01	-0.06	1.30	-0.01
POS 000	0.00	-4.90	0.19	0.07	-0.86	0.29	-0.06	-0.01	0.16	-0.00
	Σ=	-	118.64	246.84	-109.38	108.68	-120.74	-2.45	53.47	-11.45
		1776.48								

Nivo	Z [m]	Ton 4			Ton 5			Ton 6		
		Px [kN]	Py [kN]	Pz [kN]	Px [kN]	Py [kN]	Pz [kN]	Px [kN]	Py [kN]	Pz [kN]
POS 200	8.50	-242.26	-159.67	-27.29	-12.17	27.06	-7.79	-10.57	34.95	-13.08
POS 100	4.50	-12.84	-120.41	-70.81	-0.01	6.04	19.46	-0.65	14.35	8.77
POS 100'	4.30	-5.47	-10.66	-0.10	-0.24	0.61	0.01	-0.29	1.31	0.00
POS 000	0.00	-0.44	-1.01	-0.04	-0.01	0.11	0.00	-0.02	0.20	0.00
	Σ=	-261.00	-291.76	-98.23	-12.43	33.82	11.68	-11.53	50.81	-4.30

Nivo	Z [m]	Ton 7			Ton 8			Ton 9		
		Px [kN]	Py [kN]	Pz [kN]	Px [kN]	Py [kN]	Pz [kN]	Px [kN]	Py [kN]	Pz [kN]
POS 200	8.50	-0.23	1.54	1.83	-0.12	-0.32	-0.05	0.01	0.11	0.10
POS 100	4.50	0.20	0.81	0.22	-0.13	-0.10	-3.57	-0.02	0.03	0.65
POS 100'	4.30	0.00	0.07	0.00	-0.01	-0.01	-0.00	-0.00	0.01	0.01
POS 000	0.00	0.00	0.01	0.00	-0.00	-0.00	-0.00	-0.00	0.00	0.00
	Σ=	-0.03	2.44	2.05	-0.26	-0.44	-3.63	-0.01	0.15	0.75

Nivo	Z [m]	Ton 10			Ton 11			Ton 12		
		Px [kN]	Py [kN]	Pz [kN]	Px [kN]	Py [kN]	Pz [kN]	Px [kN]	Py [kN]	Pz [kN]
POS 200	8.50	-0.13	-0.14	-0.04	-0.08	-0.31	-5.37	-0.02	-0.01	-0.12
POS 100	4.50	0.07	-0.11	-1.34	-0.42	-0.29	2.19	0.02	-0.02	-0.05
POS 100'	4.30	-0.00	-0.01	-0.00	-0.01	-0.04	-0.03	0.00	-0.00	-0.00
POS 000	0.00	-0.00	-0.00	-0.00	0.00	-0.00	-0.00	0.00	-0.00	-0.00
	Σ=	-0.06	-0.26	-1.38	-0.50	-0.64	-3.21	-0.00	-0.03	-0.17

Faktori participacije - relativno učešće

Ton \ Naziv	1. Sx	2. Sy
-------------	-------	-------

1	0.817	0.817
---	-------	-------

2	0.050	0.050
3	0.001	0.001
4	0.120	0.120
5	0.006	0.006
6	0.005	0.005
7	0.000	0.000
8	0.000	0.000
9	0.000	0.000
10	0.000	0.000
11	0.000	0.000
12	0.000	0.000

Faktori participacije - angažovanje mase

Ton	U [$\alpha=0^\circ$]	U [$\alpha=90^\circ$]	U [Z]
-----	------------------------	-------------------------	-------

1	52.52	0.23	1.01
2	3.23	3.19	3.94
3	0.08	36.55	1.68
4	8.67	10.83	1.23
5	0.42	3.11	0.37
6	0.40	7.86	0.06
7	0.00	7.70	5.44
8	0.01	0.03	1.93
9	0.00	0.17	3.97
10	0.00	0.04	1.20
11	0.02	0.03	0.85
12	0.00	0.06	2.03
ΣU (%)	65.37	69.81	23.70

Izbor tekućeg tona

Nº	T [s]	f [Hz]	GPO [°]	FU α [%]	FU $\alpha+90^\circ$ [%]	FU Z [%]	max odst.
1	0.183596	5.446742	176.18	52.52	0.23	1.01	5.19
2	0.150002	6.666582	132.99	3.23	3.19	3.94	13.25
3	0.136797	7.310079	92.62	0.08	36.55	1.68	10.47
4	0.124031	8.062511	47.93	8.67	10.83	1.23	6.46
5	0.120725	8.283270	99.75	0.42	3.11	0.37	9.93
6	0.112725	8.871134	101.90	0.40	7.86	0.06	16.47
7	0.105718	9.459100	90.66	0.00	7.70	5.44	13.38
8	0.094313	10.602953	*	0.01	0.03	1.93	28.23
9	0.093567	10.687491	*	0.00	0.17	3.97	39.90
10	0.093495	10.695790	*	0.00	0.04	1.20	38.04
11	0.082687	12.093776	*	0.02	0.03	0.85	10.40

Faktori angažovanja masa za zadati pravac seizmičkog dejstva

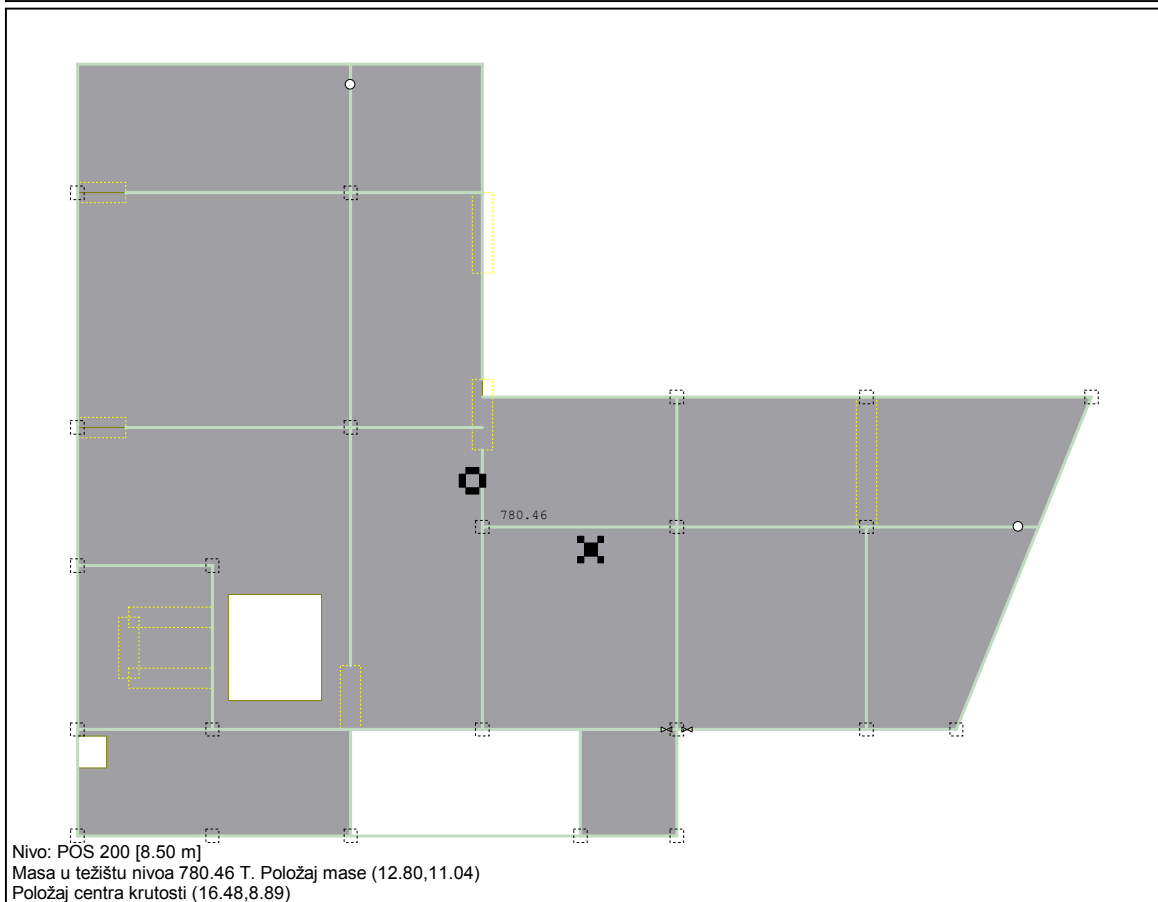
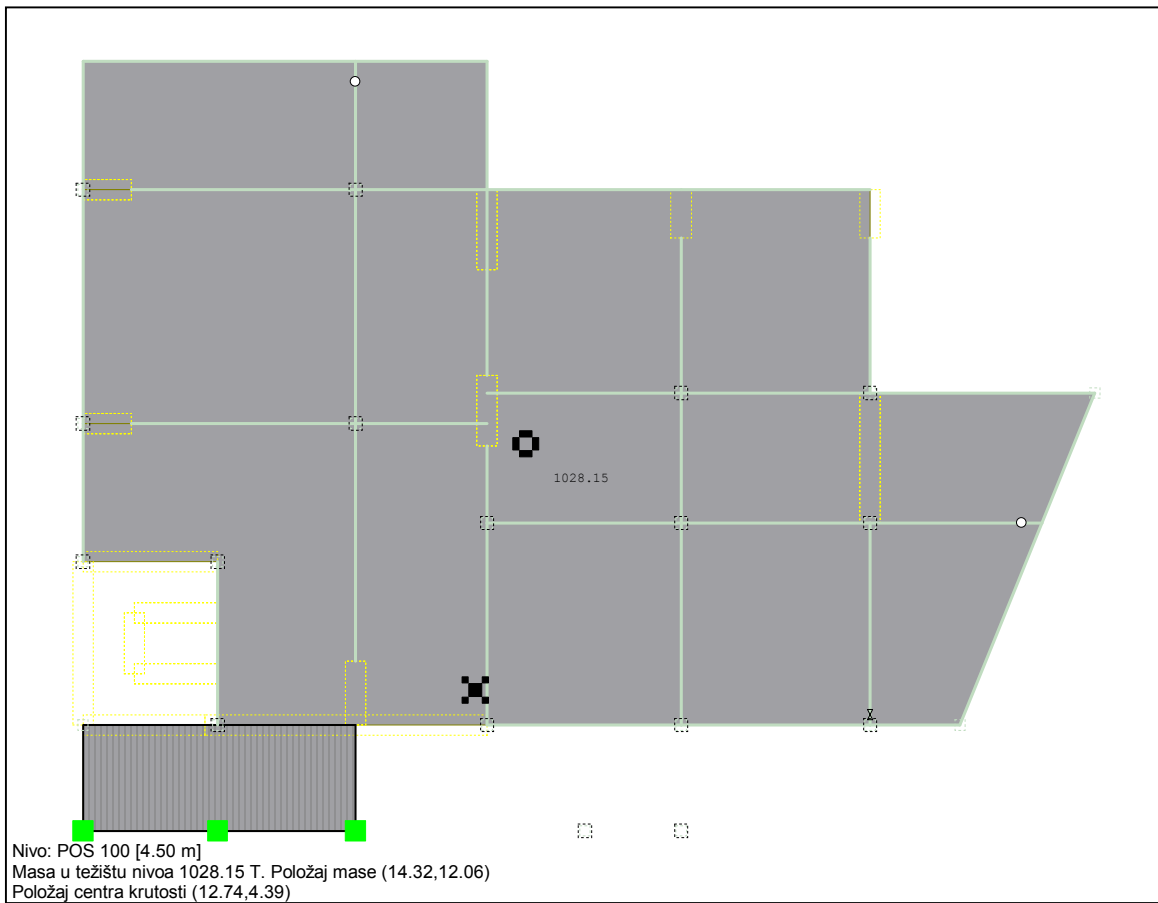
Pravac seizmičkog dejstva ° $\Sigma FU \alpha$ 65.37 $\Sigma FU \alpha+90^\circ$ 69.81 $\Sigma FU Z$ 23.70

☐ Računati samo sa masom iznad ove kote ukļještenja m

Dijagnostika oblika oscilovanja

Granično odstupanje Sklopovi koji sadrže čvorove sa odstupanjima većim od graničnog:

Broj čvorova koji se obeležava



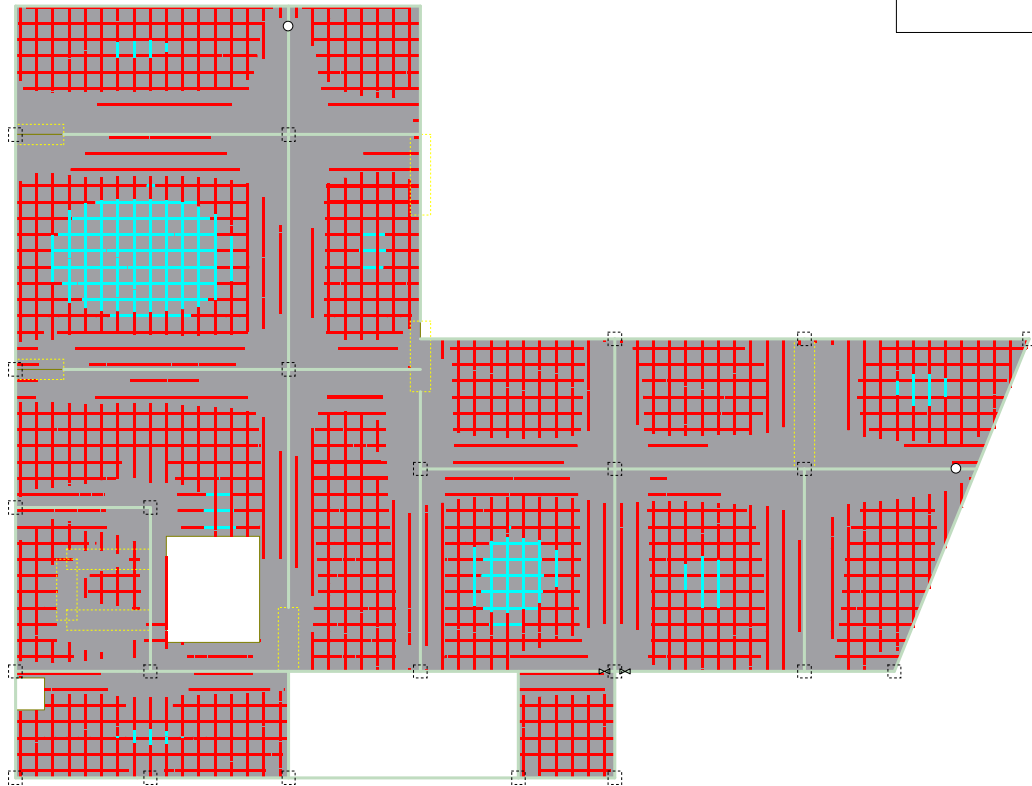
5. DIMENZIONISANJE PLOČA

5.1 POTREBNA ARMATURA



Usvojena armatura
PBAB 87, MB 30, MA 500/560, a=2.00 cm

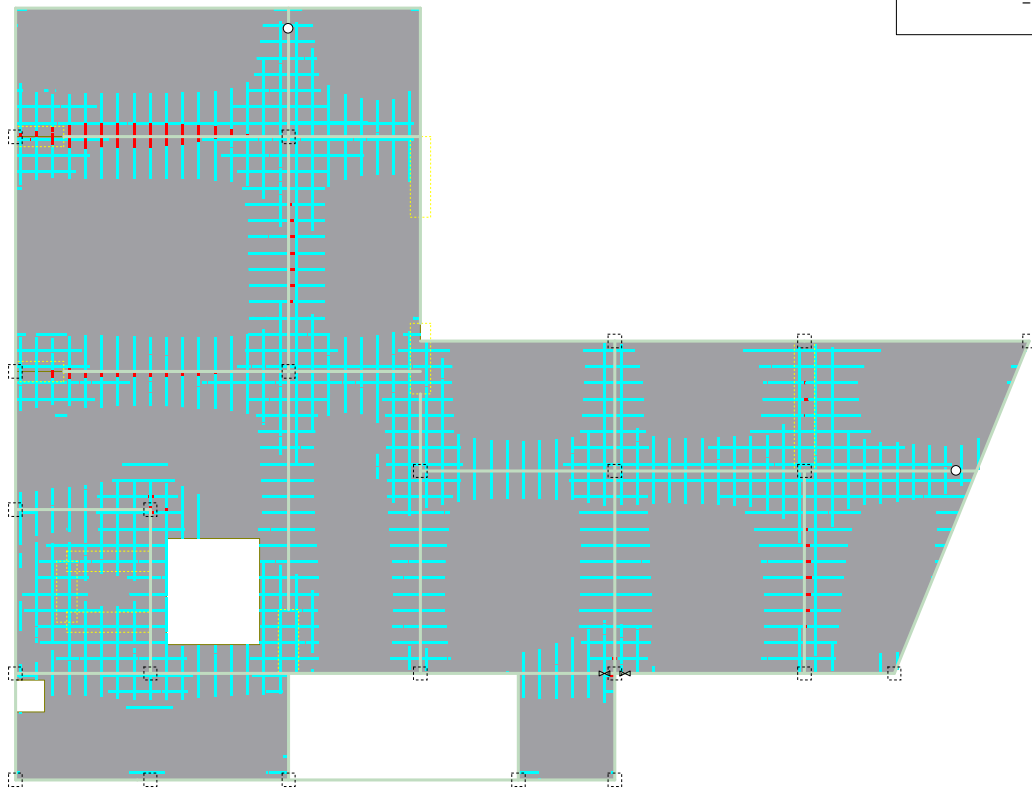
Aa - d.zona [cm ² /m]	
0.00	
2.04	
4.08	



Nivo: POS 200 [8.50 m]
Aa - d.zona

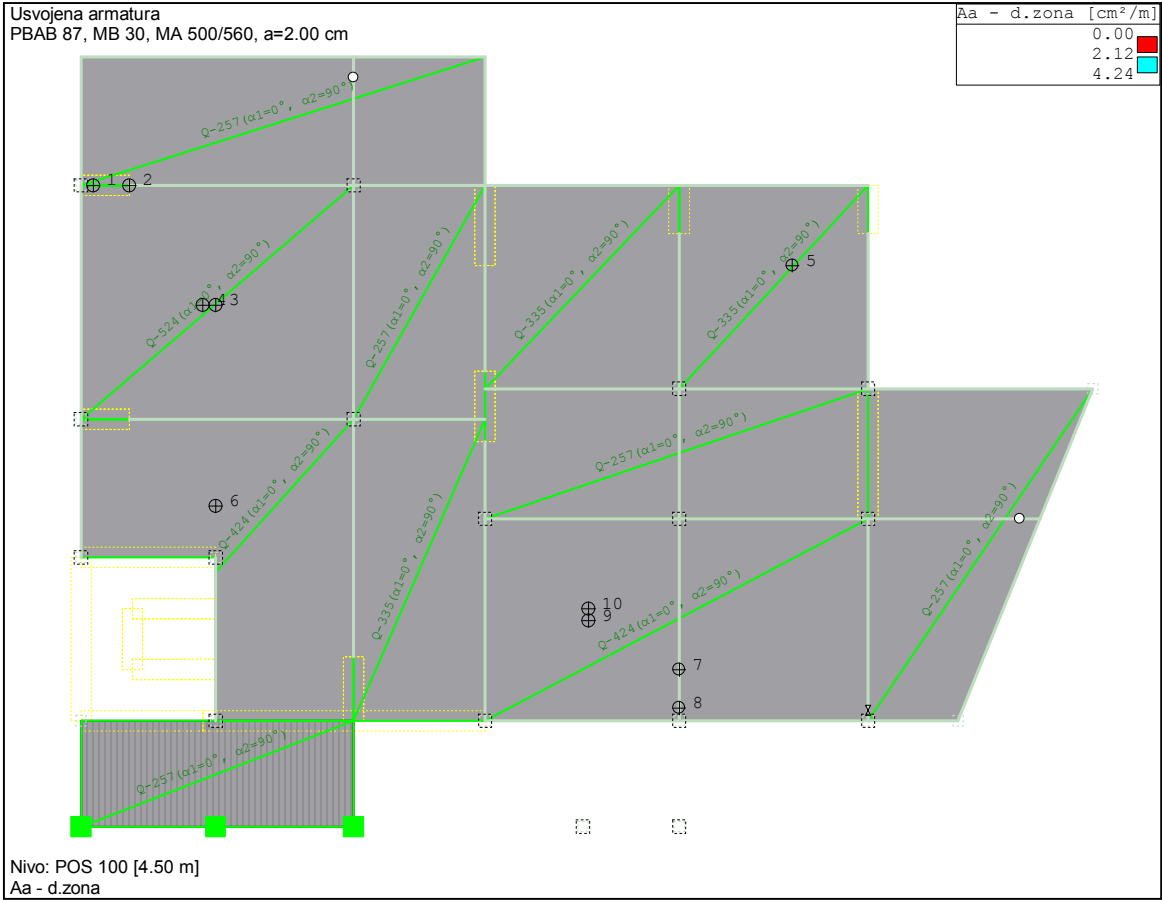
Usvojena armatura
PBAB 87, MB 30, MA 500/560, a=2.00 cm

Aa - g.zona [cm ² /m]	
-8.02	
-4.01	
0.00	



Nivo: POS 200 [8.50 m]
Aa - g.zona

5.2. USVOJENA ARMATURA





Nivo: POS 100 [4.50 m]

PBAB 87
d.pl=21.0 cm
MB 30
Gornja zona: MA 500/560 (a=2.0 cm)
Donja zona: MA 500/560 (a=2.0 cm)
Kompletna šema opterećenja

Tačka 1

X=0.88 m; Y=20.00 m; Z=4.50 m

Pravac 1: (α=0°)

Merodavna kombinacija:

1.00xl-1.30xlV

Mu = 5.82 kNm
Nu = 0.00 kN
εb/εa = -0.683/10.000 %
Ag1 = 5.19 cm²/m
Ad1 = 0.54 cm²/m

Pravac 2: (α=90°)

Merodavna kombinacija:

1.30xl+0.65xII+1.30xlV

Mu = -35.72 kNm
Nu = 0.00 kN
εb/εa = -1.182/10.000 %
Ag2 = 3.91 cm²/m
Ad2 = 0.00 cm²/m

Tačka 2

X=2.00 m; Y=20.00 m; Z=4.50 m

Pravac 1: (α=0°)

Merodavna kombinacija:

1.30xl+0.65xII-1.30xlV

Mu = -31.68 kNm
Nu = 0.00 kN
εb/εa = -1.098/10.000 %
Ag1 = 3.45 cm²/m
Ad1 = 0.00 cm²/m

Pravac 2: (α=90°)

Merodavna kombinacija:

1.60xl+1.80xII+1.80xIII

Mu = -48.32 kNm
Nu = 0.00 kN
εb/εa = -1.433/10.000 %
Ag2 = 5.33 cm²/m
Ad2 = 0.00 cm²/m

Tačka 3

X=4.70 m; Y=16.26 m; Z=4.50 m

Pravac 1: (α=0°)

Merodavna kombinacija:

1.60xl+1.80xII+1.80xIII

Mu = 24.67 kNm
Nu = 0.00 kN
εb/εa = -0.945/10.000 %
Ag1 = 0.00 cm²/m
Ad1 = 2.68 cm²/m

Pravac 2: (α=90°)

Merodavna kombinacija:

1.60xl+1.80xII+1.80xIII

Mu = 30.03 kNm
Nu = 0.00 kN
εb/εa = -1.063/10.000 %
Ag2 = 0.00 cm²/m
Ad2 = 3.27 cm²/m

Tačka 4

X=4.30 m; Y=16.26 m; Z=4.50 m

Pravac 1: (α=0°)

Merodavna kombinacija:

1.60xl+1.80xII

Mu = 24.44 kNm
Nu = 0.00 kN
εb/εa = -0.940/10.000 %
Ag1 = 0.00 cm²/m
Ad1 = 2.65 cm²/m

Pravac 2: (α=90°)

Merodavna kombinacija:

1.60xl+1.80xII+1.80xIII

Mu = 30.40 kNm
Nu = 0.00 kN
εb/εa = -1.071/10.000 %
Ag2 = 0.00 cm²/m
Ad2 = 3.31 cm²/m

PBAB 87

d.pl=16.0 cm

MB 30

Gornja zona: MA 500/560 (a=2.0 cm)

Donja zona: MA 500/560 (a=2.0 cm)

Kompletna šema opterećenja

Tačka 1

X=0.88 m; Y=20.00 m; Z=4.50 m

Pravac 1: (α=0°)

Merodavna kombinacija:

1.30xl+0.65xII+1.30xlV

Mu = -43.80 kNm
Nu = 0.00 kN
εb/εa = -2.052/10.000 %
Ag1 = 6.69 cm²/m
Ad1 = 0.70 cm²/m

Pravac 2: (α=90°)

Merodavna kombinacija:

1.30xl+0.65xII+1.30xlV

Mu = -35.72 kNm
Nu = 0.00 kN
εb/εa = -1.774/10.000 %
Ag2 = 5.40 cm²/m
Ad2 = 0.00 cm²/m

Tačka 2

X=2.00 m; Y=20.00 m; Z=4.50 m

Pravac 1: (α=0°)

Merodavna kombinacija:

1.30xl+0.65xII-1.30xlV

Mu = -31.68 kNm
Nu = 0.00 kN
εb/εa = -1.629/10.000 %
Ag1 = 4.77 cm²/m
Ad1 = 0.00 cm²/m

Pravac 2: (α=90°)

Merodavna kombinacija:

1.60xl+1.80xII+1.80xIII

Mu = -48.32 kNm
Nu = 0.00 kN
εb/εa = -2.250/10.000 %
Ag2 = 7.43 cm²/m
Ad2 = 0.00 cm²/m

Tačka 5

X=22.69 m; Y=17.50 m; Z=4.50 m

Pravac 1: (α=0°)

Merodavna kombinacija:

1.60xl+1.80xII+1.80xIII

Mu = 21.72 kNm
Nu = 0.00 kN
εb/εa = -1.269/10.000 %
Ag1 = 0.00 cm²/m
Ad1 = 3.23 cm²/m

Pravac 2: ($\alpha=90^\circ$)
 Merodavna kombinacija:
 $1.60xI+1.80xII+1.80xIII$
 $Mu = 18.28 \text{ kNm}$
 $Nu = 0.00 \text{ kN}$
 $\epsilon b/\epsilon a = -1.140/10.000 \text{ ‰}$
 $Ag2 = 0.00 \text{ cm}^2/\text{m}$
 $Ad2 = 2.71 \text{ cm}^2/\text{m}$

Tačka 6
 $X=4.70 \text{ m}; Y=10.00 \text{ m}; Z=4.50 \text{ m}$
 Pravac 1: ($\alpha=0^\circ$)
 Merodavna kombinacija:
 $1.60xI+1.80xII+1.80xIII$
 $Mu = 11.75 \text{ kNm}$
 $Nu = 0.00 \text{ kN}$
 $\epsilon b/\epsilon a = -0.876/10.000 \text{ ‰}$
 $Ag1 = 0.00 \text{ cm}^2/\text{m}$
 $Ad1 = 1.73 \text{ cm}^2/\text{m}$

Pravac 2: ($\alpha=90^\circ$)
 Merodavna kombinacija:
 $1.60xI+1.80xII+1.80xIII$
 $Mu = 23.75 \text{ kNm}$
 $Nu = 0.00 \text{ kN}$
 $\epsilon b/\epsilon a = -1.344/10.000 \text{ ‰}$
 $Ag2 = 0.00 \text{ cm}^2/\text{m}$
 $Ad2 = 3.54 \text{ cm}^2/\text{m}$

PBAB 87
 $d, pl=21.0 \text{ cm}$
 MB 30
 Gornja zona: MA 500/560 ($a=2.0 \text{ cm}$)
 Donja zona: MA 500/560 ($a=2.0 \text{ cm}$)
 Kompletna šema opterećenja

Tačka 7
 $X=19.15 \text{ m}; Y=4.90 \text{ m}; Z=4.50 \text{ m}$
 Pravac 1: ($\alpha=0^\circ$)
 Merodavna kombinacija:
 $1.60xI+1.80xII+1.80xIII$
 $Mu = -44.20 \text{ kNm}$
 $Nu = 0.00 \text{ kN}$
 $\epsilon b/\epsilon a = -1.352/10.000 \text{ ‰}$
 $Ag1 = 4.86 \text{ cm}^2/\text{m}$
 $Ad1 = 0.00 \text{ cm}^2/\text{m}$

Pravac 2: ($\alpha=90^\circ$)
 Merodavna kombinacija:
 $1.00xI+1.30xV$
 $Mu = -0.90 \text{ kNm}$
 $Nu = 0.00 \text{ kN}$
 $\epsilon b/\epsilon a = -0.199/10.000 \text{ ‰}$
 $Ag2 = 0.09 \text{ cm}^2/\text{m}$
 $Ad2 = 0.16 \text{ cm}^2/\text{m}$

Tačka 8
 $X=19.15 \text{ m}; Y=3.70 \text{ m}; Z=4.50 \text{ m}$
 Pravac 1: ($\alpha=0^\circ$)
 Merodavna kombinacija:
 $1.60xI+1.80xII+1.80xIII$
 $Mu = -33.97 \text{ kNm}$
 $Nu = 0.00 \text{ kN}$
 $\epsilon b/\epsilon a = -1.146/10.000 \text{ ‰}$
 $Ag1 = 3.71 \text{ cm}^2/\text{m}$
 $Ad1 = 0.00 \text{ cm}^2/\text{m}$

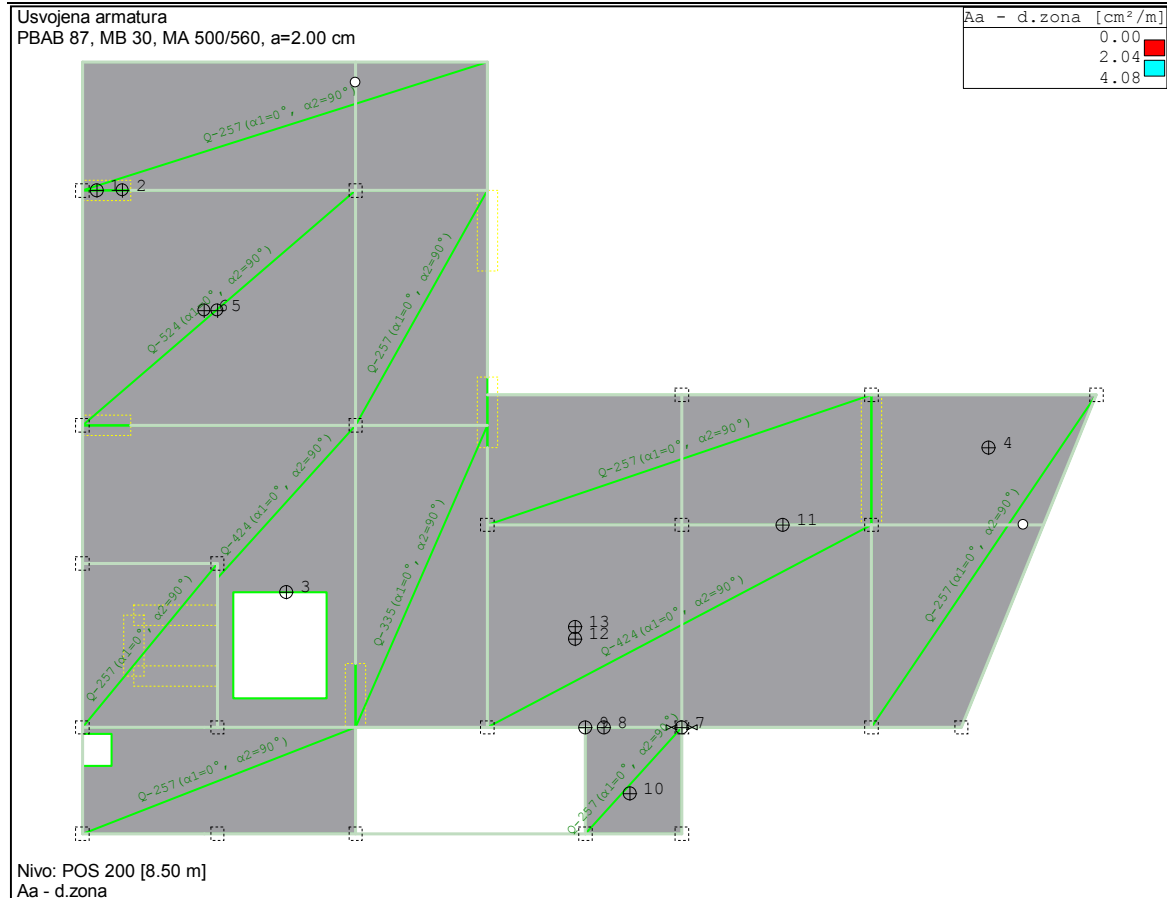
Pravac 2: ($\alpha=90^\circ$)
 Merodavna kombinacija:
 $1.60xI+1.80xII+1.80xIII$
 $Mu = -32.80 \text{ kNm}$
 $Nu = 0.00 \text{ kN}$
 $\epsilon b/\epsilon a = -1.121/10.000 \text{ ‰}$
 $Ag2 = 3.58 \text{ cm}^2/\text{m}$
 $Ad2 = 0.00 \text{ cm}^2/\text{m}$

Tačka 9
 $X=16.33 \text{ m}; Y=6.42 \text{ m}; Z=4.50 \text{ m}$
 Pravac 1: ($\alpha=0^\circ$)
 Merodavna kombinacija:
 $1.60xI+1.80xII+1.80xIII$
 $Mu = 38.67 \text{ kNm}$
 $Nu = 0.00 \text{ kN}$
 $\epsilon b/\epsilon a = -1.242/10.000 \text{ ‰}$
 $Ag1 = 0.00 \text{ cm}^2/\text{m}$
 $Ad1 = 4.24 \text{ cm}^2/\text{m}$

Pravac 2: ($\alpha=90^\circ$)
 Merodavna kombinacija:
 $1.60xI+1.80xII+1.80xIII$
 $Mu = 35.07 \text{ kNm}$
 $Nu = 0.00 \text{ kN}$
 $\epsilon b/\epsilon a = -1.168/10.000 \text{ ‰}$
 $Ag2 = 0.00 \text{ cm}^2/\text{m}$
 $Ad2 = 3.83 \text{ cm}^2/\text{m}$

Tačka 10
 $X=16.33 \text{ m}; Y=6.80 \text{ m}; Z=4.50 \text{ m}$
 Pravac 1: ($\alpha=0^\circ$)
 Merodavna kombinacija:
 $1.60xI+1.80xII+1.80xIII$
 $Mu = 38.04 \text{ kNm}$
 $Nu = 0.00 \text{ kN}$
 $\epsilon b/\epsilon a = -1.229/10.000 \text{ ‰}$
 $Ag1 = 0.00 \text{ cm}^2/\text{m}$
 $Ad1 = 4.17 \text{ cm}^2/\text{m}$

Pravac 2: ($\alpha=90^\circ$)
 Merodavna kombinacija:
 $1.60xI+1.80xII+1.80xIII$
 $Mu = 35.46 \text{ kNm}$
 $Nu = 0.00 \text{ kN}$
 $\epsilon b/\epsilon a = -1.176/10.000 \text{ ‰}$
 $Ag2 = 0.00 \text{ cm}^2/\text{m}$
 $Ad2 = 3.88 \text{ cm}^2/\text{m}$



Pravac 2: ($\alpha=90^\circ$)
 Merodavna kombinacija:
 1.60xI+1.80xII+1.80xIII
 Mu = 36.85 kNm
 Nu = 0.00 kN
 $\epsilon b/\epsilon a = -1.205/10.000\%$
 Ag2 = 0.00 cm²/m
 Ad2 = 4.03 cm²/m

Tačka 6

X=4.30 m; Y=16.26 m; Z=8.50 m

Pravac 1: ($\alpha=0^\circ$)
 Merodavna kombinacija:
 1.60xI+1.80xII+1.80xIII
 Mu = 30.90 kNm
 Nu = 0.00 kN
 $\epsilon b/\epsilon a = -1.081/10.000\%$
 Ag1 = 0.00 cm²/m
 Ad1 = 3.37 cm²/m

Pravac 2: ($\alpha=90^\circ$)
 Merodavna kombinacija:
 1.60xI+1.80xII+1.80xIII
 Mu = 37.23 kNm
 Nu = 0.00 kN
 $\epsilon b/\epsilon a = -1.213/10.000\%$
 Ag2 = 0.00 cm²/m
 Ad2 = 4.08 cm²/m

PBAB 87
 d,pl=16.0 cm
 MB 30
 Gornja zona: MA 500/560 (a=2.0 cm)
 Donja zona: MA 500/560 (a=2.0 cm)
 Kompletna šema opterećenja

Tačka 7

X=19.15 m; Y=3.30 m; Z=8.50 m

Pravac 1: ($\alpha=0^\circ$)
 Merodavna kombinacija:
 1.60xI+1.80xII+1.80xIII
 Mu = -48.39 kNm
 Nu = 0.00 kN
 $\epsilon b/\epsilon a = -2.253/10.000\%$
 Ag1 = 7.44 cm²/m
 Ad1 = 0.00 cm²/m

Pravac 2: ($\alpha=90^\circ$)
 Merodavna kombinacija:
 1.60xI+1.80xII+1.80xIII
 Mu = -10.06 kNm
 Nu = 0.00 kN
 $\epsilon b/\epsilon a = -0.801/10.000\%$
 Ag2 = 1.47 cm²/m
 Ad2 = 0.00 cm²/m

Tačka 8

X=16.73 m; Y=3.30 m; Z=8.50 m

Pravac 1: ($\alpha=0^\circ$)
 Merodavna kombinacija:
 1.60xI+1.80xII+1.80xIII
 Mu = 3.38 kNm
 Nu = 0.00 kN
 $\epsilon b/\epsilon a = -0.439/10.000\%$
 Ag1 = 0.00 cm²/m
 Ad1 = 0.49 cm²/m

Pravac 2: ($\alpha=90^\circ$)
 Merodavna kombinacija:
 1.60xI+1.80xII+1.80xIII
 Mu = -21.39 kNm
 Nu = 0.00 kN
 $\epsilon b/\epsilon a = -1.257/10.000\%$
 Ag2 = 3.18 cm²/m
 Ad2 = 0.00 cm²/m

Tačka 9

X=16.15 m; Y=3.30 m; Z=8.50 m

Pravac 1: ($\alpha=0^\circ$)
 Merodavna kombinacija:
 1.60xI+1.80xII+1.80xIII
 Mu = 11.55 kNm
 Nu = 0.00 kN
 $\epsilon b/\epsilon a = -0.867/10.000\%$
 Ag1 = 0.00 cm²/m
 Ad1 = 1.70 cm²/m

Pravac 2: ($\alpha=90^\circ$)
 Merodavna kombinacija:
 1.60xI+1.80xII+1.80xIII
 Mu = -6.72 kNm
 Nu = 0.00 kN
 $\epsilon b/\epsilon a = -0.638/10.000\%$
 Ag2 = 0.98 cm²/m
 Ad2 = 0.00 cm²/m

Tačka 10

X=17.54 m; Y=1.24 m; Z=8.50 m

Pravac 1: ($\alpha=0^\circ$)
 Merodavna kombinacija:
 1.60xI+1.80xII+1.80xIII
 Mu = 6.25 kNm
 Nu = 0.00 kN
 $\epsilon b/\epsilon a = -0.613/10.000\%$
 Ag1 = 0.00 cm²/m
 Ad1 = 0.91 cm²/m

Pravac 2: ($\alpha=90^\circ$)
 Merodavna kombinacija:
 1.60xI+1.80xII+1.80xIII
 Mu = 6.74 kNm
 Nu = 0.00 kN
 $\epsilon b/\epsilon a = -0.639/10.000\%$
 Ag2 = 0.00 cm²/m
 Ad2 = 0.98 cm²/m

PBAB 87

d,pl=21.0 cm
 MB 30
 Gornja zona: MA 500/560 (a=2.0 cm)
 Donja zona: MA 500/560 (a=2.0 cm)
 Kompletna šema opterećenja

Tačka 7

X=19.15 m; Y=3.30 m; Z=8.50 m

Pravac 1: ($\alpha=0^\circ$)
 Merodavna kombinacija:
 1.60xI+1.80xII+1.80xIII
 Mu = -51.72 kNm
 Nu = 0.00 kN
 $\epsilon b/\epsilon a = -1.499/10.000\%$
 Ag1 = 5.71 cm²/m
 Ad1 = 0.00 cm²/m

Pravac 2: ($\alpha=90^\circ$)
 Merodavna kombinacija:
 1.60xI+1.80xII+1.80xIII
 Mu = -9.45 kNm
 Nu = 0.00 kN
 $\epsilon b/\epsilon a = -0.550/10.000\%$
 Ag2 = 1.01 cm²/m
 Ad2 = 0.00 cm²/m

Tačka 11

X=22.30 m; Y=9.60 m; Z=8.50 m

Pravac 1: ($\alpha=0^\circ$)
 Merodavna kombinacija:
 1.60xI+1.80xII+1.80xIII
 Mu = -3.24 kNm
 Nu = 0.00 kN
 $\epsilon b/\epsilon a = -0.310/10.000\%$
 Ag1 = 0.34 cm²/m
 Ad1 = 0.00 cm²/m

Pravac 2: ($\alpha=90^\circ$)
 Merodavna kombinacija:
 1.60xI+1.80xII+1.80xIII
 Mu = -28.39 kNm
 Nu = 0.00 kN
 $\epsilon b/\epsilon a = -1.028/10.000\%$
 Ag2 = 3.09 cm²/m
 Ad2 = 0.00 cm²/m

Tačka 12

X=15.83 m; Y=6.05 m; Z=8.50 m

Pravac 1: ($\alpha=0^\circ$)
 Merodavna kombinacija:
 1.60xI+1.80xII+1.80xIII
 Mu = 23.65 kNm
 Nu = 0.00 kN
 $\epsilon b/\epsilon a = -0.922/10.000\%$
 Ag1 = 0.00 cm²/m
 Ad1 = 2.56 cm²/m

Pravac 2: ($\alpha=90^\circ$)
 Merodavna kombinacija:
 1.60xI+1.80xII+1.80xIII
 Mu = 23.59 kNm
 Nu = 0.00 kN
 $\epsilon b/\epsilon a = -0.921/10.000\%$
 Ag2 = 0.00 cm²/m
 Ad2 = 2.56 cm²/m

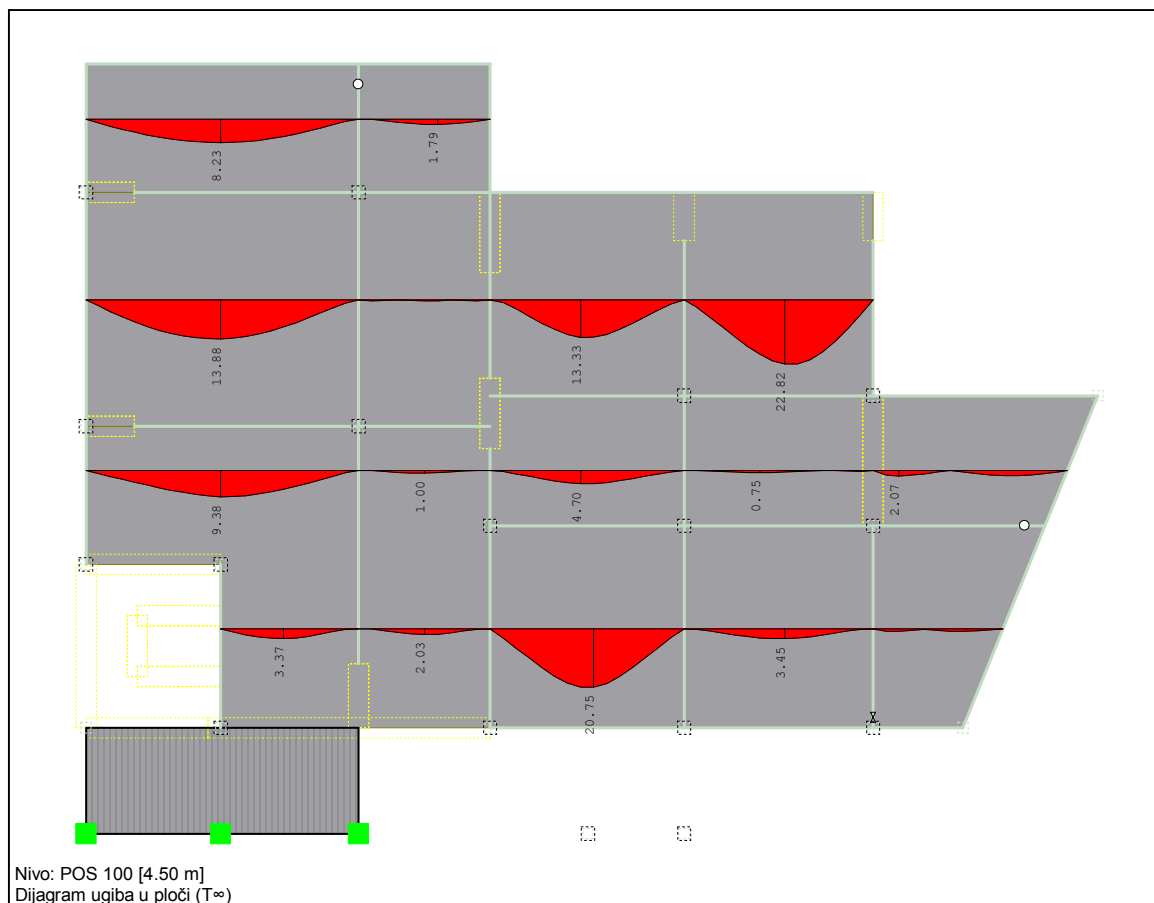
Tačka 13

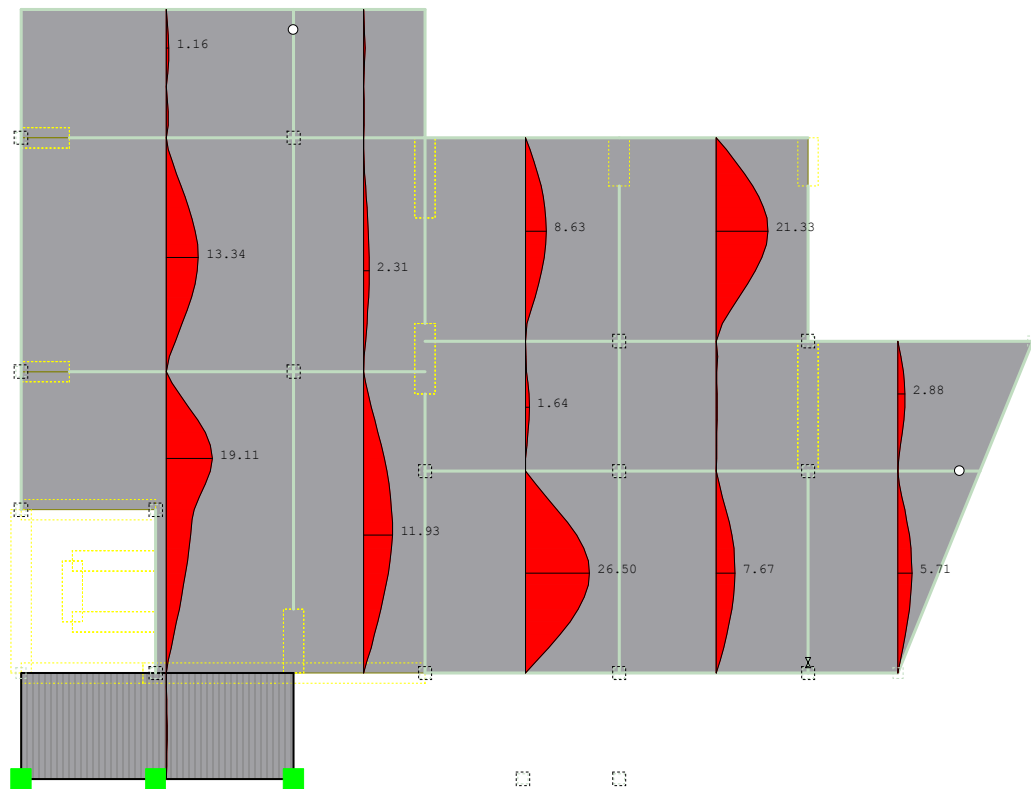
X=15.83 m; Y=6.43 m; Z=8.50 m

Pravac 1: ($\alpha=0^\circ$)
 Merodavna kombinacija:
 1.60xI+1.80xII+1.80xIII
 Mu = 23.54 kNm
 Nu = 0.00 kN
 $\epsilon b/\epsilon a = -0.920/10.000\%$
 Ag1 = 0.00 cm²/m
 Ad1 = 2.55 cm²/m

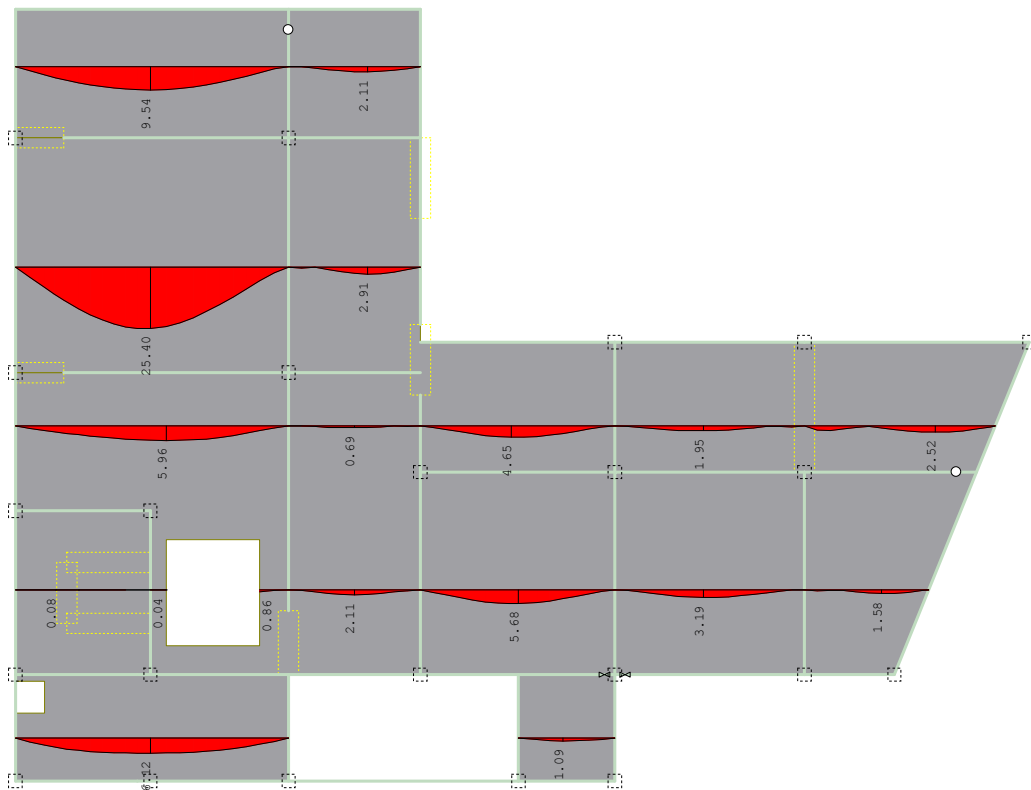
Pravac 2: ($\alpha=90^\circ$)
 Merodavna kombinacija:
 1.60xI+1.80xII+1.80xIII
 Mu = 23.84 kNm
 Nu = 0.00 kN
 $\epsilon b/\epsilon a = -0.926/10.000\%$
 Ag2 = 0.00 cm²/m
 Ad2 = 2.59 cm²/m

5.3. KONTROLA UGIBA U PLOČAMA





Nivo: POS 100 [4.50 m]
Dijagram ugiba u ploči (T^∞)

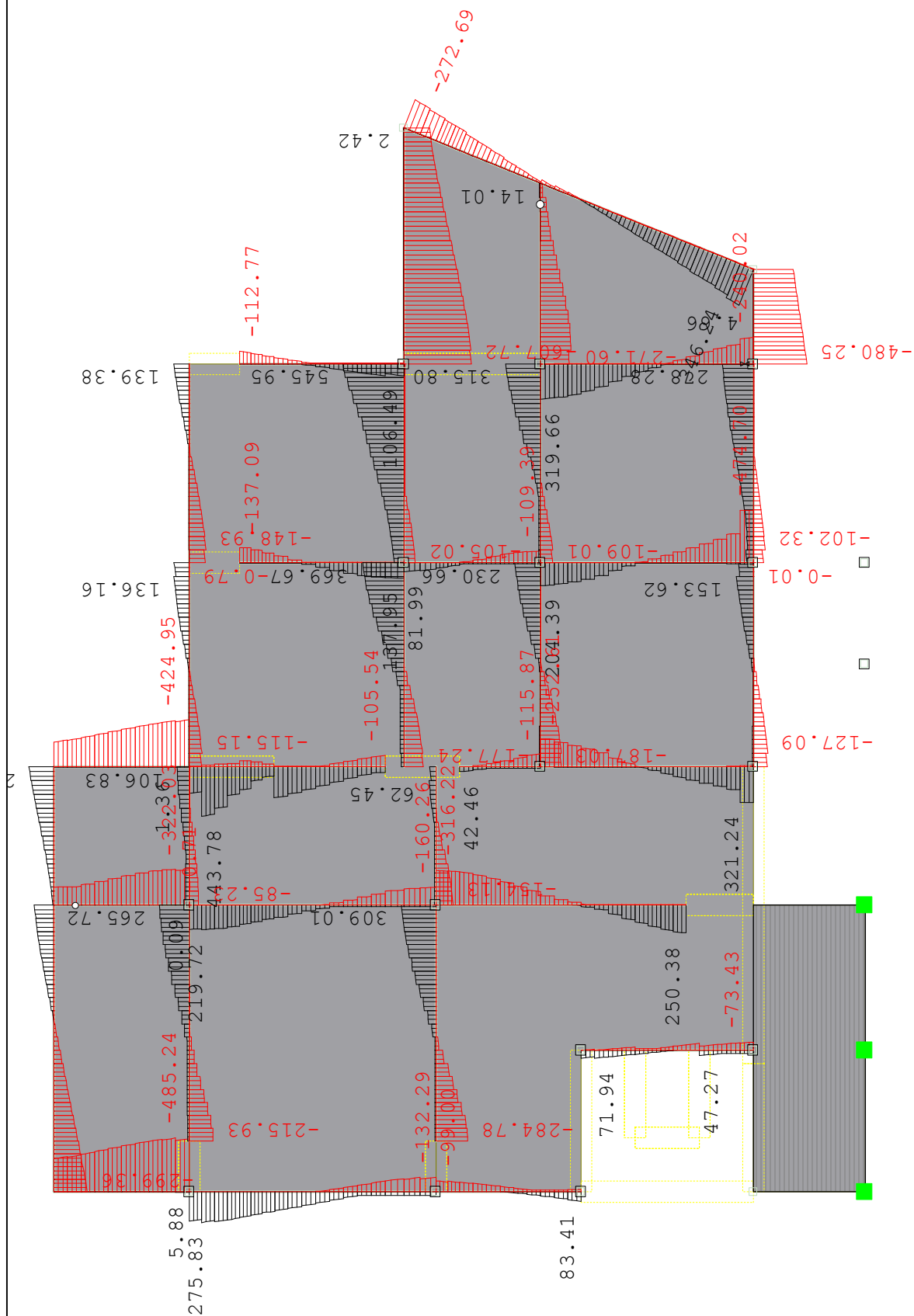


Nivo: POS 200 [8.50 m]
Dijagram ugiba u ploči (T^∞)

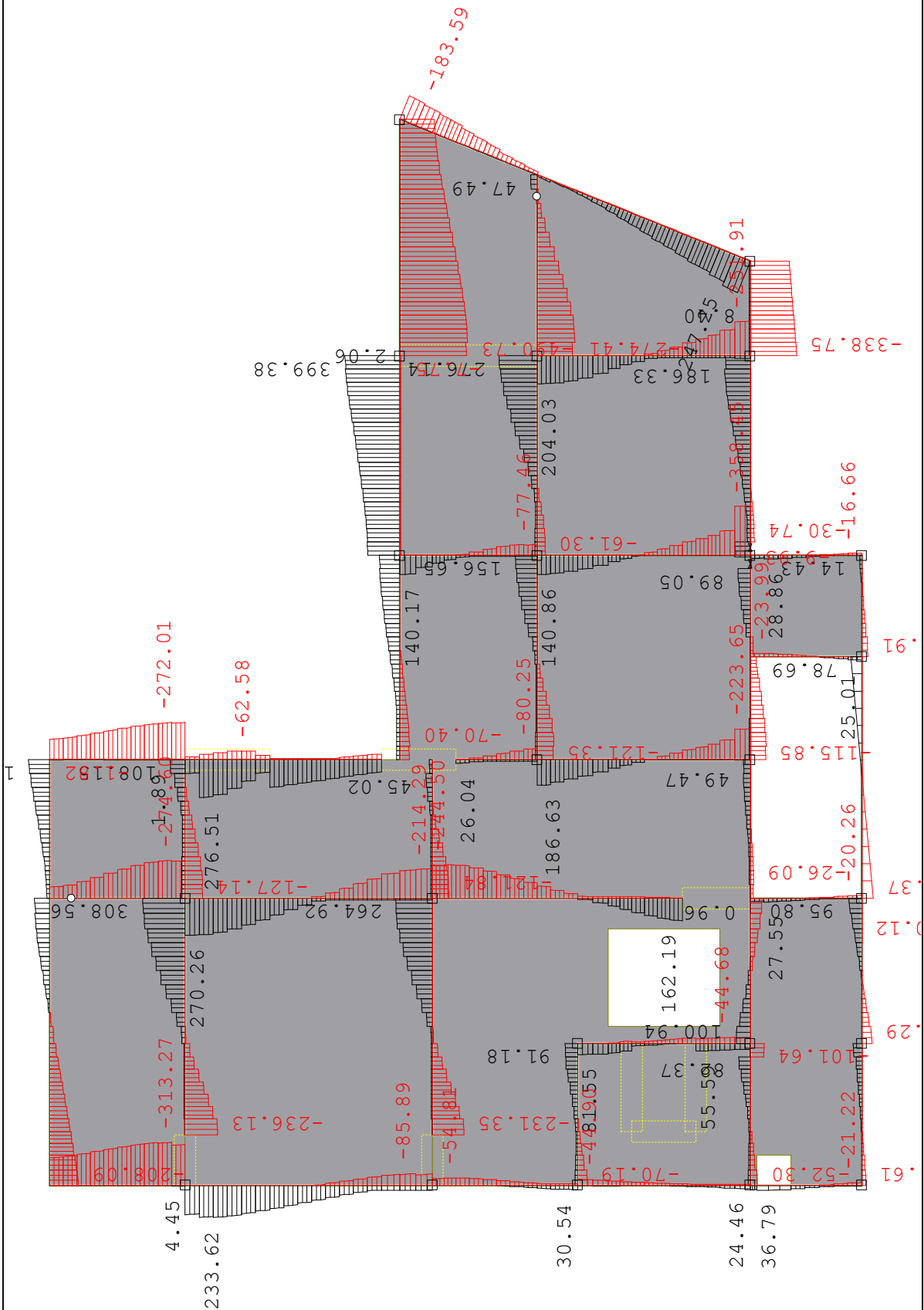


6.1 UTICAJI







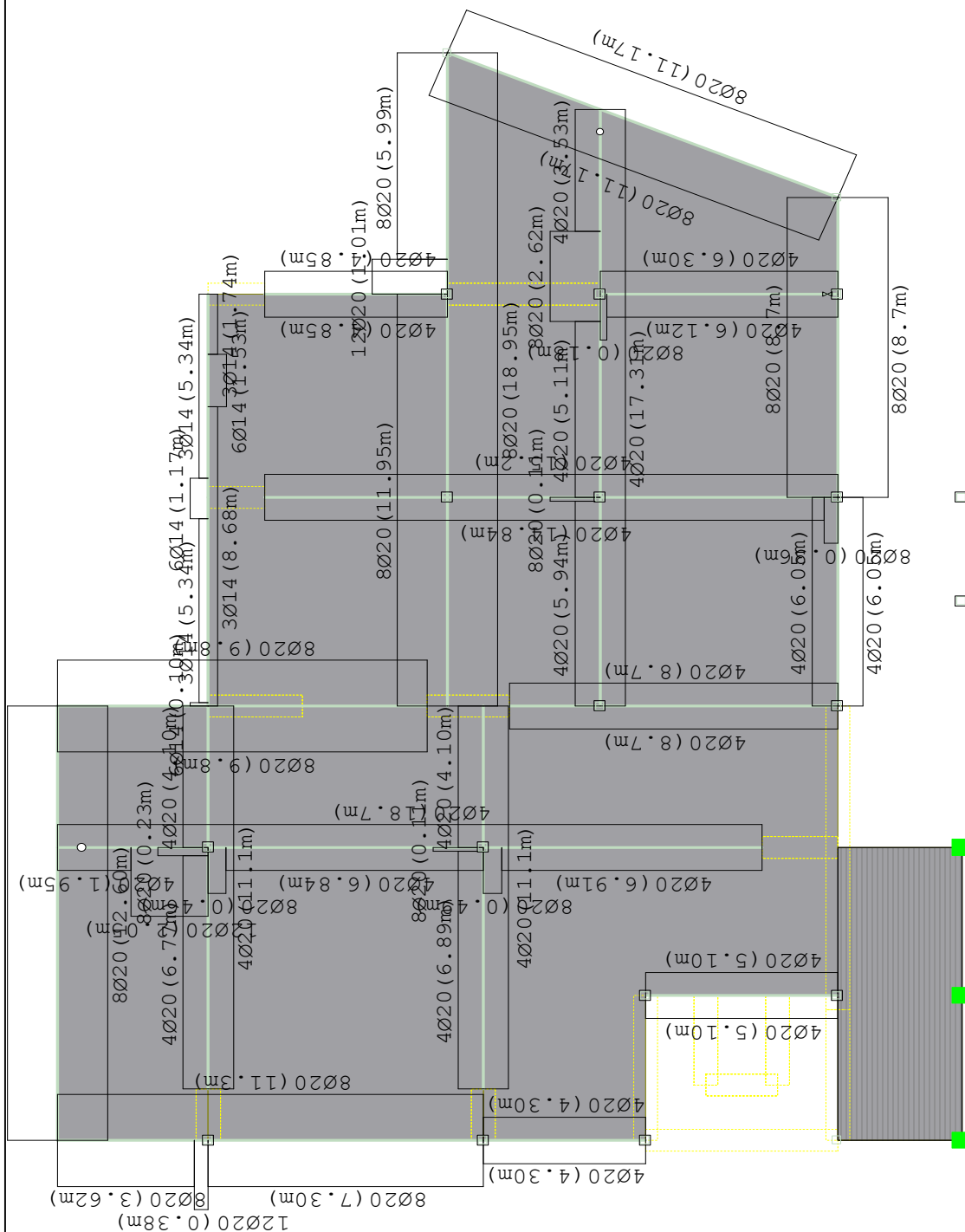


Nivo: POS 200 [8.50 m]

Uticaji u gredi: max T2= 399.38 / min T2= -490.73 kN

6.2 USVOJENA ARMATURA

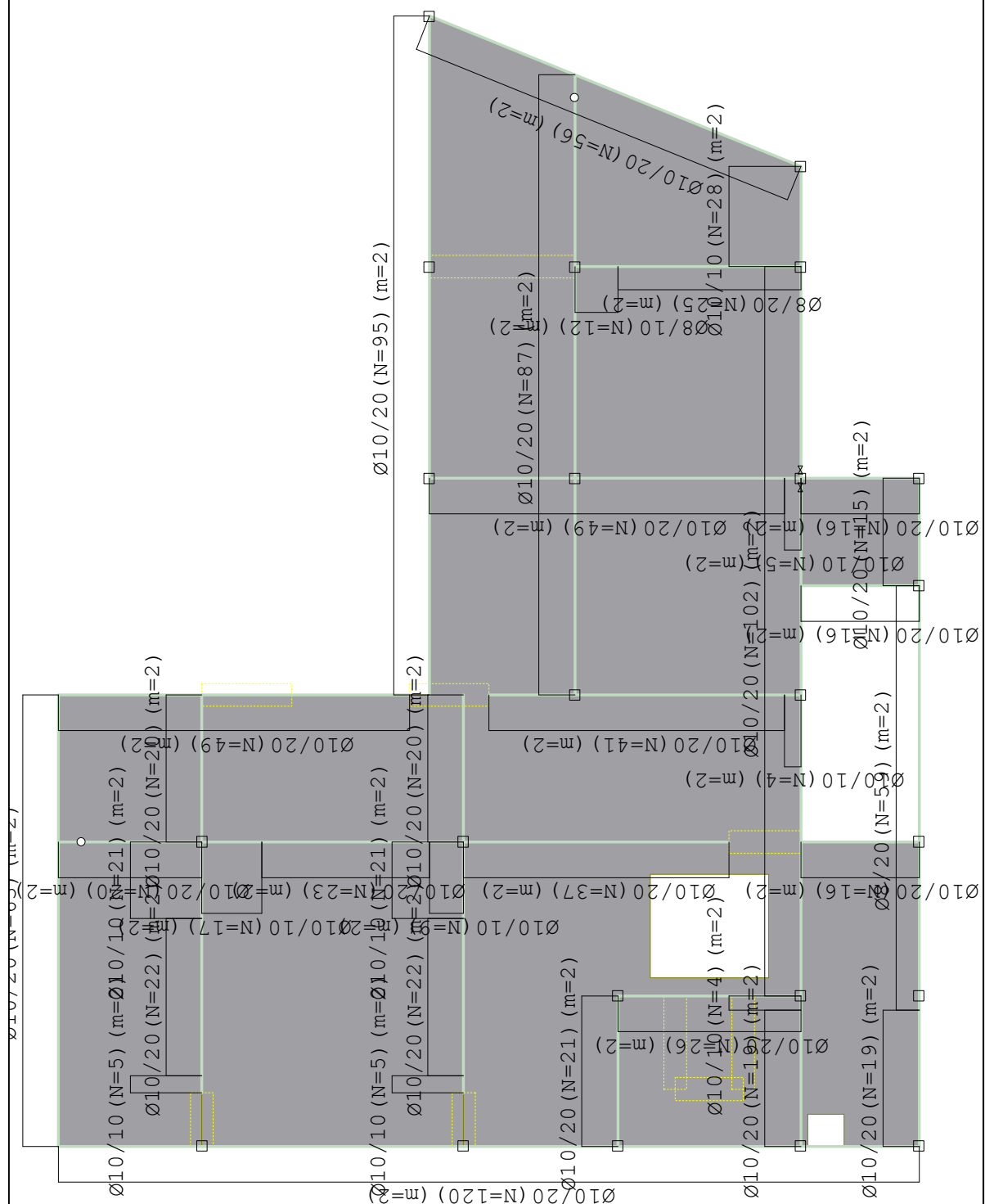
Usvojena armatura
PBAB 87, MB 30, B500



Nivo: POS 100 [4.50 m]
Armatura u gredama: Aa2/Aa1

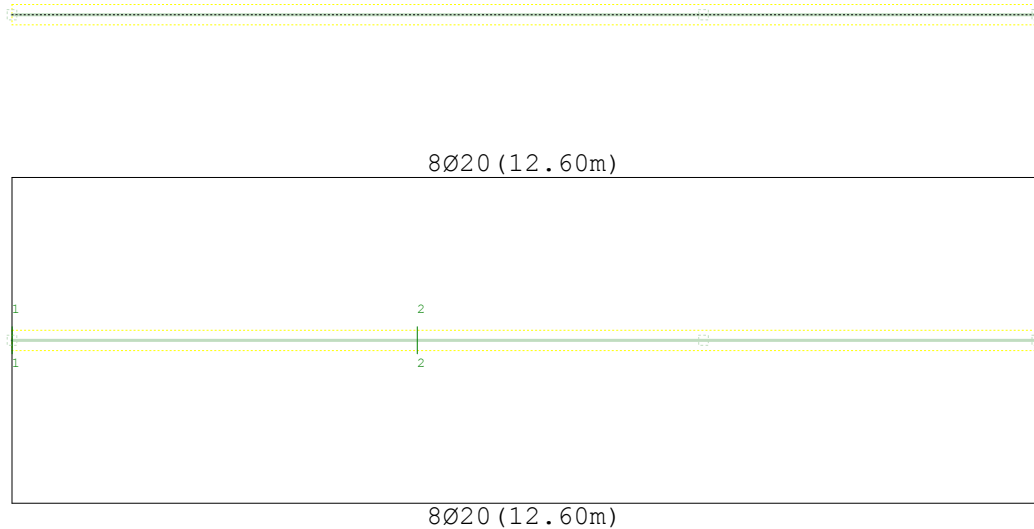






GREDA POS G101

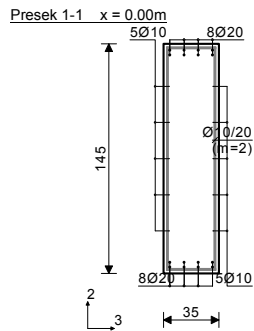
Usvojena armatura
PBAB 87, MB 30, B500



Ram: H_7
Armatura u gredama: Aa2/Aa1

Greda 5310-9109

PBAB 87
MB 30
B500
Kompletna šema opterećenja



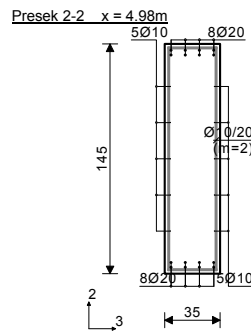
Merodavna kombinacija za savijanje:
1.30xI+0.65xII-1.30xIV
N1u = 1.69 kN
M2u = 0.00 kNm
M3u = -49.59 kNm

Merodavna kombinacija za torziju:
1.30xI+0.65xII-1.30xIV
M1u = -2.72 kNm

Merodavna kombinacija za smicanje:
1.60xI
T2u = -270.64 kN
T3u = -0.21 kN
M1u = -2.53 kNm

$\epsilon_b/\epsilon_a = -0.295/10.000 \%$
Aa1 = 0.00 + 0.02' = 0.02 cm²
Aa2 = 0.79 + 0.02' = 0.81 cm²
Aa3 = 0.00 + 0.10' = 0.10 cm²
Aa4 = 0.00 + 0.10' = 0.10 cm²
Aa,uz = 0.00 cm²/m (m=1)
[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]

$\tau_y = 0.77 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.11 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$
Procenat armiranja: 1.15%
) - dodatna podužna armatura za prijem torzije.

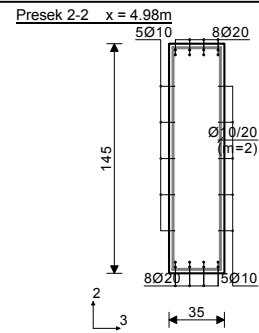


Merodavna kombinacija za savijanje:
1.60xI+1.80xII+1.80xIII
N1u = 2.40 kN
M2u = 0.00 kNm
M3u = 753.41 kNm

Merodavna kombinacija za torziju:
1.30xI+0.65xII-1.30xIV
M1u = -2.74 kNm

Merodavna kombinacija za smicanje:
1.30xI+0.65xII-1.30xIV
T2u = -7.65 kN
T3u = 0.42 kN
M1u = -2.74 kNm

$\epsilon_b/\epsilon_a = -1.379/10.000 \%$
Aa1 = 12.10 + 0.02' = 12.12 cm²
Aa2 = 0.00 + 0.02' = 0.02 cm²
Aa3 = 0.00 + 0.10' = 0.10 cm²
Aa4 = 0.00 + 0.10' = 0.10 cm²
Aa,uz = 0.00 cm²/m (m=1)
[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]
 $\tau_y = 0.14 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.12 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$
Procenat armiranja: 1.15%



Merodavna kombinacija za savijanje:
1.60xI+1.80xII+1.80xIII
N1u = 2.03 kN
M2u = 0.00 kNm
M3u = 753.49 kNm

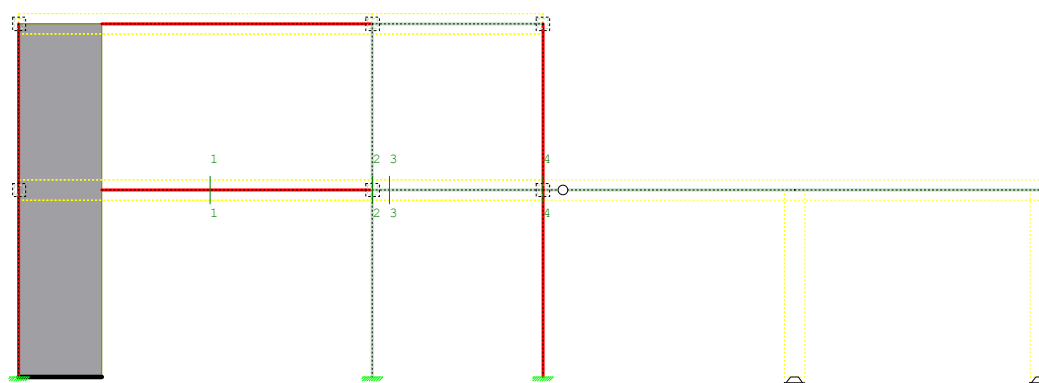
Merodavna kombinacija za torziju:
1.30xI+0.65xII-1.30xIV
M1u = -2.74 kNm

Merodavna kombinacija za smicanje:
1.30xI+0.65xII-1.30xIV
T2u = -3.50 kN
T3u = 0.49 kN
M1u = -2.74 kNm

$\epsilon_b/\epsilon_a = -1.379/10.000 \%$
Aa1 = 12.09 + 0.02' = 12.12 cm²
Aa2 = 0.00 + 0.02' = 0.02 cm²
Aa3 = 0.00 + 0.10' = 0.10 cm²
Aa4 = 0.00 + 0.10' = 0.10 cm²
Aa,uz = 0.00 cm²/m (m=1)
[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]
 $\tau_y = 0.13 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.12 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$
Procenat armiranja: 1.15%

GREDA POS G102

Usvojena armatura
PBAB 87, MB 30, B500



Ram: H_6
Armatura u gredama: Aa2/Aa1

Greda 4664-6679

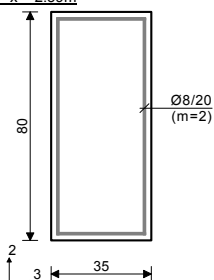
PBAB 87

MB 30

B500

Kompletna šema opterećenja

Presek 1-1 x = 2.59m



Merodavna kombinacija za savijanje:
1.60xl+1.80xII+1.80xIII

N1u = -7.84 kN
M2u = 0.00 kNm
M3u = 263.43 kNm

Merodavna kombinacija za torziju:

1.60xl+1.80xII
M1u = -7.84 kNm

Merodavna kombinacija za smicanje:

1.30xl+0.65xII-1.30xIV

T2u = -24.49 kN

T3u = 0.37 kN

M1u = -6.78 kNm

$\epsilon_b/\epsilon_a = -1.522/10.000 \%$

Aa1 = 7.60 + 0.12' = 7.72 cm²

Aa2 = 0.00 + 0.12' = 0.12 cm²

Aa3 = 0.00 + 0.28' = 0.28 cm²

Aa4 = 0.00 + 0.28' = 0.28 cm²

Aa,uz = 0.00 cm²/m (m=1)

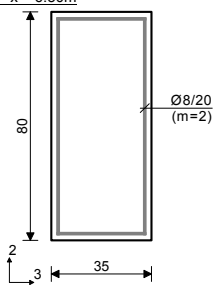
[Usvojeno Aa,uz = Ø8/20(m=2) = 5.03 cm²/m]

$\tau_y = 0.65 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$

$\tau_z = 0.54 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$

*) - dodatna poduzna armatura za prijem torzije.

Presek 2-2 x = 6.50m



Merodavna kombinacija za savijanje:

1.30xl+0.65xII+1.30xIV

N1u = 44.74 kN

M2u = 0.00 kNm

M3u = -377.94 kNm

Merodavna kombinacija za torziju:

1.60xl+1.80xII+1.80xIII

M1u = -22.36 kNm

Merodavna kombinacija za smicanje:

1.60xl+1.80xII+1.80xIII

T2u = 236.54 kN

T3u = 0.31 kN

M1u = -22.36 kNm

$\epsilon_b/\epsilon_a = -1.902/10.000 \%$

Aa1 = 0.00 + 0.35' = 0.35 cm²

Aa2 = 11.63 + 0.35' = 11.98 cm²

Aa3 = 0.00 + 0.80' = 0.80 cm²

Aa4 = 0.00 + 0.80' = 0.80 cm²

Aa,uz = 8.98 cm²/m (m=1)

[Usvojeno Aa,uz = Ø8/20(m=2) = 5.03 cm²/m]

$\tau_y = 2.83 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$

$\tau_z = 1.78 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$

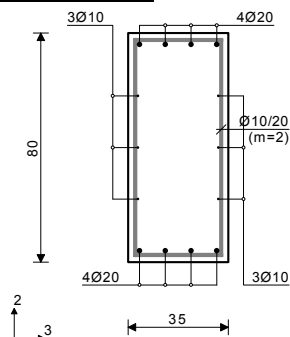
Greda 6679-7878

PBAB 87

MB 30

B500

Kompletna šema opterećenja

Presek 2-2 $x = 0.00\text{m}$ Merodavna kombinacija za savijanje:
1.00xI+1.30xIV

N1u = -24.83 kN
M2u = 0.00 kNm
M3u = 80.50 kNm

Merodavna kombinacija za torziju:

1.60xI+1.80xII+1.80xIII
M1u = -8.58 kNm

Merodavna kombinacija za smicanje:

1.60xI+1.80xII
T2u = -78.46 kN
T3u = -4.35 kN
M1u = -8.53 kNm

 $\varepsilon_b/\varepsilon_a = -0.886/10.000 \text{ ‰}$

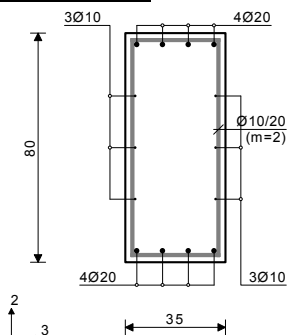
Aa1 = 1.97 + 0.13' = 2.11 cm²
Aa2 = 5.20 + 0.13' = 5.33 cm²
Aa3 = 0.00 + 0.31' = 0.31 cm²
Aa4 = 0.00 + 0.31' = 0.31 cm²

Aa,uz = 0.00 cm²/m (m=1)
[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]

$\tau_y = 1.03\text{MPa} < \tau_r$, $\tau_r = 1.10\text{MPa}$
 $\tau_z = 0.70\text{MPa} < \tau_r$, $\tau_r = 1.10\text{MPa}$

Procentat armiranja: 1.07%

*) - dodatna poduzna armatura za prijem torzije.

Presek 3-3 $x = 0.41\text{m}$ 

Merodavna kombinacija za savijanje:

1.30xI+0.65xII-1.30xIV
N1u = -34.11 kN
M2u = 0.00 kNm
M3u = -142.58 kNm

Merodavna kombinacija za torziju:

1.60xI+1.80xII+1.80xIII
M1u = -8.58 kNm

Merodavna kombinacija za smicanje:

1.60xI+1.80xII
T2u = -73.87 kN
T3u = -4.35 kN
M1u = -8.53 kNm

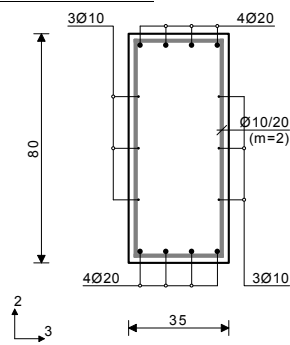
 $\varepsilon_b/\varepsilon_a = -1.091/10.000 \text{ ‰}$

Aa1 = 2.14 + 0.13' = 2.27 cm²
Aa2 = 3.72 + 0.13' = 3.86 cm²
Aa3 = 0.00 + 0.31' = 0.31 cm²
Aa4 = 0.00 + 0.31' = 0.31 cm²

Aa,uz = 0.00 cm²/m (m=1)
[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]

$\tau_y = 1.01\text{MPa} < \tau_r$, $\tau_r = 1.10\text{MPa}$
 $\tau_z = 0.70\text{MPa} < \tau_r$, $\tau_r = 1.10\text{MPa}$

Procentat armiranja: 1.07%

Presek 4-4 $x = 4.10\text{m}$ 

Merodavna kombinacija za savijanje:

1.30xI+0.65xII+1.30xIV
N1u = 0.37 kN
M2u = 0.00 kNm
M3u = -139.48 kNm

Merodavna kombinacija za torziju:

1.60xI+1.80xII+1.80xIII
M1u = 18.77 kNm

Merodavna kombinacija za smicanje:

1.60xI+1.80xII+1.80xIII
T2u = 91.92 kN
T3u = 0.80 kN
M1u = 18.77 kNm

 $\varepsilon_b/\varepsilon_a = -1.024/10.000 \text{ ‰}$

Aa1 = 0.91 + 0.29' = 1.20 cm²
Aa2 = 4.00 + 0.29' = 4.30 cm²
Aa3 = 0.00 + 0.67' = 0.67 cm²
Aa4 = 0.00 + 0.67' = 0.67 cm²

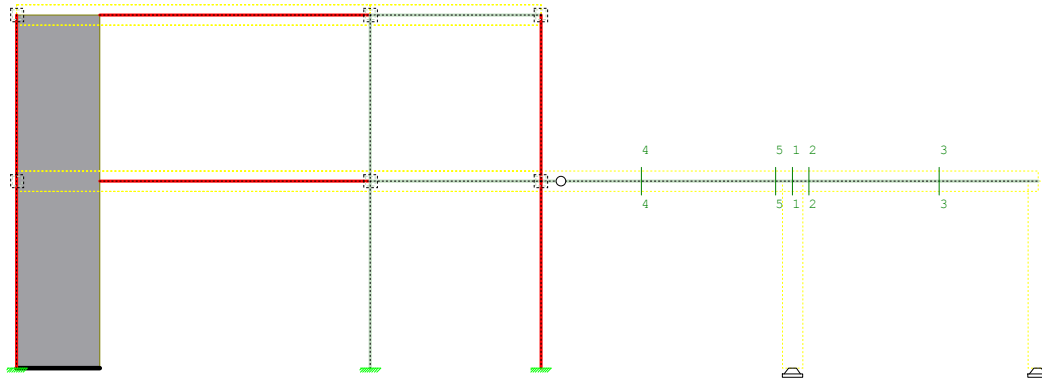
Aa,uz = 3.12 cm²/m (m=1)
[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]

$\tau_y = 1.90\text{MPa} < 3\tau_r$, $\tau_r = 1.10\text{MPa}$
 $\tau_z = 1.50\text{MPa} < 3\tau_r$, $\tau_r = 1.10\text{MPa}$

Procentat armiranja: 1.07%

GREDA POS G103

Usvojena armatura
PBAB 87, MB 30, B500

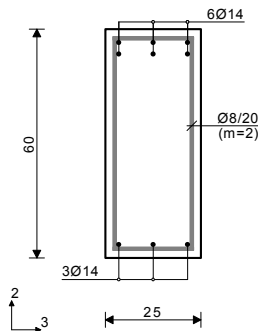


Ram: H_6
Armatura u gredama: Aa2/Aa1

Greda 9293-9976

PBAB 87
MB 30
B500
Kompletna šema opterećenja

Presek 1-1 x = 0.00m



Merodavna kombinacija za savijanje:

1.60xI+1.80xII+1.80xIII
N1u = 25.70 kN
M2u = 0.00 kNm
M3u = -225.16 kNm

Merodavna kombinacija za torziju:

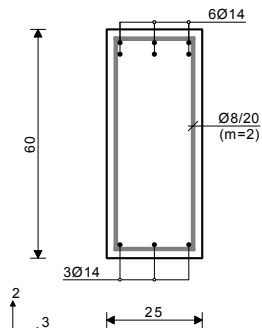
1.30xI+0.65xII-1.30xV
M1u = 1.09 kNm

Merodavna kombinacija za smicanje:

1.60xI+1.80xII+1.80xIII
T2u = -152.24 kN
T3u = 19.56 kN
M1u = 0.99 kNm
 $\epsilon_b/\epsilon_a = -2.692/10.000 \text{ ‰}$
Aa1 = 0.00 + 0.02' = 0.02 cm²
Aa2 = 9.37 + 0.02' = 9.39 cm²
Aa3 = 0.00 + 0.05' = 0.05 cm²
Aa4 = 0.00 + 0.05' = 0.05 cm²
Aa,uz = 2.39 cm²/m (m=1)
[Usvojeno Aa,uz = Ø8/20(m=2) = 5.03 cm²/m]

$\tau_y = 1.23 \text{ MPa} < 3\tau_r, \tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.36 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$
Procentat armiranja: 0.92%
*) - dodatna podužna armatura za prijem torzije.

Presek 2-2 x = 0.39m



Merodavna kombinacija za savijanje:

1.60xI+1.80xII+1.80xIII
N1u = 3.46 kN
M2u = 0.00 kNm
M3u = -160.58 kNm

Merodavna kombinacija za torziju:

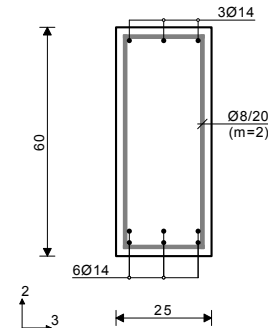
1.30xI+0.65xII-1.30xV
M1u = 1.09 kNm

Merodavna kombinacija za smicanje:

1.60xI+1.80xII+1.80xIII
T2u = -156.48 kN
T3u = 3.27 kN
M1u = 0.99 kNm
 $\epsilon_b/\epsilon_a = -2.039/10.000 \text{ ‰}$
Aa1 = 0.00 + 0.02' = 0.02 cm²
Aa2 = 6.39 + 0.02' = 6.41 cm²
Aa3 = 0.00 + 0.05' = 0.05 cm²
Aa4 = 0.00 + 0.05' = 0.05 cm²
Aa,uz = 2.63 cm²/m (m=1)
[Usvojeno Aa,uz = Ø8/20(m=2) = 5.03 cm²/m]

$\tau_y = 1.23 \text{ MPa} < 3\tau_r, \tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.25 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$
Procentat armiranja: 0.92%

Presek 3-3 x = 3.54m



Merodavna kombinacija za savijanje:

1.60xI+1.80xII+1.80xIII
N1u = -4.16 kN
M2u = 0.00 kNm
M3u = 153.02 kNm

Merodavna kombinacija za torziju:

1.30xI+0.65xII-1.30xV
M1u = 1.00 kNm

Merodavna kombinacija za smicanje:

1.30xI+0.65xII-1.30xV
T2u = -3.72 kN
T3u = 1.12 kN
M1u = 1.00 kNm
 $\epsilon_b/\epsilon_a = -1.981/10.000 \text{ ‰}$
Aa1 = 6.00 + 0.02' = 6.02 cm²
Aa2 = 0.00 + 0.02' = 0.02 cm²
Aa3 = 0.00 + 0.05' = 0.05 cm²
Aa4 = 0.00 + 0.05' = 0.05 cm²
Aa,uz = 0.00 cm²/m (m=1)
[Usvojeno Aa,uz = Ø8/20(m=2) = 5.03 cm²/m]

$\tau_y = 0.24 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.22 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$
 Procent armiranja: 0.92%

Greda 7878-9293

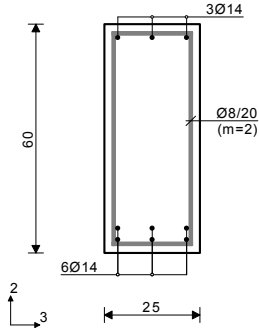
PBAB 87

MB 30

B500

Kompletna šema opterećenja

Presek 4-4 x = 2.42m



Merodavna kombinacija za savijanje:

$1.60xI+1.80xII+1.80xIII$
 $N1u = -6.97 \text{ kN}$
 $M2u = 0.00 \text{ kNm}$
 $M3u = 130.75 \text{ kNm}$

Merodavna kombinacija za torziju:

$1.30xI-1.30xIV$
 $M1u = -1.29 \text{ kNm}$

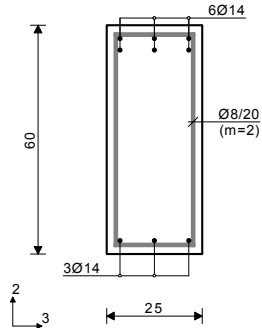
Merodavna kombinacija za smicanje:

$1.30xI-1.30xIV$
 $T2u = -2.63 \text{ kN}$
 $T3u = 0.12 \text{ kN}$
 $M1u = -1.29 \text{ kNm}$

$\epsilon_b/\epsilon_a = -1.769/10.000 \text{ ‰}$
 $Aa1 = 5.05 + 0.03' = 5.08 \text{ cm}^2$
 $Aa2 = 0.00 + 0.03' = 0.03 \text{ cm}^2$
 $Aa3 = 0.00 + 0.06' = 0.06 \text{ cm}^2$
 $Aa4 = 0.00 + 0.06' = 0.06 \text{ cm}^2$
 $Aa,uz = 0.00 \text{ cm}^2/\text{m} \quad (m=1)$
[Usvojeno $Aa,uz = \phi 8/20(m=2) = 5.03 \text{ cm}^2/\text{m}$]

$\tau_y = 0.29 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.27 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$
 Procent armiranja: 0.92%
*) - dodatna podužna armatura za prijem torzije.

Presek 5-5 x = 5.65m



Merodavna kombinacija za savijanje:

$1.60xI+1.80xII+1.80xIII$
 $N1u = 1.04 \text{ kN}$
 $M2u = 0.00 \text{ kNm}$
 $M3u = -161.74 \text{ kNm}$

Merodavna kombinacija za torziju:

$1.30xI-1.30xIV$
 $M1u = -1.35 \text{ kNm}$

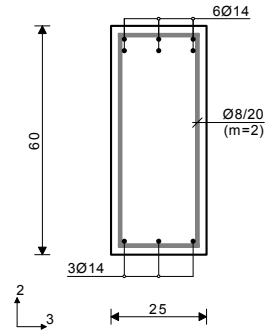
Merodavna kombinacija za smicanje:

$1.60xI+1.80xII+1.80xIII$
 $T2u = 151.11 \text{ kN}$
 $T3u = -3.32 \text{ kN}$
 $M1u = -1.23 \text{ kNm}$

$\epsilon_b/\epsilon_a = -2.057/10.000 \text{ ‰}$
 $Aa1 = 0.00 + 0.03' = 0.03 \text{ cm}^2$
 $Aa2 = 6.41 + 0.03' = 6.44 \text{ cm}^2$
 $Aa3 = 0.00 + 0.07' = 0.07 \text{ cm}^2$
 $Aa4 = 0.00 + 0.07' = 0.07 \text{ cm}^2$
 $Aa,uz = 2.59 \text{ cm}^2/\text{m} \quad (m=1)$
[Usvojeno $Aa,uz = \phi 8/20(m=2) = 5.03 \text{ cm}^2/\text{m}$]

$\tau_y = 1.22 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.30 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$
 Procent armiranja: 0.92%

Presek 1-1 x = 6.05m



Merodavna kombinacija za savijanje:

$1.60xI+1.80xII+1.80xIII$
 $N1u = 24.49 \text{ kN}$
 $M2u = 0.00 \text{ kNm}$
 $M3u = -225.78 \text{ kNm}$

Merodavna kombinacija za torziju:

$1.30xI-1.30xIV$
 $M1u = -1.35 \text{ kNm}$

Merodavna kombinacija za smicanje:

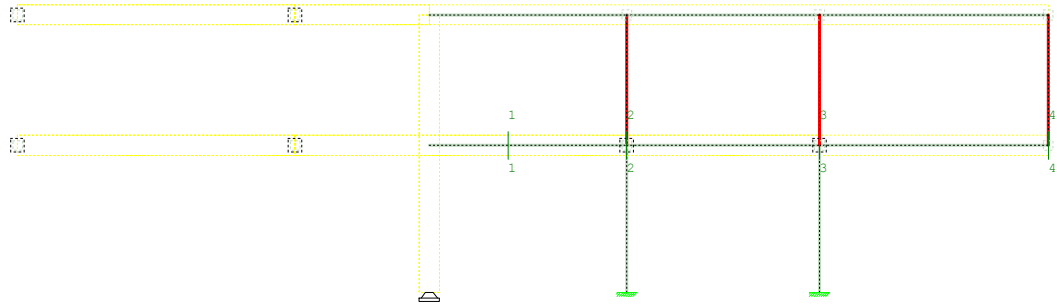
$1.60xI+1.80xII+1.80xIII$
 $T2u = 148.05 \text{ kN}$
 $T3u = -19.39 \text{ kN}$
 $M1u = -1.23 \text{ kNm}$

$\epsilon_b/\epsilon_a = -2.702/10.000 \text{ ‰}$
 $Aa1 = 0.00 + 0.03' = 0.03 \text{ cm}^2$
 $Aa2 = 9.39 + 0.03' = 9.41 \text{ cm}^2$
 $Aa3 = 0.00 + 0.07' = 0.07 \text{ cm}^2$
 $Aa4 = 0.00 + 0.07' = 0.07 \text{ cm}^2$
 $Aa,uz = 2.42 \text{ cm}^2/\text{m} \quad (m=1)$
[Usvojeno $Aa,uz = \phi 8/20(m=2) = 5.03 \text{ cm}^2/\text{m}$]

$\tau_y = 1.23 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.39 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$
 Procent armiranja: 0.92%

GREDA POS G105(106)

Usvojena armatura
PBAB 87, MB 30, B500

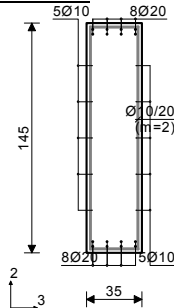


Ram: H_5
Armatura u gredama: Aa2/Aa1

Greda 6030-7799

PBAB 87
MB 30
B500
Kompletna šema opterećenja

Presek 1-1 x = 2.42m



Merodavna kombinacija za savijanje:
1.60xI+1.80xII+1.80xIII
N1u = -10.27 kN
M2u = 0.00 kNm
M3u = 281.17 kNm

Merodavna kombinacija za torziju:
1.30xI+1.30xIV
M1u = 0.84 kNm

Merodavna kombinacija za smicanje:

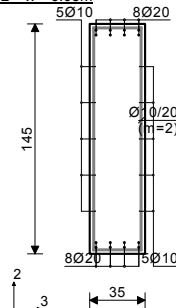
1.30xI+1.30xIV
T2u = 53.51 kN
T3u = -7.47 kN
M1u = 0.84 kNm

$\epsilon_b/\epsilon_a = -0.772/10.000 \%$

Aa1 = 4.31 cm²
Aa2 = 0.00 cm²
Aa3 = 0.00 cm²
Aa4 = 0.00 cm²
Aa,uz = 0.00 cm²/m
(Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m)

$\tau_y = 0.17 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.05 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$
Procent armiranja: 1.15%

Presek 2-2 x = 6.05m



[cm]

(m=1)

Merodavna kombinacija za savijanje:

1.30xI+0.65xII+1.30xIV
N1u = 96.65 kN
M2u = 0.00 kNm
M3u = -659.98 kNm

Merodavna kombinacija za torziju:

1.30xI+0.65xII-1.30xV
M1u = 27.13 kNm

Merodavna kombinacija za smicanje:

1.30xI+0.65xII-1.30xV
T2u = 318.32 kN
T3u = 1.26 kN
M1u = 27.13 kNm

$\epsilon_b/\epsilon_a = -1.199/10.000 \%$

Aa1 = 0.00 + 0.23' = 0.23 cm²
Aa2 = 11.55 + 0.23' = 11.79 cm²
Aa3 = 0.00 + 0.97' = 0.97 cm²
Aa4 = 0.00 + 0.97' = 0.97 cm²
Aa,uz = 4.69 cm²/m (m=1)
(Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m)

$\tau_y = 1.97 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$
 $\tau_z = 1.20 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$
Procent armiranja: 1.15%

*) - dodatna podužna armatura za prijem torzije.

[cm]

Greda 7799-9217

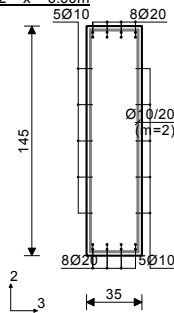
PBAB 87

MB 30

B500

Kompletna šema opterećenja

Presek 2-2 x = 0.00m



[cm]

Merodavna kombinacija za savijanje:

1.00xI+1.30xIV

N1u = -94.89 kN

M2u = 0.00 kNm

M3u = 301.83 kNm

Merodavna kombinacija za torziju:

1.30xI+0.65xII-1.30xV

M1u = -44.66 kNm

Merodavna kombinacija za smicanje:

1.30xI+0.65xII-1.30xV

T2u = -39.55 kN

T3u = 5.24 kN

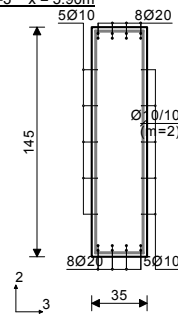
M1u = -44.66 kNm

 $\epsilon_b/\epsilon_a = -0.907/10.000 \%$ Aa1 = 3.70 + 0.39' = 4.09 cm²Aa2 = 3.09 + 0.39' = 3.47 cm²Aa3 = 0.00 + 1.60' = 1.60 cm²Aa4 = 0.00 + 1.60' = 1.60 cm²Aa,uz = 2.59 cm²/m (m=1)[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m] $\tau_y = 2.06 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$ $\tau_z = 1.98 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$

Procenat armiranja: 1.15%

*) - dodatna podubna armatura za prijem torzije.

Presek 3-3 x = 5.90m



[cm]

Merodavna kombinacija za savijanje:

1.60xI+1.80xII+1.80xIII

N1u = -269.19 kN

M2u = 0.00 kNm

M3u = -1327.65 kNm

Merodavna kombinacija za torziju:

1.30xI+0.65xII-1.30xV

M1u = 61.65 kNm

Merodavna kombinacija za smicanje:

1.60xI+1.80xII+1.80xIII

T2u = 534.67 kN

T3u = -4.68 kN

M1u = 39.30 kNm

 $\epsilon_b/\epsilon_a = -2.268/10.000 \%$ Aa1 = 0.00 + 0.53' = 0.53 cm²Aa2 = 19.09 + 0.53' = 19.62 cm²Aa3 = 0.00 + 2.20' = 2.20 cm²Aa4 = 0.00 + 2.20' = 2.20 cm²Aa,uz = 11.03 cm²/m (m=1)[Usvojeno Aa,uz = Ø10/10(m=2) = 15.71 cm²/m] $\tau_y = 3.70 \text{ MPa} < 5\tau_r$, $\tau_r = 1.10 \text{ MPa}$ $\tau_z = 2.73 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$

Procenat armiranja: 1.15%

Greda 9217-10004

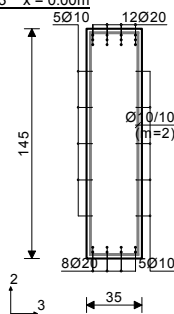
PBAB 87

MB 30

B500

Kompletna šema opterećenja

Presek 3-3 x = 0.00m



[cm]

Merodavna kombinacija za savijanje:

1.60xI+1.80xII+1.80xIII

N1u = -219.64 kN

M2u = 0.00 kNm

M3u = -2282.05 kNm

Merodavna kombinacija za torziju:

1.30xI+0.65xII+1.30xV

M1u = 25.14 kNm

Merodavna kombinacija za smicanje:

1.60xI+1.80xII+1.80xIII

T2u = -634.53 kN

T3u = -5.23 kN

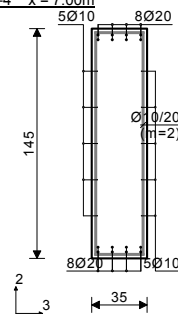
M1u = 20.80 kNm

 $\epsilon_b/\epsilon_a = -3.500/9.283 \%$ Aa1 = 0.00 + 0.22' = 0.22 cm²Aa2 = 37.28 + 0.22' = 37.50 cm²Aa3 = 0.00 + 0.90' = 0.90 cm²Aa4 = 0.00 + 0.90' = 0.90 cm²Aa,uz = 10.02 cm²/m (m=1)[Usvojeno Aa,uz = Ø10/10(m=2) = 15.71 cm²/m] $\tau_y = 2.33 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$ $\tau_z = 1.14 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$

Procenat armiranja: 1.39%

*) - dodatna podubna armatura za prijem torzije.

Presek 4-4 x = 7.00m



[cm]

Merodavna kombinacija za savijanje:

1.60xI+1.80xII+1.80xIII

N1u = -377.08 kN

M2u = 0.00 kNm

M3u = 904.91 kNm

Merodavna kombinacija za torziju:

1.30xI+0.65xII+1.30xV

M1u = 24.99 kNm

Merodavna kombinacija za smicanje:

1.30xI+0.65xII+1.30xV

T2u = -195.82 kN

T3u = 1.26 kN

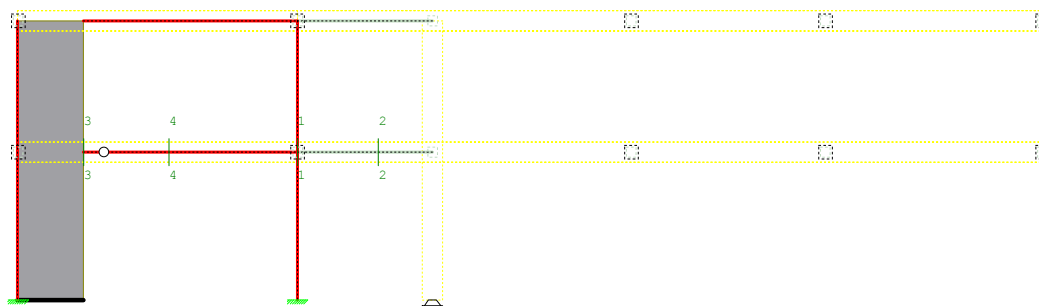
M1u = 24.99 kNm

 $\epsilon_b/\epsilon_a = -1.818/10.000 \%$ Aa1 = 10.72 + 0.22' = 10.93 cm²Aa2 = 0.00 + 0.22' = 0.22 cm²Aa3 = 0.00 + 0.89' = 0.89 cm²Aa4 = 0.00 + 0.89' = 0.89 cm²Aa,uz = 2.21 cm²/m (m=1)[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m] $\tau_y = 1.58 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$ $\tau_z = 1.10 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$

Procenat armiranja: 1.15%

GREDA POS G104

Usvojena armatura
PBAB 87, MB 30, B500

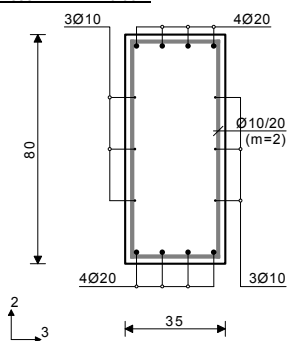


Ram: H_4
Armatura u gredama: Aa2/Aa1

Greda 4404-5745

PBAB 87
MB 30
B500
Kompletna šema opterećenja

Presek 1-1 x = 0.00m



Merodavna kombinacija za savijanje:

1.60xI+1.80xII

N1u = -26.02 kN
M2u = 0.00 kNm
M3u = -257.90 kNm

Merodavna kombinacija za torziju:

1.30xI+0.65xII+1.30xV

M1u = 14.42 kNm

Merodavna kombinacija za smicanje:

1.60xI+1.80xII+1.80xIII

T2u = -159.13 kN
T3u = -0.71 kN
M1u = 13.45 kNm

$\epsilon_b/\epsilon_a = -1.523/10.000 \%$

Aa1 = 0.00 + 0.23' = 0.23 cm²
Aa2 = 7.25 + 0.23' = 7.47 cm²
Aa3 = 0.00 + 0.52' = 0.52 cm²
Aa4 = 0.00 + 0.52' = 0.52 cm²
Aa,uz = 3.65 cm²/m (m=1)

[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]

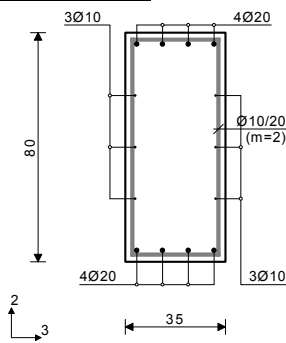
$\tau_y = 1.67 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$

$\tau_z = 1.17 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$

Procentat armiranja: 1.07%

*) - dodatna podubna armatura za prijem torzije.

Presek 2-2 x = 2.46m



Merodavna kombinacija za savijanje:

1.00xI+0.65xII+1.30xIV

N1u = 25.05 kN
M2u = 0.00 kNm
M3u = 4.53 kNm

Merodavna kombinacija za torziju:

1.30xI-1.30xV

M1u = -1.73 kNm

Merodavna kombinacija za smicanje:

1.30xI-1.30xV

T2u = -1.96 kN
T3u = -1.89 kN
M1u = -1.73 kNm

$\epsilon_b/\epsilon_a = 0.937/10.000 \%$

Aa1 = 0.48 + 0.03' = 0.51 cm²
Aa2 = 0.11 + 0.03' = 0.14 cm²
Aa3 = 0.00 + 0.06' = 0.06 cm²
Aa4 = 0.00 + 0.06' = 0.06 cm²
Aa,uz = 0.00 cm²/m (m=1)

[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]

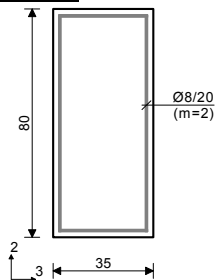
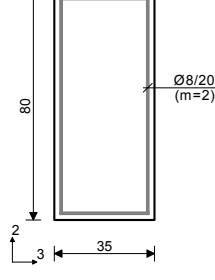
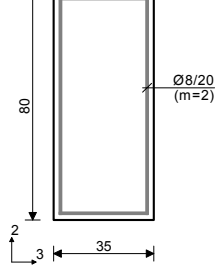
$\tau_y = 0.15 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$

$\tau_z = 0.15 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$

Procentat armiranja: 1.07%

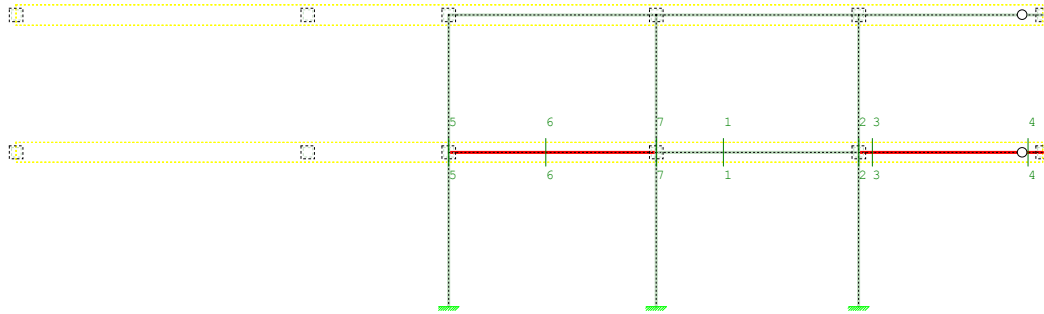
Greda 2653-4404

PBAB 87
MB 30
B500
Kompletna šema opterećenja

<p>Presek 3-3 $x = 0.00\text{m}$</p>  <p>[cm]</p> <p>Merodavna kombinacija za savijanje: 1.00xI+1.30xV N1u = 1.89 kN M2u = 0.00 kNm M3u = 0.00 kNm</p> <p>Merodavna kombinacija za torziju: 1.60xI+1.80xII+1.80xIII M1u = -11.33 kNm</p> <p>Merodavna kombinacija za smicanje: 1.60xI+1.80xII+1.80xIII T2u = -85.60 kN T3u = -1.39 kN M1u = -11.33 kNm</p> <p>$\varepsilon_b/\varepsilon_a = 1.428/10.000 \%$</p> <table> <tr><td>Aa1 =</td><td>0.00</td><td>+</td><td>0.18'</td><td>=</td><td>0.18</td><td>cm²</td></tr> <tr><td>Aa2 =</td><td>0.00</td><td>+</td><td>0.18'</td><td>=</td><td>0.18</td><td>cm²</td></tr> <tr><td>Aa3 =</td><td>0.00</td><td>+</td><td>0.40'</td><td>=</td><td>0.40</td><td>cm²</td></tr> <tr><td>Aa4 =</td><td>0.00</td><td>+</td><td>0.40'</td><td>=</td><td>0.40</td><td>cm²</td></tr> <tr><td>Aa,uz =</td><td>0.83</td><td>cm²/m</td><td>(m=1)</td><td></td><td></td><td></td></tr> </table> <p>[Usvojeno Aa,uz = Ø8/20(m=2) = 5.03 cm²/m]</p> <p>$\tau_y = 1.28\text{MPa} < 3\tau_r$, $\tau_r = 1.10\text{MPa}$ $\tau_z = 0.91\text{MPa} < \tau_r$, $\tau_r = 1.10\text{MPa}$ *) - dodatna poduzna armatura za prijem torzije.</p>	Aa1 =	0.00	+	0.18'	=	0.18	cm ²	Aa2 =	0.00	+	0.18'	=	0.18	cm ²	Aa3 =	0.00	+	0.40'	=	0.40	cm ²	Aa4 =	0.00	+	0.40'	=	0.40	cm ²	Aa,uz =	0.83	cm ² /m	(m=1)				<p>Presek 4-4 $x = 2.59\text{m}$</p>  <p>[cm]</p> <p>Merodavna kombinacija za savijanje: 1.60xI+1.80xII+1.80xIII N1u = -10.19 kN M2u = 0.00 kNm M3u = 415.83 kNm</p> <p>Merodavna kombinacija za torziju: 1.60xI+1.80xII M1u = 2.77 kNm</p> <p>Merodavna kombinacija za smicanje: 1.60xI+1.80xII T2u = 10.62 kN T3u = -4.23 kN M1u = 2.77 kNm</p> <p>$\varepsilon_b/\varepsilon_a = -2.128/10.000 \%$</p> <table> <tr><td>Aa1 =</td><td>12.27</td><td>+</td><td>0.04'</td><td>=</td><td>12.31</td><td>cm²</td></tr> <tr><td>Aa2 =</td><td>0.00</td><td>+</td><td>0.04'</td><td>=</td><td>0.04</td><td>cm²</td></tr> <tr><td>Aa3 =</td><td>0.00</td><td>+</td><td>0.10'</td><td>=</td><td>0.10</td><td>cm²</td></tr> <tr><td>Aa4 =</td><td>0.00</td><td>+</td><td>0.10'</td><td>=</td><td>0.10</td><td>cm²</td></tr> <tr><td>Aa,uz =</td><td>0.00</td><td>cm²/m</td><td>(m=1)</td><td></td><td></td><td></td></tr> </table> <p>[Usvojeno Aa,uz = Ø8/20(m=2) = 5.03 cm²/m]</p> <p>$\tau_y = 0.27\text{MPa} < \tau_r$, $\tau_r = 1.10\text{MPa}$ $\tau_z = 0.24\text{MPa} < \tau_r$, $\tau_r = 1.10\text{MPa}$</p>	Aa1 =	12.27	+	0.04'	=	12.31	cm ²	Aa2 =	0.00	+	0.04'	=	0.04	cm ²	Aa3 =	0.00	+	0.10'	=	0.10	cm ²	Aa4 =	0.00	+	0.10'	=	0.10	cm ²	Aa,uz =	0.00	cm ² /m	(m=1)				<p>Presek 1-1 $x = 6.50\text{m}$</p>  <p>[cm]</p> <p>Merodavna kombinacija za savijanje: 1.60xI+1.80xII+1.80xIII N1u = 0.60 kN M2u = 0.00 kNm M3u = -402.78 kNm</p> <p>Merodavna kombinacija za torziju: 1.30xI+0.65xII-1.30xV M1u = 11.19 kNm</p> <p>Merodavna kombinacija za smicanje: 1.60xI+1.80xII T2u = 298.14 kN T3u = -8.45 kN M1u = 9.70 kNm</p> <p>$\varepsilon_b/\varepsilon_a = -2.060/10.000 \%$</p> <table> <tr><td>Aa1 =</td><td>0.00</td><td>+</td><td>0.17'</td><td>=</td><td>0.17</td><td>cm²</td></tr> <tr><td>Aa2 =</td><td>11.97</td><td>+</td><td>0.17'</td><td>=</td><td>12.14</td><td>cm²</td></tr> <tr><td>Aa3 =</td><td>0.00</td><td>+</td><td>0.40'</td><td>=</td><td>0.40</td><td>cm²</td></tr> <tr><td>Aa4 =</td><td>0.00</td><td>+</td><td>0.40'</td><td>=</td><td>0.40</td><td>cm²</td></tr> <tr><td>Aa,uz =</td><td>7.30</td><td>cm²/m</td><td>(m=1)</td><td></td><td></td><td></td></tr> </table> <p>[Usvojeno Aa,uz = Ø8/20(m=2) = 5.03 cm²/m]</p> <p>$\tau_y = 1.87\text{MPa} < 3\tau_r$, $\tau_r = 1.10\text{MPa}$ $\tau_z = 0.90\text{MPa} < \tau_r$, $\tau_r = 1.10\text{MPa}$</p>	Aa1 =	0.00	+	0.17'	=	0.17	cm ²	Aa2 =	11.97	+	0.17'	=	12.14	cm ²	Aa3 =	0.00	+	0.40'	=	0.40	cm ²	Aa4 =	0.00	+	0.40'	=	0.40	cm ²	Aa,uz =	7.30	cm ² /m	(m=1)			
Aa1 =	0.00	+	0.18'	=	0.18	cm ²																																																																																																					
Aa2 =	0.00	+	0.18'	=	0.18	cm ²																																																																																																					
Aa3 =	0.00	+	0.40'	=	0.40	cm ²																																																																																																					
Aa4 =	0.00	+	0.40'	=	0.40	cm ²																																																																																																					
Aa,uz =	0.83	cm ² /m	(m=1)																																																																																																								
Aa1 =	12.27	+	0.04'	=	12.31	cm ²																																																																																																					
Aa2 =	0.00	+	0.04'	=	0.04	cm ²																																																																																																					
Aa3 =	0.00	+	0.10'	=	0.10	cm ²																																																																																																					
Aa4 =	0.00	+	0.10'	=	0.10	cm ²																																																																																																					
Aa,uz =	0.00	cm ² /m	(m=1)																																																																																																								
Aa1 =	0.00	+	0.17'	=	0.17	cm ²																																																																																																					
Aa2 =	11.97	+	0.17'	=	12.14	cm ²																																																																																																					
Aa3 =	0.00	+	0.40'	=	0.40	cm ²																																																																																																					
Aa4 =	0.00	+	0.40'	=	0.40	cm ²																																																																																																					
Aa,uz =	7.30	cm ² /m	(m=1)																																																																																																								

GREDA POS G107(108)

Usvojena armatura
PBAB 87, MB 30, B500

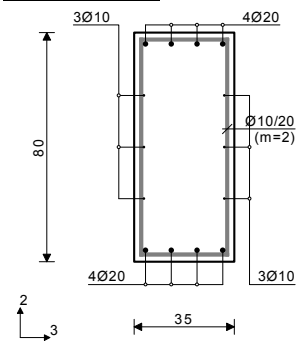


Ram: H_3
Armatura u gredama: Aa2/Aa1

Greda 6615-8308

PBAB 87
MB 30
B500
Kompletna šema opterećenja

Presek 1-1 x = 1.97m



Merodavna kombinacija za savijanje:

1.30xI+0.65xII+1.30xIV
N1u = -10.30 kN
M2u = 0.00 kNm
M3u = 56.06 kNm

Merodavna kombinacija za torziju:

1.60xI+1.80xII+1.80xIII
M1u = 10.18 kNm

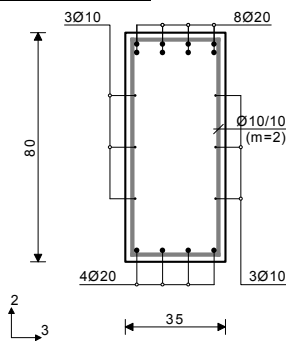
Merodavna kombinacija za smicanje:

1.60xI+1.80xII+1.80xIII
T2u = -27.77 kN
T3u = 3.24 kN
M1u = 10.18 kNm

$\epsilon_b/\epsilon_a = -0.621/10.000 \%$
Aa1 = 1.48 + 0.16' = 1.64 cm²
Aa2 = 0.00 + 0.16' = 0.16 cm²
Aa3 = 0.00 + 0.36' = 0.36 cm²
Aa4 = 0.00 + 0.36' = 0.36 cm²
Aa,uz = 0.00 cm²/m (m=1)
(Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m)

$\tau_y = 0.93 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.83 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$
Procentat armiranja: 1.07%
) - dodatna podubna armatura za prijem torzije.

Presek 2-2 x = 5.90m



Merodavna kombinacija za savijanje:

1.60xI+1.80xII+1.80xIII
N1u = -43.86 kN
M2u = 0.00 kNm
M3u = -691.30 kNm

Merodavna kombinacija za torziju:

1.60xI+1.80xII+1.80xIII
M1u = -30.13 kNm

Merodavna kombinacija za smicanje:

1.60xI+1.80xII+1.80xIII
T2u = 298.58 kN
T3u = 1.45 kN
M1u = -30.13 kNm

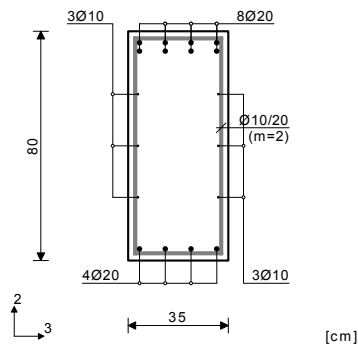
$\epsilon_b/\epsilon_a = -3.500/9.869 \%$
Aa1 = 0.00 + 0.47' = 0.47 cm²
Aa2 = 21.11 + 0.47' = 21.58 cm²
Aa3 = 0.00 + 1.08' = 1.08 cm²
Aa4 = 0.00 + 1.08' = 1.08 cm²
Aa,uz = 12.60 cm²/m (m=1)
(Usvojeno Aa,uz = Ø10/10(m=2) = 15.71 cm²/m)

$\tau_y = 3.72 \text{ MPa} < 5\tau_r$, $\tau_r = 1.10 \text{ MPa}$
 $\tau_z = 2.41 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$
Procentat armiranja: 1.51%

Greda 8308-9435

PBAB 87
MB 30
B500
Kompletna šema opterećenja

Presek 2-2 x = 0.00m



Merodavna kombinacija za savijanje:

$$1.60xI+1.80xII+1.80xIII$$

$$N1u = -29.47 \text{ kN}$$

$$M2u = 0.00 \text{ kNm}$$

$$M3u = -851.27 \text{ kNm}$$

Merodavna kombinacija za torziju:

$$1.30xI+0.65xII-1.30xV$$

$$M1u = -9.37 \text{ kNm}$$

Merodavna kombinacija za smicanje:

$$1.60xI+1.80xII+1.80xIII$$

$$T2u = -261.37 \text{ kN}$$

$$T3u = 6.08 \text{ kN}$$

$$M1u = -6.27 \text{ kNm}$$

$$\epsilon_b/\epsilon_a = -3.500/7.118 \text{ ‰}$$

$$Aa1 = 0.00 + 0.15' = 0.15 \text{ cm}^2$$

$$Aa2 = 27.11 + 0.15' = 27.26 \text{ cm}^2$$

$$Aa3 = 0.00 + 0.33' = 0.33 \text{ cm}^2$$

$$Aa4 = 0.00 + 0.33' = 0.33 \text{ cm}^2$$

$$Aa,uz = 4.40 \text{ cm}^2/\text{m} \quad (m=1)$$

[Usvojeno $Aa,uz = \emptyset 10/20(m=2) = 7.85 \text{ cm}^2/\text{m}$]

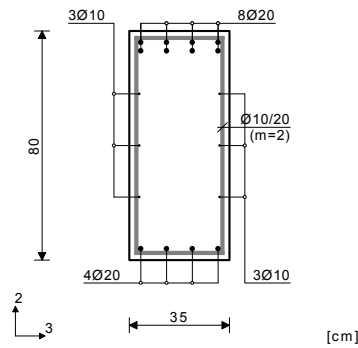
$$\tau_y = 1.59 \text{ MPa} < 3\tau_r, \tau_r = 1.10 \text{ MPa}$$

$$\tau_z = 0.77 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$$

Procentat armiranja: 1.51%

*) - dodatna podužna armatura za prijem torzije.

Presek 3-3 x = 0.40m



Merodavna kombinacija za savijanje:

$$1.60xI+1.80xII+1.80xIII$$

$$N1u = -28.79 \text{ kN}$$

$$M2u = 0.00 \text{ kNm}$$

$$M3u = -733.13 \text{ kNm}$$

Merodavna kombinacija za torziju:

$$1.30xI+0.65xII-1.30xV$$

$$M1u = -9.94 \text{ kNm}$$

Merodavna kombinacija za smicanje:

$$1.60xI+1.80xII+1.80xIII$$

$$T2u = -262.38 \text{ kN}$$

$$T3u = 4.03 \text{ kN}$$

$$M1u = -7.87 \text{ kNm}$$

$$\epsilon_b/\epsilon_a = -3.500/9.112 \text{ ‰}$$

$$Aa1 = 0.00 + 0.16' = 0.16 \text{ cm}^2$$

$$Aa2 = 22.73 + 0.16' = 22.89 \text{ cm}^2$$

$$Aa3 = 0.00 + 0.35' = 0.35 \text{ cm}^2$$

$$Aa4 = 0.00 + 0.35' = 0.35 \text{ cm}^2$$

$$Aa,uz = 5.16 \text{ cm}^2/\text{m} \quad (m=1)$$

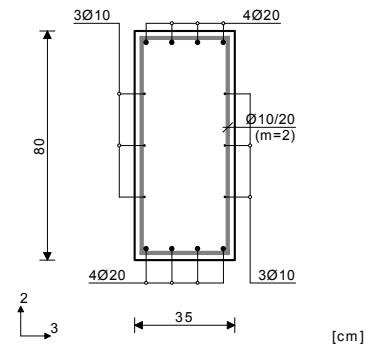
[Usvojeno $Aa,uz = \emptyset 10/20(m=2) = 7.85 \text{ cm}^2/\text{m}$]

$$\tau_y = 1.64 \text{ MPa} < 3\tau_r, \tau_r = 1.10 \text{ MPa}$$

$$\tau_z = 0.82 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$$

Procentat armiranja: 1.51%

Presek 4-4 x = 4.93m



Merodavna kombinacija za savijanje:

$$1.00xI+1.80xII$$

$$N1u = -3.06 \text{ kN}$$

$$M2u = 0.00 \text{ kNm}$$

$$M3u = 9.81 \text{ kNm}$$

Merodavna kombinacija za torziju:

$$1.60xI+1.80xIII$$

$$M1u = -16.77 \text{ kNm}$$

Merodavna kombinacija za smicanje:

$$1.60xI+1.80xIII$$

$$T2u = -3.99 \text{ kN}$$

$$T3u = -1.00 \text{ kN}$$

$$M1u = -16.77 \text{ kNm}$$

$$\epsilon_b/\epsilon_a = -0.258/10.000 \text{ ‰}$$

$$Aa1 = 0.24 + 0.26' = 0.50 \text{ cm}^2$$

$$Aa2 = 0.05 + 0.26' = 0.32 \text{ cm}^2$$

$$Aa3 = 0.00 + 0.60' = 0.60 \text{ cm}^2$$

$$Aa4 = 0.00 + 0.60' = 0.60 \text{ cm}^2$$

$$Aa,uz = 0.58 \text{ cm}^2/\text{m} \quad (m=1)$$

[Usvojeno $Aa,uz = \emptyset 10/20(m=2) = 7.85 \text{ cm}^2/\text{m}$]

$$\tau_y = 1.35 \text{ MPa} < 3\tau_r, \tau_r = 1.10 \text{ MPa}$$

$$\tau_z = 1.34 \text{ MPa} < 3\tau_r, \tau_r = 1.10 \text{ MPa}$$

Procentat armiranja: 1.07%

Greda 4725-6615

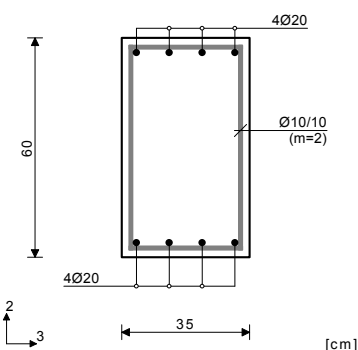
PBAB 87

MB 30

B500

Kompletna šema opterećenja

Presek 5-5 x = 0.00m



Merodavna kombinacija za savijanje:

$$1.60xI+1.80xII+1.80xIII$$

$$N1u = -4.35 \text{ kN}$$

$$M2u = 0.00 \text{ kNm}$$

$$M3u = -244.55 \text{ kNm}$$

Merodavna kombinacija za torziju:

$$1.60xI+1.80xII+1.80xIII$$

$$M1u = 22.09 \text{ kNm}$$

Merodavna kombinacija za smicanje:

$$1.60xI+1.80xII+1.80xIII$$

$$T2u = -205.22 \text{ kN}$$

$$T3u = -2.72 \text{ kN}$$

$$M1u = 22.09 \text{ kNm}$$

$$\epsilon_b/\epsilon_a = -2.202/10.000 \text{ ‰}$$

$$Aa1 = 0.00 + 0.46' = 0.46 \text{ cm}^2$$

$$Aa2 = 9.68 + 0.46' = 10.14 \text{ cm}^2$$

$$Aa3 = 0.00 + 0.79' = 0.79 \text{ cm}^2$$

$$Aa4 = 0.00 + 0.79' = 0.79 \text{ cm}^2$$

$$Aa,uz = 11.77 \text{ cm}^2/\text{m} \quad (m=1)$$

[Usvojeno $Aa,uz = \emptyset 10/10(m=2) = 15.71 \text{ cm}^2/\text{m}$]

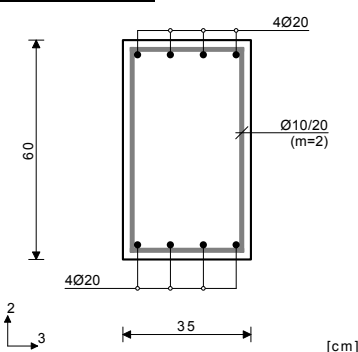
$$\tau_y = 3.55 \text{ MPa} < 5\tau_r, \tau_r = 1.10 \text{ MPa}$$

$$\tau_z = 2.36 \text{ MPa} < 3\tau_r, \tau_r = 1.10 \text{ MPa}$$

Procentat armiranja: 1.20%

*) - dodatna podužna armatura za prijem torzije.

Presek 6-6 x = 2.82m



Merodavna kombinacija za savijanje:

$$1.60xI+1.80xII$$

$$N1u = -8.22 \text{ kN}$$

$$M2u = 0.00 \text{ kNm}$$

$$M3u = 208.19 \text{ kNm}$$

Merodavna kombinacija za torziju:

$$1.60xI+1.80xII+1.80xIII$$

$$M1u = 4.08 \text{ kNm}$$

Merodavna kombinacija za smicanje:

$$1.60xI+1.80xII+1.80xIII$$

$$T2u = -34.26 \text{ kN}$$

$$T3u = -2.19 \text{ kN}$$

$$M1u = 4.08 \text{ kNm}$$

$$\epsilon_b/\epsilon_a = -1.942/10.000 \text{ ‰}$$

$$Aa1 = 8.12 + 0.09' = 8.21 \text{ cm}^2$$

$$Aa2 = 0.00 + 0.09' = 0.09 \text{ cm}^2$$

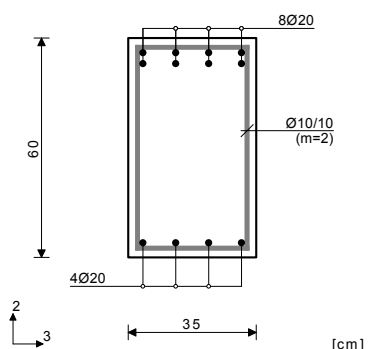
$$Aa3 = 0.00 + 0.15' = 0.15 \text{ cm}^2$$

$$Aa4 = 0.00 + 0.15' = 0.15 \text{ cm}^2$$

$$Aa,uz = 0.00 \text{ cm}^2/\text{m} \quad (m=1)$$

[Usvojeno $Aa,uz = \emptyset 10/20(m=2) = 7.85 \text{ cm}^2/\text{m}$]

Presek 7-7 x = 6.05m



Merodavna kombinacija za savijanje:

$$1.60xI+1.80xII$$

$$N1u = -0.99 \text{ kN}$$

$$M2u = 0.00 \text{ kNm}$$

$$M3u = -331.30 \text{ kNm}$$

Merodavna kombinacija za torziju:

$$1.60xI+1.80xII+1.80xIII$$

$$M1u = -21.82 \text{ kNm}$$

Merodavna kombinacija za smicanje:

$$1.60xI+1.80xII+1.80xIII$$

$$T2u = 250.24 \text{ kN}$$

$$T3u = -1.53 \text{ kN}$$

$$M1u = -21.82 \text{ kNm}$$

$$\epsilon_b/\epsilon_a = -2.910/10.000 \text{ ‰}$$

$$Aa1 = 0.00 + 0.45' = 0.45 \text{ cm}^2$$

$$Aa2 = 13.48 + 0.45' = 13.94 \text{ cm}^2$$

$$Aa3 = 0.00 + 0.78' = 0.78 \text{ cm}^2$$

$$Aa4 = 0.00 + 0.78' = 0.78 \text{ cm}^2$$

$$Aa,uz = 13.56 \text{ cm}^2/\text{m} \quad (m=1)$$

[Usvojeno $Aa,uz = \emptyset 10/10(m=2) = 15.71 \text{ cm}^2/\text{m}$]

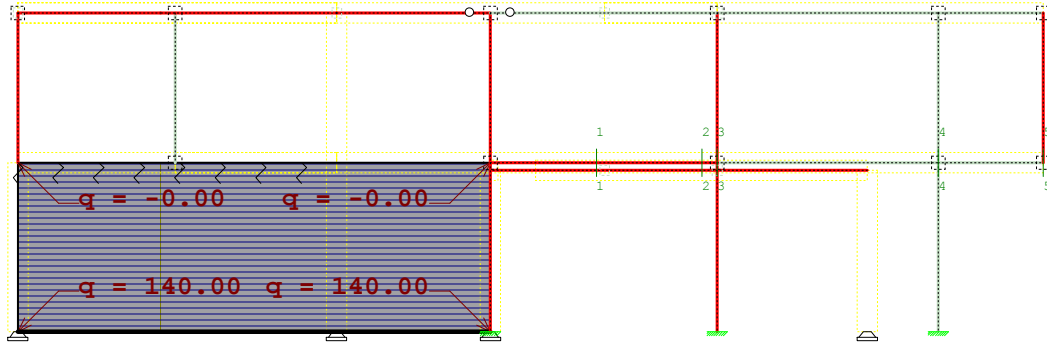
$$\tau_y = 3.79 \text{ MPa} < 5\tau_r, \tau_r = 1.10 \text{ MPa}$$

$$\tau_z = 2.33 \text{ MPa} < 3\tau_r, \tau_r = 1.10 \text{ MPa}$$

Procentat armiranja: 1.80%

GREDA POS G109(110)

Usvojena armatura
PBAB 87, MB 30, B500

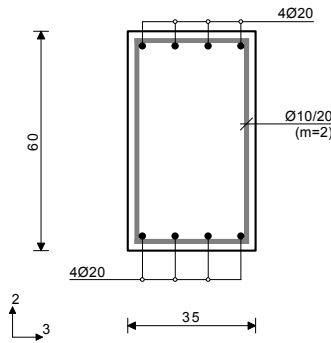


Ram: H_2
Armatura u gredama: Aa2/Aa1

Greda 2940-4649

PBAB 87
MB 30
B500
Kompletna šema opterećenja

Presek 1-1 x = 2.82m



Merodavna kombinacija za savijanje:
1.60xl+1.80xII+1.80xIII

N1u = -38.29 kN
M2u = 0.00 kNm
M3u = 132.62 kNm

Merodavna kombinacija za torziju:

1.30xl+0.65xII-1.30xV
M1u = 1.13 kNm

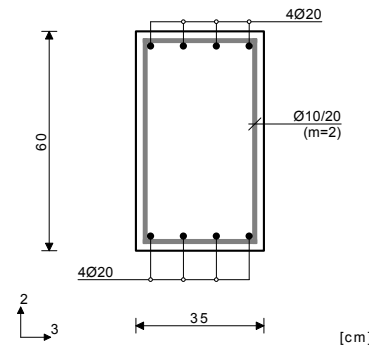
Merodavna kombinacija za smicanje:

1.30xl+0.65xII+1.30xIV
T2u = 16.01 kN
T3u = -1.89 kN
M1u = 0.68 kNm

$\epsilon_b/\epsilon_a = -1.469/10.000 \text{ ‰}$
Aa1 = 4.74 + 0.02' = 4.76 cm²
Aa2 = 0.00 + 0.02' = 0.02 cm²
Aa3 = 0.00 + 0.04' = 0.04 cm²
Aa4 = 0.00 + 0.04' = 0.04 cm²
Aa,uz = 0.00 cm²/m (m=1)
[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]

$\tau_y = 0.17 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.08 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$
Procenat armiranja: 1.20%
) - dodatna produžna armatura za prijem torzije.

Presek 2-2 x = 5.65m



Merodavna kombinacija za savijanje:
1.60xl+1.80xII+1.80xIII

N1u = -67.93 kN
M2u = 0.00 kNm
M3u = -166.39 kNm

Merodavna kombinacija za torziju:

1.30xl+0.65xII-1.30xV
M1u = 1.26 kNm

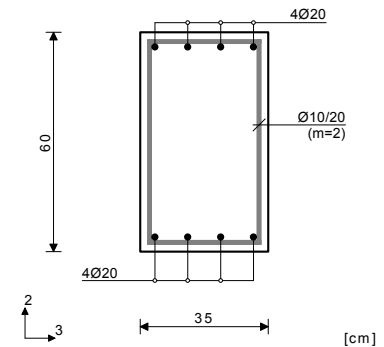
Merodavna kombinacija za smicanje:

1.60xl+1.80xII
T2u = 171.85 kN
T3u = -10.86 kN
M1u = 1.05 kNm

$\epsilon_b/\epsilon_a = -1.750/10.000 \text{ ‰}$
Aa1 = 0.00 + 0.03' = 0.03 cm²
Aa2 = 5.80 + 0.03' = 5.83 cm²
Aa3 = 0.00 + 0.05' = 0.05 cm²
Aa4 = 0.00 + 0.05' = 0.05 cm²
Aa,uz = 0.21 cm²/m (m=1)
[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]

$\tau_y = 0.89 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.23 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$
Procenat armiranja: 1.20%

Presek 3-3 x = 6.05m



Merodavna kombinacija za savijanje:
1.60xl+1.80xII+1.80xIII

N1u = -92.21 kN
M2u = 0.00 kNm
M3u = -236.52 kNm

Merodavna kombinacija za torziju:

1.30xl+0.65xII-1.30xV
M1u = 1.27 kNm

Merodavna kombinacija za smicanje:

1.60xl
T2u = 153.07 kN
T3u = -33.50 kN
M1u = 0.75 kNm

$\epsilon_b/\epsilon_a = -2.303/10.000 \text{ ‰}$
Aa1 = 0.00 + 0.03' = 0.03 cm²
Aa2 = 8.48 + 0.03' = 8.51 cm²
Aa3 = 0.00 + 0.05' = 0.05 cm²
Aa4 = 0.00 + 0.05' = 0.05 cm²
Aa,uz = 0.00 cm²/m (m=1)
[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]

$\tau_y = 0.98 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.28 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$
Procenat armiranja: 1.20%

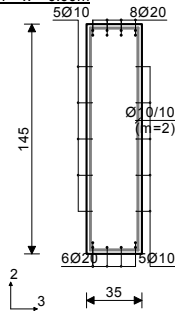
Greda 6496-7326

PBAB 87

MB 30

B500

Kompletna šema opterećenja

Presek 4-4 $x = 0.00\text{m}$ 

Merodavna kombinacija za savijanje:

1.60xI+1.80xII+1.80xIII

N1u = -77.89 kN

M2u = 0.00 kNm

M3u = -1019.34 kNm

Merodavna kombinacija za torziju:

1.60xI+1.80xII+1.80xIII

M1u = -109.75 kNm

Merodavna kombinacija za smicanje:

1.60xI+1.80xII+1.80xIII

T2u = -476.98 kN

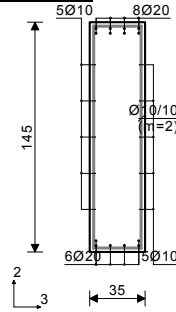
T3u = -4.01 kN

M1u = -109.75 kNm

 $\varepsilon_b/\varepsilon_a = -1.619/10.000 \%$ Aa1 = 0.00 + 0.84' = 0.84 cm²Aa2 = 14.78 + 0.84' = 15.62 cm²Aa3 = 0.00 + 3.92' = 3.92 cm²Aa4 = 0.00 + 3.92' = 3.92 cm²Aa,uz = 13.79 cm²/m[Usvajeno Aa,uz = Ø10/10(m=2) = 15.71 cm²/m] $\tau_y = 5.37\text{MPa} < 5\tau_r$, $\tau_r = 1.10\text{MPa}$ $\tau_z = 4.28\text{MPa} < 5\tau_r$, $\tau_r = 1.10\text{MPa}$

Procentat armiranja: 1.02%

*) - dodatna podužna armatura za prijem torzije.

Presek 5-5 $x = 2.80\text{m}$ 

Merodavna kombinacija za savijanje:

1.30xI+0.65xII-1.30xIV

N1u = -77.36 kN

M2u = 0.00 kNm

M3u = 160.99 kNm

Merodavna kombinacija za torziju:

1.60xI+1.80xII+1.80xIII

M1u = -109.74 kNm

Merodavna kombinacija za smicanje:

1.60xI+1.80xII+1.80xIII

T2u = -352.93 kN

T3u = -4.01 kN

M1u = -109.74 kNm

 $\varepsilon_b/\varepsilon_a = -0.611/10.000 \%$ Aa1 = 1.58 + 0.84' = 2.42 cm²Aa2 = 0.00 + 0.84' = 0.84 cm²Aa3 = 0.00 + 3.92' = 3.92 cm²Aa4 = 0.00 + 3.92' = 3.92 cm²Aa,uz = 11.81 cm²/m[Usvajeno Aa,uz = Ø10/10(m=2) = 15.71 cm²/m] $\tau_y = 5.09\text{MPa} < 5\tau_r$, $\tau_r = 1.10\text{MPa}$ $\tau_z = 4.28\text{MPa} < 5\tau_r$, $\tau_r = 1.10\text{MPa}$

Procentat armiranja: 1.02%

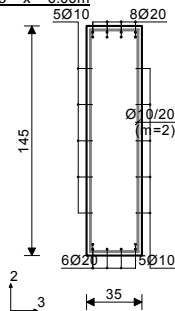
Greda 4649-6496

PBAB 87

MB 30

B500

Kompletna šema opterećenja

Presek 3-3 $x = 0.00\text{m}$ 

Merodavna kombinacija za savijanje:

1.00xI+1.30xIV

N1u = 26.82 kN

M2u = 0.00 kNm

M3u = 225.49 kNm

Merodavna kombinacija za torziju:

1.30xI+0.65xII-1.30xV

M1u = 5.46 kNm

Merodavna kombinacija za smicanje:

1.30xI+0.65xII-1.30xV

T2u = -31.33 kN

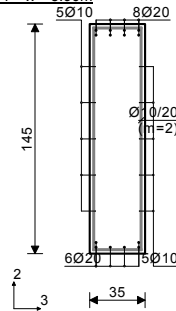
T3u = 87.23 kN

M1u = 5.46 kNm

 $\varepsilon_b/\varepsilon_a = -0.601/10.000 \%$ Aa1 = 3.61 + 0.04' = 3.65 cm²Aa2 = 1.37 + 0.04' = 1.41 cm²Aa3 = 0.00 + 0.20' = 0.20 cm²Aa4 = 0.00 + 0.20' = 0.20 cm²Aa,uz = 0.00 cm²/m[Usvajeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m] $\tau_y = 0.28\text{MPa} < \tau_r$, $\tau_r = 1.10\text{MPa}$ $\tau_z = 0.42\text{MPa} < \tau_r$, $\tau_r = 1.10\text{MPa}$

Procentat armiranja: 1.02%

*) - dodatna podužna armatura za prijem torzije.

Presek 4-4 $x = 5.90\text{m}$ 

Merodavna kombinacija za savijanje:

1.30xI+0.65xII+1.30xIV

N1u = 31.63 kN

M2u = 0.00 kNm

M3u = -705.34 kNm

Merodavna kombinacija za torziju:

1.30xI+0.65xII-1.30xV

M1u = 5.65 kNm

Merodavna kombinacija za smicanje:

1.30xI+0.65xII+1.30xIV

T2u = 277.33 kN

T3u = 4.76 kN

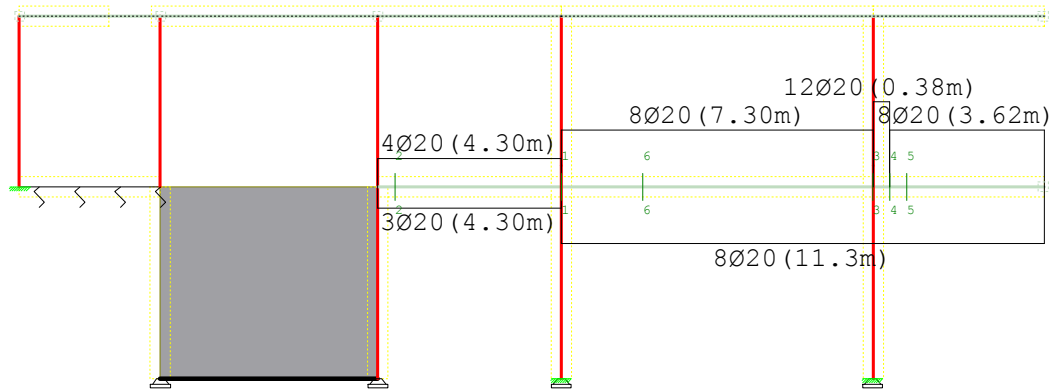
M1u = 3.84 kNm

 $\varepsilon_b/\varepsilon_a = -1.208/10.000 \%$ Aa1 = 0.00 + 0.04' = 0.04 cm²Aa2 = 10.95 + 0.04' = 10.99 cm²Aa3 = 0.00 + 0.20' = 0.20 cm²Aa4 = 0.00 + 0.20' = 0.20 cm²Aa,uz = 0.00 cm²/m[Usvajeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m] $\tau_y = 0.79\text{MPa} < \tau_r$, $\tau_r = 1.10\text{MPa}$ $\tau_z = 0.16\text{MPa} < \tau_r$, $\tau_r = 1.10\text{MPa}$

Procentat armiranja: 1.02%

GREDA POS G111(G112)

Usvojena armatura
PBAB 87, MB 30, B500

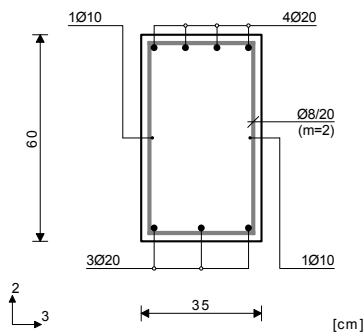


Ram: V_10
Armatura u gredama: Aa2/Aa1

Greda 2138-1017

PBAB 87
MB 30
B500
Kompletna šema opterećenja

Presek 1-1 x = 0.00m



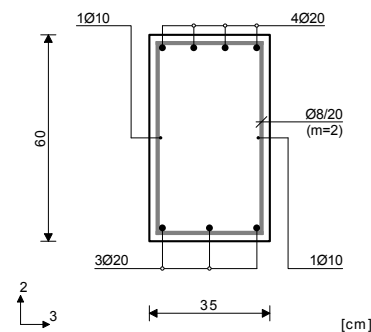
Merodavna kombinacija za savijanje:
1.30xI+0.65xII+1.30xV
N1u = 151.41 kN
M2u = 0.00 kNm
M3u = -136.36 kNm

Merodavna kombinacija za torziju:
1.30xI+0.65xII+1.30xV
M1u = 2.51 kNm

Merodavna kombinacija za smicanje:
1.30xI+0.65xII+1.30xV
T2u = -82.01 kN
T3u = 4.40 kN
M1u = 2.51 kNm

$\epsilon_b/\epsilon_a = -1.175/10.000 \%$
Aa1 = 0.00 + 0.05' = 0.05 cm²
Aa2 = 6.88 + 0.05' = 6.93 cm²
Aa3 = 0.00 + 0.09' = 0.09 cm²
Aa4 = 0.00 + 0.09' = 0.09 cm²
Aa,uz = 0.00 cm²/m (m=1)
[Usvojeno Aa,uz = Ø8/20(m=2) = 5.03 cm²/m]
 $\tau_y = 0.75 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.29 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$
Procenat armiranja: 1.12%
*) - dodatna podubna armatura za prijem torzije.

Presek 2-2 x = 3.90m



Merodavna kombinacija za savijanje:
1.30xI+0.65xII+1.30xV
N1u = 331.45 kN
M2u = 0.00 kNm
M3u = 32.03 kNm

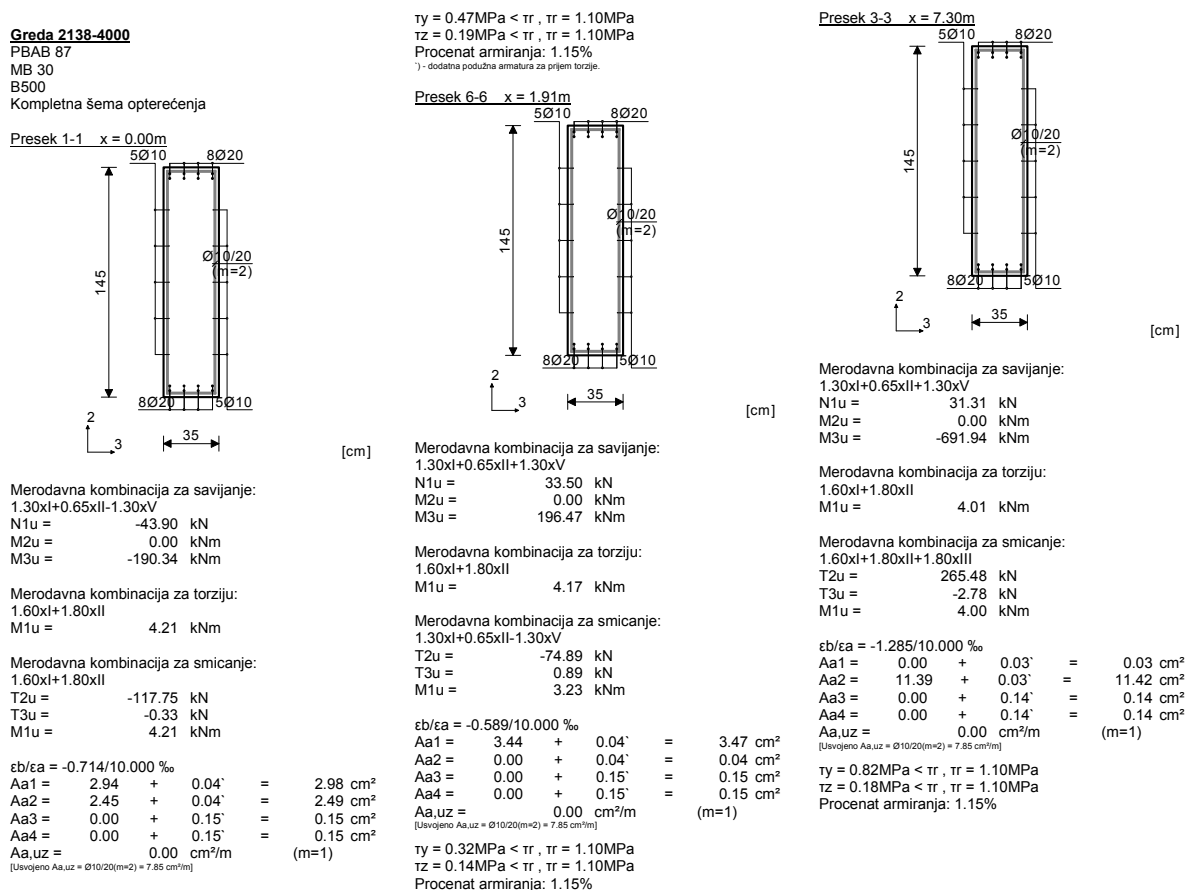
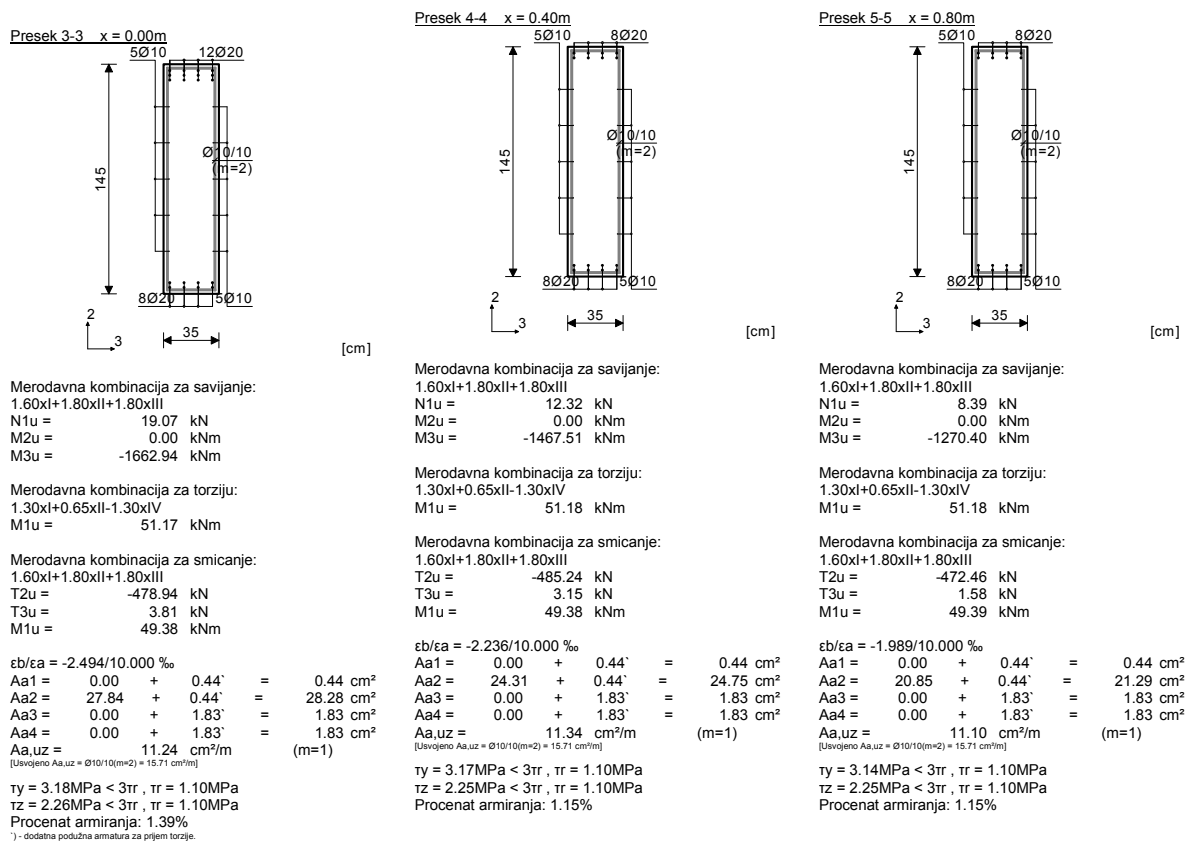
Merodavna kombinacija za torziju:
1.30xI+0.65xII+1.30xV
M1u = 2.55 kNm

Merodavna kombinacija za smicanje:
1.30xI-1.30xV
T2u = 69.83 kN
T3u = 21.17 kN
M1u = 1.16 kNm

$\epsilon_b/\epsilon_a = 1.136/10.000 \%$
Aa1 = 5.22 + 0.05' = 5.27 cm²
Aa2 = 1.98 + 0.05' = 2.03 cm²
Aa3 = 0.00 + 0.09' = 0.09 cm²
Aa4 = 0.00 + 0.09' = 0.09 cm²
Aa,uz = 0.00 cm²/m (m=1)
[Usvojeno Aa,uz = Ø8/20(m=2) = 5.03 cm²/m]
 $\tau_y = 0.53 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.25 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$
Procenat armiranja: 1.12%

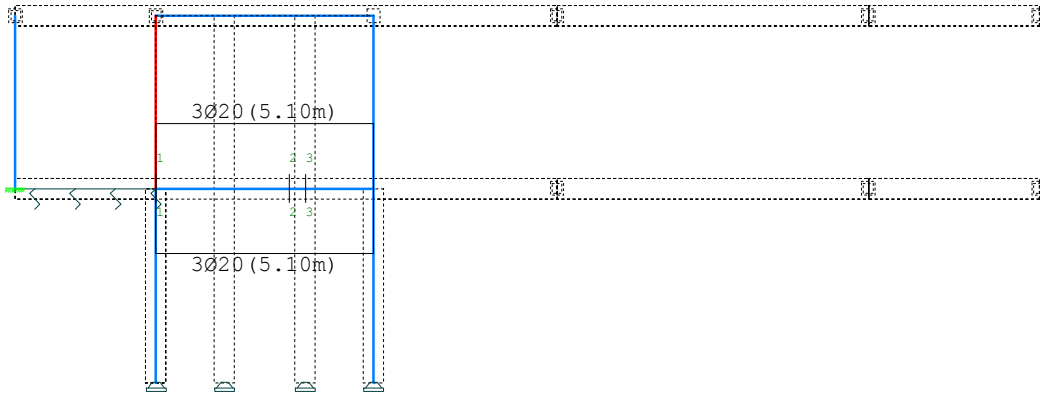
Greda 4000-5310

PBAB 87
MB 30
B500
Kompletna šema opterećenja



GREDA POS G113

Usvojena armatura
PBAB 87, MB 30, B500

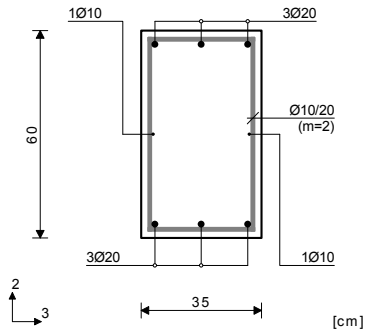


Ram: V_11

Armatura u gredama: Aa2/Aa1

PBAB 87
MB 30
B500
Kompletna šema opterećenja

Presek 1-1 x = 0.00m



Merodavna kombinacija za savijanje:
1.30xI+0.65xII+1.30xIV
N1u = 218.01 kN
M2u = 0.00 kNm
M3u = -72.56 kNm

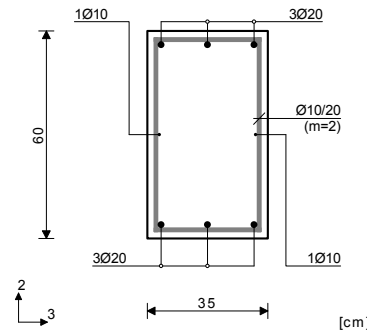
Merodavna kombinacija za torziju:
1.30xI+0.65xII+1.30xV
M1u = 3.02 kNm

Merodavna kombinacija za smicanje:
1.30xI+0.65xII+1.30xIV
T2u = -68.27 kN
T3u = 30.50 kN
M1u = 2.74 kNm

$\epsilon_b/\epsilon_a = -0.601/10.000 \text{ ‰}$
Aa1 = 1.93 + 0.06' = 1.99 cm²
Aa2 = 5.08 + 0.06' = 5.14 cm²
Aa3 = 0.00 + 0.11' = 0.11 cm²
Aa4 = 0.00 + 0.11' = 0.11 cm²
Aa,uz = 0.00 cm²/m (m=1)
[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]

$\tau_y = 0.69 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.47 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$
Procentat armiranja: 0.97%
*) - dodatna podubna armatura za prijem torzije.

Presek 2-2 x = 3.13m



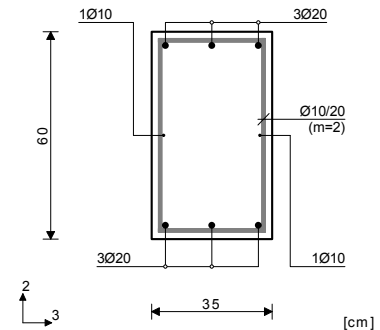
Merodavna kombinacija za savijanje:
1.30xI+0.65xII+1.30xV
N1u = 126.74 kN
M2u = 0.00 kNm
M3u = 37.25 kNm

Merodavna kombinacija za torziju:
1.30xI+1.30xV
M1u = -2.04 kNm

Merodavna kombinacija za smicanje:
1.00xI-1.30xV
T2u = 22.07 kN
T3u = 5.65 kN
M1u = 1.76 kNm

$\epsilon_b/\epsilon_a = -0.400/10.000 \text{ ‰}$
Aa1 = 2.76 + 0.04' = 2.80 cm²
Aa2 = 1.05 + 0.04' = 1.09 cm²
Aa3 = 0.00 + 0.07' = 0.07 cm²
Aa4 = 0.00 + 0.07' = 0.07 cm²
Aa,uz = 0.00 cm²/m (m=1)
[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]
 $\tau_y = 0.32 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.22 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$
Procentat armiranja: 0.97%

Presek 3-3 x = 3.50m



Merodavna kombinacija za savijanje:
1.30xI+0.65xII+1.30xV
N1u = 85.23 kN
M2u = 0.00 kNm
M3u = 46.55 kNm

Merodavna kombinacija za torziju:
1.30xI+0.65xII+1.30xIV
M1u = 3.05 kNm

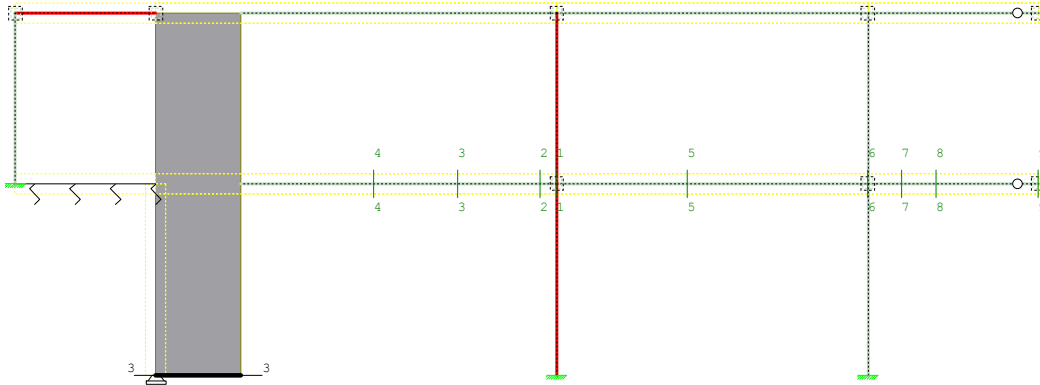
Merodavna kombinacija za smicanje:
1.30xI+0.65xII+1.30xIV
T2u = 39.31 kN
T3u = -54.78 kN
M1u = 3.05 kNm

$\epsilon_b/\epsilon_a = -0.606/10.000 \text{ ‰}$
Aa1 = 2.67 + 0.06' = 2.73 cm²
Aa2 = 1.01 + 0.06' = 1.08 cm²
Aa3 = 0.00 + 0.11' = 0.11 cm²
Aa4 = 0.00 + 0.11' = 0.11 cm²
Aa,uz = 0.00 cm²/m (m=1)
[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]

$\tau_y = 0.56 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.65 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$
Procentat armiranja: 0.97%

GREDA POS G114(G115)

Usvojena armatura
PBAB 87, MB 30, B500

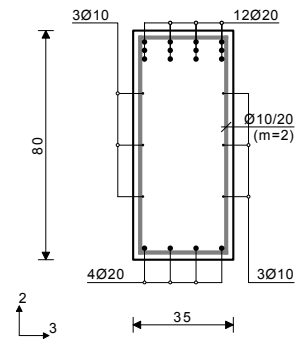


Ram: V_3
Armatura u gredama: Aa2/Aa1

Greda 4404-2423

PBAB 87
MB 30
B500
Kompletna šema opterećenja

Presek 1-1 x = 0.00m



Merodavna kombinacija za savijanje:

1.60xI+1.80xII+1.80xIII
N1u = 17.23 kN
M2u = 0.00 kNm
M3u = -607.38 kNm

Merodavna kombinacija za torziju:

1.30xI-1.30xIV
M1u = -7.40 kNm

Merodavna kombinacija za smicanje:

1.60xI+1.80xII
T2u = -328.57 kN
T3u = 7.91 kN
M1u = -5.69 kNm

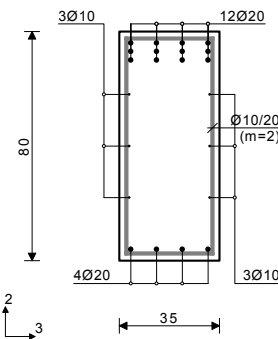
$\epsilon_b/\epsilon_a = -2.973/10.000 \%$

Aa1 = 0.00 + 0.12' = 0.12 cm²
Aa2 = 18.77 + 0.12' = 18.89 cm²
Aa3 = 0.00 + 0.26' = 0.26 cm²
Aa4 = 0.00 + 0.26' = 0.26 cm²
Aa,uz = 6.82 cm²/m
(Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m)

$\tau_y = 1.59 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.60 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$
Procenat armiranja: 1.96%

*) - dodatna podubna armatura za prijem torzije.

Presek 2-2 x = 0.39m



Merodavna kombinacija za savijanje:

1.60xI+1.80xII+1.80xIII
N1u = 14.40 kN
M2u = 0.00 kNm
M3u = -465.15 kNm

Merodavna kombinacija za torziju:

1.30xI-1.30xIV
M1u = -8.22 kNm

Merodavna kombinacija za smicanje:

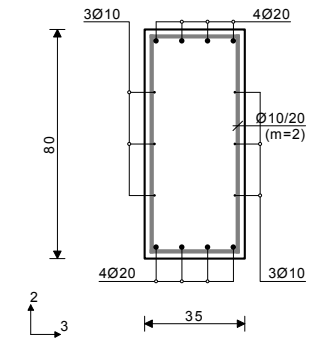
1.60xI+1.80xII
T2u = -321.27 kN
T3u = 5.55 kN
M1u = -6.92 kNm

$\epsilon_b/\epsilon_a = -2.305/10.000 \%$

Aa1 = 0.00 + 0.13' = 0.13 cm²
Aa2 = 14.08 + 0.13' = 14.20 cm²
Aa3 = 0.00 + 0.29' = 0.29 cm²
Aa4 = 0.00 + 0.29' = 0.29 cm²
Aa,uz = 7.07 cm²/m
(Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m)

$\tau_y = 1.62 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.67 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$
Procenat armiranja: 1.96%

Presek 3-3 x = 2.33m



Merodavna kombinacija za savijanje:

1.60xI+1.80xII+1.80xIII
N1u = 12.62 kN
M2u = 0.00 kNm
M3u = 112.80 kNm

Merodavna kombinacija za torziju:

1.60xI
M1u = -12.95 kNm

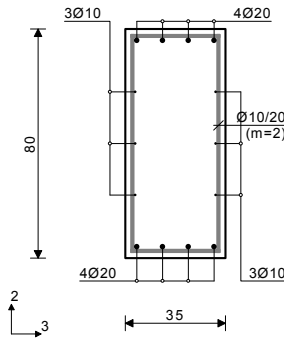
Merodavna kombinacija za smicanje:

1.60xI+1.80xII
T2u = -178.20 kN
T3u = 4.07 kN
M1u = -12.60 kNm

$\epsilon_b/\epsilon_a = -0.890/10.000 \%$

$$\begin{aligned}
 Aa1 &= 3.35 + 0.20' = 3.56 \text{ cm}^2 \\
 Aa2 &= 0.76 + 0.20' = 0.96 \text{ cm}^2 \\
 Aa3 &= 0.00 + 0.46' = 0.46 \text{ cm}^2 \\
 Aa4 &= 0.00 + 0.46' = 0.46 \text{ cm}^2 \\
 Aa,uz &= 3.99 \text{ cm}^2/\text{m} \quad (m=1) \\
 &[\text{Usvajeno } Aa,uz = \emptyset 10/20(m=2) = 7.85 \text{ cm}^2/\text{m}] \\
 \tau_y &= 1.69 \text{ MPa} < 3\tau_r, \tau_r = 1.10 \text{ MPa} \\
 \tau_z &= 1.05 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa} \\
 \text{Procenat armiranja: } &1.07\%
 \end{aligned}$$

Presek 4-4 x = 4.30m



Merodavna kombinacija za savijanje:
 1.60xI+1.80xII+1.80xIII
 N1u = 16.19 kN
 M2u = 0.00 kNm
 M3u = 316.20 kNm

Merodavna kombinacija za torziju:

1.60xI+1.80xII

M1u = -10.16 kNm

Merodavna kombinacija za smicanje:

1.60xI+1.80xII

T2u = -22.67 kN

T3u = 5.14 kN

M1u = -10.16 kNm

$\epsilon_b/\epsilon_a = -1.696/10.000 \text{ ‰}$

Aa1 = 9.45 + 0.16' = 9.61 cm²

Aa2 = 0.00 + 0.16' = 0.16 cm²

Aa3 = 0.00 + 0.36' = 0.36 cm²

Aa4 = 0.00 + 0.36' = 0.36 cm²

Aa,uz = 0.00 cm²/m (m=1)

[Usvajeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]

$\tau_y = 0.91 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$

$\tau_z = 0.83 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$

Procenat armiranja: 1.07%

Greda 4404-6679

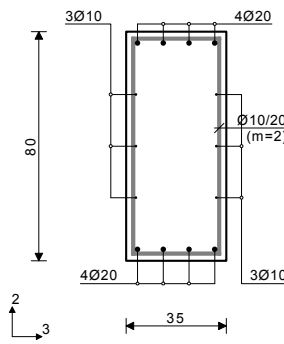
PBAB 87

MB 30

B500

Kompletna šema opterećenja

Presek 5-5 x = 3.06m



Merodavna kombinacija za savijanje:

1.60xI+1.80xII

N1u = -11.23 kN

M2u = 0.00 kNm

M3u = 160.69 kNm

Merodavna kombinacija za torziju:

1.60xI+1.80xII+1.80xIII

M1u = -5.57 kNm

Merodavna kombinacija za smicanje:

1.60xI+1.80xII+1.80xIII

T2u = -14.79 kN

T3u = 3.22 kN

M1u = -5.57 kNm

$\epsilon_b/\epsilon_a = -1.119/10.000 \text{ ‰}$

Aa1 = 4.51 + 0.09' = 4.59 cm²

Aa2 = 0.00 + 0.09' = 0.09 cm²

Aa3 = 0.00 + 0.20' = 0.20 cm²

Aa4 = 0.00 + 0.20' = 0.20 cm²

Aa,uz = 0.00 cm²/m (m=1)

[Usvajeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]

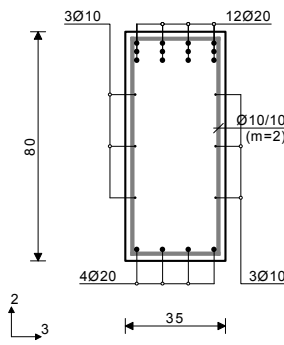
$\tau_y = 0.51 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$

$\tau_z = 0.46 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$

Procenat armiranja: 1.07%

*) - dodatna podružna armatura za prijem torzije.

Presek 6-6 x = 7.30m



Merodavna kombinacija za savijanje:

1.60xI+1.80xII+1.80xIII

N1u = -10.81 kN

M2u = 0.00 kNm

M3u = -541.97 kNm

Merodavna kombinacija za torziju:

1.60xI+1.80xII+1.80xIII

M1u = 33.43 kNm

Merodavna kombinacija za smicanje:

1.60xI+1.80xII+1.80xIII

T2u = 223.76 kN

T3u = 10.53 kN

M1u = 33.43 kNm

$\epsilon_b/\epsilon_a = -2.694/10.000 \text{ ‰}$

Aa1 = 0.00 + 0.52' = 0.52 cm²

Aa2 = 16.33 + 0.52' = 16.85 cm²

Aa3 = 0.00 + 1.19' = 1.19 cm²

Aa4 = 0.00 + 1.19' = 1.19 cm²

Aa,uz = 10.86 cm²/m (m=1)

[Usvajeno Aa,uz = Ø10/10(m=2) = 15.71 cm²/m]

$\tau_y = 3.65 \text{ MPa} < 5\tau_r, \tau_r = 1.10 \text{ MPa}$

$\tau_z = 2.71 \text{ MPa} < 3\tau_r, \tau_r = 1.10 \text{ MPa}$

Procenat armiranja: 1.96%

Greda 6679-7837

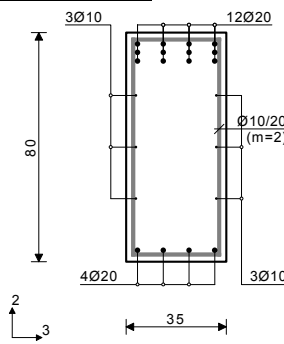
PBAB 87

MB 30

B500

Kompletna šema opterećenja

Presek 6-6 x = 0.00m



Merodavna kombinacija za savijanje:

1.60xI+1.80xII

N1u = 9.50 kN

M2u = 0.00 kNm

M3u = -1000.73 kNm

Merodavna kombinacija za torziju:

1.30xI+0.65xII+1.30xIV

M1u = -15.29 kNm

Merodavna kombinacija za smicanje:

1.60xI+1.80xII+1.80xIII

T2u = -292.30 kN

T3u = -5.97 kN

M1u = -11.37 kNm

$\epsilon_b/\epsilon_a = -3.500/5.379 \text{ ‰}$

Aa1 = 0.00 + 0.24' = 0.24 cm²

Aa2 = 33.33 + 0.24' = 33.57 cm²

Aa3 = 0.00 + 0.55' = 0.55 cm²

Aa4 = 0.00 + 0.55' = 0.55 cm²

Aa,uz = 7.70 cm²/m (m=1)

[Usvajeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]

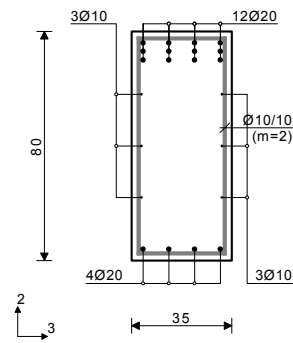
$\tau_y = 2.18 \text{ MPa} < 3\tau_r, \tau_r = 1.10 \text{ MPa}$

$\tau_z = 1.24 \text{ MPa} < 3\tau_r, \tau_r = 1.10 \text{ MPa}$

Procenat armiranja: 1.96%

*) - dodatna podružna armatura za prijem torzije.

Presek 7-7 x = 0.80m



Merodavna kombinacija za savijanje:

1.60xI+1.80xII

N1u = 5.61 kN

M2u = 0.00 kNm

M3u = -735.73 kNm

Merodavna kombinacija za torziju:

1.30xI+0.65xII+1.30xIV

M1u = -15.07 kNm

Merodavna kombinacija za smicanje:

1.60xI+1.80xII+1.80xIII
 $T2_u = -287.11 \text{ kN}$
 $T3_u = 0.06 \text{ kN}$
 $M1_u = -13.12 \text{ kNm}$

$\varepsilon_b/\varepsilon_a = -3.500/9.280 \%$

$Aa1 = 0.00 + 0.24' = 0.24 \text{ cm}^2$
 $Aa2 = 23.12 + 0.24' = 23.36 \text{ cm}^2$
 $Aa3 = 0.00 + 0.54' = 0.54 \text{ cm}^2$
 $Aa4 = 0.00 + 0.54' = 0.54 \text{ cm}^2$
 $Aa_{uz} = 8.12 \text{ cm}^2/\text{m} \quad (m=1)$

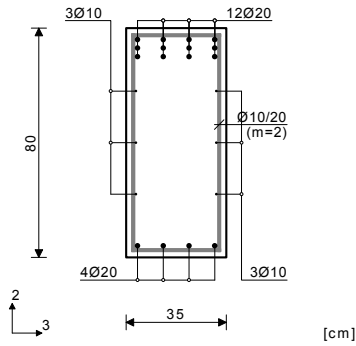
[Usvajeno $Aa_{uz} = \emptyset 10/10(m=2) = 15.71 \text{ cm}^2/\text{m}$]

$\tau_y = 2.15 \text{ MPa} < 3\tau_r, \tau_r = 1.10 \text{ MPa}$

$\tau_z = 1.21 \text{ MPa} < 3\tau_r, \tau_r = 1.10 \text{ MPa}$

Procenat armiranja: 1.96%

Presek 8-8 $x = 1.60 \text{ m}$



Merodavna kombinacija za savijanje:

1.60xI+1.80xII
 $N1_u = 3.29 \text{ kN}$
 $M2_u = 0.00 \text{ kNm}$
 $M3_u = -488.34 \text{ kNm}$

Merodavna kombinacija za torziju:

1.30xI+0.65xII+1.30xIV
 $M1_u = -15.52 \text{ kNm}$

Merodavna kombinacija za smicanje:

1.60xI+1.80xII+1.80xIII
 $T2_u = -245.74 \text{ kN}$
 $T3_u = 0.33 \text{ kN}$
 $M1_u = -14.77 \text{ kNm}$

$\varepsilon_b/\varepsilon_a = -2.424/10.000 \%$

$Aa1 = 0.00 + 0.24' = 0.24 \text{ cm}^2$
 $Aa2 = 14.71 + 0.24' = 14.96 \text{ cm}^2$
 $Aa3 = 0.00 + 0.55' = 0.55 \text{ cm}^2$
 $Aa4 = 0.00 + 0.55' = 0.55 \text{ cm}^2$
 $Aa_{uz} = 7.11 \text{ cm}^2/\text{m} \quad (m=1)$

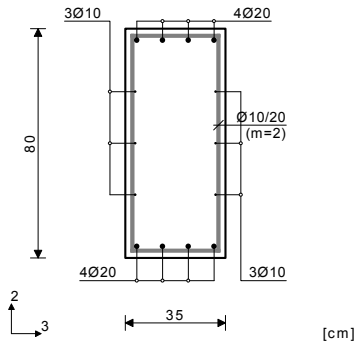
[Usvajeno $Aa_{uz} = \emptyset 10/20(m=2) = 7.85 \text{ cm}^2/\text{m}$]

$\tau_y = 2.06 \text{ MPa} < 3\tau_r, \tau_r = 1.10 \text{ MPa}$

$\tau_z = 1.24 \text{ MPa} < 3\tau_r, \tau_r = 1.10 \text{ MPa}$

Procenat armiranja: 1.96%

Presek 9-9 $x = 4.00 \text{ m}$



Merodavna kombinacija za savijanje:

1.30xI+1.30xV
 $N1_u = 4.07 \text{ kN}$
 $M2_u = 0.00 \text{ kNm}$
 $M3_u = 0.00 \text{ kNm}$

Merodavna kombinacija za torziju:

1.30xI+0.65xII+1.30xIV
 $M1_u = -14.31 \text{ kNm}$

Merodavna kombinacija za smicanje:

1.60xI+1.80xII+1.80xIII
 $T2_u = -138.86 \text{ kN}$
 $T3_u = 0.07 \text{ kN}$
 $M1_u = -14.14 \text{ kNm}$

$\varepsilon_b/\varepsilon_a = 1.427/10.000 \%$

$Aa1 = 0.04 + 0.22' = 0.26 \text{ cm}^2$
 $Aa2 = 0.04 + 0.22' = 0.26 \text{ cm}^2$
 $Aa3 = 0.00 + 0.51' = 0.51 \text{ cm}^2$
 $Aa4 = 0.00 + 0.51' = 0.51 \text{ cm}^2$
 $Aa_{uz} = 3.23 \text{ cm}^2/\text{m} \quad (m=1)$

[Usvajeno $Aa_{uz} = \emptyset 10/20(m=2) = 7.85 \text{ cm}^2/\text{m}$]

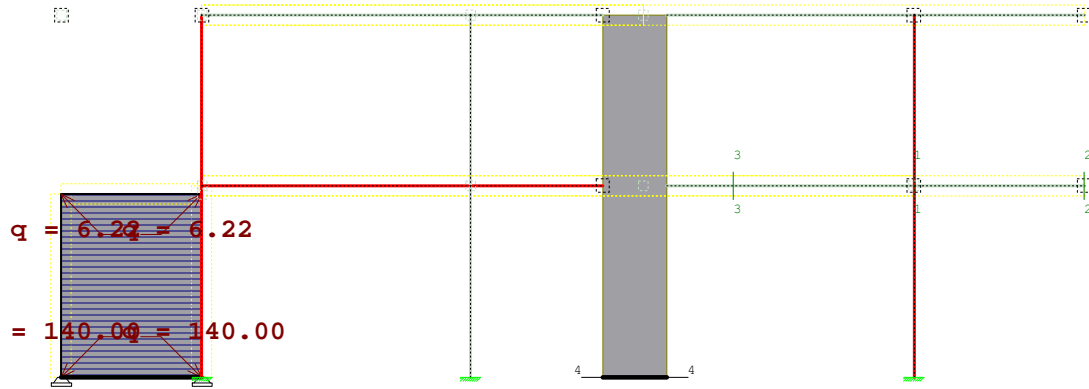
$\tau_y = 1.64 \text{ MPa} < 3\tau_r, \tau_r = 1.10 \text{ MPa}$

$\tau_z = 1.14 \text{ MPa} < 3\tau_r, \tau_r = 1.10 \text{ MPa}$

Procenat armiranja: 1.07%

GREDA POS G116

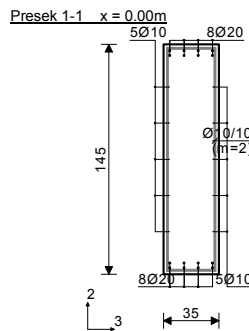
Usvojena armatura
PBAB 87, MB 30, B500



Ram: V_8
Armatura u gredama: Aa2/Aa1

Greda 7878-8914

PBAB 87
MB 30
B500
Kompletna šema opterećenja

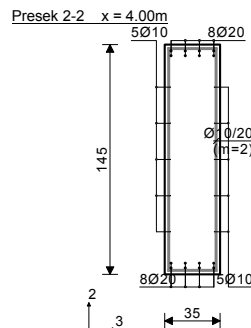


Merodavna kombinacija za savijanje:
1.60xl+1.80xII+1.80xIII
N1u = 3.28 kN
M2u = 0.00 kNm
M3u = -1442.47 kNm

Merodavna kombinacija za torziju:
1.60xl+1.80xII+1.80xIII
M1u = -55.96 kNm

Merodavna kombinacija za smicanje:
1.60xl+1.80xII+1.80xIII
T2u = -445.12 kN
T3u = 1.88 kN
M1u = -55.96 kNm

$\epsilon_b/\epsilon_a = -2.210/10.000 \%$
Aa1 = 0.00 + 0.48' = 0.48 cm²
Aa2 = 23.78 + 0.48' = 24.27 cm²
Aa3 = 0.00 + 2.00' = 2.00 cm²
Aa4 = 0.00 + 2.00' = 2.00 cm²
Aa,uz = 11.05 cm²/m (m=1)
[Usvojeno Aa,uz = Ø10/10(m=2) = 15.71 cm²/m]
 $\tau_y = 3.54 \text{ MPa} < 5\tau_r$, $\tau_r = 1.10 \text{ MPa}$
 $\tau_z = 2.47 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$
Procenat armiranja: 1.15%
*) - dodatna podužna armatura za prijem torzije.



Merodavna kombinacija za savijanje:
1.60xl+1.80xII+1.80xIII
N1u = 0.37 kN
M2u = 0.00 kNm
M3u = -3.41 kNm

Merodavna kombinacija za torziju:
1.60xl+1.80xII+1.80xIII
M1u = -55.92 kNm

Merodavna kombinacija za smicanje:
1.60xl+1.80xII+1.80xIII
T2u = -241.94 kN
T3u = -0.33 kN
M1u = -55.92 kNm

$\epsilon_b/\epsilon_a = -0.075/10.000 \%$
Aa1 = 0.00 + 0.48' = 0.48 cm²
Aa2 = 0.06 + 0.48' = 0.54 cm²
Aa3 = 0.00 + 2.00' = 2.00 cm²
Aa4 = 0.00 + 2.00' = 2.00 cm²
Aa,uz = 7.26 cm²/m (m=1)
[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]
 $\tau_y = 3.05 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$
 $\tau_z = 2.46 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$
Procenat armiranja: 1.15%

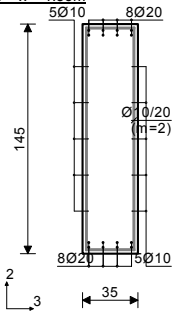
Greda 6187-7878

PBAB 87

MB 30

B500

Kompletna šema opterećenja

Presek 3-3 $x = 1.56\text{m}$ 

Merodavna kombinacija za savijanje:

1.60xI+1.80xII+1.80xIII

N1u = -50.68 kN

M2u = 0.00 kNm

M3u = 191.32 kNm

Merodavna kombinacija za torziju:

1.60xI+1.80xII+1.80xIII

M1u = 16.68 kNm

Merodavna kombinacija za smicanje:

1.60xI+1.80xII+1.80xIII

T2u = -25.38 kN

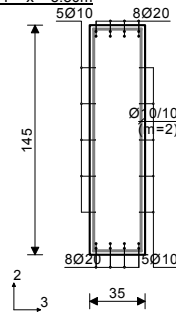
T3u = 3.39 kN

M1u = 16.68 kNm

 $\epsilon_b/\epsilon_a = -0.666/10.000 \%$ Aa1 = 2.44 + 0.14' = 2.59 cm²Aa2 = 0.00 + 0.14' = 0.14 cm²Aa3 = 0.00 + 0.60' = 0.60 cm²Aa4 = 0.00 + 0.60' = 0.60 cm²Aa,uz = 0.00 cm²/m (m=1)[Usvajeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m] $\tau_y = 0.80\text{MPa} < \tau_r, \tau_r = 1.10\text{MPa}$ $\tau_z = 0.74\text{MPa} < \tau_r, \tau_r = 1.10\text{MPa}$

Procenat armiranja: 1.15%

*) - dodatna poduzna armatura za prijem torzije.

Presek 1-1 $x = 5.80\text{m}$ 

[cm]

[cm]

Merodavna kombinacija za savijanje:

1.30xI+0.65xII+1.30xV

N1u = -9.35 kN

M2u = 0.00 kNm

M3u = -920.01 kNm

Merodavna kombinacija za torziju:

1.60xI+1.80xII+1.80xIII

M1u = -65.66 kNm

Merodavna kombinacija za smicanje:

1.60xI+1.80xII+1.80xIII

T2u = 469.78 kN

T3u = 5.69 kN

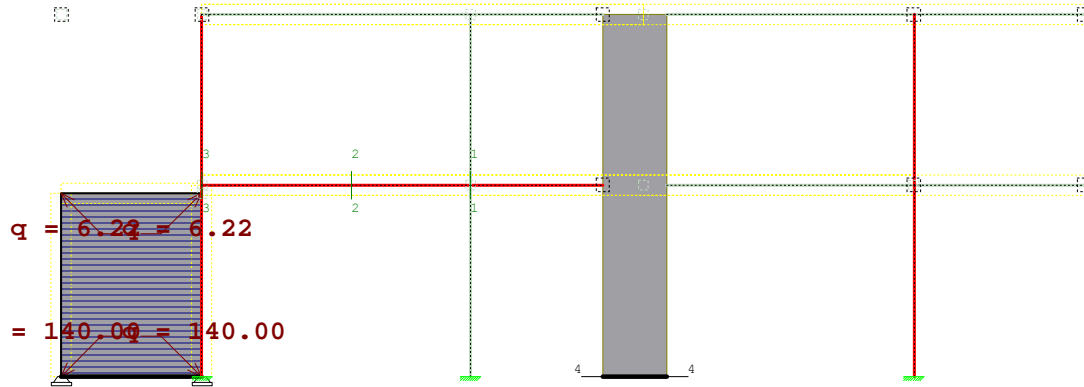
M1u = -65.66 kNm

 $\epsilon_b/\epsilon_a = -1.583/10.000 \%$ Aa1 = 0.00 + 0.57' = 0.57 cm²Aa2 = 14.74 + 0.57' = 15.30 cm²Aa3 = 0.00 + 2.35' = 2.35 cm²Aa4 = 0.00 + 2.35' = 2.35 cm²Aa,uz = 12.17 cm²/m (m=1)[Usvajeno Aa,uz = Ø10/10(m=2) = 15.71 cm²/m] $\tau_y = 4.03\text{MPa} < 5\tau_r, \tau_r = 1.10\text{MPa}$ $\tau_z = 2.90\text{MPa} < 3\tau_r, \tau_r = 1.10\text{MPa}$

Procenat armiranja: 1.15%

GREDA POS G117

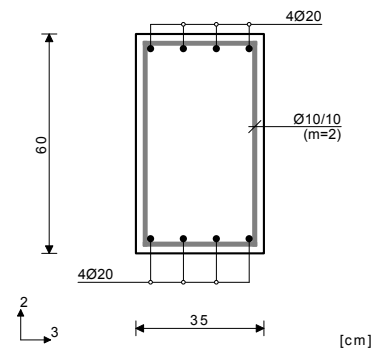
Usvojena armatura
PBAB 87, MB 30, B500



Ram: V_8
Armatura u gredama: Aa2/Aa1

Greda 4725-5745
PBAB 87
MB 30
B500
Kompletna šema opterećenja

Presek 1-1 x = 0.00m



Merodavna kombinacija za savijanje:
1.60xl+1.80xll
N1u = -26.34 kN
M2u = 0.00 kNm
M3u = -169.02 kNm

Merodavna kombinacija za torziju:
1.60xl+1.80xll+1.80xlll
M1u = -22.50 kNm

Merodavna kombinacija za smicanje:
1.60xl+1.80xll
T2u = -129.43 kN
T3u = 4.63 kN
M1u = -22.48 kNm

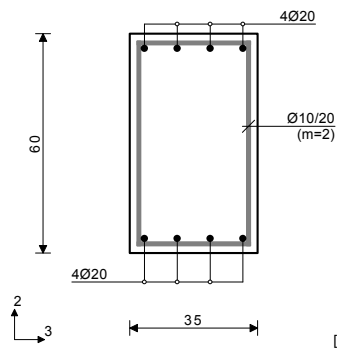
$\epsilon_b/\epsilon_a = -1.699/10.000 \%$
Aa1 = 0.00 + 0.47' = 0.47 cm²
Aa2 = 6.33 + 0.47' = 6.80 cm²
Aa3 = 0.00 + 0.80' = 0.80 cm²
Aa4 = 0.00 + 0.80' = 0.80 cm²
Aa,uz = 8.56 cm²/m (m=1)
(Usvojeno Aa,uz = Ø10/10(m=2) = 15.71 cm²/m)

$\tau_y = 3.15 \text{ MPa} < 3\tau_r, \tau_r = 1.10 \text{ MPa}$
 $\tau_z = 2.42 \text{ MPa} < 3\tau_r, \tau_r = 1.10 \text{ MPa}$
Procentat armiranja: 1.20%

*) - dodatna podužna armatura za prijem torzije.

Greda 4725-2940
PBAB 87
MB 30
B500
Kompletna šema opterećenja

Presek 2-2 x = 2.80m



Merodavna kombinacija za savijanje:
1.60xI+1.80xII+1.80xIII

N1u = -28.57 kN
M2u = 0.00 kNm
M3u = 245.51 kNm

Merodavna kombinacija za torziju:
1.60xI+1.80xII+1.80xIII
M1u = -14.76 kNm

Merodavna kombinacija za smicanje:
1.60xI+1.80xII

T2u = -27.92 kN
T3u = 3.52 kN
M1u = -14.74 kNm

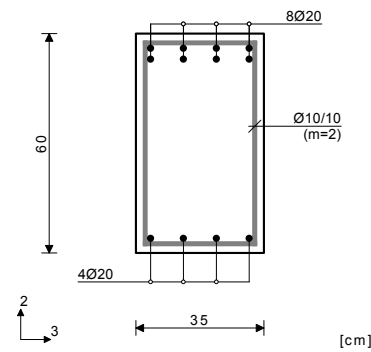
$$\epsilon_b/\epsilon_a = -2.254/10.000 \text{ ‰}$$

$$\begin{aligned} Aa1 &= 9.48 + 0.31' = 9.79 \text{ cm}^2 \\ Aa2 &= 0.00 + 0.31' = 0.31 \text{ cm}^2 \\ Aa3 &= 0.00 + 0.53' = 0.53 \text{ cm}^2 \\ Aa4 &= 0.00 + 0.53' = 0.53 \text{ cm}^2 \\ Aa,uz &= 1.89 \text{ cm}^2/\text{m} \quad (m=1) \end{aligned}$$

$$\begin{aligned} \tau_y &= 1.73 \text{ MPa} < 3\tau_r, \tau_r = 1.10 \text{ MPa} \\ \tau_z &= 1.59 \text{ MPa} < 3\tau_r, \tau_r = 1.10 \text{ MPa} \end{aligned}$$

Procenat armiranja: 1.20%
*) - dodatna podužna armatura za prijem torzije.

Presek 3-3 x = 6.30m



Merodavna kombinacija za savijanje:

1.60xI+1.80xII+1.80xIII
N1u = -112.27 kN
M2u = 0.00 kNm
M3u = -397.13 kNm

Merodavna kombinacija za torziju:

1.60xI+1.80xII+1.80xIII
M1u = 24.05 kNm

Merodavna kombinacija za smicanje:

1.60xI+1.80xII+1.80xIII
T2u = 383.22 kN
T3u = -16.42 kN
M1u = 24.05 kNm

$$\epsilon_b/\epsilon_a = -3.500/8.884 \text{ ‰}$$

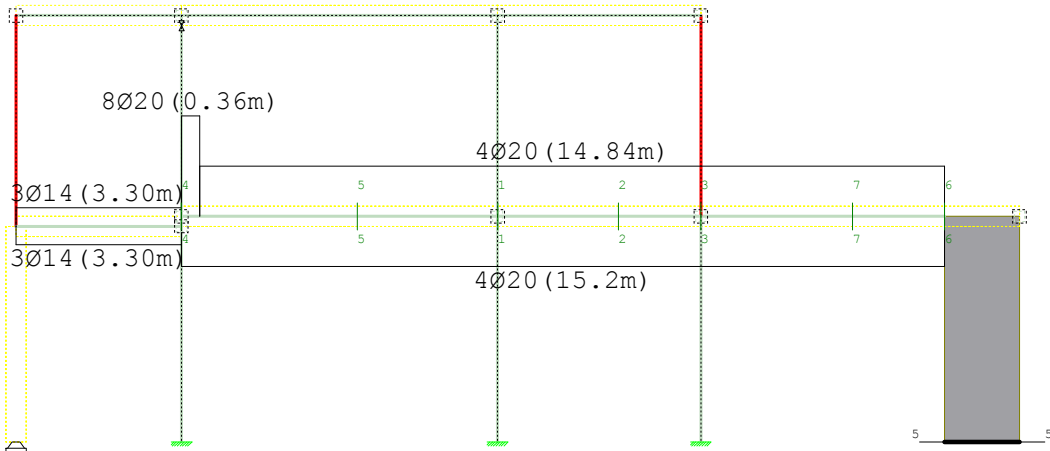
$$\begin{aligned} Aa1 &= 0.00 + 0.50' = 0.50 \text{ cm}^2 \\ Aa2 &= 15.55 + 0.50' = 16.05 \text{ cm}^2 \\ Aa3 &= 0.00 + 0.86' = 0.86 \text{ cm}^2 \\ Aa4 &= 0.00 + 0.86' = 0.86 \text{ cm}^2 \\ Aa,uz &= 19.54 \text{ cm}^2/\text{m} \quad (m=1) \end{aligned}$$

$$\begin{aligned} \tau_y &= 4.81 \text{ MPa} < 5\tau_r, \tau_r = 1.10 \text{ MPa} \\ \tau_z &= 2.65 \text{ MPa} < 3\tau_r, \tau_r = 1.10 \text{ MPa} \end{aligned}$$

Procenat armiranja: 1.80%

GREDA POS G118

Usvojena armatura
PBAB 87, MB 30, B500

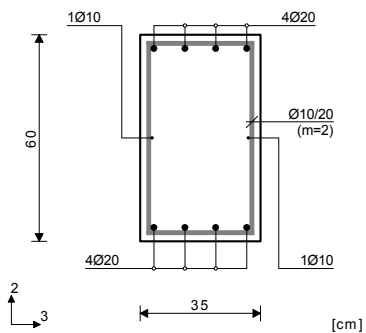


Ram: V_5
Armatura u gredama: Aa2/Aa1

Greda 6597-7854

PBAB 87
MB 30
B500B
Kompletna šema opterećenja

Presek 1-1 x = 0.00m



Merodavna kombinacija za savijanje:

1.60xI+1.80xII
N1u = -5.94 kN
M2u = 0.00 kNm
M3u = -176.72 kNm

Merodavna kombinacija za torziju:

1.30xI+0.65xII+1.30xIV
M1u = -6.19 kNm

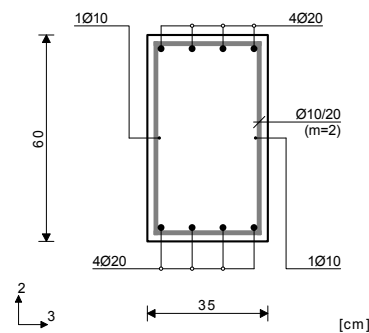
Merodavna kombinacija za smicanje:

1.60xI+1.80xII
T2u = -109.39 kN
T3u = -5.30 kN
M1u = -5.82 kNm

$\epsilon_b/\epsilon_a = -1.593/10.000 \text{ ‰}$
Aa1 = 0.00 + 0.11' = 0.11 cm²
Aa2 = 6.47 + 0.11' = 6.58 cm²
Aa3 = 0.00 + 0.21' = 0.21 cm²
Aa4 = 0.00 + 0.21' = 0.21 cm²
Aa,uz = 0.00 cm²/m (m=1)
[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]

$\tau_y = 0.97 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.52 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$
Procentat armiranja: 1.27%
*) - dodatna podužna armatura za prijem torzije.

Presek 2-2 x = 2.40m



Merodavna kombinacija za savijanje:

1.30xI+1.30xV
N1u = 10.51 kN
M2u = 0.00 kNm
M3u = -19.60 kNm

Merodavna kombinacija za torziju:

1.60xI+1.80xII+1.80xIII
M1u = 5.45 kNm

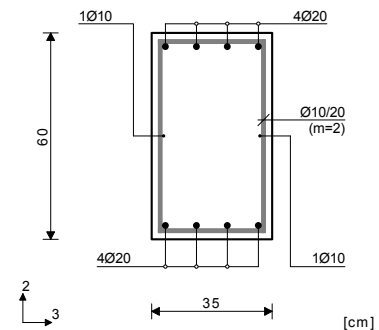
Merodavna kombinacija za smicanje:

1.60xI+1.80xII+1.80xIII
T2u = 16.74 kN
T3u = 0.66 kN
M1u = 5.45 kNm

$\epsilon_b/\epsilon_a = -0.409/10.000 \text{ ‰}$
Aa1 = 0.31 + 0.10' = 0.41 cm²
Aa2 = 0.81 + 0.10' = 0.91 cm²
Aa3 = 0.00 + 0.18' = 0.18 cm²
Aa4 = 0.00 + 0.18' = 0.18 cm²
Aa,uz = 0.00 cm²/m (m=1)
[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]

$\tau_y = 0.54 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.45 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$
Procentat armiranja: 1.27%

Presek 3-3 x = 4.05m



Merodavna kombinacija za savijanje:

1.30xI+0.65xII+1.30xV
N1u = 15.65 kN
M2u = 0.00 kNm
M3u = -110.43 kNm

Merodavna kombinacija za torziju:

1.30xI+0.65xII+1.30xIV
M1u = 9.98 kNm

Merodavna kombinacija za smicanje:

1.60xI+1.80xII+1.80xIII
T2u = 81.99 kN
T3u = 10.42 kN
M1u = 9.32 kNm

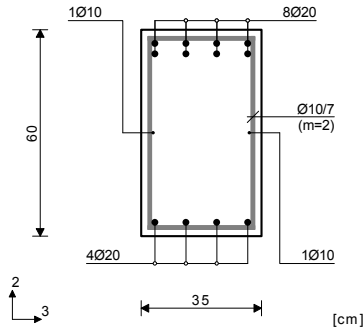
$\epsilon_b/\epsilon_a = -1.139/10.000 \text{ ‰}$
Aa1 = 0.00 + 0.18' = 0.18 cm²
Aa2 = 4.18 + 0.18' = 4.36 cm²
Aa3 = 0.00 + 0.33' = 0.33 cm²
Aa4 = 0.00 + 0.33' = 0.33 cm²
Aa,uz = 0.66 cm²/m (m=1)
[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]

$\tau_y = 1.15 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.92 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$
 Procenat armiranja: 1.27%

Greda 4613-6597

PBAB 87
 MB 30
 B500B
 Kompletna šema opterećenja

Presek 4-4 x = 0.00m



Merodavna kombinacija za savijanje:
 $1.60xI + 1.80xII + 1.80xIII$
 $N1u = -26.60 \text{ kN}$
 $M2u = 0.00 \text{ kNm}$
 $M3u = -490.67 \text{ kNm}$

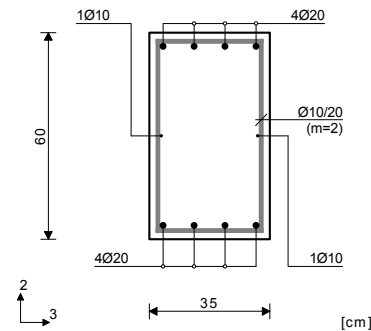
Merodavna kombinacija za torziju:
 $1.60xI + 1.80xII + 1.80xIII$
 $M1u = -29.58 \text{ kNm}$

Merodavna kombinacija za smicanje:

$1.60xI + 1.80xII + 1.80xIII$
 $T2u = -474.70 \text{ kN}$
 $T3u = -0.65 \text{ kN}$
 $M1u = -29.58 \text{ kNm}$
 $eb/ea = -3.500/8.174 \text{ ‰}$
 $Aa1 = 0.00 + 0.55' = 0.55 \text{ cm}^2$
 $Aa2 = 19.42 + 0.55' = 19.96 \text{ cm}^2$
 $Aa3 = 0.00 + 0.99' = 0.99 \text{ cm}^2$
 $Aa4 = 0.00 + 0.99' = 0.99 \text{ cm}^2$
 $Aa,uz = 22.16 \text{ cm}^2/\text{m} \quad (m=1)$
 $[Usvjeto Aa,uz = \phi 10/7(m=2) = 22.44 \text{ cm}^2/\text{m}]$

$\tau_y = 5.08 \text{ MPa} < 5\tau_r$, $\tau_r = 1.10 \text{ MPa}$
 $\tau_z = 2.44 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$
 Procenat armiranja: 1.87%
 *) - dodatna podubna armatura za prijem torzije.

Presek 5-5 x = 3.50m



Merodavna kombinacija za savijanje:

$1.60xI + 1.80xII + 1.80xIII$
 $N1u = -5.75 \text{ kN}$
 $M2u = 0.00 \text{ kNm}$
 $M3u = 247.57 \text{ kNm}$

Merodavna kombinacija za torziju:

$1.60xI$
 $M1u = 2.11 \text{ kNm}$

Merodavna kombinacija za smicanje:

$1.60xI + 1.80xIII$
 $T2u = -4.83 \text{ kN}$
 $T3u = -0.98 \text{ kN}$
 $M1u = 2.10 \text{ kNm}$

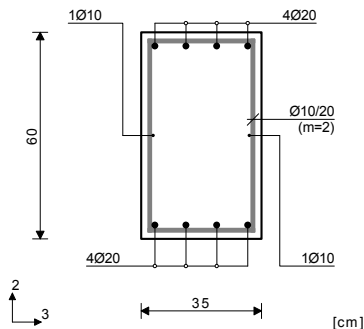
$eb/ea = -2.036/10.000 \text{ ‰}$
 $Aa1 = 9.22 + 0.04' = 9.26 \text{ cm}^2$
 $Aa2 = 0.00 + 0.04' = 0.04 \text{ cm}^2$
 $Aa3 = 0.00 + 0.07' = 0.07 \text{ cm}^2$
 $Aa4 = 0.00 + 0.07' = 0.07 \text{ cm}^2$
 $Aa,uz = 0.00 \text{ cm}^2/\text{m} \quad (m=1)$
 $[Usvjeto Aa,uz = \phi 10/20(m=2) = 7.85 \text{ cm}^2/\text{m}]$

$\tau_y = 0.20 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.18 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$
 Procenat armiranja: 1.27%

Greda 9225-7854

PBAB 87
 MB 30
 B500
 Kompletna šema opterećenja

Presek 6-6 x = 0.00m



Merodavna kombinacija za savijanje:
 $1.30xI + 0.65xII + 1.30xV$
 $N1u = -71.08 \text{ kN}$
 $M2u = 0.00 \text{ kNm}$
 $M3u = -44.78 \text{ kNm}$

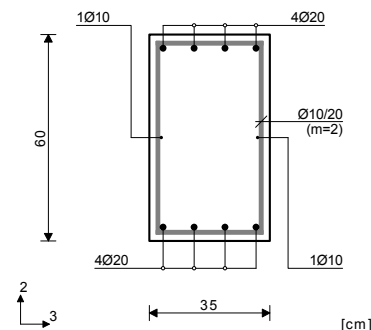
Merodavna kombinacija za torziju:
 $1.30xI + 0.65xII - 1.30xIV$
 $M1u = -3.62 \text{ kNm}$

Merodavna kombinacija za smicanje:
 $1.60xI + 1.80xII + 1.80xIII$
 $T2u = -137.09 \text{ kN}$
 $T3u = -0.28 \text{ kN}$
 $M1u = -2.23 \text{ kNm}$

$eb/ea = -0.881/10.000 \text{ ‰}$
 $Aa1 = 0.00 + 0.08' = 0.08 \text{ cm}^2$
 $Aa2 = 0.94 + 0.08' = 1.01 \text{ cm}^2$
 $Aa3 = 0.00 + 0.13' = 0.13 \text{ cm}^2$
 $Aa4 = 0.00 + 0.13' = 0.13 \text{ cm}^2$
 $Aa,uz = 0.00 \text{ cm}^2/\text{m} \quad (m=1)$
 $[Usvjeto Aa,uz = \phi 10/20(m=2) = 7.85 \text{ cm}^2/\text{m}]$

$\tau_y = 0.97 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.40 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$
 Procenat armiranja: 1.27%
 *) - dodatna podubna armatura za prijem torzije.

Presek 7-7 x = 1.82m



Merodavna kombinacija za savijanje:
 $1.60xI + 1.80xII + 1.80xIII$
 $N1u = -16.07 \text{ kN}$
 $M2u = 0.00 \text{ kNm}$
 $M3u = 134.36 \text{ kNm}$

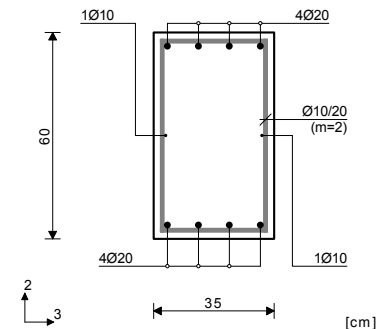
Merodavna kombinacija za torziju:
 $1.60xI + 1.80xII + 1.80xIII$
 $M1u = 2.15 \text{ kNm}$

Merodavna kombinacija za smicanje:
 $1.60xI + 1.80xII + 1.80xIII$
 $T2u = 5.99 \text{ kN}$
 $T3u = 0.01 \text{ kN}$
 $M1u = 2.15 \text{ kNm}$

$eb/ea = -1.444/10.000 \text{ ‰}$
 $Aa1 = 5.04 + 0.04' = 5.09 \text{ cm}^2$
 $Aa2 = 0.00 + 0.04' = 0.04 \text{ cm}^2$
 $Aa3 = 0.00 + 0.08' = 0.08 \text{ cm}^2$
 $Aa4 = 0.00 + 0.08' = 0.08 \text{ cm}^2$
 $Aa,uz = 0.00 \text{ cm}^2/\text{m} \quad (m=1)$
 $[Usvjeto Aa,uz = \phi 10/20(m=2) = 7.85 \text{ cm}^2/\text{m}]$

$\tau_y = 0.26 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.23 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$
 Procenat armiranja: 1.27%

Presek 3-3 x = 4.85m



Merodavna kombinacija za savijanje:
 $1.60xI + 1.80xII + 1.80xIII$
 $N1u = -12.74 \text{ kN}$
 $M2u = 0.00 \text{ kNm}$
 $M3u = -165.68 \text{ kNm}$

Merodavna kombinacija za torziju:
 $1.30xI + 1.30xIV$
 $M1u = -2.92 \text{ kNm}$

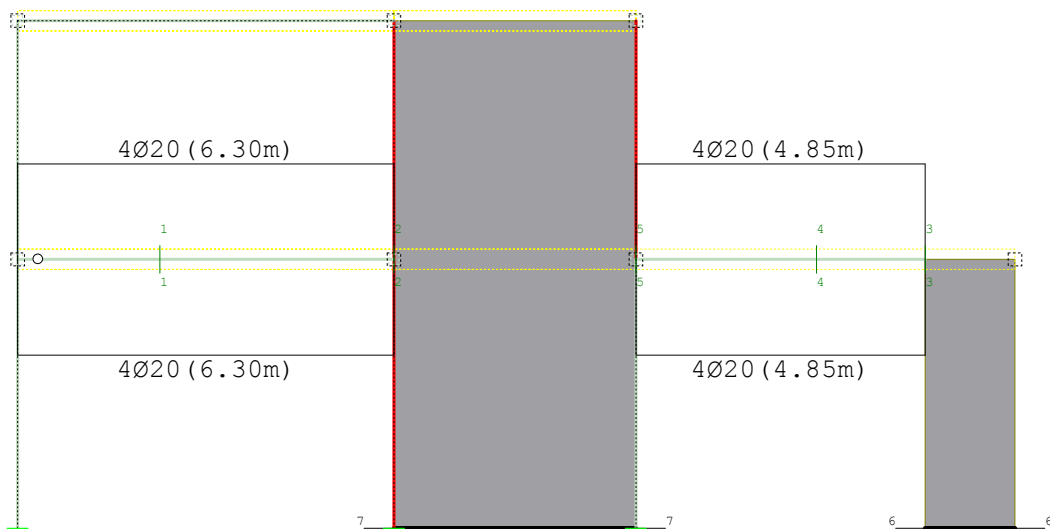
Merodavna kombinacija za smicanje:
 $1.30xI + 0.65xII + 1.30xIV$
 $T2u = 100.59 \text{ kN}$
 $T3u = -6.08 \text{ kN}$
 $M1u = -2.85 \text{ kNm}$

$eb/ea = -1.654/10.000 \text{ ‰}$
 $Aa1 = 0.00 + 0.06' = 0.06 \text{ cm}^2$
 $Aa2 = 6.34 + 0.06' = 6.40 \text{ cm}^2$
 $Aa3 = 0.00 + 0.10' = 0.10 \text{ cm}^2$
 $Aa4 = 0.00 + 0.10' = 0.10 \text{ cm}^2$
 $Aa,uz = 0.00 \text{ cm}^2/\text{m} \quad (m=1)$
 $[Usvjeto Aa,uz = \phi 10/20(m=2) = 7.85 \text{ cm}^2/\text{m}]$

$\tau_y = 0.86 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.34 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$
 Procenat armiranja: 1.27%

GREDA POS G119

Usvojena armatura
PBAB 87, MB 30, B500

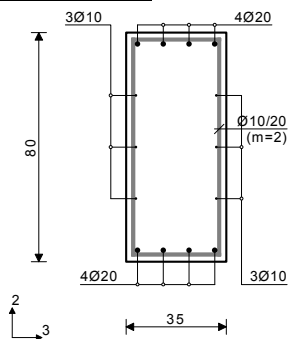


Ram: V_6
Armatura u gredama: Aa2/Aa1

Greda 6472-8431

PBAB 87
MB 30
B500
Kompletna šema opterećenja

Presek 1-1 x = 2.38m



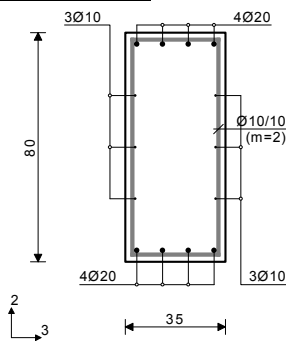
Merodavna kombinacija za savijanje:
1.60xI+1.80xII+1.80xIII
N1u = 23.73 kN
M2u = 0.00 kNm
M3u = 345.77 kNm

Merodavna kombinacija za torziju:
1.60xI+1.80xII+1.80xIII
M1u = -4.62 kNm

Merodavna kombinacija za smicanje:
1.60xI+1.80xII+1.80xIII
T2u = -28.73 kN
T3u = 0.26 kN
M1u = -4.62 kNm

$\epsilon_b/\epsilon_a = -1.802/10.000 \%$
Aa1 = 10.43 + 0.07' = 10.50 cm²
Aa2 = 0.00 + 0.07' = 0.07 cm²
Aa3 = 0.00 + 0.16' = 0.16 cm²
Aa4 = 0.00 + 0.16' = 0.16 cm²
Aa,uz = 0.00 cm²/m (m=1)
(Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m)
 $\tau_y = 0.49 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.37 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$
Procenat armiranja: 1.07%
' - dodatna podubna armatura za prijem torzije.

Presek 2-2 x = 6.30m



Merodavna kombinacija za savijanje:
1.60xI+1.80xII+1.80xIII
N1u = -5.93 kN
M2u = 0.00 kNm
M3u = -464.10 kNm

Merodavna kombinacija za torziju:
1.60xI+1.80xII+1.80xIII
M1u = 30.11 kNm

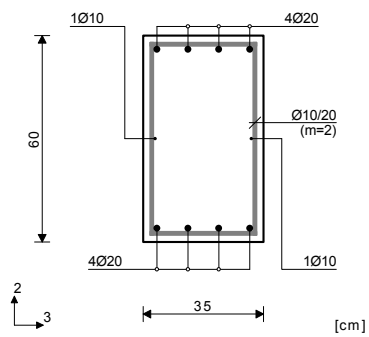
Merodavna kombinacija za smicanje:
1.60xI+1.80xII+1.80xIII
T2u = 319.66 kN
T3u = -5.21 kN
M1u = 30.11 kNm

$\epsilon_b/\epsilon_a = -2.330/10.000 \%$
Aa1 = 0.00 + 0.47' = 0.47 cm²
Aa2 = 13.84 + 0.47' = 14.31 cm²
Aa3 = 0.00 + 1.08' = 1.08 cm²
Aa4 = 0.00 + 1.08' = 1.08 cm²
Aa,uz = 13.29 cm²/m (m=1)
(Usvojeno Aa,uz = Ø10/10(m=2) = 15.71 cm²/m)
 $\tau_y = 3.81 \text{ MPa} < 5\tau_r, \tau_r = 1.10 \text{ MPa}$
 $\tau_z = 2.42 \text{ MPa} < 3\tau_r, \tau_r = 1.10 \text{ MPa}$
Procenat armiranja: 1.07%

Greda 10156-9453

PBAB 87
MB 30
B500
Kompletna šema opterećenja

Presek 3-3 x = 0.00m



Merodavna kombinacija za savijanje:

1.30xI+0.65xII+1.30xV

N1u = -65.97 kN

M2u = 0.00 kNm

M3u = -39.96 kNm

Merodavna kombinacija za torziju:

1.60xI+1.80xII+1.80xIII

M1u = -8.98 kNm

Merodavna kombinacija za smicanje:

1.60xI+1.80xII+1.80xIII

T2u = -112.77 kN

T3u = -8.92 kN

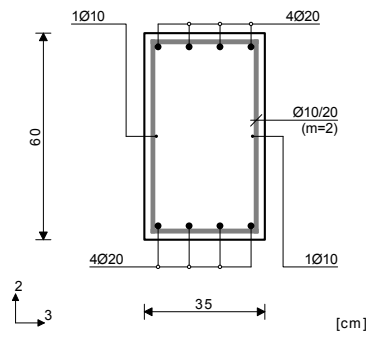
M1u = -8.98 kNm

 $\varepsilon_b/\varepsilon_a = -0.830/10.000 \text{ ‰}$ Aa1 = 0.00 + 0.19' = 0.19 cm²Aa2 = 0.80 + 0.19' = 0.99 cm²Aa3 = 0.00 + 0.32' = 0.32 cm²Aa4 = 0.00 + 0.32' = 0.32 cm²Aa,uz = 2.87 cm²/m (m=1)[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m] $\tau_y = 1.62 \text{ MPa} < 3\tau_r, \tau_r = 1.10 \text{ MPa}$ $\tau_z = 1.01 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$

Procentat armiranja: 1.27%

*) - dodatna podužna armatura za prijem torzije.

Presek 4-4 x = 1.82m



Merodavna kombinacija za savijanje:

1.60xI+1.80xII+1.80xIII

N1u = -11.09 kN

M2u = 0.00 kNm

M3u = 98.03 kNm

Merodavna kombinacija za torziju:

1.60xI+1.80xII+1.80xIII

M1u = -9.13 kNm

Merodavna kombinacija za smicanje:

1.60xI+1.80xII+1.80xIII

T2u = -5.05 kN

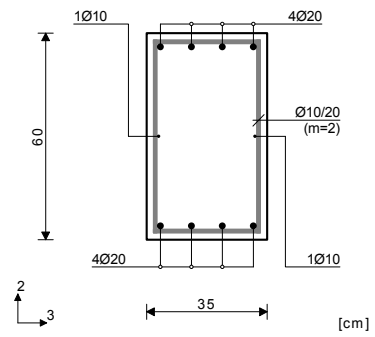
T3u = -0.98 kN

M1u = -9.13 kNm

 $\varepsilon_b/\varepsilon_a = -1.180/10.000 \text{ ‰}$ Aa1 = 3.65 + 0.19' = 3.84 cm²Aa2 = 0.00 + 0.19' = 0.19 cm²Aa3 = 0.00 + 0.33' = 0.33 cm²Aa4 = 0.00 + 0.33' = 0.33 cm²Aa,uz = 0.00 cm²/m (m=1)[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m] $\tau_y = 1.00 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$ $\tau_z = 0.98 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$

Procentat armiranja: 1.27%

Presek 5-5 x = 4.85m



Merodavna kombinacija za savijanje:

1.30xI+0.65xII-1.30xV

N1u = -22.63 kN

M2u = 0.00 kNm

M3u = -116.86 kNm

Merodavna kombinacija za torziju:

1.60xI+1.80xII+1.80xIII

M1u = -9.23 kNm

Merodavna kombinacija za smicanje:

1.60xI+1.80xII+1.80xIII

T2u = 106.49 kN

T3u = 13.73 kN

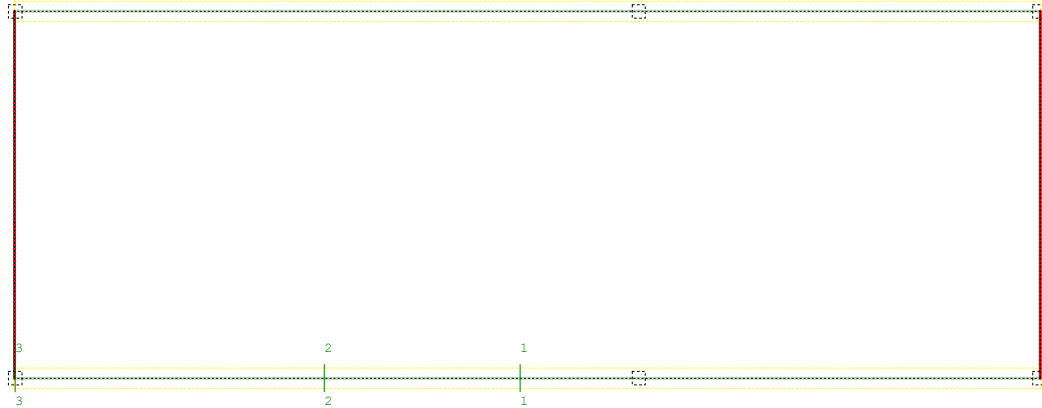
M1u = -9.23 kNm

 $\varepsilon_b/\varepsilon_a = -1.333/10.000 \text{ ‰}$ Aa1 = 0.00 + 0.19' = 0.19 cm²Aa2 = 4.28 + 0.19' = 4.47 cm²Aa3 = 0.00 + 0.33' = 0.33 cm²Aa4 = 0.00 + 0.33' = 0.33 cm²Aa,uz = 2.73 cm²/m (m=1)[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m] $\tau_y = 1.61 \text{ MPa} < 3\tau_r, \tau_r = 1.10 \text{ MPa}$ $\tau_z = 1.06 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$

Procentat armiranja: 1.27%

GREDA POS G120

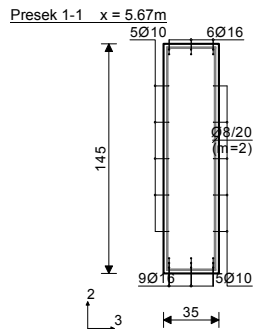
Usvojena armatura
PBAB 87, MB 30, B500



Ram: K_3
Armatura u gredama: Aa2/Aa1

Greda 10004-7326

PBAB 87
MB 30
B500
Kompletna šema opterećenja



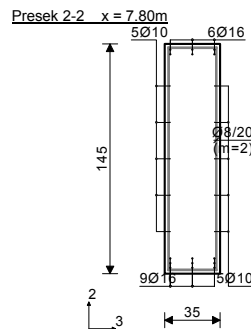
Merodavna kombinacija za savijanje:
1.60xI+1.80xII
N1u = 89.33 kN
M2u = 0.00 kNm
M3u = 642.19 kNm

Merodavna kombinacija za torziju:
1.60xI+1.80xII+1.80xIII
M1u = 35.74 kNm

Merodavna kombinacija za smicanje:
1.60xI+1.80xII+1.80xIII
T2u = 10.72 kN
T3u = -0.02 kN
M1u = 35.74 kNm

$\epsilon_b/\epsilon_a = -1.183/10.000 \%$
Aa1 = 11.19 + 0.31' = 11.49 cm²
Aa2 = 0.00 + 0.31' = 0.31 cm²
Aa3 = 0.00 + 1.28' = 1.28 cm²
Aa4 = 0.00 + 1.28' = 1.28 cm²
Aa,uz = 1.11 cm²/m (m=1)
[Usvojeno Aa,uz = Ø8/20(m=2) = 5.03 cm²/m]

$\tau_y = 1.60 \text{ MPa} < 3\tau_r, \tau_r = 1.10 \text{ MPa}$
 $\tau_z = 1.57 \text{ MPa} < 3\tau_r, \tau_r = 1.10 \text{ MPa}$
Procenat armiranja: 0.75%
) - dodatna podužna armatura za prijem torzije.

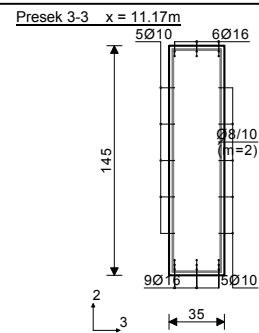


Merodavna kombinacija za savijanje:
1.60xI+1.80xII
N1u = 90.20 kN
M2u = 0.00 kNm
M3u = 495.90 kNm

Merodavna kombinacija za torziju:
1.60xI+1.80xII+1.80xIII
M1u = 35.76 kNm

Merodavna kombinacija za smicanje:
1.60xI+1.80xII+1.80xIII
T2u = 130.47 kN
T3u = -0.11 kN
M1u = 35.76 kNm

$\epsilon_b/\epsilon_a = -0.994/10.000 \%$
Aa1 = 8.82 + 0.31' = 9.13 cm²
Aa2 = 0.00 + 0.31' = 0.31 cm²
Aa3 = 0.00 + 1.28' = 1.28 cm²
Aa4 = 0.00 + 1.28' = 1.28 cm²
Aa,uz = 2.77 cm²/m (m=1)
[Usvojeno Aa,uz = Ø8/20(m=2) = 5.03 cm²/m]
 $\tau_y = 1.89 \text{ MPa} < 3\tau_r, \tau_r = 1.10 \text{ MPa}$
 $\tau_z = 1.57 \text{ MPa} < 3\tau_r, \tau_r = 1.10 \text{ MPa}$
Procenat armiranja: 0.75%



Merodavna kombinacija za savijanje:
1.60xI+1.80xII+1.80xIII
N1u = 103.27 kN
M2u = 0.00 kNm
M3u = -315.13 kNm

Merodavna kombinacija za torziju:
1.60xI+1.80xII+1.80xIII
M1u = 35.73 kNm

Merodavna kombinacija za smicanje:
1.60xI+1.80xII+1.80xIII
T2u = 353.56 kN
T3u = 26.24 kN
M1u = 35.73 kNm

$\epsilon_b/\epsilon_a = -0.723/10.000 \%$
Aa1 = 0.00 + 0.31' = 0.31 cm²
Aa2 = 6.07 + 0.31' = 6.38 cm²
Aa3 = 0.00 + 1.28' = 1.28 cm²
Aa4 = 0.00 + 1.28' = 1.28 cm²
Aa,uz = 6.96 cm²/m (m=1)
[Usvojeno Aa,uz = Ø8/10(m=2) = 10.05 cm²/m]
 $\tau_y = 2.43 \text{ MPa} < 3\tau_r, \tau_r = 1.10 \text{ MPa}$
 $\tau_z = 1.64 \text{ MPa} < 3\tau_r, \tau_r = 1.10 \text{ MPa}$
Procenat armiranja: 0.75%

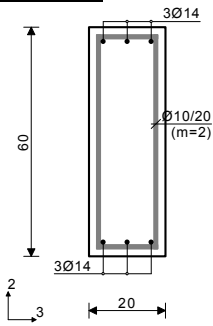
Greda 3594-4583

PBAB 87

MB 30

B500

Kompletna šema opterećenja

Presek 1-1 x = 0.00m

Merodavna kombinacija za savijanje:

1.60xI+1.80xII+1.80xIII

N1u = -134.61 kN

M2u = 0.00 kNm

M3u = -131.20 kNm

Merodavna kombinacija za torziju:

1.30xI+1.30xIV

M1u = -0.81 kNm

Merodavna kombinacija za smicanje:

1.60xI+1.80xII+1.80xIII

T2u = -138.90 kN

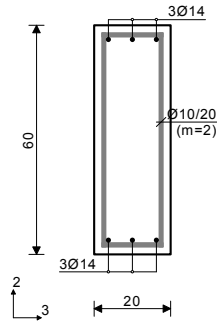
T3u = -0.33 kN

M1u = -0.33 kNm

 $\epsilon_b/\epsilon_a = -2.524/10.000 \%$ Aa1 = 0.00 + 0.00' = 0.00 cm²Aa2 = 3.88 + 0.00' = 3.88 cm²Aa3 = 0.00 + 0.05' = 0.05 cm²Aa4 = 0.00 + 0.05' = 0.05 cm²Aa,uz = 2.47 cm²/m (m=1)[Usvajeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m] $\tau_y = 1.39 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$ $\tau_z = 0.29 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$

Procenat armiranja: 0.77%

*) - dodatna poduzna armatura za prijem torzije.

Presek 2-2 x = 3.30m

Merodavna kombinacija za savijanje:

1.30xI+0.65xII+1.30xV

N1u = 20.02 kN

M2u = 0.00 kNm

M3u = -104.30 kNm

Merodavna kombinacija za torziju:

1.30xI+0.65xII+1.30xIV

M1u = 1.86 kNm

Merodavna kombinacija za smicanje:

1.30xI+0.65xII+1.30xV

T2u = 101.88 kN

T3u = 10.12 kN

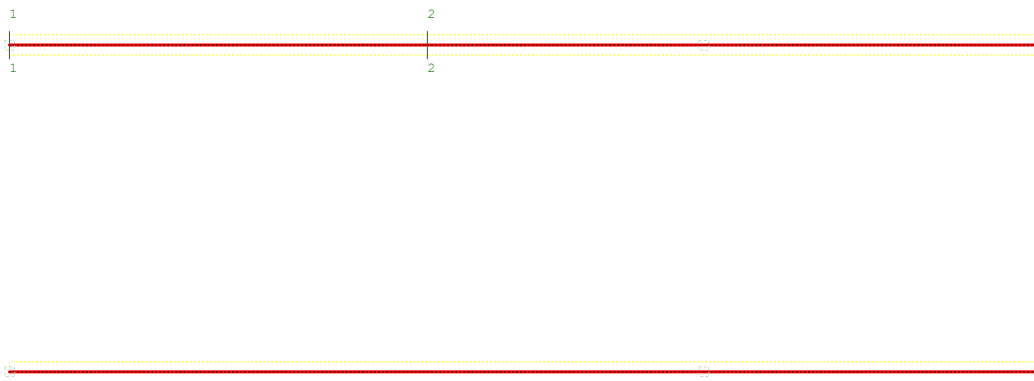
M1u = 1.13 kNm

 $\epsilon_b/\epsilon_a = -1.691/10.000 \%$ Aa1 = 0.00 + 0.04' = 0.04 cm²Aa2 = 4.29 + 0.04' = 4.33 cm²Aa3 = 0.00 + 0.12' = 0.12 cm²Aa4 = 0.00 + 0.12' = 0.12 cm²Aa,uz = 1.50 cm²/m (m=1)[Usvajeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m] $\tau_y = 1.18 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$ $\tau_z = 0.71 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$

Procenat armiranja: 0.77%

GREDA POS G201

Usvojena armatura
PBAB 87, MB 30, B500



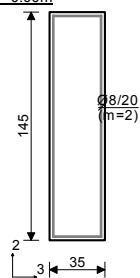
Ram: H_7
Armatura u gredama: Aa2/Aa1

Greda 6543-9605

PBAB 87
MB 30
B500

Kompletna šema opterećenja

Presek 1-1 x = 0.00m



Merodavna kombinacija za savijanje:

1.30xI+0.65xII-1.30xIV

N1u = -0.79 kN
M2u = 0.00 kNm
M3u = -30.26 kNm

Merodavna kombinacija za torziju:

1.30xI+0.65xII-1.30xV

M1u = 2.66 kNm

Merodavna kombinacija za smicanje:

1.60xI

T2u = -183.66 kN
T3u = 2.03 kN
M1u = 1.71 kNm

$\epsilon_b/\epsilon_a = -0.232/10.000 \%$

Aa1 = 0.00 + 0.02' = 0.02 cm²
Aa2 = 0.46 + 0.02' = 0.48 cm²
Aa3 = 0.00 + 0.10' = 0.10 cm²
Aa4 = 0.00 + 0.10' = 0.10 cm²
Aa,uz = 0.00 cm²/m (m=1)

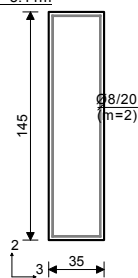
[Usvojeno Aa,uz = Ø8/20(m=2) = 5.03 cm²/m]

$\tau_y = 0.52 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$

$\tau_z = 0.08 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$

*) - dodatna podužna armatura za prijem torzije.

Presek 2-2 x = 5.11m



[cm]

Merodavna kombinacija za savijanje:

1.60xI+1.80xII+1.80xIII

N1u = -26.51 kN
M2u = 0.00 kNm
M3u = 537.96 kNm

Merodavna kombinacija za torziju:

1.30xI+0.65xII-1.30xV

M1u = 2.60 kNm

Merodavna kombinacija za smicanje:

1.30xI+0.65xII-1.30xV

T2u = -5.21 kN
T3u = 0.34 kN
M1u = 2.60 kNm

$\epsilon_b/\epsilon_a = -1.136/10.000 \%$

Aa1 = 8.27 + 0.02' = 8.29 cm²
Aa2 = 0.00 + 0.02' = 0.02 cm²
Aa3 = 0.00 + 0.09' = 0.09 cm²
Aa4 = 0.00 + 0.09' = 0.09 cm²
Aa,uz = 0.00 cm²/m (m=1)

[Usvojeno Aa,uz = Ø8/20(m=2) = 5.03 cm²/m]

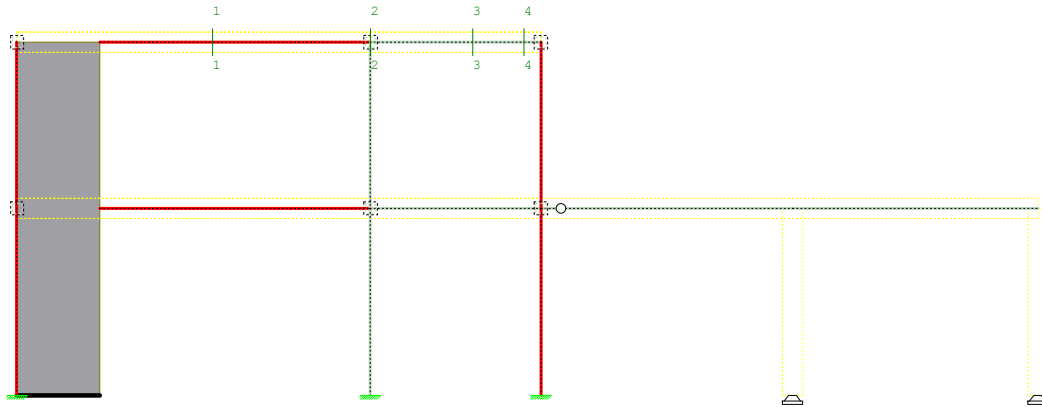
$\tau_y = 0.13 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$

$\tau_z = 0.12 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$

[cm]

GREDA POS G202

Usvojena armatura
PBAB 87, MB 30, B500

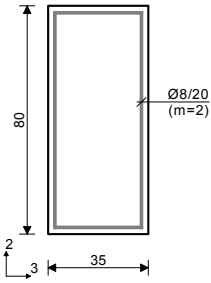


Ram: H_6
Armatura u gredama: Aa2/Aa1

Greda 5956-7835

PBAB 87
MB 30
B500
Kompletna šema opterećenja

Presek 1-1 x = 2.70m



Merodavna kombinacija za savijanje:
1.60xI+1.80xII+1.80xIII
N1u = -30.34 kN
M2u = 0.00 kNm
M3u = 319.90 kNm

Merodavna kombinacija za torziju:
1.60xI+1.80xII+1.80xIII
M1u = -9.91 kNm

Merodavna kombinacija za smicanje:

1.60xI+1.80xII+1.80xIII
T2u = 26.60 kN
T3u = 1.26 kN
M1u = -9.91 kNm

$\epsilon_b/\epsilon_a = -1.769/10.000 \%$

Aa1 = 9.09 + 0.15' = 9.24 cm²
Aa2 = 0.00 + 0.15' = 0.15 cm²
Aa3 = 0.00 + 0.35' = 0.35 cm²
Aa4 = 0.00 + 0.35' = 0.35 cm²
Aa,uz = 0.00 cm²/m (m=1)

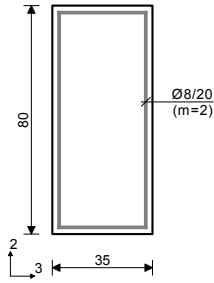
[Usvojeno Aa,uz = Ø8/20(m=2) = 5.03 cm²/m]

$\tau_y = 0.91 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$

$\tau_z = 0.80 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$

*) - dodatna podubna armatura za prijem torzije.

Presek 2-2 x = 6.50m



Merodavna kombinacija za savijanje:

1.60xI+1.80xII+1.80xIII
N1u = -59.46 kN
M2u = 0.00 kNm
M3u = -392.20 kNm

Merodavna kombinacija za torziju:

1.60xI+1.80xII+1.80xIII
M1u = -28.22 kNm

Merodavna kombinacija za smicanje:

1.60xI+1.80xII+1.80xIII
T2u = 257.63 kN
T3u = -4.76 kN
M1u = -28.22 kNm

$\epsilon_b/\epsilon_a = -2.096/10.000 \%$

Aa1 = 0.00 + 0.44' = 0.44 cm²
Aa2 = 11.04 + 0.44' = 11.48 cm²
Aa3 = 0.00 + 1.01' = 1.01 cm²
Aa4 = 0.00 + 1.01' = 1.01 cm²
Aa,uz = 11.16 cm²/m (m=1)

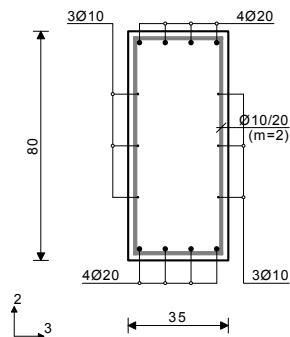
[Usvojeno Aa,uz = Ø8/20(m=2) = 5.03 cm²/m]

$\tau_y = 3.39 \text{ MPa} < 5\tau_r$, $\tau_r = 1.10 \text{ MPa}$

$\tau_z = 2.27 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$

Greda 7835-8910
PBAB 87
MB 30
B500
Kompletna šema opterećenja

Presek 2-2 x = 0.00m



Merodavna kombinacija za savijanje:
1.30xI+0.65xII-1.30xIV
N1u = -4.61 kN
M2u = 0.00 kNm
M3u = -189.14 kNm

Merodavna kombinacija za torziju:
1.60xI+1.80xII+1.80xIII
M1u = -4.46 kNm

Merodavna kombinacija za smicanje:
1.60xI+1.80xII+1.80xIII
T2u = -110.33 kN
T3u = 6.11 kN
M1u = -4.46 kNm

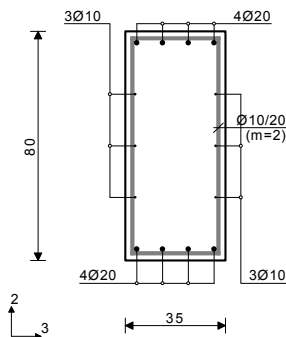
$\epsilon_b/\epsilon_a = -1.227/10.000 \text{ ‰}$

Aa1 =	0.57	+	0.07'	=	0.64 cm ²
Aa2 =	5.42	+	0.07'	=	5.49 cm ²
Aa3 =	0.00	+	0.16'	=	0.16 cm ²
Aa4 =	0.00	+	0.16'	=	0.16 cm ²
Aa,uz =	0.00				cm ² /m (m=1)

[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]

$\tau_y = 0.84 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.38 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$
Procenat armiranja: 1.07%

Presek 3-3 x = 2.46m



Merodavna kombinacija za savijanje:
1.60xI+1.80xII+1.80xIII
N1u = -2.70 kN
M2u = 0.00 kNm
M3u = 59.57 kNm

Merodavna kombinacija za torziju:
1.30xI-1.30xV
M1u = 2.19 kNm

Merodavna kombinacija za smicanje:
1.00xI-1.30xIV
T2u = -38.52 kN
T3u = 0.76 kN
M1u = 0.27 kNm

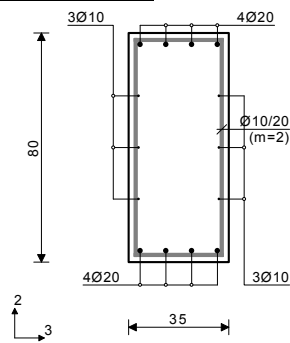
$\epsilon_b/\epsilon_a = -0.628/10.000 \text{ ‰}$

Aa1 =	1.66	+	0.03'	=	1.69 cm ²
Aa2 =	0.00	+	0.03'	=	0.03 cm ²
Aa3 =	0.00	+	0.08'	=	0.08 cm ²
Aa4 =	0.00	+	0.08'	=	0.08 cm ²
Aa,uz =	0.00				cm ² /m (m=1)

[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]

$\tau_y = 0.19 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.02 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$
Procenat armiranja: 1.07%

Presek 4-4 x = 3.69m



Merodavna kombinacija za savijanje:
1.00xI+0.65xII+1.30xIV
N1u = -18.88 kN
M2u = 0.00 kNm
M3u = -38.37 kNm

Merodavna kombinacija za torziju:
1.30xI-1.30xV
M1u = 4.67 kNm

Merodavna kombinacija za smicanje:
1.30xI+0.65xII-1.30xV
T2u = 81.36 kN
T3u = -11.67 kN
M1u = 4.59 kNm

$\epsilon_b/\epsilon_a = -0.601/10.000 \text{ ‰}$

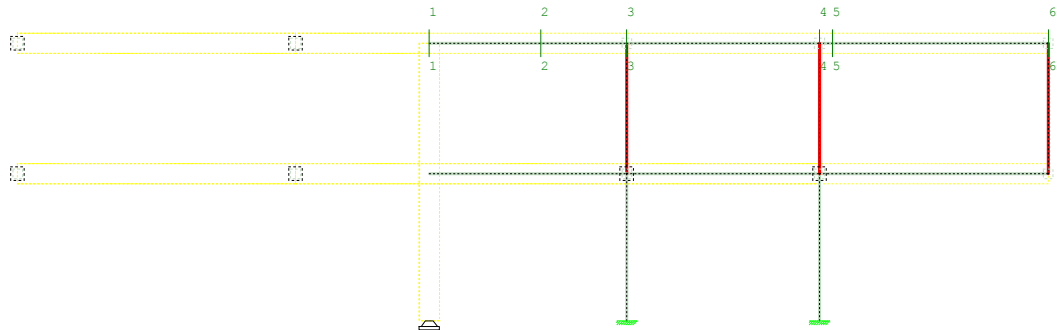
Aa1 =	1.47	+	0.07'	=	1.55 cm ²
Aa2 =	0.85	+	0.07'	=	0.92 cm ²
Aa3 =	0.00	+	0.17'	=	0.17 cm ²
Aa4 =	0.00	+	0.17'	=	0.17 cm ²
Aa,uz =	0.00				cm ² /m (m=1)

[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]

$\tau_y = 0.71 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.42 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$
Procenat armiranja: 1.07%

GREDA POS G204(205)

Usvojena armatura
PBAB 87, MB 30, B500

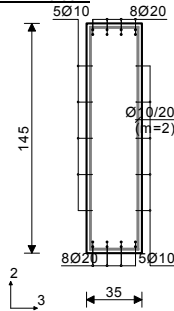


Ram: H_5
Armatura u gredama: Aa2/Aa1

Greda 7208-8849

PBAB 87
MB 30
B500
Kompletna šema opterećenja

Presek 1-1 x = 0.00m



Merodavna kombinacija za savijanje:

1.30xI+0.65xII-1.30xIV
N1u = 166.85 kN
M2u = 0.00 kNm
M3u = -30.18 kNm

Merodavna kombinacija za torziju:

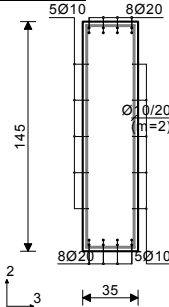
1.30xI+0.65xII-1.30xV
M1u = 3.44 kNm

Merodavna kombinacija za smicanje:

1.60xI+1.80xII+1.80xIII
T2u = -43.53 kN
T3u = 34.04 kN
M1u = 3.12 kNm
 $\epsilon_b/\epsilon_a = 0.433/10.000 \%$
Aa1 = 1.83 + 0.03' = 1.86 cm²
Aa2 = 2.19 + 0.03' = 2.22 cm²
Aa3 = 0.00 + 0.12' = 0.12 cm²
Aa4 = 0.00 + 0.12' = 0.12 cm²
Aa,uz = 0.00 cm²/m (m=1)
[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]

$\tau_y = 0.23\text{MPa} < \tau_r, \tau_r = 1.10\text{MPa}$
 $\tau_z = 0.23\text{MPa} < \tau_r, \tau_r = 1.10\text{MPa}$
Procent armiranja: 1.15%
) - dodatna podužna armatura za prijem torzije.

Presek 2-2 x = 3.42m



Merodavna kombinacija za savijanje:

1.30xI+0.65xII+1.30xIV
N1u = 44.39 kN
M2u = 0.00 kNm
M3u = -66.68 kNm

Merodavna kombinacija za torziju:

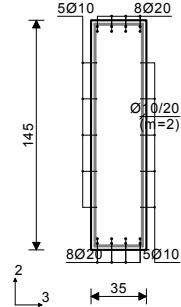
1.30xI+0.65xII-1.30xV
M1u = 3.39 kNm

Merodavna kombinacija za smicanje:

1.30xI+0.65xII+1.30xIV
T2u = 79.38 kN
T3u = 1.60 kN
M1u = 2.85 kNm
 $\epsilon_b/\epsilon_a = -0.445/10.000 \%$
Aa1 = 3.73 + 0.03' = 3.76 cm²
Aa2 = 1.41 + 0.03' = 1.44 cm²
Aa3 = 0.00 + 0.12' = 0.12 cm²
Aa4 = 0.00 + 0.12' = 0.12 cm²
Aa,uz = 0.00 cm²/m (m=1)
[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]

$\tau_y = 0.32\text{MPa} < \tau_r, \tau_r = 1.10\text{MPa}$
 $\tau_z = 0.13\text{MPa} < \tau_r, \tau_r = 1.10\text{MPa}$
Procent armiranja: 1.15%

Presek 3-3 x = 6.05m



Merodavna kombinacija za savijanje:

1.30xI+0.65xII+1.30xIV
N1u = -19.41 kN
M2u = 0.00 kNm
M3u = -393.53 kNm

Merodavna kombinacija za torziju:

1.30xI+0.65xII-1.30xV
M1u = 3.35 kNm

Merodavna kombinacija za smicanje:

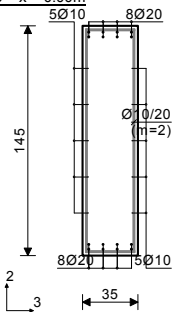
1.30xI+0.65xII+1.30xIV
T2u = 142.69 kN
T3u = 13.03 kN
M1u = 2.80 kNm
 $\epsilon_b/\epsilon_a = -0.961/10.000 \%$
Aa1 = 2.27 + 0.03' = 2.30 cm²
Aa2 = 5.99 + 0.03' = 6.02 cm²
Aa3 = 0.00 + 0.12' = 0.12 cm²
Aa4 = 0.00 + 0.12' = 0.12 cm²
Aa,uz = 0.00 cm²/m (m=1)
[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]

$\tau_y = 0.47\text{MPa} < \tau_r, \tau_r = 1.10\text{MPa}$
 $\tau_z = 0.15\text{MPa} < \tau_r, \tau_r = 1.10\text{MPa}$
Procent armiranja: 1.15%

Greda 8849-9785PBAB 87
MB 30
B500

Kompletna šema opterećenja

Presek 3-3 x = 0.00m



Merodavna kombinacija za savijanje:

1.30xI+0.65xII+1.30xIV

N1u = 344.54 kN
M2u = 0.00 kNm
M3u = 442.67 kNm

Merodavna kombinacija za torziju:

1.30xI+0.65xII+1.30xV

M1u = 7.90 kNm

Merodavna kombinacija za smicanje:

1.60xI+1.80xII+1.80xIII

T2u = 171.48 kN
T3u = 0.57 kN
M1u = 5.64 kNm

 $\epsilon_b/\epsilon_a = -0.744/10.000 \text{ ‰}$

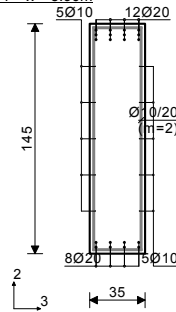
Aa1 = 10.66 + 0.07' = 10.73 cm²
Aa2 = 2.42 + 0.07' = 2.49 cm²
Aa3 = 0.00 + 0.28' = 0.28 cm²
Aa4 = 0.00 + 0.28' = 0.28 cm²
Aa,uz = 0.00 cm²/m (m=1)

[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m] $\tau_y = 0.65 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$ $\tau_z = 0.37 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$

Procenat armiranja: 1.15%

*) - dodatna podužna armatura za prijem torzije.

Presek 4-4 x = 5.90m



Merodavna kombinacija za savijanje:

1.60xI+1.80xII+1.80xIII

N1u = 404.55 kN
M2u = 0.00 kNm
M3u = -1301.27 kNm

Merodavna kombinacija za torziju:

1.30xI+0.65xII+1.30xV

M1u = 7.80 kNm

Merodavna kombinacija za smicanje:

1.60xI

T2u = 320.64 kN
T3u = -3.65 kN
M1u = 4.74 kNm

 $\epsilon_b/\epsilon_a = -1.749/10.000 \text{ ‰}$

Aa1 = 0.00 + 0.07' = 0.07 cm²
Aa2 = 25.38 + 0.07' = 25.45 cm²
Aa3 = 0.00 + 0.28' = 0.28 cm²
Aa4 = 0.00 + 0.28' = 0.28 cm²
Aa,uz = 0.00 cm²/m (m=1)

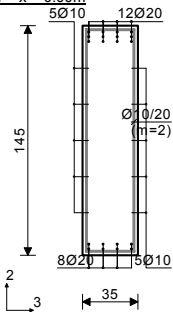
[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m] $\tau_y = 0.99 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$ $\tau_z = 0.22 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$

Procenat armiranja: 1.39%

Greda 9785-10077PBAB 87
MB 30
B500

Kompletna šema opterećenja

Presek 4-4 x = 0.00m



Merodavna kombinacija za savijanje:

1.60xI+1.80xII+1.80xIII

N1u = 174.30 kN
M2u = 0.00 kNm
M3u = -1869.30 kNm

Merodavna kombinacija za torziju:

1.30xI+1.30xV

M1u = 5.97 kNm

Merodavna kombinacija za smicanje:

1.60xI+1.80xII+1.80xIII

T2u = -493.02 kN
T3u = -10.45 kN
M1u = 2.11 kNm

 $\epsilon_b/\epsilon_a = -2.659/10.000 \text{ ‰}$

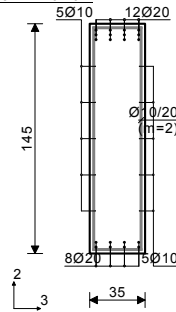
Aa1 = 0.00 + 0.05' = 0.05 cm²
Aa2 = 33.04 + 0.05' = 33.09 cm²
Aa3 = 0.00 + 0.21' = 0.21 cm²
Aa4 = 0.00 + 0.21' = 0.21 cm²
Aa,uz = 1.90 cm²/m (m=1)

[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m] $\tau_y = 1.17 \text{ MPa} < 3\tau_r, \tau_r = 1.10 \text{ MPa}$ $\tau_z = 0.30 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$

Procenat armiranja: 1.39%

*) - dodatna podužna armatura za prijem torzije.

Presek 5-5 x = 0.40m



Merodavna kombinacija za savijanje:

1.60xI+1.80xII+1.80xIII

N1u = 174.30 kN
M2u = 0.00 kNm
M3u = -1673.72 kNm

Merodavna kombinacija za torziju:

1.30xI+1.30xV

M1u = 5.97 kNm

Merodavna kombinacija za smicanje:

1.60xI+1.80xII+1.80xIII

T2u = -484.90 kN
T3u = -10.45 kN
M1u = 2.11 kNm

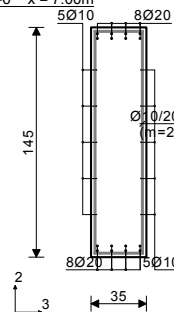
 $\epsilon_b/\epsilon_a = -2.385/10.000 \text{ ‰}$

Aa1 = 0.00 + 0.05' = 0.05 cm²
Aa2 = 29.53 + 0.05' = 29.58 cm²
Aa3 = 0.00 + 0.21' = 0.21 cm²
Aa4 = 0.00 + 0.21' = 0.21 cm²
Aa,uz = 1.70 cm²/m (m=1)

[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m] $\tau_y = 1.16 \text{ MPa} < 3\tau_r, \tau_r = 1.10 \text{ MPa}$ $\tau_z = 0.30 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$

Procenat armiranja: 1.39%

Presek 6-6 x = 7.00m



Merodavna kombinacija za savijanje:

1.60xI+1.80xII+1.80xIII

N1u = 377.09 kN
M2u = 0.00 kNm
M3u = 873.94 kNm

Merodavna kombinacija za torziju:

1.30xI+1.30xV

M1u = 5.85 kNm

Merodavna kombinacija za smicanje:

1.30xI+0.65xII+1.30xV

T2u = -205.84 kN
T3u = -0.63 kN
M1u = 5.67 kNm

 $\epsilon_b/\epsilon_a = -1.262/10.000 \text{ ‰}$

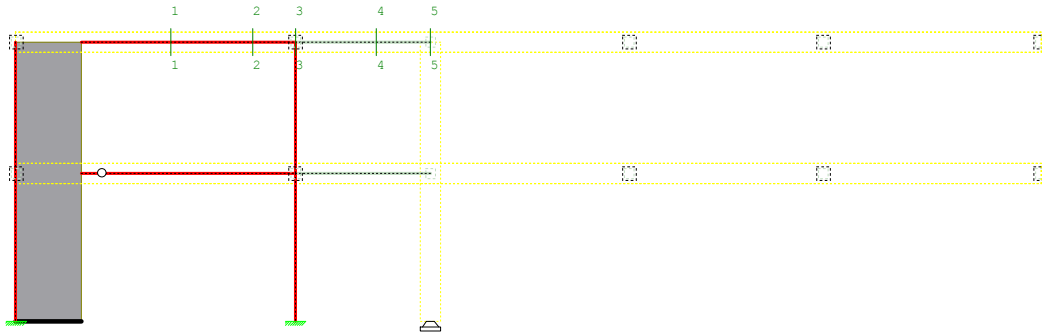
Aa1 = 18.00 + 0.05' = 18.05 cm²
Aa2 = 0.00 + 0.05' = 0.05 cm²
Aa3 = 0.00 + 0.21' = 0.21 cm²
Aa4 = 0.00 + 0.21' = 0.21 cm²
Aa,uz = 0.00 cm²/m (m=1)

[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m] $\tau_y = 0.74 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$ $\tau_z = 0.26 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$

Procenat armiranja: 1.15%

GREDA POS G203

Usvojena armatura
PBAB 87, MB 30, B500

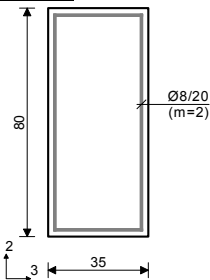


Ram: H_4
Armatura u gredama: Aa2/Aa1

Greda 3657-5724

PBAB 87
MB 30
B500
Kompletna šema opterećenja

Presek 1-1 x = 2.70m



Merodavna kombinacija za savijanje:
1.60xI+1.80xII+1.80xIII

N1u = -2.47 kN
M2u = 0.00 kNm
M3u = 330.06 kNm

Merodavna kombinacija za torziju:
1.60xI+1.80xII+1.80xIII
M1u = 11.12 kNm

Merodavna kombinacija za smicanje:
1.60xI+1.80xII+1.80xIII

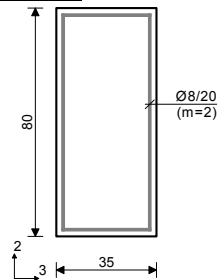
T2u = 13.57 kN
T3u = -0.74 kN
M1u = 11.12 kNm

$\epsilon_b/\epsilon_a = -1.773/10.000 \text{ ‰}$

Aa1 = 9.68 + 0.17' = 9.85 cm²
Aa2 = 0.00 + 0.17' = 0.17 cm²
Aa3 = 0.00 + 0.40' = 0.40 cm²
Aa4 = 0.00 + 0.40' = 0.40 cm²
Aa,uz = 0.00 cm²/m (m=1)
[Usvojeno Aa,uz = Ø8/20(m=2) = 5.03 cm²/m]

$\tau_y = 0.95 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.89 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$
) - dodatna podužna armatura za prijem torzije.

Presek 2-2 x = 5.19m



Merodavna kombinacija za savijanje:
1.00xI+1.30xIV

N1u = 3.38 kN
M2u = 0.00 kNm
M3u = -6.43 kNm

Merodavna kombinacija za torziju:
1.60xI+1.80xII+1.80xIII
M1u = 22.51 kNm

Merodavna kombinacija za smicanje:
1.60xI+1.80xII+1.80xIII

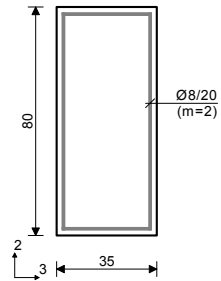
T2u = 195.78 kN
T3u = -0.47 kN
M1u = 22.51 kNm

$\epsilon_b/\epsilon_a = -0.364/10.000 \text{ ‰}$

Aa1 = 1.58 + 0.35' = 1.93 cm²
Aa2 = 0.17 + 0.35' = 0.52 cm²
Aa3 = 0.00 + 0.80' = 0.80 cm²
Aa4 = 0.00 + 0.80' = 0.80 cm²
Aa,uz = 7.52 cm²/m (m=1)
[Usvojeno Aa,uz = Ø8/20(m=2) = 5.03 cm²/m]

$\tau_y = 2.66 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$
 $\tau_z = 1.80 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$

Presek 3-3 x = 6.50m



Merodavna kombinacija za savijanje:
1.60xI+1.80xII+1.80xIII

N1u = 19.74 kN
M2u = 0.00 kNm
M3u = -288.95 kNm

Merodavna kombinacija za torziju:
1.60xI+1.80xII+1.80xIII

M1u = 22.46 kNm

Merodavna kombinacija za smicanje:
1.60xI+1.80xII+1.80xIII

T2u = 227.77 kN
T3u = 6.86 kN
M1u = 22.46 kNm

$\epsilon_b/\epsilon_a = -1.587/10.000 \text{ ‰}$

Aa1 = 0.00 + 0.35' = 0.35 cm²
Aa2 = 8.66 + 0.35' = 9.01 cm²
Aa3 = 0.00 + 0.80' = 0.80 cm²
Aa4 = 0.00 + 0.80' = 0.80 cm²
Aa,uz = 8.73 cm²/m (m=1)
[Usvojeno Aa,uz = Ø8/20(m=2) = 5.03 cm²/m]

$\tau_y = 2.79 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$
 $\tau_z = 1.82 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$

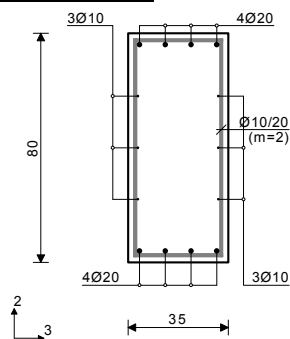
Greda 5724-6920

PBAB 87

MB 30

B500

Kompletna šema opterećenja

Presek 3-3 x = 0.00m

Merodavna kombinacija za savijanje:

1.60xI+1.80xII+1.80xIII

N1u = 64.91 kN

M2u = 0.00 kNm

M3u = -194.07 kNm

Merodavna kombinacija za torziju:

1.30xI+0.65xII+1.30xV

M1u = 11.83 kNm

Merodavna kombinacija za smicanje:

1.30xI+0.65xII+1.30xV

T2u = -79.45 kN

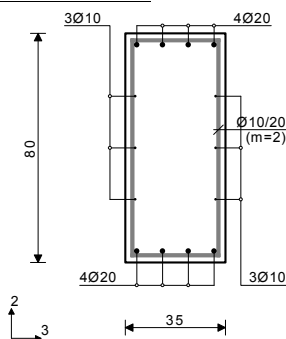
T3u = -16.23 kN

M1u = 11.83 kNm

 $\varepsilon_b/\varepsilon_a = -1.156/10.000 \text{ ‰}$ Aa1 = 0.00 + 0.18' = 0.18 cm²Aa2 = 6.29 + 0.18' = 6.48 cm²Aa3 = 0.00 + 0.42' = 0.42 cm²Aa4 = 0.00 + 0.42' = 0.42 cm²Aa,uz = 0.85 cm²/m (m=1)[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m] $\tau_y = 1.29 \text{ MPa} < 3\tau_r, \tau_r = 1.10 \text{ MPa}$ $\tau_z = 1.01 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$

Procenat armiranja: 1.07%

*) - dodatna podubna armatura za prijem torzije.

Presek 4-4 x = 2.46m

[cm]

Merodavna kombinacija za savijanje:

1.30xI+0.65xII-1.30xV

N1u = 64.97 kN

M2u = 0.00 kNm

M3u = 1.03 kNm

Merodavna kombinacija za torziju:

1.30xI+0.65xII+1.30xV

M1u = 6.83 kNm

Merodavna kombinacija za smicanje:

1.30xI+0.65xII+1.30xV

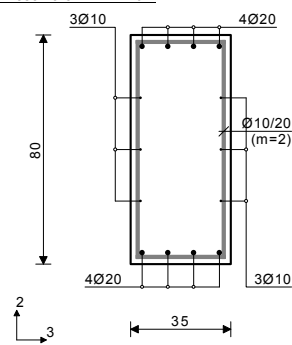
T2u = -8.00 kN

T3u = -1.43 kN

M1u = 6.83 kNm

 $\varepsilon_b/\varepsilon_a = 0.450/10.000 \text{ ‰}$ Aa1 = 1.07 + 0.11' = 1.18 cm²Aa2 = 0.62 + 0.11' = 0.72 cm²Aa3 = 0.00 + 0.24' = 0.24 cm²Aa4 = 0.00 + 0.24' = 0.24 cm²Aa,uz = 0.00 cm²/m (m=1)[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m] $\tau_y = 0.58 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$ $\tau_z = 0.55 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$

Procenat armiranja: 1.07%

Presek 5-5 x = 4.10m

[cm]

Merodavna kombinacija za savijanje:

1.60xI+1.80xII+1.80xIII

N1u = 30.21 kN

M2u = 0.00 kNm

M3u = -50.24 kNm

Merodavna kombinacija za torziju:

1.30xI+0.65xII+1.30xV

M1u = 15.12 kNm

Merodavna kombinacija za smicanje:

1.30xI+0.65xII+1.30xV

T2u = 41.58 kN

T3u = 12.45 kN

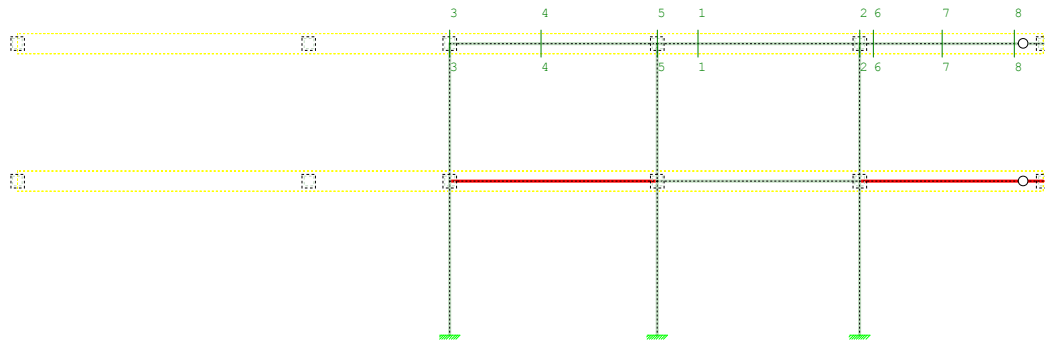
M1u = 15.12 kNm

 $\varepsilon_b/\varepsilon_a = -0.505/10.000 \text{ ‰}$ Aa1 = 0.00 + 0.24' = 0.24 cm²Aa2 = 1.75 + 0.24' = 1.99 cm²Aa3 = 0.00 + 0.54' = 0.54 cm²Aa4 = 0.00 + 0.54' = 0.54 cm²Aa,uz = 1.00 cm²/m (m=1)[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m] $\tau_y = 1.39 \text{ MPa} < 3\tau_r, \tau_r = 1.10 \text{ MPa}$ $\tau_z = 1.26 \text{ MPa} < 3\tau_r, \tau_r = 1.10 \text{ MPa}$

Procenat armiranja: 1.07%

GREDA POS G206(G207)

Usvojena armatura
PBAB 87, MB 30, B500

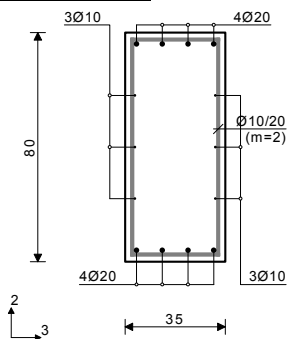


Ram: H_3
Armatura u gredama: Aa2/Aa1

Greda 7782-9204

PBAB 87
MB 30
B500
Kompletna šema opterećenja

Presek 1-1 x = 1.18m



Merodavna kombinacija za savijanje:

1.30xI+0.65xII-1.30xIV
N1u = 55.04 kN
M2u = 0.00 kNm
M3u = -21.39 kNm

Merodavna kombinacija za torziju:

1.60xI+1.80xII+1.80xIII
M1u = 2.18 kNm

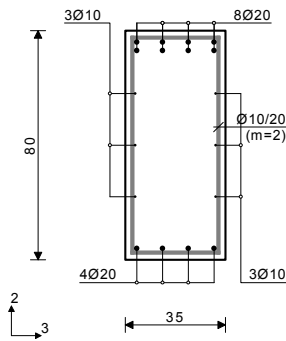
Merodavna kombinacija za smicanje:

1.60xI+1.80xII+1.80xIII
T2u = -47.15 kN
T3u = -1.36 kN
M1u = 2.18 kNm

$\epsilon_b/\epsilon_a = -0.384/10.000 \%$
Aa1 = 1.99 + 0.03' = 2.02 cm²
Aa2 = 1.14 + 0.03' = 1.18 cm²
Aa3 = 0.00 + 0.08' = 0.08 cm²
Aa4 = 0.00 + 0.08' = 0.08 cm²
Aa,uz = 0.00 cm²/m (m=1)
[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]

$\tau_y = 0.38 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.18 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$
Procenat armiranja: 1.07%
) - dodatna podubna armatura za prijem torzije.

Presek 2-2 x = 5.90m



Merodavna kombinacija za savijanje:

1.60xI+1.80xII+1.80xIII
N1u = 66.83 kN
M2u = 0.00 kNm
M3u = -628.83 kNm

Merodavna kombinacija za torziju:

1.30xI+0.65xII+1.30xV
M1u = -14.65 kNm

Merodavna kombinacija za smicanje:

1.60xI+1.80xII+1.80xIII
T2u = 234.32 kN
T3u = 4.91 kN
M1u = -14.04 kNm

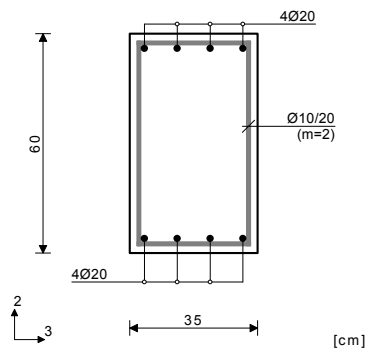
$\epsilon_b/\epsilon_a = -3.001/10.000 \%$
Aa1 = 0.00 + 0.23' = 0.23 cm²
Aa2 = 19.95 + 0.23' = 20.18 cm²
Aa3 = 0.00 + 0.52' = 0.52 cm²
Aa4 = 0.00 + 0.52' = 0.52 cm²
Aa,uz = 6.45 cm²/m (m=1)
[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]

$\tau_y = 1.94 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$
 $\tau_z = 1.20 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$
Procenat armiranja: 1.51%

Greda 6013-7782

PBAB 87
MB 30
B500
Kompletna šema opterećenja

Presek 3-3 x = 0.00m



Merodavna kombinacija za savijanje:

$$\begin{aligned} 1.30xI + 0.65xII - 1.30xIV \\ N1u &= -2.88 \text{ kN} \\ M2u &= 0.00 \text{ kNm} \\ M3u &= -128.08 \text{ kNm} \end{aligned}$$

Merodavna kombinacija za torziju:

$$1.60xI + 1.80xII + 1.80xIII \\ M1u = 7.37 \text{ kNm}$$

Merodavna kombinacija za smicanje:

$$\begin{aligned} 1.60xI + 1.80xII + 1.80xIII \\ T2u &= -112.81 \text{ kN} \\ T3u &= -3.84 \text{ kN} \\ M1u &= 7.37 \text{ kNm} \end{aligned}$$

$$\epsilon_b/\epsilon_a = -1.379/10.000 \text{ ‰}$$

$$\begin{aligned} Aa1 &= 0.00 + 0.15' = 0.15 \text{ cm}^2 \\ Aa2 &= 4.93 + 0.15' = 5.08 \text{ cm}^2 \\ Aa3 &= 0.00 + 0.26' = 0.26 \text{ cm}^2 \\ Aa4 &= 0.00 + 0.26' = 0.26 \text{ cm}^2 \\ Aa,uz &= 2.06 \text{ cm}^2/\text{m} \quad (m=1) \end{aligned}$$

$$[Usvajeno Aa,uz = \emptyset 10/20(m=2) = 7.85 \text{ cm}^2/\text{m}]$$

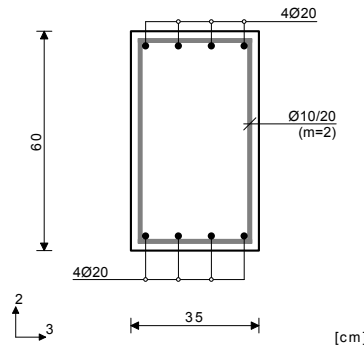
$$\tau_y = 1.45 \text{ MPa} < 3\tau_r, \tau_r = 1.10 \text{ MPa}$$

$$\tau_z = 0.81 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$$

Procentat armiranja: 1.20%

*) - dodatna podužna armatura za prijem torzije.

Presek 4-4 x = 2.67m



Merodavna kombinacija za savijanje:

$$\begin{aligned} 1.60xI + 1.80xII + 1.80xIII \\ N1u &= 31.68 \text{ kN} \\ M2u &= 0.00 \text{ kNm} \\ M3u &= 133.25 \text{ kNm} \end{aligned}$$

Merodavna kombinacija za torziju:

$$1.30xI + 0.65xII + 1.30xIV \\ M1u = -0.38 \text{ kNm}$$

Merodavna kombinacija za smicanje:

$$\begin{aligned} 1.30xI + 1.30xIV \\ T2u &= 9.10 \text{ kN} \\ T3u &= -0.46 \text{ kN} \\ M1u &= -0.38 \text{ kNm} \end{aligned}$$

$$\epsilon_b/\epsilon_a = -1.357/10.000 \text{ ‰}$$

$$\begin{aligned} Aa1 &= 5.49 \text{ cm}^2 \\ Aa2 &= 0.00 \text{ cm}^2 \\ Aa3 &= 0.00 \text{ cm}^2 \\ Aa4 &= 0.00 \text{ cm}^2 \\ Aa,uz &= 0.00 \text{ cm}^2/\text{m} \quad (m=1) \end{aligned}$$

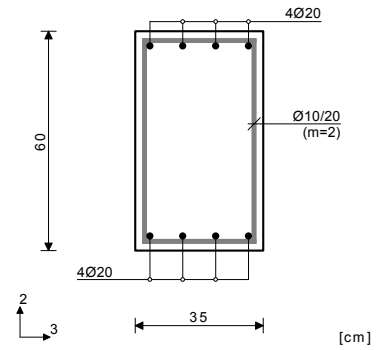
$$[Usvajeno Aa,uz = \emptyset 10/20(m=2) = 7.85 \text{ cm}^2/\text{m}]$$

$$\tau_y = 0.09 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$$

$$\tau_z = 0.04 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$$

Procentat armiranja: 1.20%

Presek 5-5 x = 6.05m



Merodavna kombinacija za savijanje:

$$\begin{aligned} 1.60xI + 1.80xII + 1.80xIII \\ N1u &= 28.91 \text{ kN} \\ M2u &= 0.00 \text{ kNm} \\ M3u &= -215.60 \text{ kNm} \end{aligned}$$

Merodavna kombinacija za torziju:

$$1.60xI + 1.80xII + 1.80xIII \\ M1u = -6.38 \text{ kNm}$$

Merodavna kombinacija za smicanje:

$$\begin{aligned} 1.60xI + 1.80xII + 1.80xIII \\ T2u &= 150.40 \text{ kN} \\ T3u &= 2.13 \text{ kN} \\ M1u &= -6.38 \text{ kNm} \end{aligned}$$

$$\epsilon_b/\epsilon_a = -1.931/10.000 \text{ ‰}$$

$$\begin{aligned} Aa1 &= 0.00 + 0.13' = 0.13 \text{ cm}^2 \\ Aa2 &= 8.80 + 0.13' = 8.94 \text{ cm}^2 \\ Aa3 &= 0.00 + 0.23' = 0.23 \text{ cm}^2 \\ Aa4 &= 0.00 + 0.23' = 0.23 \text{ cm}^2 \\ Aa,uz &= 3.17 \text{ cm}^2/\text{m} \quad (m=1) \end{aligned}$$

$$[Usvajeno Aa,uz = \emptyset 10/20(m=2) = 7.85 \text{ cm}^2/\text{m}]$$

$$\tau_y = 1.56 \text{ MPa} < 3\tau_r, \tau_r = 1.10 \text{ MPa}$$

$$\tau_z = 0.69 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$$

Procentat armiranja: 1.20%

Greda 9204-9912

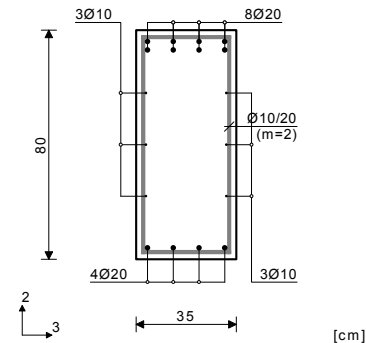
PBAB 87

MB 30

B500

Kompletna šema opterećenja

Presek 2-2 x = 0.00m



Merodavna kombinacija za savijanje:

$$\begin{aligned} 1.60xI + 1.80xII + 1.80xIII \\ N1u &= 37.83 \text{ kN} \\ M2u &= 0.00 \text{ kNm} \\ M3u &= -719.52 \text{ kNm} \end{aligned}$$

Merodavna kombinacija za torziju:

$$1.30xI + 0.65xII - 1.30xV \\ M1u = -9.38 \text{ kNm}$$

Merodavna kombinacija za smicanje:

$$\begin{aligned} 1.60xI + 1.80xII + 1.80xIII \\ T2u &= -243.68 \text{ kN} \\ T3u &= -7.52 \text{ kN} \\ M1u &= -8.51 \text{ kNm} \end{aligned}$$

$$\epsilon_b/\epsilon_a = -3.500/9.829 \text{ ‰}$$

$$\begin{aligned} Aa1 &= 0.00 + 0.15' = 0.15 \text{ cm}^2 \\ Aa2 &= 22.82 + 0.15' = 22.96 \text{ cm}^2 \\ Aa3 &= 0.00 + 0.34' = 0.34 \text{ cm}^2 \\ Aa4 &= 0.00 + 0.34' = 0.34 \text{ cm}^2 \\ Aa,uz &= 4.73 \text{ cm}^2/\text{m} \quad (m=1) \end{aligned}$$

$$[Usvajeno Aa,uz = \emptyset 10/20(m=2) = 7.85 \text{ cm}^2/\text{m}]$$

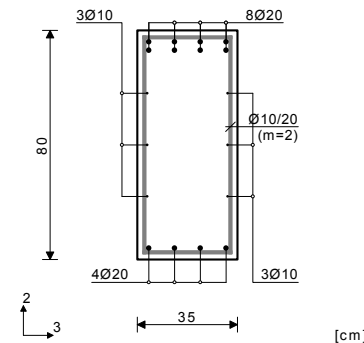
$$\tau_y = 1.55 \text{ MPa} < 3\tau_r, \tau_r = 1.10 \text{ MPa}$$

$$\tau_z = 0.75 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$$

Procentat armiranja: 1.51%

*) - dodatna podužna armatura za prijem torzije.

Presek 6-6 x = 0.40m



Merodavna kombinacija za savijanje:

$$\begin{aligned} 1.60xI + 1.80xII + 1.80xIII \\ N1u &= 37.50 \text{ kN} \\ M2u &= 0.00 \text{ kNm} \\ M3u &= -609.61 \text{ kNm} \end{aligned}$$

Merodavna kombinacija za torziju:

$$1.60xI + 1.80xII + 1.80xIII \\ M1u = -10.21 \text{ kNm}$$

Merodavna kombinacija za smicanje:

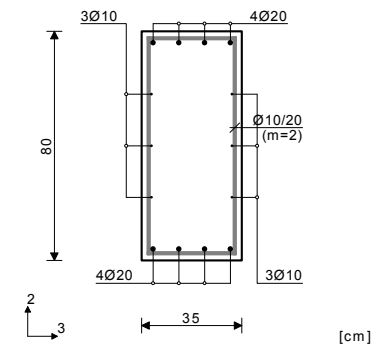
$$\begin{aligned} 1.60xI + 1.80xII + 1.80xIII \\ T2u &= -247.00 \text{ kN} \\ T3u &= -3.80 \text{ kN} \\ M1u &= -10.21 \text{ kNm} \end{aligned}$$

$$\epsilon_b/\epsilon_a = -2.951/10.000 \text{ ‰}$$

$$\begin{aligned} Aa1 &= 0.00 + 0.16' = 0.16 \text{ cm}^2 \\ Aa2 &= 19.03 + 0.16' = 19.19 \text{ cm}^2 \\ Aa3 &= 0.00 + 0.36' = 0.36 \text{ cm}^2 \\ Aa4 &= 0.00 + 0.36' = 0.36 \text{ cm}^2 \\ Aa,uz &= 5.55 \text{ cm}^2/\text{m} \quad (m=1) \end{aligned}$$

$$[Usvajeno Aa,uz = \emptyset 10/20(m=2) = 7.85 \text{ cm}^2/\text{m}]$$

Presek 7-7 x = 2.40m



Merodavna kombinacija za savijanje:

$$\begin{aligned} 1.60xI + 1.80xII \\ N1u &= 25.49 \text{ kN} \\ M2u &= 0.00 \text{ kNm} \\ M3u &= -144.38 \text{ kNm} \end{aligned}$$

Merodavna kombinacija za torziju:

$$1.60xI + 1.80xII + 1.80xIII \\ M1u = -13.75 \text{ kNm}$$

Merodavna kombinacija za smicanje:

$$\begin{aligned} 1.60xI + 1.80xII + 1.80xIII \\ T2u &= -135.33 \text{ kN} \\ T3u &= -1.96 \text{ kN} \\ M1u &= -13.75 \text{ kNm} \end{aligned}$$

$$\epsilon_b/\epsilon_a = -0.999/10.000 \text{ ‰}$$

$$\begin{aligned} Aa1 &= 0.00 + 0.21' = 0.21 \text{ cm}^2 \\ Aa2 &= 4.42 + 0.21' = 4.63 \text{ cm}^2 \\ Aa3 &= 0.00 + 0.49' = 0.49 \text{ cm}^2 \\ Aa4 &= 0.00 + 0.49' = 0.49 \text{ cm}^2 \\ Aa,uz &= 3.00 \text{ cm}^2/\text{m} \quad (m=1) \end{aligned}$$

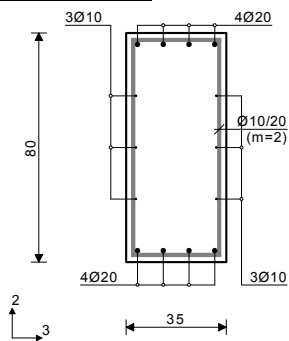
$$[Usvajeno Aa,uz = \emptyset 10/20(m=2) = 7.85 \text{ cm}^2/\text{m}]$$

$$\tau_y = 1.69 \text{ MPa} < 3\tau_r, \tau_r = 1.10 \text{ MPa}$$

$$\tau_z = 1.10 \text{ MPa} < 3\tau_r, \tau_r = 1.10 \text{ MPa}$$

Procentat armiranja: 1.07%

Presek 8-8 x = 4.50m



Merodavna kombinacija za savijanje:

1.60xI+1.80xII+1.80xIII

N1u = 12.42 kN

M2u = 0.00 kNm

M3u = 24.46 kNm

Merodavna kombinacija za torziju:

1.60xI+1.80xII

M1u = -7.91 kNm

Merodavna kombinacija za smicanje:

1.60xI+1.80xII

T2u = -14.13 kN

T3u = -0.45 kN

M1u = -7.91 kNm

$\epsilon_b/\epsilon_a = -0.350/10.000 \%$

Aa1 = 0.82 + 0.12' = 0.95 cm²

Aa2 = 0.00 + 0.12' = 0.12 cm²

Aa3 = 0.00 + 0.28' = 0.28 cm²

Aa4 = 0.00 + 0.28' = 0.28 cm²

Aa,uz = 0.00 cm²/m (m=1)

[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]

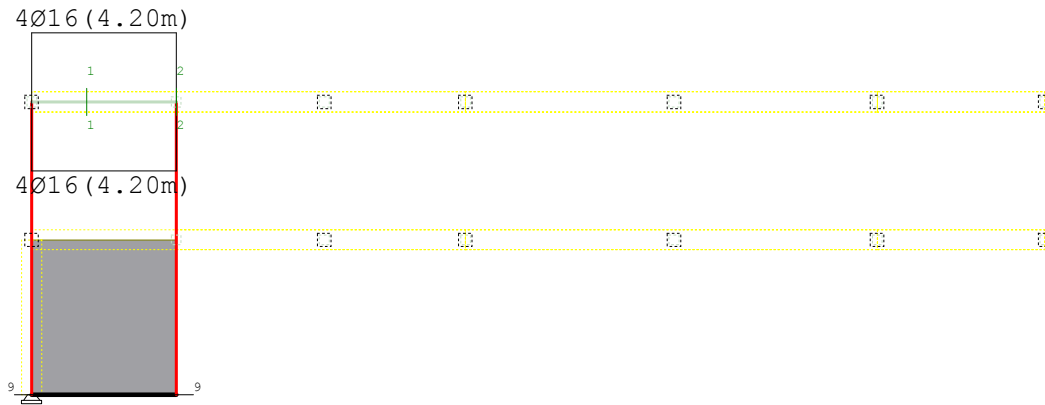
$\tau_y = 0.69\text{MPa} < \tau_r = 1.10\text{MPa}$

$\tau_z = 0.63\text{MPa} < \tau_r = 1.10\text{MPa}$

Procenat armiranja: 1.07%

GREDA POS G208

Usvojena armatura
PBAB 87, MB 30, B500

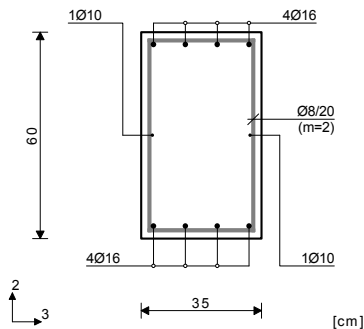


Ram: H_10
Armatura u gredama: Aa2/Aa1

Greda 2053-3093

PBAB 87
MB 30
B500
Kompletna šema opterećenja

Presek 1-1 x = 1.60m



Merodavna kombinacija za savijanje:
1.60xI+1.80xII+1.80xIII
N1u = 3.27 kN
M2u = 0.00 kNm
M3u = 59.50 kNm

Merodavna kombinacija za torziju:
1.60xI+1.80xII+1.80xIII
M1u = -8.88 kNm

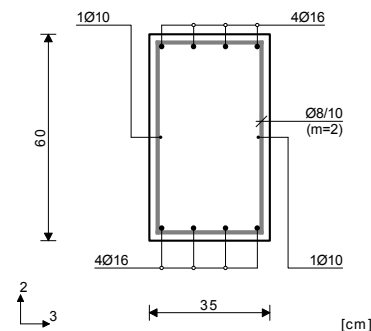
Merodavna kombinacija za smicanje:

1.60xI+1.80xII+1.80xIII
T2u = -6.09 kN
T3u = -6.08 kN
M1u = -8.88 kNm

$\epsilon_b/\epsilon_a = -0.855/10.000 \%$
Aa1 = 2.30 + 0.19' = 2.49 cm²
Aa2 = 0.00 + 0.19' = 0.19 cm²
Aa3 = 0.00 + 0.32' = 0.32 cm²
Aa4 = 0.00 + 0.32' = 0.32 cm²
Aa,uz = 0.00 cm²/m (m=1)
(Usvojeno Aa,uz = Ø8/20(m=2) = 5.03 cm²/m)

$\tau_y = 0.98 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.98 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$
Procenat armiranja: 0.84%
) - dodatna podužna armatura za prijem torzije.

Presek 2-2 x = 4.20m



Merodavna kombinacija za savijanje:

1.30xI+0.65xII+1.30xIV
N1u = 19.91 kN
M2u = 0.00 kNm
M3u = -120.38 kNm

Merodavna kombinacija za torziju:

1.60xI+1.80xII+1.80xIII
M1u = 25.63 kNm

Merodavna kombinacija za smicanje:

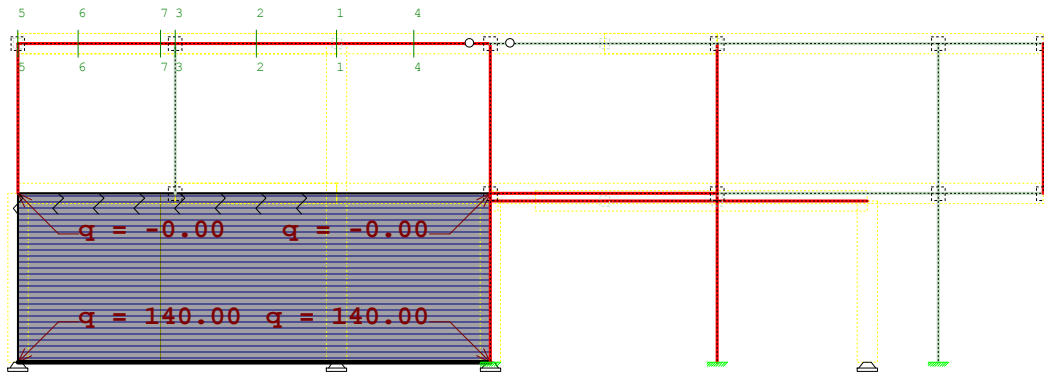
1.60xI+1.80xII+1.80xIII
T2u = 91.18 kN
T3u = -3.41 kN
M1u = 25.63 kNm

$\epsilon_b/\epsilon_a = -1.286/10.000 \%$
Aa1 = 0.00 + 0.53' = 0.53 cm²
Aa2 = 4.86 + 0.53' = 5.39 cm²
Aa3 = 0.00 + 0.92' = 0.92 cm²
Aa4 = 0.00 + 0.92' = 0.92 cm²
Aa,uz = 7.62 cm²/m (m=1)
(Usvojeno Aa,uz = Ø8/10(m=2) = 10.05 cm²/m)

$\tau_y = 3.26 \text{ MPa} < 3\tau_r, \tau_r = 1.10 \text{ MPa}$
 $\tau_z = 2.74 \text{ MPa} < 3\tau_r, \tau_r = 1.10 \text{ MPa}$
Procenat armiranja: 0.84%

GREDA POS G209

Usvojena armatura
PBAB 87, MB 30, B500

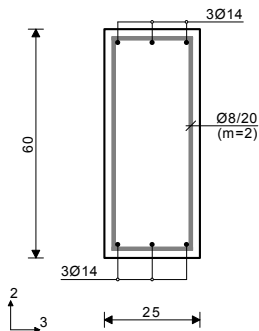


Ram: H_2
Armatura u gredama: Aa2/Aa1

Greda 2918-1703

PBAB 87
MB 30
B500
Kompletna šema opterećenja

Presek 1-1 x = 0.00m



Merodavna kombinacija za savijanje:

1.60xI+1.80xII+1.80xIII
N1u = 19.94 kN
M2u = 0.00 kNm
M3u = -79.93 kNm

Merodavna kombinacija za torziju:

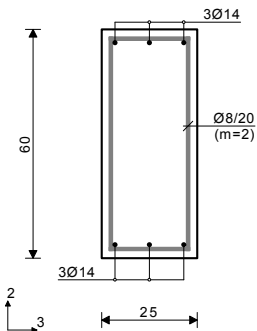
1.60xI+1.80xII+1.80xIII
M1u = -6.17 kNm

Merodavna kombinacija za smicanje:

1.60xI+1.80xII+1.80xIII
T2u = -81.19 kN
T3u = 9.33 kN
M1u = -6.17 kNm
 $\epsilon_b/\epsilon_a = -1.212/10.000 \text{ ‰}$
Aa1 = 0.00 + 0.13' = 0.13 cm²
Aa2 = 3.29 + 0.13' = 3.42 cm²
Aa3 = 0.00 + 0.31' = 0.31 cm²
Aa4 = 0.00 + 0.31' = 0.31 cm²
Aa,uz = 3.07 cm²/m (m=1)
[Usvojeno Aa,uz = Ø8/20(m=2) = 5.03 cm²/m]

$\tau_y = 1.95 \text{ MPa} < 3\tau_r, \tau_r = 1.10 \text{ MPa}$
 $\tau_z = 1.36 \text{ MPa} < 3\tau_r, \tau_r = 1.10 \text{ MPa}$
Procentat armiranja: 0.62%
*) - dodatna podužna armatura za prijem torzije.

Presek 2-2 x = 2.14m



Merodavna kombinacija za savijanje:

1.60xI+1.80xII+1.80xIII
N1u = 23.13 kN
M2u = 0.00 kNm
M3u = 45.44 kNm

Merodavna kombinacija za torziju:

1.30xI+0.65xII-1.30xIV
M1u = -2.56 kNm

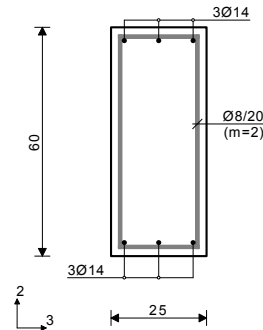
Merodavna kombinacija za smicanje:

1.30xI+0.65xII-1.30xIV
T2u = 5.80 kN
T3u = -1.40 kN
M1u = -2.56 kNm

$\epsilon_b/\epsilon_a = -0.831/10.000 \text{ ‰}$
Aa1 = 1.98 + 0.05' = 2.03 cm²
Aa2 = 0.00 + 0.05' = 0.05 cm²
Aa3 = 0.00 + 0.13' = 0.13 cm²
Aa4 = 0.00 + 0.13' = 0.13 cm²
Aa,uz = 0.00 cm²/m (m=1)
[Usvojeno Aa,uz = Ø8/20(m=2) = 5.03 cm²/m]

$\tau_y = 0.58 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.54 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$
Procentat armiranja: 0.62%

Presek 3-3 x = 4.30m



Merodavna kombinacija za savijanje:

1.60xI+1.80xII+1.80xIII
N1u = 13.59 kN
M2u = 0.00 kNm
M3u = -72.81 kNm

Merodavna kombinacija za torziju:

1.30xI+0.65xII+1.30xV
M1u = -6.83 kNm

Merodavna kombinacija za smicanje:

1.60xI+1.80xII+1.80xIII
T2u = -81.37 kN
T3u = 0.53 kN
M1u = -6.78 kNm

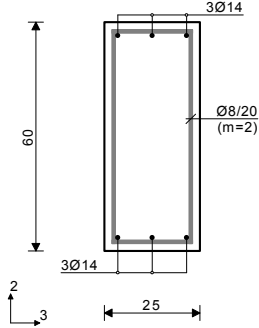
$\epsilon_b/\epsilon_a = -1.155/10.000 \text{ ‰}$
Aa1 = 0.00 + 0.14' = 0.14 cm²
Aa2 = 2.95 + 0.14' = 3.09 cm²
Aa3 = 0.00 + 0.34' = 0.34 cm²
Aa4 = 0.00 + 0.34' = 0.34 cm²
Aa,uz = 3.37 cm²/m (m=1)
[Usvojeno Aa,uz = Ø8/20(m=2) = 5.03 cm²/m]

$\tau_y = 1.88 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$
 $\tau_z = 1.42 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$
 Procenat armiranja: 0.62%

Greda 2918-3993

PBAB 87
 MB 30
 B500
 Kompletna šema opterećenja

Presek 1-1 $x = 0.00 \text{ m}$



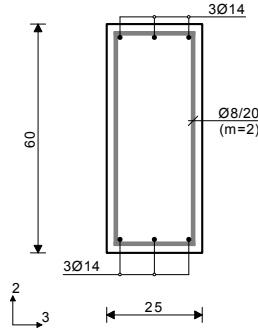
Merodavna kombinacija za savijanje:
 $1.30xI + 0.65xII + 1.30xV$
 $N1u = 58.92 \text{ kN}$
 $M2u = 0.00 \text{ kNm}$
 $M3u = -53.50 \text{ kNm}$

Merodavna kombinacija za torziju:
 $1.60xI + 1.80xII + 1.80xIII$
 $M1u = -4.65 \text{ kNm}$

Merodavna kombinacija za smicanje:
 $1.60xI + 1.80xII + 1.80xIII$
 $T2u = -37.94 \text{ kN}$
 $T3u = -17.59 \text{ kN}$
 $M1u = -4.65 \text{ kNm}$

$eb/ea = -0.825/10.000 \%$
 $Aa1 = 0.00 + 0.10' = 0.10 \text{ cm}^2$
 $Aa2 = 2.68 + 0.10' = 2.77 \text{ cm}^2$
 $Aa3 = 0.00 + 0.23' = 0.23 \text{ cm}^2$
 $Aa4 = 0.00 + 0.23' = 0.23 \text{ cm}^2$
 $Aa,uz = 0.54 \text{ cm}^2/\text{m}$ (m=1)
 $[Usvjeto Aa,uz = Ø8/20(m=2) = 5.03 \text{ cm}^2/\text{m}]$
 $\tau_y = 1.28 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$
 $\tau_z = 1.11 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$
 Procenat armiranja: 0.62%
 *) - dodatna podužna armatura za prijem torzije.

Presek 4-4 $x = 2.05 \text{ m}$



Merodavna kombinacija za savijanje:
 $1.30xI + 0.65xII + 1.30xIV$
 $N1u = 19.30 \text{ kN}$
 $M2u = 0.00 \text{ kNm}$
 $M3u = 7.83 \text{ kNm}$

Merodavna kombinacija za torziju:
 $1.60xI + 1.80xII + 1.80xIII$
 $M1u = -4.63 \text{ kNm}$

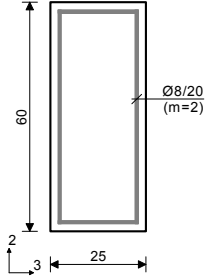
Merodavna kombinacija za smicanje:
 $1.60xI + 1.80xII + 1.80xIII$
 $T2u = -13.93 \text{ kN}$
 $T3u = -0.88 \text{ kN}$
 $M1u = -4.63 \text{ kNm}$

$eb/ea = -0.247/10.000 \%$
 $Aa1 = 0.50 + 0.10' = 0.60 \text{ cm}^2$
 $Aa2 = 0.11 + 0.10' = 0.21 \text{ cm}^2$
 $Aa3 = 0.00 + 0.23' = 0.23 \text{ cm}^2$
 $Aa4 = 0.00 + 0.23' = 0.23 \text{ cm}^2$
 $Aa,uz = 0.00 \text{ cm}^2/\text{m}$ (m=1)
 $[Usvjeto Aa,uz = Ø8/20(m=2) = 5.03 \text{ cm}^2/\text{m}]$
 $\tau_y = 1.08 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.97 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$
 Procenat armiranja: 0.62%

Greda 808-1703

PBAB 87
 MB 30
 B500
 Kompletna šema opterećenja

Presek 5-5 $x = 0.00 \text{ m}$



Merodavna kombinacija za savijanje:
 $1.30xI + 0.65xII + 1.30xIV$
 $N1u = 6.44 \text{ kN}$
 $M2u = 0.00 \text{ kNm}$
 $M3u = 20.48 \text{ kNm}$

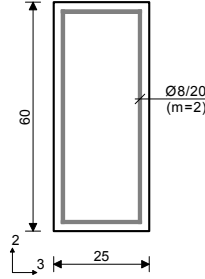
Merodavna kombinacija za torziju:
 $1.60xI + 1.80xII + 1.80xIII$
 $M1u = 11.75 \text{ kNm}$

Merodavna kombinacija za smicanje:
 $1.60xI + 1.80xII + 1.80xIII$
 $T2u = -36.91 \text{ kN}$
 $T3u = 1.09 \text{ kN}$
 $M1u = 11.75 \text{ kNm}$

$eb/ea = -0.591/10.000 \%$
 $Aa1 = 0.83 + 0.24' = 1.08 \text{ cm}^2$
 $Aa2 = 0.48 + 0.24' = 0.72 \text{ cm}^2$
 $Aa3 = 0.00 + 0.59' = 0.59 \text{ cm}^2$
 $Aa4 = 0.00 + 0.59' = 0.59 \text{ cm}^2$
 $Aa,uz = 3.62 \text{ cm}^2/\text{m}$ (m=1)
 $[Usvjeto Aa,uz = Ø8/20(m=2) = 5.03 \text{ cm}^2/\text{m}]$

$\tau_y = 2.75 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$
 $\tau_z = 2.46 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$
 *) - dodatna podužna armatura za prijem torzije.

Presek 6-6 $x = 1.60 \text{ m}$



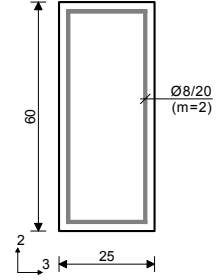
Merodavna kombinacija za savijanje:
 $1.60xI + 1.80xII + 1.80xIII$
 $N1u = 9.61 \text{ kN}$
 $M2u = 0.00 \text{ kNm}$
 $M3u = 42.67 \text{ kNm}$

Merodavna kombinacija za torziju:
 $1.60xI + 1.80xII + 1.80xIII$
 $M1u = 7.19 \text{ kNm}$

Merodavna kombinacija za smicanje:
 $1.60xI + 1.80xII + 1.80xIII$
 $T2u = -5.39 \text{ kN}$
 $T3u = 0.94 \text{ kN}$
 $M1u = 7.19 \text{ kNm}$

$eb/ea = -0.836/10.000 \%$
 $Aa1 = 1.73 + 0.15' = 1.88 \text{ cm}^2$
 $Aa2 = 0.00 + 0.15' = 0.15 \text{ cm}^2$
 $Aa3 = 0.00 + 0.36' = 0.36 \text{ cm}^2$
 $Aa4 = 0.00 + 0.36' = 0.36 \text{ cm}^2$
 $Aa,uz = 0.77 \text{ cm}^2/\text{m}$ (m=1)
 $[Usvjeto Aa,uz = Ø8/20(m=2) = 5.03 \text{ cm}^2/\text{m}]$
 $\tau_y = 1.54 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$
 $\tau_z = 1.51 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$

Presek 7-7 $x = 3.80 \text{ m}$



Merodavna kombinacija za savijanje:
 $1.60xI + 1.80xII + 1.80xIII$
 $N1u = 12.64 \text{ kN}$
 $M2u = 0.00 \text{ kNm}$
 $M3u = -33.47 \text{ kNm}$

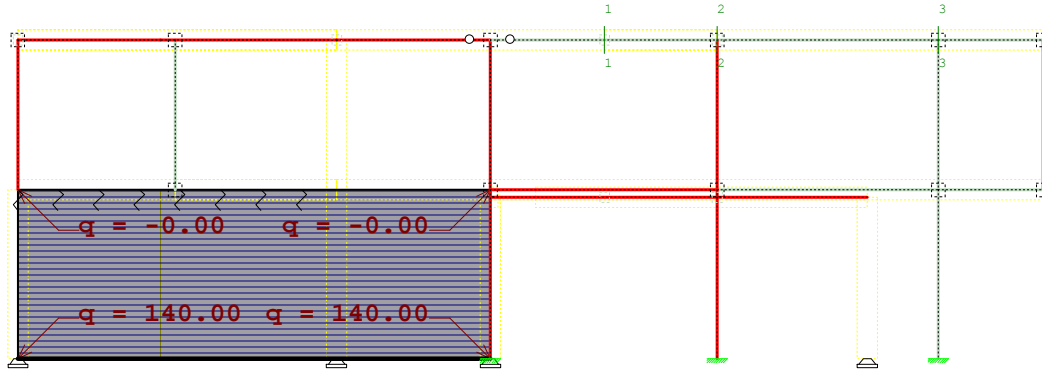
Merodavna kombinacija za torziju:
 $1.30xI + 0.65xII + 1.30xIV$
 $M1u = -6.61 \text{ kNm}$

Merodavna kombinacija za smicanje:
 $1.60xI + 1.80xII + 1.80xIII$
 $T2u = 59.79 \text{ kN}$
 $T3u = 0.13 \text{ kN}$
 $M1u = -5.97 \text{ kNm}$

$eb/ea = -0.712/10.000 \%$
 $Aa1 = 0.00 + 0.14' = 0.14 \text{ cm}^2$
 $Aa2 = 1.41 + 0.14' = 1.54 \text{ cm}^2$
 $Aa3 = 0.00 + 0.33' = 0.33 \text{ cm}^2$
 $Aa4 = 0.00 + 0.33' = 0.33 \text{ cm}^2$
 $Aa,uz = 2.04 \text{ cm}^2/\text{m}$ (m=1)
 $[Usvjeto Aa,uz = Ø8/20(m=2) = 5.03 \text{ cm}^2/\text{m}]$
 $\tau_y = 1.74 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$
 $\tau_z = 1.39 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$

GREDA POS G210

Usvojena armatura
PBAB 87, MB 30, B500

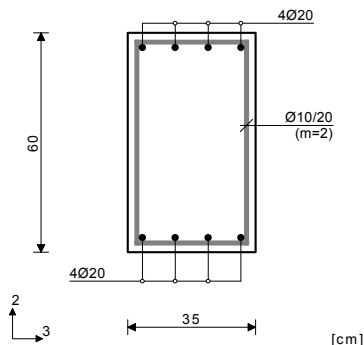


Ram: H_2
Armatura u gredama: Aa2/Aa1

Greda 3993-5944

PBAB 87
MB 30
B500
Kompletna šema opterećenja

Presek 1-1 x = 3.05m



Merodavna kombinacija za savijanje:
1.60xI+1.80xII+1.80xIII
N1u = -27.47 kN
M2u = 0.00 kNm
M3u = 113.73 kNm

Merodavna kombinacija za torziju:
1.60xI+1.80xII+1.80xIII
M1u = -22.34 kNm

Merodavna kombinacija za smicanje:

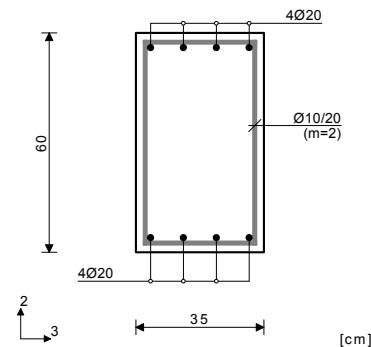
1.60xI+1.80xII+1.80xIII
T2u = 7.16 kN
T3u = -1.65 kN
M1u = -22.34 kNm

$\epsilon_b/\epsilon_a = -1.320/10.000 \%$
Aa1 = 4.10 + 0.47' = 4.57 cm²
Aa2 = 0.00 + 0.47' = 0.47 cm²
Aa3 = 0.00 + 0.80' = 0.80 cm²
Aa4 = 0.00 + 0.80' = 0.80 cm²
Aa,uz = 3.04 cm²/m (m=1)
[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]

$\tau_y = 2.42 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$
 $\tau_z = 2.38 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$
Procentat armiranja: 1.20%

*) - dodatna podužna armatura za prijem torzije.

Presek 2-2 x = 6.05m



Merodavna kombinacija za savijanje:

1.60xI+1.80xII+1.80xIII
N1u = -63.62 kN
M2u = 0.00 kNm
M3u = -250.16 kNm

Merodavna kombinacija za torziju:

1.30xI+0.65xII-1.30xV
M1u = 12.89 kNm

Merodavna kombinacija za smicanje:

1.30xI+0.65xII-1.30xV
T2u = 123.64 kN
T3u = -12.64 kN
M1u = 12.89 kNm

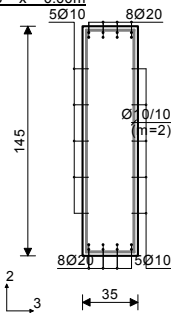
$\epsilon_b/\epsilon_a = -2.356/10.000 \%$
Aa1 = 0.00 + 0.27' = 0.27 cm²
Aa2 = 9.34 + 0.27' = 9.61 cm²
Aa3 = 0.00 + 0.46' = 0.46 cm²
Aa4 = 0.00 + 0.46' = 0.46 cm²
Aa,uz = 5.05 cm²/m (m=1)
[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]

$\tau_y = 2.10 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$
 $\tau_z = 1.44 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$
Procentat armiranja: 1.20%

Greda 7674-8456

PBAB 87
MB 30
B500
Kompletna šema opterećenja

Presek 3-3 x = 0.00m



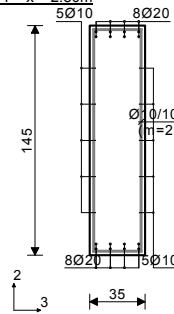
Merodavna kombinacija za savijanje:
1.60xI+1.80xII+1.80xIII
N1u = 74.19 kN
M2u = 0.00 kNm
M3u = -743.14 kNm

Merodavna kombinacija za torziju:
1.60xI+1.80xII+1.80xIII
M1u = -69.84 kNm

Merodavna kombinacija za smicanje:
1.60xI+1.80xII+1.80xIII
T2u = -345.01 kN
T3u = 4.70 kN
M1u = -69.84 kNm

$\epsilon_b/\epsilon_a = -1.316/10.000 \%$
Aa1 = 0.00 + 0.60' = 0.60 cm²
Aa2 = 12.68 + 0.60' = 13.28 cm²
Aa3 = 0.00 + 2.49' = 2.49 cm²
Aa4 = 0.00 + 2.49' = 2.49 cm²
Aa,uz = 10.31 cm²/m (m=1)
[Usvajeno Aa,uz = Ø10/10(m=2) = 15.71 cm²/m]
 $\tau_y = 3.91 \text{ MPa} < 5\tau_r$, $\tau_r = 1.10 \text{ MPa}$
 $\tau_z = 3.08 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$
Procenat armiranja: 1.15%
*) - dodatna podužna armatura za prijem torzije.

Presek 4-4 x = 2.80m



Merodavna kombinacija za savijanje:

1.30xI+0.65xII+1.30xIV
N1u = 58.46 kN
M2u = 0.00 kNm
M3u = 160.82 kNm

Merodavna kombinacija za torziju:

1.60xI+1.80xII+1.80xIII
M1u = -69.83 kNm

Merodavna kombinacija za smicanje:

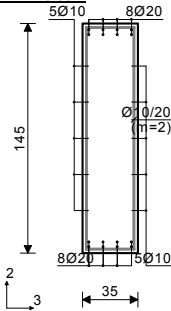
1.60xI+1.80xII+1.80xIII
T2u = -288.15 kN
T3u = 4.70 kN
M1u = -69.83 kNm

$\epsilon_b/\epsilon_a = -0.492/10.000 \%$
Aa1 = 3.15 + 0.60' = 3.75 cm²
Aa2 = 0.00 + 0.60' = 0.60 cm²
Aa3 = 0.00 + 2.49' = 2.49 cm²
Aa4 = 0.00 + 2.49' = 2.49 cm²
Aa,uz = 9.36 cm²/m (m=1)
[Usvajeno Aa,uz = Ø10/10(m=2) = 15.71 cm²/m]
 $\tau_y = 3.77 \text{ MPa} < 5\tau_r$, $\tau_r = 1.10 \text{ MPa}$
 $\tau_z = 3.08 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$
Procenat armiranja: 1.15%

Greda 5944-7674

PBAB 87
MB 30
B500
Kompletna šema opterećenja

Presek 2-2 x = 0.00m



Merodavna kombinacija za savijanje:
1.30xI+0.65xII+1.30xIV
N1u = 126.55 kN
M2u = 0.00 kNm
M3u = 319.53 kNm

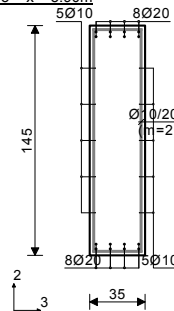
Merodavna kombinacija za torziju:
1.30xI+0.65xII+1.30xV
M1u = -7.82 kNm

Merodavna kombinacija za smicanje:

1.30xI+0.65xII+1.30xIV
T2u = 88.15 kN
T3u = 6.23 kN
M1u = -4.87 kNm

$\epsilon_b/\epsilon_a = -0.749/10.000 \%$
Aa1 = 6.36 + 0.07' = 6.42 cm²
Aa2 = 2.41 + 0.07' = 2.48 cm²
Aa3 = 0.00 + 0.28' = 0.28 cm²
Aa4 = 0.00 + 0.28' = 0.28 cm²
Aa,uz = 0.00 cm²/m (m=1)
[Usvajeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]
 $\tau_y = 0.43 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.23 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$
Procenat armiranja: 1.15%
*) - dodatna podužna armatura za prijem torzije.

Presek 3-3 x = 5.90m



Merodavna kombinacija za savijanje:

1.30xI+0.65xII+1.30xIV
N1u = 51.28 kN
M2u = 0.00 kNm
M3u = -645.95 kNm

Merodavna kombinacija za torziju:

1.30xI+0.65xII+1.30xV
M1u = -7.68 kNm

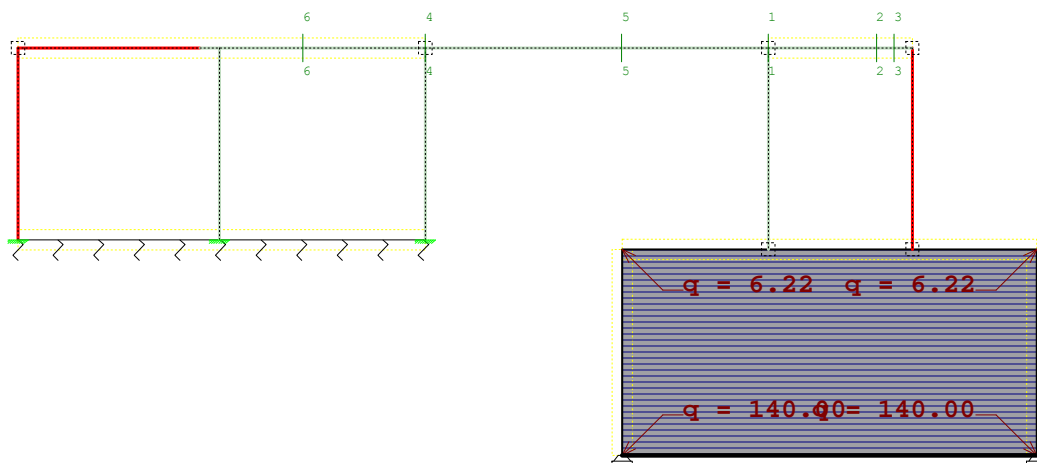
Merodavna kombinacija za smicanje:

1.30xI+0.65xII+1.30xIV
T2u = 228.47 kN
T3u = -5.74 kN
M1u = -4.74 kNm

$\epsilon_b/\epsilon_a = -1.214/10.000 \%$
Aa1 = 0.00 + 0.07' = 0.07 cm²
Aa2 = 10.85 + 0.07' = 10.91 cm²
Aa3 = 0.00 + 0.27' = 0.27 cm²
Aa4 = 0.00 + 0.27' = 0.27 cm²
Aa,uz = 0.00 cm²/m (m=1)
[Usvajeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]
 $\tau_y = 0.76 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.22 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$
Procenat armiranja: 1.15%

GREDA POS G211(G212)

Usvojena armatura
PBAB 87, MB 30, B500

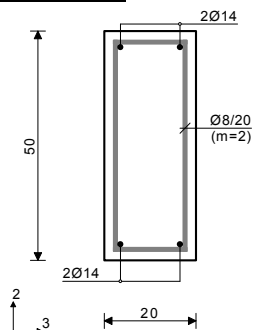


Ram: H_1
Armatura u gredama: Aa2/Aa1

Greda 3933-4877

PBAB 87
MB 30
B500
Kompletna šema opterećenja

Presek 1-1 x = 0.00m



Merodavna kombinacija za savijanje:
1.60xI+1.80xII+1.80xIII
N1u = -4.48 kN
M2u = 0.00 kNm
M3u = -50.54 kNm

Merodavna kombinacija za torziju:
1.30xI+0.65xII+1.30xV
M1u = 1.01 kNm

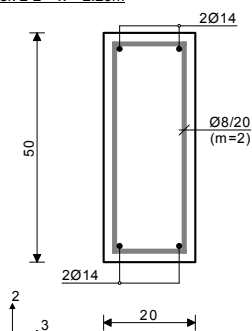
Merodavna kombinacija za smicanje:
1.60xI
T2u = -33.99 kN
T3u = 0.55 kN
M1u = 0.78 kNm

$\epsilon_b/\epsilon_a = -1.385/10.000 \%$

Aa1 = 0.00 + 0.03' = 0.03 cm²
Aa2 = 2.30 + 0.03' = 2.33 cm²
Aa3 = 0.00 + 0.06' = 0.06 cm²
Aa4 = 0.00 + 0.06' = 0.06 cm²
Aa,uz = 0.00 cm²/m (m=1)
[Usvojeno Aa,uz = Ø8/20(m=2) = 5.03 cm²/m]

$\tau_y = 0.72 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.31 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$
Procenat armiranja: 0.62%
) - dodatna podužna armatura za prijem torzije.

Presek 2-2 x = 2.25m



Merodavna kombinacija za savijanje:
1.30xI+1.30xIV
N1u = -2.34 kN
M2u = 0.00 kNm
M3u = -6.51 kNm

Merodavna kombinacija za torziju:
1.30xI+0.65xII+1.30xV
M1u = 1.03 kNm

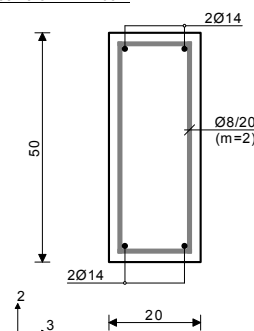
Merodavna kombinacija za smicanje:
1.30xI+0.65xII+1.30xV
T2u = 4.71 kN
T3u = -0.42 kN
M1u = 1.03 kNm

$\epsilon_b/\epsilon_a = -0.458/10.000 \%$

Aa1 = 0.10 + 0.03' = 0.13 cm²
Aa2 = 0.26 + 0.03' = 0.29 cm²
Aa3 = 0.00 + 0.06' = 0.06 cm²
Aa4 = 0.00 + 0.06' = 0.06 cm²
Aa,uz = 0.00 cm²/m (m=1)
[Usvojeno Aa,uz = Ø8/20(m=2) = 5.03 cm²/m]

$\tau_y = 0.46 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.41 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$
Procenat armiranja: 0.62%

Presek 3-3 x = 2.63m



Merodavna kombinacija za savijanje:
1.30xI+0.65xII+1.30xIV
N1u = -4.09 kN
M2u = 0.00 kNm
M3u = -9.74 kNm

Merodavna kombinacija za torziju:
1.30xI+0.65xII+1.30xV
M1u = 1.03 kNm

Merodavna kombinacija za smicanje:
1.30xI+0.65xII+1.30xV
T2u = 8.94 kN
T3u = -0.46 kN
M1u = 1.03 kNm

$\epsilon_b/\epsilon_a = -0.561/10.000 \%$

$$\begin{aligned}
 Aa1 &= 0.09 + 0.03' = 0.12 \text{ cm}^2 \\
 Aa2 &= 0.39 + 0.03' = 0.42 \text{ cm}^2 \\
 Aa3 &= 0.00 + 0.06' = 0.06 \text{ cm}^2 \\
 Aa4 &= 0.00 + 0.06' = 0.06 \text{ cm}^2 \\
 Aa,uz &= 0.00 \text{ cm}^2/\text{m} \quad (m=1) \\
 &[\text{Usvajeno } Aa,uz = \emptyset 8/20(m=2) = 5.03 \text{ cm}^2/\text{m}]
 \end{aligned}$$

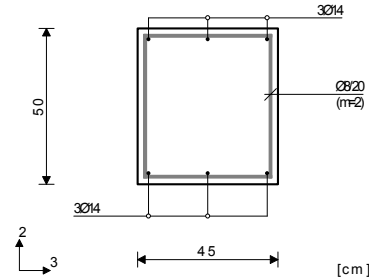
$$\begin{aligned}
 t_y &= 0.51 \text{ MPa} < t_r, t_r = 1.10 \text{ MPa} \\
 t_z &= 0.41 \text{ MPa} < t_r, t_r = 1.10 \text{ MPa} \\
 \text{Procent armiranja: } &0.62\%
 \end{aligned}$$

Greda 2085-3933

PBAB 87
MB 30
B500

Kompletna šema opterećenja

Presek 4-4 x = 0.00m



Merodavna kombinacija za savijanje:
1.60xI+1.80xII+1.80xIII
N1u = -12.51 kN
M2u = 0.00 kNm
M3u = -94.99 kNm

Merodavna kombinacija za torziju:
1.30xI+0.65xII+1.30xV
M1u = -2.79 kNm

Merodavna kombinacija za smicanje:

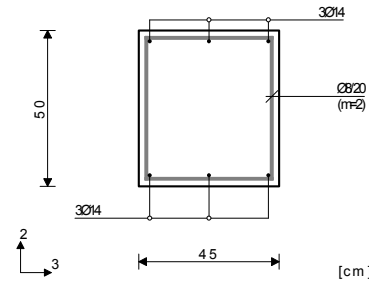
1.60xI
T2u = -77.64 kN
T3u = -0.17 kN
M1u = -2.40 kNm

$$eb/ea = -1.241/10.000 \%$$

$$\begin{aligned}
 Aa1 &= 0.00 + 0.07' = 0.07 \text{ cm}^2 \\
 Aa2 &= 4.26 + 0.07' = 4.33 \text{ cm}^2 \\
 Aa3 &= 0.00 + 0.08' = 0.08 \text{ cm}^2 \\
 Aa4 &= 0.00 + 0.08' = 0.08 \text{ cm}^2 \\
 Aa,uz &= 0.00 \text{ cm}^2/\text{m} \quad (m=1) \\
 &[\text{Usvajeno } Aa,uz = \emptyset 8/20(m=2) = 5.03 \text{ cm}^2/\text{m}]
 \end{aligned}$$

$$\begin{aligned}
 t_y &= 0.61 \text{ MPa} < t_r, t_r = 1.10 \text{ MPa} \\
 t_z &= 0.19 \text{ MPa} < t_r, t_r = 1.10 \text{ MPa} \\
 \text{Procent armiranja: } &0.41\% \\
 &*) - \text{dodatna podubna armatura za prijem torzije.}
 \end{aligned}$$

Presek 5-5 x = 4.09m



Merodavna kombinacija za savijanje:

1.60xI+1.80xII
N1u = -12.65 kN
M2u = 0.00 kNm
M3u = 59.76 kNm

Merodavna kombinacija za torziju:

1.30xI+0.65xII+1.30xV
M1u = -2.79 kNm

Merodavna kombinacija za smicanje:

1.30xI+0.65xII+1.30xV
T2u = 7.22 kN
T3u = -0.48 kN
M1u = -2.79 kNm

$$eb/ea = -0.945/10.000 \%$$

$$\begin{aligned}
 Aa1 &= 2.60 + 0.07' = 2.67 \text{ cm}^2 \\
 Aa2 &= 0.00 + 0.07' = 0.07 \text{ cm}^2 \\
 Aa3 &= 0.00 + 0.08' = 0.08 \text{ cm}^2 \\
 Aa4 &= 0.00 + 0.08' = 0.08 \text{ cm}^2 \\
 Aa,uz &= 0.00 \text{ cm}^2/\text{m} \quad (m=1) \\
 &[\text{Usvajeno } Aa,uz = \emptyset 8/20(m=2) = 5.03 \text{ cm}^2/\text{m}]
 \end{aligned}$$

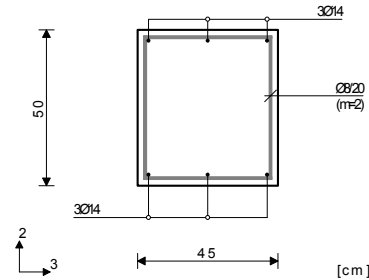
$$\begin{aligned}
 t_y &= 0.25 \text{ MPa} < t_r, t_r = 1.10 \text{ MPa} \\
 t_z &= 0.22 \text{ MPa} < t_r, t_r = 1.10 \text{ MPa} \\
 \text{Procent armiranja: } &0.41\%
 \end{aligned}$$

Greda 899-2085

PBAB 87
MB 30
B500

Kompletna šema opterećenja

Presek 6-6 x = 2.14m



Merodavna kombinacija za savijanje:
1.60xI+1.80xII+1.80xIII
N1u = -10.64 kN
M2u = 0.00 kNm
M3u = 27.48 kNm

Merodavna kombinacija za torziju:
1.30xI+0.65xII+1.30xV
M1u = 3.68 kNm

Merodavna kombinacija za smicanje:

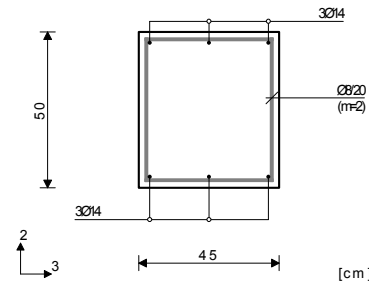
1.30xI+0.65xII+1.30xV
T2u = -4.74 kN
T3u = 0.08 kN
M1u = 3.68 kNm

$$eb/ea = -0.619/10.000 \%$$

$$\begin{aligned}
 Aa1 &= 1.13 + 0.09' = 1.22 \text{ cm}^2 \\
 Aa2 &= 0.00 + 0.09' = 0.09 \text{ cm}^2 \\
 Aa3 &= 0.00 + 0.10' = 0.10 \text{ cm}^2 \\
 Aa4 &= 0.00 + 0.10' = 0.10 \text{ cm}^2 \\
 Aa,uz &= 0.00 \text{ cm}^2/\text{m} \quad (m=1) \\
 &[\text{Usvajeno } Aa,uz = \emptyset 8/20(m=2) = 5.03 \text{ cm}^2/\text{m}]
 \end{aligned}$$

$$\begin{aligned}
 t_y &= 0.31 \text{ MPa} < t_r, t_r = 1.10 \text{ MPa} \\
 t_z &= 0.28 \text{ MPa} < t_r, t_r = 1.10 \text{ MPa} \\
 \text{Procent armiranja: } &0.41\% \\
 &*) - \text{dodatna podubna armatura za prijem torzije.}
 \end{aligned}$$

Presek 4-4 x = 4.70m



Merodavna kombinacija za savijanje:

1.60xI+1.80xII+1.80xIII
N1u = -12.29 kN
M2u = 0.00 kNm
M3u = -94.15 kNm

Merodavna kombinacija za torziju:

1.30xI+0.65xII+1.30xV
M1u = 3.70 kNm

Merodavna kombinacija za smicanje:

1.30xI+0.65xII+1.30xV
T2u = 72.37 kN
T3u = 1.49 kN
M1u = 3.70 kNm

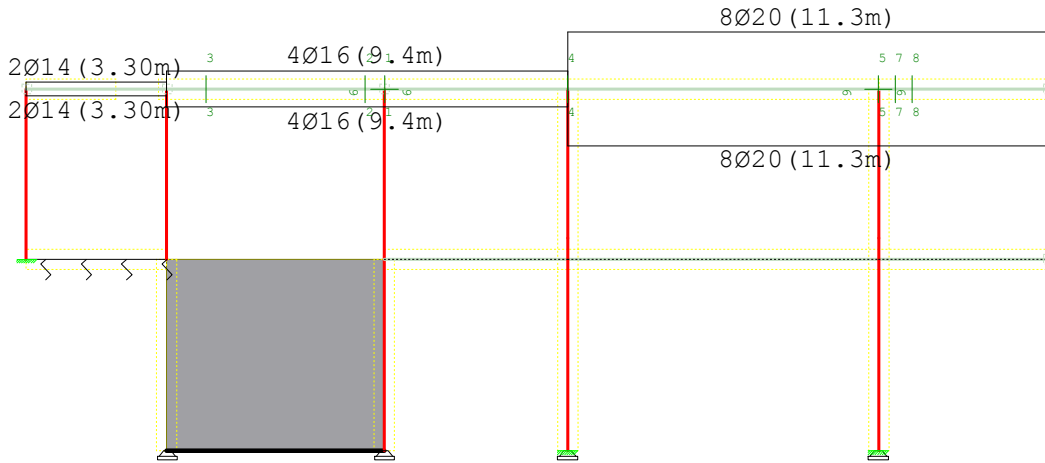
$$eb/ea = -1.234/10.000 \%$$

$$\begin{aligned}
 Aa1 &= 0.00 + 0.09' = 0.09 \text{ cm}^2 \\
 Aa2 &= 4.22 + 0.09' = 4.31 \text{ cm}^2 \\
 Aa3 &= 0.00 + 0.10' = 0.10 \text{ cm}^2 \\
 Aa4 &= 0.00 + 0.10' = 0.10 \text{ cm}^2 \\
 Aa,uz &= 0.00 \text{ cm}^2/\text{m} \quad (m=1) \\
 &[\text{Usvajeno } Aa,uz = \emptyset 8/20(m=2) = 5.03 \text{ cm}^2/\text{m}]
 \end{aligned}$$

$$\begin{aligned}
 t_y &= 0.68 \text{ MPa} < t_r, t_r = 1.10 \text{ MPa} \\
 t_z &= 0.29 \text{ MPa} < t_r, t_r = 1.10 \text{ MPa} \\
 \text{Procent armiranja: } &0.41\%
 \end{aligned}$$

GREDA POS G213 (G214)

Usvojena armatura
PBAB 87, MB 30, B500

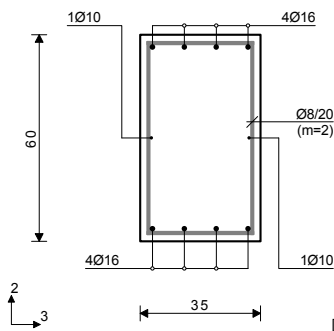


Ram: V_10
Armatura u gredama: Aa2/Aa1

Greda 2053-808

PBAB 87
MB 30
B500
Kompletna šema opterećenja

Presek 1-1 x = 0.00m



Merodavna kombinacija za savijanje:
1.30xl+0.65xII+1.30xV
N1u = 7.17 kN
M2u = 0.00 kNm
M3u = -68.00 kNm

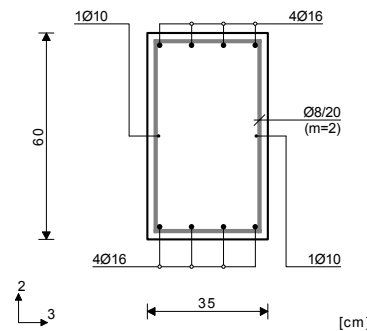
Merodavna kombinacija za torziju:
1.30xl+0.65xII+1.30xV
M1u = 1.03 kNm

Merodavna kombinacija za smicanje:
1.30xl+0.65xII+1.30xV
T2u = -43.92 kN
T3u = 4.70 kN
M1u = 1.03 kNm

$\epsilon_b/\epsilon_a = -0.917/10.000 \text{ ‰}$
Aa1 = 0.00 + 0.02' = 0.02 cm²
Aa2 = 2.67 + 0.02' = 2.69 cm²
Aa3 = 0.00 + 0.04' = 0.04 cm²
Aa4 = 0.00 + 0.04' = 0.04 cm²
Aa,uz = 0.00 cm²/m (m=1)
[Usvojeno Aa,uz = Ø8/20(m=2) = 5.03 cm²/m]

$\tau_y = 0.37 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.14 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$
Procent armiranja: 0.84%
) - dodatna podužna armatura za prijem torzije.

Presek 2-2 x = 0.45m



Merodavna kombinacija za savijanje:
1.30xl+0.65xII+1.30xV
N1u = 17.15 kN
M2u = 0.00 kNm
M3u = -47.35 kNm

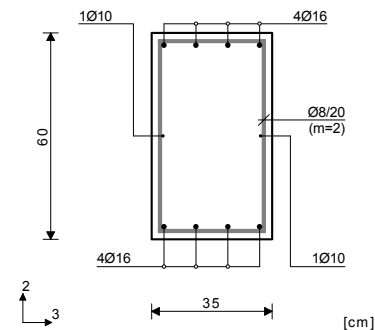
Merodavna kombinacija za torziju:
1.30xl+0.65xII+1.30xV
M1u = 1.03 kNm

Merodavna kombinacija za smicanje:
1.30xl+0.65xII+1.30xV
T2u = -39.74 kN
T3u = 3.40 kN
M1u = 1.03 kNm

$\epsilon_b/\epsilon_a = -0.718/10.000 \text{ ‰}$
Aa1 = 0.00 + 0.02' = 0.02 cm²
Aa2 = 1.98 + 0.02' = 2.00 cm²
Aa3 = 0.00 + 0.04' = 0.04 cm²
Aa4 = 0.00 + 0.04' = 0.04 cm²
Aa,uz = 0.00 cm²/m (m=1)
[Usvojeno Aa,uz = Ø8/20(m=2) = 5.03 cm²/m]

$\tau_y = 0.34 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.13 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$
Procent armiranja: 0.84%

Presek 3-3 x = 4.20m



Merodavna kombinacija za savijanje:
1.30xl+0.65xII+1.30xV
N1u = 20.59 kN
M2u = 0.00 kNm
M3u = 28.81 kNm

Merodavna kombinacija za torziju:
1.30xl+0.65xII+1.30xV
M1u = 1.01 kNm

Merodavna kombinacija za smicanje:
1.30xl-1.30xIV
T2u = 13.55 kN
T3u = 2.10 kN
M1u = 0.59 kNm

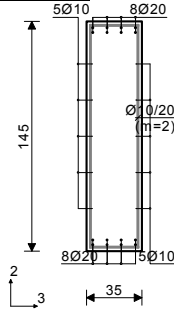
$\epsilon_b/\epsilon_a = -0.552/10.000 \text{ ‰}$
Aa1 = 1.30 + 0.02' = 1.32 cm²
Aa2 = 0.49 + 0.02' = 0.51 cm²
Aa3 = 0.00 + 0.04' = 0.04 cm²
Aa4 = 0.00 + 0.04' = 0.04 cm²
Aa,uz = 0.00 cm²/m (m=1)
[Usvojeno Aa,uz = Ø8/20(m=2) = 5.03 cm²/m]

$\tau_y = 0.14 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.08 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$
 Procenat armiranja: 0.84%

Greda 3127-5306

PBAB 87
 MB 30
 B500
 Kompletna šema opterećenja

Presek 4-4 x = 0.00m



Merodavna kombinacija za savijanje:
 $1.30xI+0.65xII+1.30xV$
 $N1u = 108.91 \text{ kN}$
 $M2u = 0.00 \text{ kNm}$
 $M3u = 242.27 \text{ kNm}$

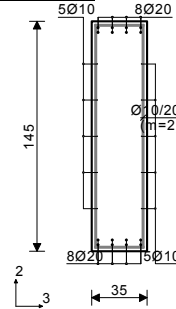
Merodavna kombinacija za torziju:
 $1.30xI+0.65xII-1.30xIV$
 $M1u = 2.76 \text{ kNm}$

Merodavna kombinacija za smicanje:
 $1.30xI+0.65xII-1.30xV$
 $T2u = -83.86 \text{ kN}$
 $T3u = 3.80 \text{ kN}$
 $M1u = 2.11 \text{ kNm}$

$\epsilon_b/\epsilon_a = -0.637/10.000 \%$
 $Aa1 = 4.94 + 0.02' = 4.96 \text{ cm}^2$
 $Aa2 = 1.87 + 0.02' = 1.90 \text{ cm}^2$
 $Aa3 = 0.00 + 0.10' = 0.10 \text{ cm}^2$
 $Aa4 = 0.00 + 0.10' = 0.10 \text{ cm}^2$
 $Aa,uz = 0.00 \text{ cm}^2/\text{m}$ (m=1)
 [Usvajeno $Aa,uz = \phi 10/20(n=2) = 7.85 \text{ cm}^2/\text{m}$]

$\tau_y = 0.30 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.10 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$
 Procenat armiranja: 1.15%
 *) - dodatna podubna armatura za prijem torzije.

Presek 5-5 x = 7.30m



Merodavna kombinacija za savijanje:
 $1.60xI+1.80xII+1.80xIII$
 $N1u = 118.61 \text{ kN}$
 $M2u = 0.00 \text{ kNm}$
 $M3u = -644.66 \text{ kNm}$

Merodavna kombinacija za torziju:
 $1.30xI+0.65xII-1.30xIV$
 $M1u = 2.56 \text{ kNm}$

Merodavna kombinacija za smicanje:
 $1.30xI+0.65xII+1.30xV$
 $T2u = 207.00 \text{ kN}$
 $T3u = -7.45 \text{ kN}$
 $M1u = 1.87 \text{ kNm}$

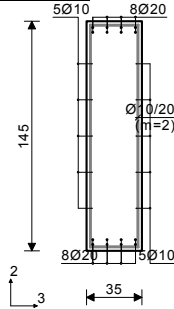
$\epsilon_b/\epsilon_a = -1.164/10.000 \%$
 $Aa1 = 0.00 + 0.02' = 0.02 \text{ cm}^2$
 $Aa2 = 11.54 + 0.02' = 11.56 \text{ cm}^2$
 $Aa3 = 0.00 + 0.09' = 0.09 \text{ cm}^2$
 $Aa4 = 0.00 + 0.09' = 0.09 \text{ cm}^2$
 $Aa,uz = 0.00 \text{ cm}^2/\text{m}$ (m=1)
 [Usvajeno $Aa,uz = \phi 10/20(n=2) = 7.85 \text{ cm}^2/\text{m}$]

$\tau_y = 0.59 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.10 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$
 Procenat armiranja: 1.15%

Greda 5306-6513

PBAB 87
 MB 30
 B500
 Kompletna šema opterećenja

Presek 5-5 x = 0.00m



Merodavna kombinacija za savijanje:
 $1.60xI+1.80xII+1.80xIII$
 $N1u = -49.52 \text{ kN}$
 $M2u = 0.00 \text{ kNm}$
 $M3u = -1094.97 \text{ kNm}$

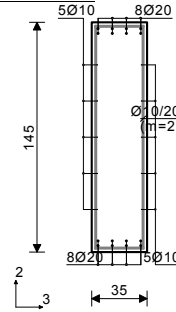
Merodavna kombinacija za torziju:
 $1.30xI+0.65xII-1.30xIV$
 $M1u = 32.34 \text{ kNm}$

Merodavna kombinacija za smicanje:
 $1.60xI+1.80xII+1.80xIII$
 $T2u = -297.85 \text{ kN}$
 $T3u = 1.32 \text{ kN}$
 $M1u = 26.87 \text{ kNm}$

$\epsilon_b/\epsilon_a = -1.817/10.000 \%$
 $Aa1 = 0.00 + 0.28' = 0.28 \text{ cm}^2$
 $Aa2 = 17.27 + 0.28' = 17.55 \text{ cm}^2$
 $Aa3 = 0.00 + 1.15' = 1.15 \text{ cm}^2$
 $Aa4 = 0.00 + 1.15' = 1.15 \text{ cm}^2$
 $Aa,uz = 4.27 \text{ cm}^2/\text{m}$ (m=1)
 [Usvajeno $Aa,uz = \phi 10/20(n=2) = 7.85 \text{ cm}^2/\text{m}$]

$\tau_y = 1.99 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$
 $\tau_z = 1.42 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$
 Procenat armiranja: 1.15%
 *) - dodatna podubna armatura za prijem torzije.

Presek 7-7 x = 0.40m



Merodavna kombinacija za savijanje:
 $1.60xI+1.80xII+1.80xIII$
 $N1u = -50.51 \text{ kN}$
 $M2u = 0.00 \text{ kNm}$
 $M3u = -972.33 \text{ kNm}$

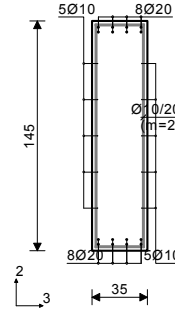
Merodavna kombinacija za torziju:
 $1.30xI+0.65xII-1.30xIV$
 $M1u = 32.34 \text{ kNm}$

Merodavna kombinacija za smicanje:
 $1.60xI+1.80xII+1.80xIII$
 $T2u = -313.27 \text{ kN}$
 $T3u = 1.79 \text{ kN}$
 $M1u = 26.87 \text{ kNm}$

$\epsilon_b/\epsilon_a = -1.673/10.000 \%$
 $Aa1 = 0.00 + 0.28' = 0.28 \text{ cm}^2$
 $Aa2 = 15.19 + 0.28' = 15.47 \text{ cm}^2$
 $Aa3 = 0.00 + 1.15' = 1.15 \text{ cm}^2$
 $Aa4 = 0.00 + 1.15' = 1.15 \text{ cm}^2$
 $Aa,uz = 4.55 \text{ cm}^2/\text{m}$ (m=1)
 [Usvajeno $Aa,uz = \phi 10/20(n=2) = 7.85 \text{ cm}^2/\text{m}$]

$\tau_y = 2.01 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$
 $\tau_z = 1.42 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$
 Procenat armiranja: 1.15%

Presek 8-8 x = 0.80m



Merodavna kombinacija za savijanje:
 $1.60xI+1.80xII+1.80xIII$
 $N1u = -46.10 \text{ kN}$
 $M2u = 0.00 \text{ kNm}$
 $M3u = -844.04 \text{ kNm}$

Merodavna kombinacija za torziju:
 $1.30xI+0.65xII-1.30xIV$
 $M1u = 32.34 \text{ kNm}$

Merodavna kombinacija za smicanje:
 $1.60xI+1.80xII+1.80xIII$
 $T2u = -310.68 \text{ kN}$
 $T3u = -1.86 \text{ kN}$
 $M1u = 26.87 \text{ kNm}$

$\epsilon_b/\epsilon_a = -1.519/10.000 \%$
 $Aa1 = 0.00 + 0.28' = 0.28 \text{ cm}^2$
 $Aa2 = 13.09 + 0.28' = 13.37 \text{ cm}^2$
 $Aa3 = 0.00 + 1.15' = 1.15 \text{ cm}^2$
 $Aa4 = 0.00 + 1.15' = 1.15 \text{ cm}^2$
 $Aa,uz = 4.50 \text{ cm}^2/\text{m}$ (m=1)
 [Usvajeno $Aa,uz = \phi 10/20(n=2) = 7.85 \text{ cm}^2/\text{m}$]

$\tau_y = 2.00 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$
 $\tau_z = 1.43 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$
 Procenat armiranja: 1.15%

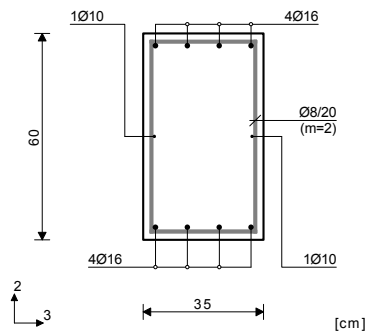
Greda 3127-2053

PBAB 87

MB 30

B500

Kompletna šema opterećenja

Presek 4-4 x = 0.00m

Merodavna kombinacija za savijanje:

1.30xI+0.65xII+1.30xV

N1u = -46.23 kN

M2u = 0.00 kNm

M3u = -103.86 kNm

Merodavna kombinacija za torziju:

1.30xI+1.30xIV

M1u = 3.15 kNm

Merodavna kombinacija za smicanje:

1.30xI+0.65xII+1.30xIV

T2u = -35.80 kN

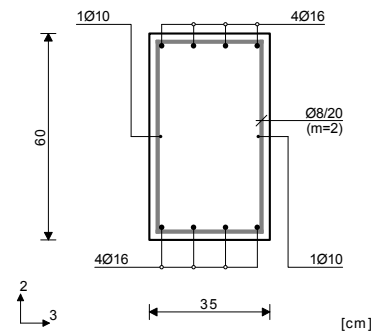
T3u = -0.39 kN

M1u = 3.14 kNm

 $\epsilon_b/\epsilon_a = -1.282/10.000 \%$ Aa1 = 0.00 + 0.07' = 0.07 cm²Aa2 = 3.51 + 0.07' = 3.58 cm²Aa3 = 0.00 + 0.11' = 0.11 cm²Aa4 = 0.00 + 0.11' = 0.11 cm²Aa,uz = 0.00 cm²/m (m=1)[Usvajeno Aa,uz = Ø8/20(m=2) = 5.03 cm²/m] $\tau_y = 0.54 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$ $\tau_z = 0.34 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$

Procenat armiranja: 0.84%

*) - dodatna poduzna armatura za prijem torzije.

Presek 1-1 x = 4.30m

Merodavna kombinacija za savijanje:

1.30xI+0.65xII+1.30xV

N1u = 35.78 kN

M2u = 0.00 kNm

M3u = 41.31 kNm

Merodavna kombinacija za torziju:

1.30xI+1.30xIV

M1u = 3.17 kNm

Merodavna kombinacija za smicanje:

1.30xI+0.65xII+1.30xIV

T2u = 10.11 kN

T3u = 7.83 kN

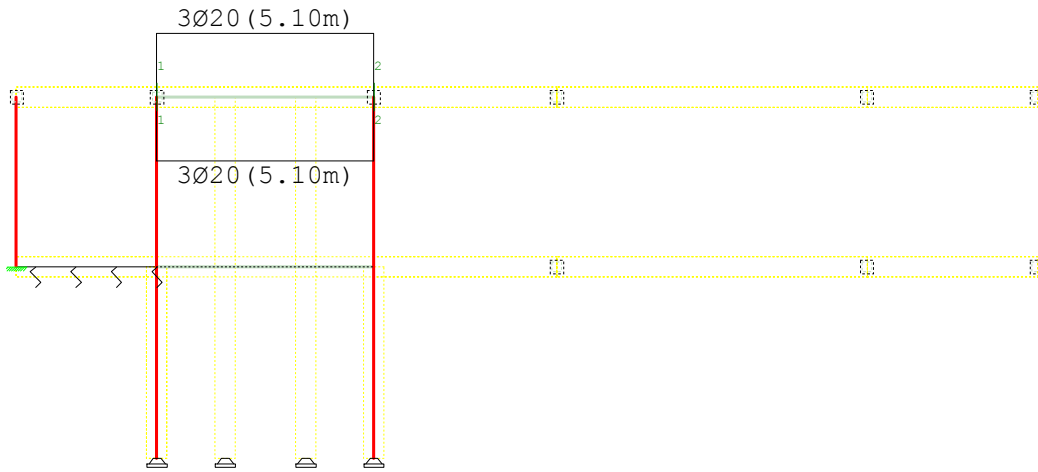
M1u = 3.16 kNm

 $\epsilon_b/\epsilon_a = -0.672/10.000 \%$ Aa1 = 1.93 + 0.07' = 2.00 cm²Aa2 = 1.11 + 0.07' = 1.18 cm²Aa3 = 0.00 + 0.11' = 0.11 cm²Aa4 = 0.00 + 0.11' = 0.11 cm²Aa,uz = 0.00 cm²/m (m=1)[Usvajeno Aa,uz = Ø8/20(m=2) = 5.03 cm²/m] $\tau_y = 0.39 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$ $\tau_z = 0.38 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$

Procenat armiranja: 0.84%

GREDA POS G215

Usvojena armatura
PBAB 87, MB 30, B500

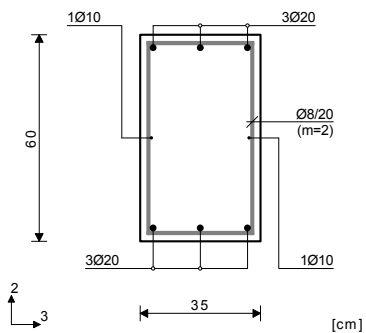


Ram: V_11
Armatura u gredama: Aa2/Aa1

Greda 1817-3093

PBAB 87
MB 30
B500
Kompletna šema opterećenja

Presek 1-1 x = 0.00m



Merodavna kombinacija za savijanje:

1.30xI+1.30xV
N1u = 17.37 kN
M2u = 0.00 kNm
M3u = 53.59 kNm

Merodavna kombinacija za torziju:

1.30xI+0.65xII+1.30xIV
M1u = 9.24 kNm

Merodavna kombinacija za smicanje:

1.30xI+0.65xII+1.30xIV
T2u = -41.76 kN
T3u = -2.26 kN
M1u = 9.24 kNm

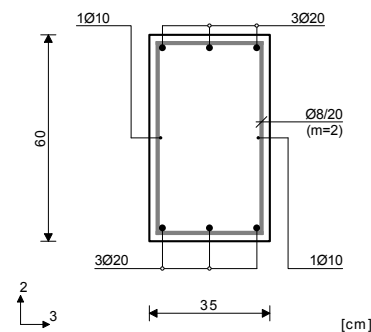
Merodavna kombinacija za savijanje:

$\epsilon_b/\epsilon_a = -0.834/10.000 \%$
Aa1 = 2.20 + 0.19' = 2.40 cm²
Aa2 = 1.84 + 0.19' = 2.03 cm²
Aa3 = 0.00 + 0.33' = 0.33 cm²
Aa4 = 0.00 + 0.33' = 0.33 cm²
Aa,uz = 0.48 cm²/m (m=1)
[Usvojeno Aa,uz = Ø8/20(m=2) = 5.03 cm²/m]

$\tau_y = 1.23 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$
 $\tau_z = 1.00 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$
Procenat armiranja: 0.97%

*) - dodatna podubna armatura za prijem torzije.

Presek 2-2 x = 5.10m



Merodavna kombinacija za savijanje:

1.60xI+1.80xII+1.80xIII
N1u = 9.95 kN
M2u = 0.00 kNm
M3u = -70.89 kNm

Merodavna kombinacija za torziju:

1.60xI+1.80xII+1.80xIII
M1u = -16.71 kNm

Merodavna kombinacija za smicanje:

1.60xI+1.80xII+1.80xIII
T2u = 66.25 kN
T3u = 2.08 kN
M1u = -16.71 kNm

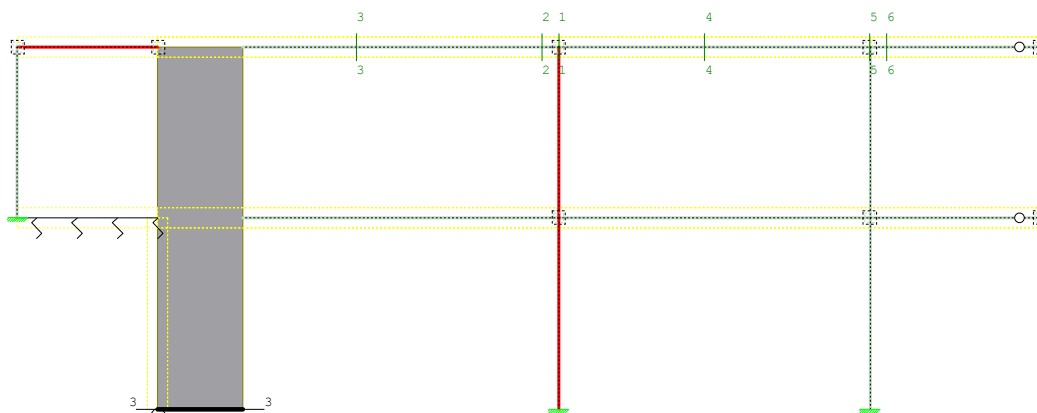
Merodavna kombinacija za savijanje:

$\epsilon_b/\epsilon_a = -0.935/10.000 \%$
Aa1 = 0.00 + 0.35' = 0.35 cm²
Aa2 = 2.81 + 0.35' = 3.16 cm²
Aa3 = 0.00 + 0.60' = 0.60 cm²
Aa4 = 0.00 + 0.60' = 0.60 cm²
Aa,uz = 3.88 cm²/m (m=1)
[Usvojeno Aa,uz = Ø8/20(m=2) = 5.03 cm²/m]

$\tau_y = 2.17 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$
 $\tau_z = 1.79 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$
Procenat armiranja: 0.97%

GREDA POS G216(G217)

Usvojena armatura
PBAB 87, MB 30, B500

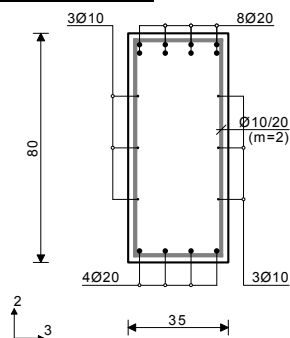


Ram: V_3
Armatura u gredama: Aa2/Aa1

Greda 5724-3427

PBAB 87
MB 30
B500
Kompletna šema opterećenja

Presek 1-1 x = 0.00m



Merodavna kombinacija za savijanje:
1.60xI+1.80xII+1.80xIII
N1u = -40.02 kN
M2u = 0.00 kNm
M3u = -482.48 kNm

Merodavna kombinacija za torziju:
1.30xI+0.65xII+1.30xIV
M1u = -4.12 kNm

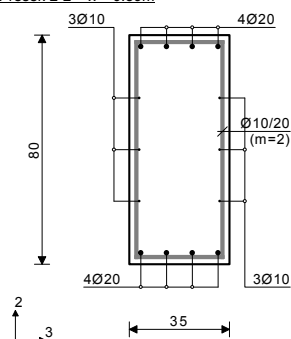
Merodavna kombinacija za smicanje:
1.60xI+1.80xII+1.80xIII
T2u = -235.42 kN
T3u = -1.31 kN
M1u = -3.91 kNm

$\epsilon_b/\epsilon_a = -2.461/10.000 \%$

Aa1 = 0.00 + 0.06' = 0.06 cm²
Aa2 = 14.11 + 0.06' = 14.17 cm²
Aa3 = 0.00 + 0.15' = 0.15 cm²
Aa4 = 0.00 + 0.15' = 0.15 cm²
Aa,uz = 2.14 cm²/m (m=1)
[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]

$\tau_y = 1.10 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.33 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$
Procenat armiranja: 1.51%
) - dodatna produžna armatura za prijem torzije.

Presek 2-2 x = 0.39m



Merodavna kombinacija za savijanje:
1.60xI+1.80xII+1.80xIII
N1u = -33.09 kN
M2u = 0.00 kNm
M3u = -378.92 kNm

Merodavna kombinacija za torziju:
1.60xI+1.80xII+1.80xIII
M1u = -4.20 kNm

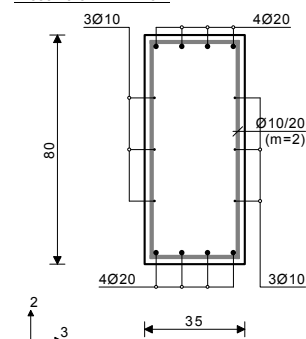
Merodavna kombinacija za smicanje:
1.60xI+1.80xII+1.80xIII
T2u = -236.65 kN
T3u = 1.51 kN
M1u = -4.20 kNm

$\epsilon_b/\epsilon_a = -2.006/10.000 \%$

Aa1 = 0.00 + 0.07' = 0.07 cm²
Aa2 = 10.88 + 0.07' = 10.95 cm²
Aa3 = 0.00 + 0.15' = 0.15 cm²
Aa4 = 0.00 + 0.15' = 0.15 cm²
Aa,uz = 2.35 cm²/m (m=1)
[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]

$\tau_y = 1.38 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.34 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$
Procenat armiranja: 1.07%

Presek 3-3 x = 4.75m



Merodavna kombinacija za savijanje:
1.60xI+1.80xII+1.80xIII
N1u = -17.77 kN
M2u = 0.00 kNm
M3u = 244.90 kNm

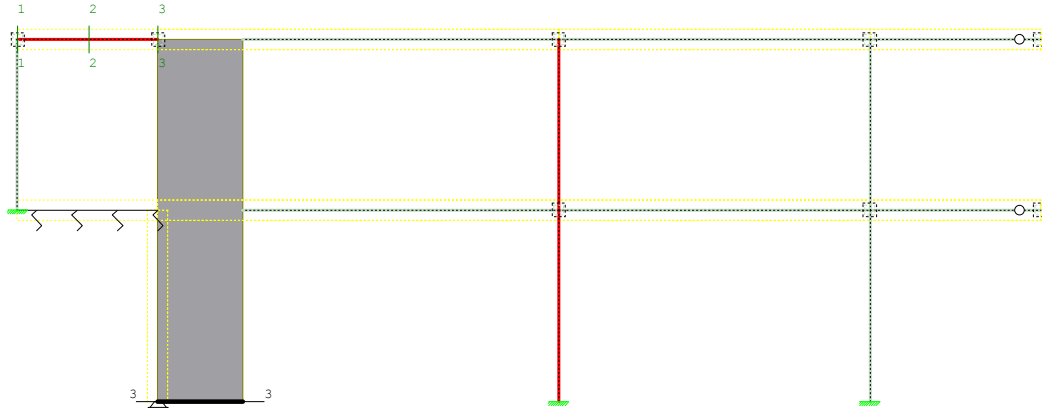
Merodavna kombinacija za torziju:
1.60xI+1.80xII+1.80xIII
M1u = -13.39 kNm

Merodavna kombinacija za smicanje:
1.60xI+1.80xII+1.80xIII
T2u = 22.97 kN
T3u = 1.82 kN
M1u = -13.39 kNm

$\epsilon_b/\epsilon_a = -1.463/10.000 \%$

GREDA POS G218

Usvojena armatura
PBAB 87, MB 30, B500

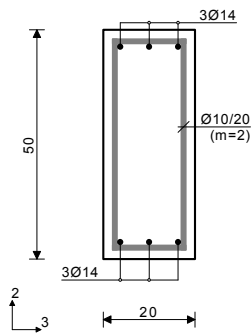


Ram: V_3
Armatura u gredama: Aa2/Aa1

Greda 2085-2918

PBAB 87
MB 30
B500
Kompletna šema opterećenja

Presek 1-1 x = 0.00m



Merodavna kombinacija za savijanje:

1.30xI+0.65xII+1.30xV

N1u = -7.98 kN
M2u = 0.00 kNm
M3u = 12.80 kNm

Merodavna kombinacija za torziju:

1.60xI+1.80xII

M1u = -1.17 kNm

Merodavna kombinacija za smicanje:

1.60xI+1.80xII+1.80xIII

T2u = -18.94 kN
T3u = 0.33 kN
M1u = -1.15 kNm

$\epsilon_b/\epsilon_a = -0.680/10.000 \text{ ‰}$

Aa1 = 0.49 + 0.03' = 0.52 cm²
Aa2 = 0.28 + 0.03' = 0.31 cm²
Aa3 = 0.00 + 0.07' = 0.07 cm²
Aa4 = 0.00 + 0.07' = 0.07 cm²
Aa,uz = 0.00 cm²/m (m=1)

[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]

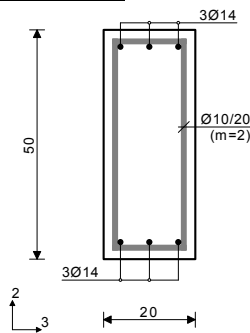
$\tau_y = 0.68 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$

$\tau_z = 0.46 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$

Procenat armiranja: 0.92%

*) - dodatna poduzna armatura za prijem torzije.

Presek 2-2 x = 1.68m



Merodavna kombinacija za savijanje:

1.30xI+0.65xII-1.30xV

N1u = 10.65 kN
M2u = 0.00 kNm
M3u = 19.56 kNm

Merodavna kombinacija za torziju:

1.60xI+1.80xII

M1u = -1.14 kNm

Merodavna kombinacija za smicanje:

1.60xI+1.80xII+1.80xIII

T2u = 12.76 kN
T3u = -0.45 kN
M1u = -1.13 kNm

$\epsilon_b/\epsilon_a = -0.725/10.000 \text{ ‰}$

Aa1 = 1.01 + 0.03' = 1.03 cm²
Aa2 = 0.00 + 0.03' = 0.03 cm²
Aa3 = 0.00 + 0.07' = 0.07 cm²
Aa4 = 0.00 + 0.07' = 0.07 cm²
Aa,uz = 0.00 cm²/m (m=1)

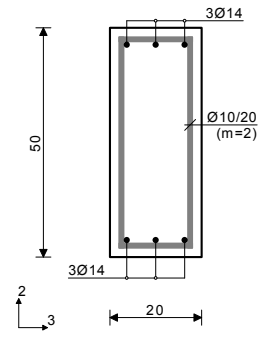
[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]

$\tau_y = 0.60 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$

$\tau_z = 0.45 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$

Procenat armiranja: 0.92%

Presek 3-3 x = 3.30m



Merodavna kombinacija za savijanje:

1.30xI+0.65xII+1.30xV

N1u = -24.60 kN
M2u = 0.00 kNm
M3u = -33.59 kNm

Merodavna kombinacija za torziju:

1.60xI+1.80xII

M1u = -1.13 kNm

Merodavna kombinacija za smicanje:

1.60xI+1.80xII+1.80xIII

T2u = 23.76 kN
T3u = 2.41 kN
M1u = -1.12 kNm

$\epsilon_b/\epsilon_a = -1.159/10.000 \text{ ‰}$

Aa1 = 0.49 + 0.03' = 0.51 cm²
Aa2 = 1.28 + 0.03' = 1.31 cm²
Aa3 = 0.00 + 0.07' = 0.07 cm²
Aa4 = 0.00 + 0.07' = 0.07 cm²
Aa,uz = 0.00 cm²/m (m=1)

[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]

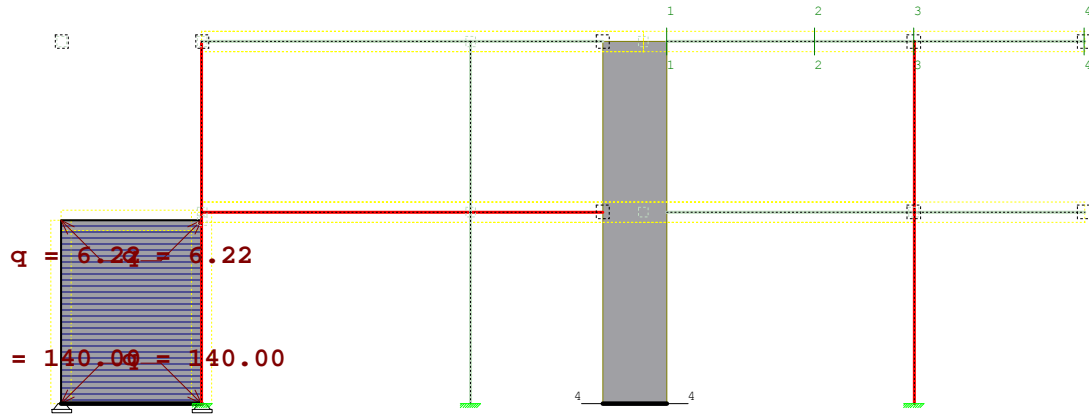
$\tau_y = 0.72 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$

$\tau_z = 0.47 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$

Procenat armiranja: 0.92%

GREDA POS G219

Usvojena armatura
PBAB 87, MB 30, B500



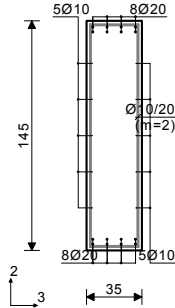
Ram: V_8

Armatura u gredama: Aa2/Aa1

Greda 7374-8910

PBAB 87
MB 30
B500
Kompletna šema opterećenja

Presek 1-1 x = 0.00m



Merodavna kombinacija za savijanje:
1.30xI+0.65xII+1.30xV
N1u = 73.73 kN
M2u = 0.00 kNm
M3u = 64.65 kNm

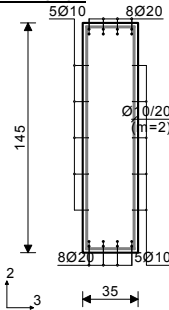
Merodavna kombinacija za torziju:
1.60xI+1.80xII+1.80xIII
M1u = -4.91 kNm

Merodavna kombinacija za smicanje:
1.30xI+0.65xII-1.30xV
T2u = -63.14 kN
T3u = -3.90 kN
M1u = -3.88 kNm

$\epsilon_b/\epsilon_a = -0.278/10.000 \%$
Aa1 = 1.77 + 0.04' = 1.82 cm²
Aa2 = 1.02 + 0.04' = 1.06 cm²
Aa3 = 0.00 + 0.18' = 0.18 cm²
Aa4 = 0.00 + 0.18' = 0.18 cm²
Aa,uz = 0.00 cm²/m (m=1)
[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]

$\tau_y = 0.32 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.18 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$
Procentat armiranja: 1.15%
(*) - dodatna podužna armatura za prijem torzije.

Presek 2-2 x = 3.48m



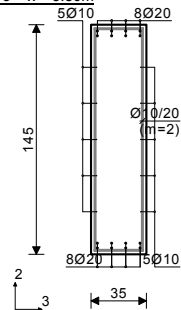
Merodavna kombinacija za savijanje:
1.30xI+0.65xII+1.30xV
N1u = 11.46 kN
M2u = 0.00 kNm
M3u = -272.86 kNm

Merodavna kombinacija za torziju:
1.30xI+0.65xII+1.30xIV
M1u = -4.82 kNm

Merodavna kombinacija za smicanje:
1.30xI+1.30xV
T2u = 151.82 kN
T3u = -1.09 kN
M1u = -2.92 kNm

$\epsilon_b/\epsilon_a = -0.779/10.000 \%$
Aa1 = 2.51 + 0.04' = 2.56 cm²
Aa2 = 4.37 + 0.04' = 4.42 cm²
Aa3 = 0.00 + 0.17' = 0.17 cm²
Aa4 = 0.00 + 0.17' = 0.17 cm²
Aa,uz = 0.00 cm²/m (m=1)
[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]
 $\tau_y = 0.50 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.13 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$
Procentat armiranja: 1.15%

Presek 3-3 x = 5.80m



Merodavna kombinacija za savijanje:
1.30xI+0.65xII+1.30xV
N1u = -9.73 kN
M2u = 0.00 kNm
M3u = -708.78 kNm

Merodavna kombinacija za torziju:
1.30xI+0.65xII+1.30xIV
M1u = -4.79 kNm

Merodavna kombinacija za smicanje:
1.30xI+1.30xV
T2u = 197.70 kN
T3u = -4.00 kN
M1u = -2.90 kNm

$\epsilon_b/\epsilon_a = -1.331/10.000 \%$
Aa1 = 1.18 + 0.04' = 1.22 cm²
Aa2 = 11.24 + 0.04' = 11.28 cm²
Aa3 = 0.00 + 0.17' = 0.17 cm²
Aa4 = 0.00 + 0.17' = 0.17 cm²
Aa,uz = 0.00 cm²/m (m=1)
[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]
 $\tau_y = 0.61 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.14 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$
Procentat armiranja: 1.15%

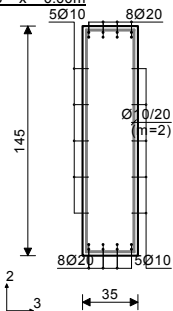
Greda 8910-9605

PBAB 87

MB 30

B500

Kompletna šema opterećenja

Presek 3-3 x = 0.00m

Merodavna kombinacija za savijanje:

1.60xI+1.80xII+1.80xIII

N1u = -41.28 kN

M2u = 0.00 kNm

M3u = -904.02 kNm

Merodavna kombinacija za torziju:

1.60xI+1.80xII+1.80xIII

M1u = -31.00 kNm

Merodavna kombinacija za smicanje:

1.60xI+1.80xII+1.80xIII

T2u = -273.37 kN

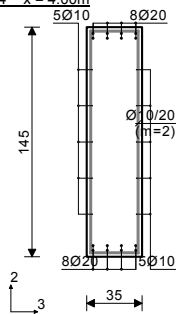
T3u = 6.66 kN

M1u = -31.00 kNm

 $\epsilon_b/\epsilon_a = -1.586/10.000 \%$ Aa1 = 0.00 + 0.27' = 0.27 cm²Aa2 = 14.14 + 0.27' = 14.41 cm²Aa3 = 0.00 + 1.11' = 1.11 cm²Aa4 = 0.00 + 1.11' = 1.11 cm²Aa,uz = 4.53 cm²/m (m=1)[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m] $\tau_y = 2.03 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$ $\tau_z = 1.38 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$

Procenat armiranja: 1.15%

*) - dodatna poduzna armatura za prijem torzije.

Presek 4-4 x = 4.00m

[cm]

[cm]

Merodavna kombinacija za savijanje:

1.30xI+0.65xII+1.30xV

N1u = 1.98 kN

M2u = 0.00 kNm

M3u = -0.17 kNm

Merodavna kombinacija za torziju:

1.60xI+1.80xII+1.80xIII

M1u = -30.96 kNm

Merodavna kombinacija za smicanje:

1.60xI+1.80xII+1.80xIII

T2u = -152.67 kN

T3u = 1.30 kN

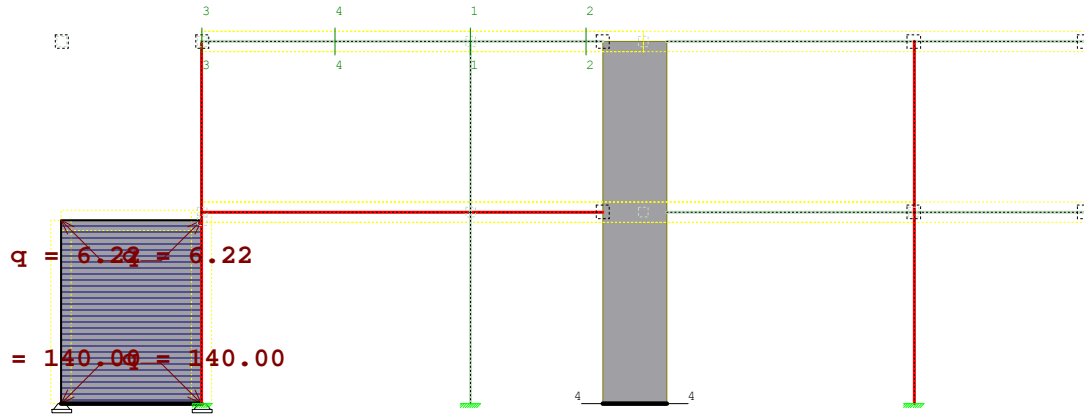
M1u = -30.96 kNm

 $\epsilon_b/\epsilon_a = 0.417/10.000 \%$ Aa1 = 0.03 + 0.27' = 0.29 cm²Aa2 = 0.02 + 0.27' = 0.29 cm²Aa3 = 0.00 + 1.11' = 1.11 cm²Aa4 = 0.00 + 1.11' = 1.11 cm²Aa,uz = 2.48 cm²/m (m=1)[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m] $\tau_y = 1.73 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$ $\tau_z = 1.36 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$

Procenat armiranja: 1.15%

GREDA POS G220(G221)

Usvojena armatura
PBAB 87, MB 30, B500

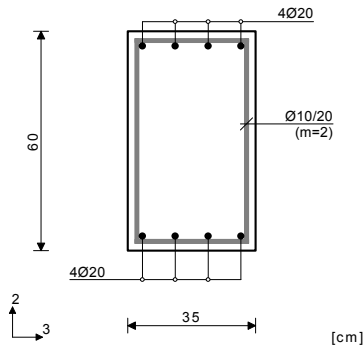


Ram: V_8
Armatura u gredama: Aa2/Aa1

Greda 6013-6920

PBAB 87
MB 30
B500
Kompletna šema opterećenja

Presek 1-1 x = 0.00m



Merodavna kombinacija za savijanje:
1.60xI+1.80xII+1.80xIII

N1u = 10.87 kN
M2u = 0.00 kNm
M3u = -102.04 kNm

Merodavna kombinacija za torziju:
1.30xI+0.65xII+1.30xIV
M1u = -16.32 kNm

Merodavna kombinacija za smicanje:

1.60xI+1.80xII+1.80xIII
T2u = -81.38 kN
T3u = -5.04 kN
M1u = -15.96 kNm

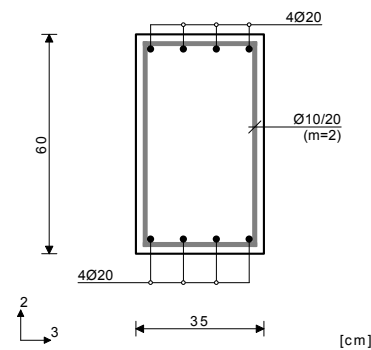
$\epsilon_b/\epsilon_a = -1.170/10.000 \%$

Aa1 = 0.00 + 0.34' = 0.34 cm²
Aa2 = 4.04 + 0.34' = 4.38 cm²
Aa3 = 0.00 + 0.58' = 0.58 cm²
Aa4 = 0.00 + 0.58' = 0.58 cm²
Aa,uz = 4.30 cm²/m (m=1)

[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]
 $\tau_y = 2.10\text{MPa} < 3\tau_r$, $\tau_r = 1.10\text{MPa}$
 $\tau_z = 1.74\text{MPa} < 3\tau_r$, $\tau_r = 1.10\text{MPa}$

Procentat armiranja: 1.20%
) - dodatna podužna armatura za prijem torzije.

Presek 2-2 x = 2.71m



Merodavna kombinacija za savijanje:

1.00xI-1.30xV
N1u = 49.18 kN
M2u = 0.00 kNm
M3u = 16.98 kNm

Merodavna kombinacija za torziju:

1.60xI+1.80xII+1.80xIII
M1u = -18.71 kNm

Merodavna kombinacija za smicanje:

1.60xI+1.80xII+1.80xIII
T2u = 41.43 kN
T3u = -6.47 kN
M1u = -18.71 kNm

$\epsilon_b/\epsilon_a = -0.409/10.000 \%$

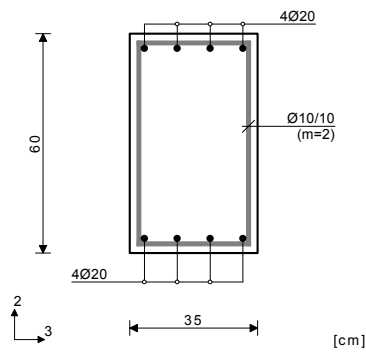
Aa1 = 1.14 + 0.39' = 1.53 cm²
Aa2 = 1.36 + 0.39' = 1.75 cm²
Aa3 = 0.00 + 0.67' = 0.67 cm²
Aa4 = 0.00 + 0.67' = 0.67 cm²
Aa,uz = 3.60 cm²/m (m=1)

[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]
 $\tau_y = 2.23\text{MPa} < 3\tau_r$, $\tau_r = 1.10\text{MPa}$
 $\tau_z = 2.03\text{MPa} < 3\tau_r$, $\tau_r = 1.10\text{MPa}$
Procentat armiranja: 1.20%

Greda 3993-6013

PBAB 87
MB 30
B500
Kompletna šema opterećenja

Presek 3-3 x = 0.00m



Merodavna kombinacija za savijanje:
1.60xI+1.80xII+1.80xIII

N1u = -47.09 kN
M2u = 0.00 kNm
M3u = -206.11 kNm

Merodavna kombinacija za torziju:
1.30xI+0.65xII-1.30xIV

M1u = 15.92 kNm

Merodavna kombinacija za smicanje:
1.60xI+1.80xII+1.80xIII

T2u = -238.03 kN
T3u = 0.62 kN
M1u = 10.78 kNm

$\epsilon_b/\epsilon_a = -1.994/10.000 \text{ ‰}$

Aa1 =	0.00	+	0.33'	=	0.33 cm ²
Aa2 =	7.65	+	0.33'	=	7.98 cm ²
Aa3 =	0.00	+	0.57'	=	0.57 cm ²
Aa4 =	0.00	+	0.57'	=	0.57 cm ²
Aa,uz =	9.71				cm ² /m

(Usvajeno Aa,uz = Ø10/10(m=2) = 15.71 cm²/m)

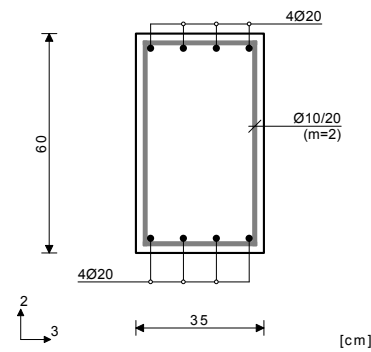
$\tau_y = 2.71 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$

$\tau_z = 1.70 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$

Procenat armiranja: 1.20%

*) - dodatna podužna armatura za prijem torzije.

Presek 4-4 x = 3.12m



Merodavna kombinacija za savijanje:
1.60xI+1.80xII+1.80xIII

N1u = -15.08 kN
M2u = 0.00 kNm
M3u = 174.90 kNm

Merodavna kombinacija za torziju:
1.60xI+1.80xII+1.80xIII

M1u = -3.92 kNm

Merodavna kombinacija za smicanje:
1.60xI+1.80xII+1.80xIII

T2u = 8.50 kN
T3u = 3.11 kN
M1u = -3.92 kNm

$\epsilon_b/\epsilon_a = -1.721/10.000 \text{ ‰}$

Aa1 =	6.69	+	0.08'	=	6.77 cm ²
Aa2 =	0.00	+	0.08'	=	0.08 cm ²
Aa3 =	0.00	+	0.14'	=	0.14 cm ²
Aa4 =	0.00	+	0.14'	=	0.14 cm ²
Aa,uz =	0.00				cm ² /m

(Usvajeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m)

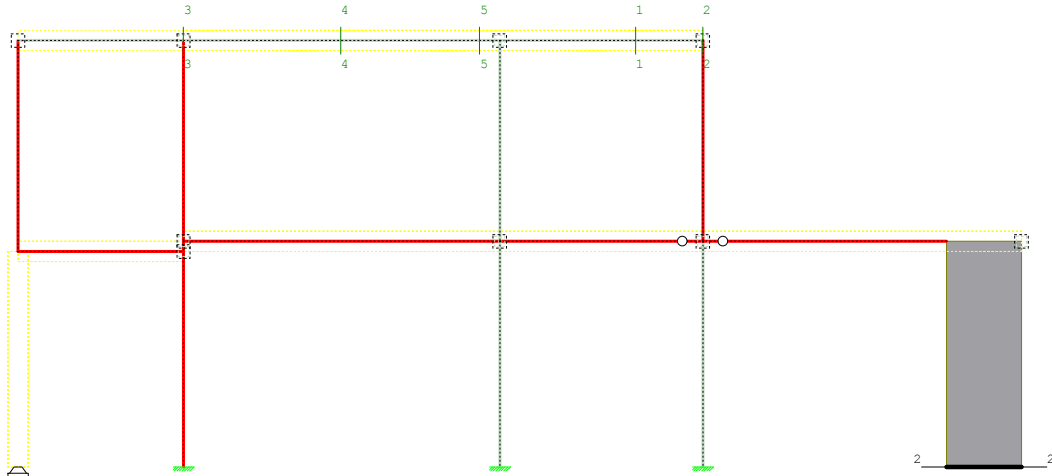
$\tau_y = 0.47 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$

$\tau_z = 0.44 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$

Procenat armiranja: 1.20%

GREDA POS G222

Usvojena armatura
PBAB 87, MB 30, B500

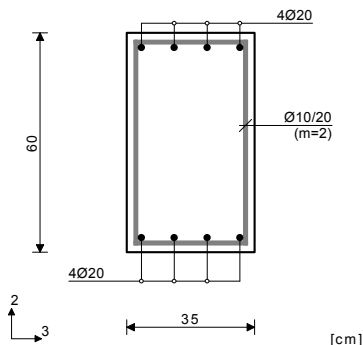


Ram: V_5
Armatura u gredama: Aa2/Aa1

Greda 7782-8849

PBAB 87
MB 30
B500
Kompletna šema opterećenja

Presek 1-1 x = 2.71m



Merodavna kombinacija za savijanje:
1.30xI+0.65xII+1.30xV
N1u = -26.97 kN
M2u = 0.00 kNm
M3u = -55.87 kNm

Merodavna kombinacija za torziju:
1.30xI+0.65xII+1.30xIV
M1u = 3.39 kNm

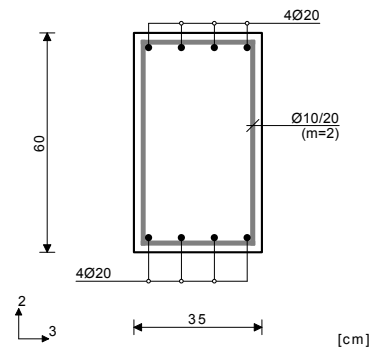
Merodavna kombinacija za smicanje:

1.60xI+1.80xII+1.80xIII
T2u = 39.58 kN
T3u = 0.19 kN
M1u = 3.12 kNm

$\epsilon_b/\epsilon_a = -0.921/10.000 \%$
Aa1 = 1.52 + 0.07' = 1.59 cm²
Aa2 = 1.82 + 0.07' = 1.89 cm²
Aa3 = 0.00 + 0.12' = 0.12 cm²
Aa4 = 0.00 + 0.12' = 0.12 cm²
Aa,uz = 0.00 cm²/m (m=1)
[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]

$\tau_y = 0.52 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.36 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$
Procentat armiranja: 1.20%
' - dodatna podubna armatura za prijem torzije.

Presek 2-2 x = 4.05m



Merodavna kombinacija za savijanje:
1.30xI+0.65xII+1.30xV

N1u = -46.05 kN
M2u = 0.00 kNm
M3u = -211.36 kNm

Merodavna kombinacija za torziju:

1.30xI+0.65xII+1.30xIV
M1u = 7.60 kNm

Merodavna kombinacija za smicanje:

1.60xI+1.80xII+1.80xIII
T2u = 148.94 kN
T3u = -7.96 kN
M1u = 6.42 kNm

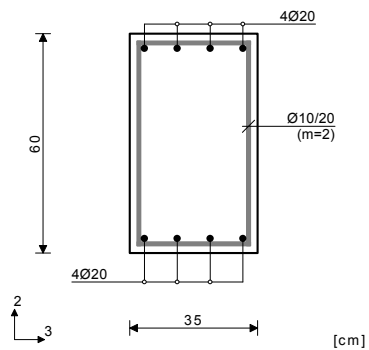
$\epsilon_b/\epsilon_a = -2.031/10.000 \%$
Aa1 = 0.00 + 0.16' = 0.16 cm²
Aa2 = 7.88 + 0.16' = 8.03 cm²
Aa3 = 0.00 + 0.27' = 0.27 cm²
Aa4 = 0.00 + 0.27' = 0.27 cm²
Aa,uz = 3.13 cm²/m (m=1)
[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]

$\tau_y = 1.42 \text{ MPa} < 3\tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.88 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$
Procentat armiranja: 1.20%

Greda 5944-7782

PBAB 87
MB 30
B500
Kompletna šema opterećenja

Presek 3-3 x = 0.00m



Merodavna kombinacija za savijanje:

$$1.60xI + 1.80xII + 1.80xIII$$

$$N1u = -56.52 \text{ kN}$$

$$M2u = 0.00 \text{ kNm}$$

$$M3u = -267.52 \text{ kNm}$$

Merodavna kombinacija za torziju:

$$1.30xI + 0.65xII + 1.30xIV$$

$$M1u = 3.33 \text{ kNm}$$

Merodavna kombinacija za smicanje:

$$1.60xI + 1.80xII + 1.80xIII$$

$$T2u = -240.53 \text{ kN}$$

$$T3u = 7.72 \text{ kN}$$

$$M1u = 1.02 \text{ kNm}$$

$$\varepsilon_b/\varepsilon_a = -2.481/10.000 \text{ ‰}$$

$$Aa1 = 0.00 + 0.07' = 0.07 \text{ cm}^2$$

$$Aa2 = 10.16 + 0.07' = 10.23 \text{ cm}^2$$

$$Aa3 = 0.00 + 0.12' = 0.12 \text{ cm}^2$$

$$Aa4 = 0.00 + 0.12' = 0.12 \text{ cm}^2$$

$$Aa,uz = 4.19 \text{ cm}^2/\text{m} \quad (m=1)$$

$$[Usvajeno \ Aa,uz = \varnothing 10/20(m=2) = 7.85 \text{ cm}^2/\text{m}]$$

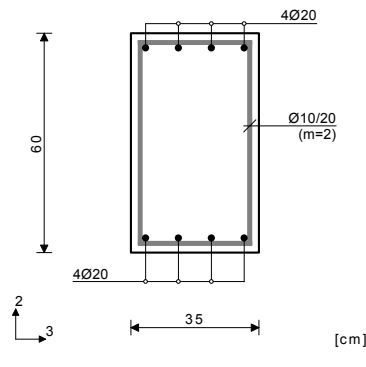
$$\tau_y = 1.36 \text{ MPa} < 3\tau_r, \tau_r = 1.10 \text{ MPa}$$

$$\tau_z = 0.36 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$$

Procenat armiranja: 1.20%

*) - dodatna podužna armatura za prijem torzije.

Presek 4-4 x = 3.13m



Merodavna kombinacija za savijanje:

$$1.60xI + 1.80xII + 1.80xIII$$

$$N1u = -21.98 \text{ kN}$$

$$M2u = 0.00 \text{ kNm}$$

$$M3u = 172.73 \text{ kNm}$$

Merodavna kombinacija za torziju:

$$1.60xI + 1.80xII + 1.80xIII$$

$$M1u = -3.99 \text{ kNm}$$

Merodavna kombinacija za smicanje:

$$1.60xI + 1.80xII + 1.80xIII$$

$$T2u = 3.22 \text{ kN}$$

$$T3u = 0.38 \text{ kN}$$

$$M1u = -3.99 \text{ kNm}$$

$$\varepsilon_b/\varepsilon_a = -1.718/10.000 \text{ ‰}$$

$$Aa1 = 6.53 + 0.08' = 6.61 \text{ cm}^2$$

$$Aa2 = 0.00 + 0.08' = 0.08 \text{ cm}^2$$

$$Aa3 = 0.00 + 0.14' = 0.14 \text{ cm}^2$$

$$Aa4 = 0.00 + 0.14' = 0.14 \text{ cm}^2$$

$$Aa,uz = 0.00 \text{ cm}^2/\text{m} \quad (m=1)$$

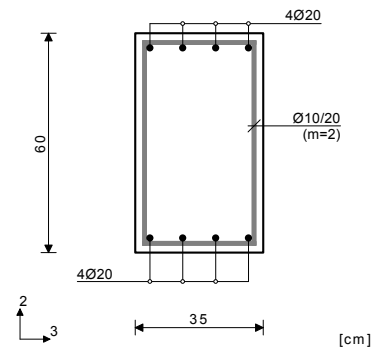
$$[Usvajeno \ Aa,uz = \varnothing 10/20(m=2) = 7.85 \text{ cm}^2/\text{m}]$$

$$\tau_y = 0.44 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$$

$$\tau_z = 0.43 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$$

Procenat armiranja: 1.20%

Presek 5-5 x = 5.90m



Merodavna kombinacija za savijanje:

$$1.60xI + 1.80xII + 1.80xIII$$

$$N1u = -26.79 \text{ kN}$$

$$M2u = 0.00 \text{ kNm}$$

$$M3u = -95.21 \text{ kNm}$$

Merodavna kombinacija za torziju:

$$1.30xI + 0.65xII + 1.30xIV$$

$$M1u = 6.11 \text{ kNm}$$

Merodavna kombinacija za smicanje:

$$1.60xI + 1.80xII + 1.80xIII$$

$$T2u = 140.28 \text{ kN}$$

$$T3u = -2.98 \text{ kN}$$

$$M1u = 5.80 \text{ kNm}$$

$$\varepsilon_b/\varepsilon_a = -1.187/10.000 \text{ ‰}$$

$$Aa1 = 0.00 + 0.13' = 0.13 \text{ cm}^2$$

$$Aa2 = 3.38 + 0.13' = 3.50 \text{ cm}^2$$

$$Aa3 = 0.00 + 0.22' = 0.22 \text{ cm}^2$$

$$Aa4 = 0.00 + 0.22' = 0.22 \text{ cm}^2$$

$$Aa,uz = 2.36 \text{ cm}^2/\text{m} \quad (m=1)$$

$$[Usvajeno \ Aa,uz = \varnothing 10/20(m=2) = 7.85 \text{ cm}^2/\text{m}]$$

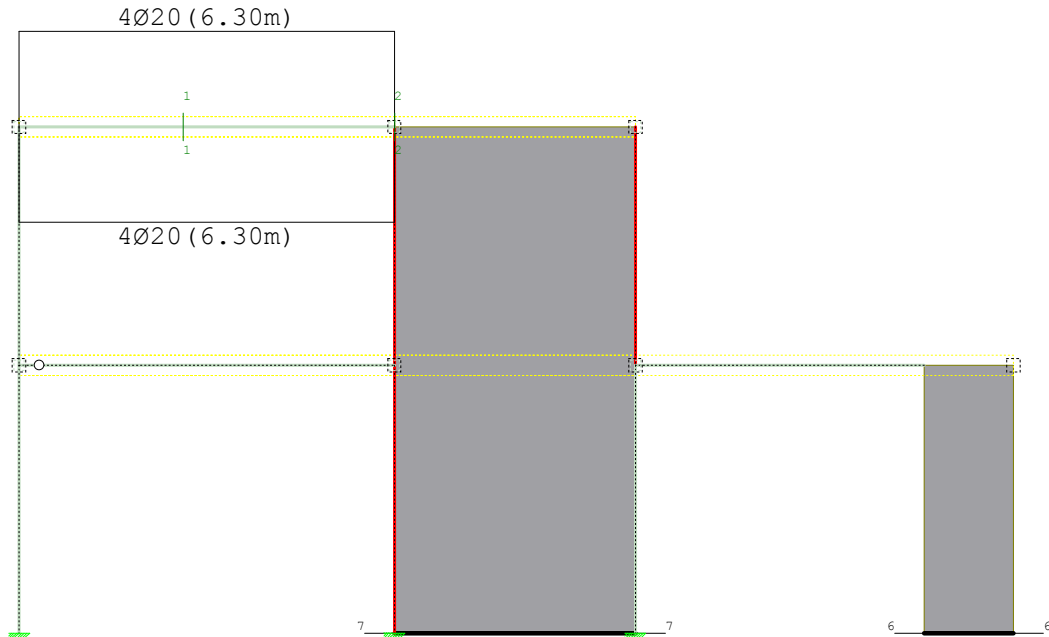
$$\tau_y = 1.24 \text{ MPa} < 3\tau_r, \tau_r = 1.10 \text{ MPa}$$

$$\tau_z = 0.67 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$$

Procenat armiranja: 1.20%

GREDA POS G223

Usvojena armatura
PBAB 87, MB 30, B500

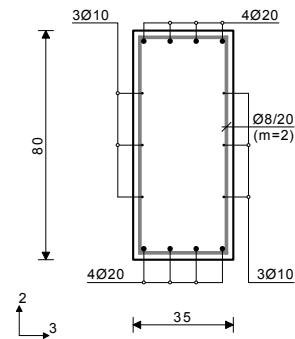


Ram: V_6
Armatura u gredama: Aa2/Aa1

Greda 7721-9428

PBAB 87
MB 30
B500
Kompletna šema opterećenja

Presek 1-1 x = 2.75m



Merodavna kombinacija za savijanje:

1.60xI+1.80xII+1.80xIII
N1u = -47.59 kN
M2u = 0.00 kNm
M3u = 252.64 kNm

Merodavna kombinacija za torziju:

1.60xI+1.80xII+1.80xIII
M1u = 5.72 kNm

Merodavna kombinacija za smicanje:

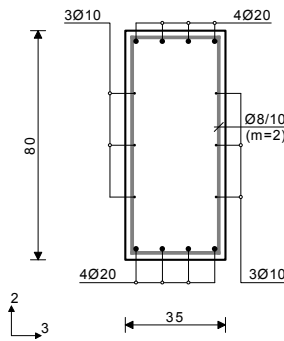
1.60xI+1.80xII+1.80xIII
T2u = -0.35 kN
T3u = -2.71 kN
M1u = 5.72 kNm

$\epsilon_b/\epsilon_a = -1.530/10.000 \%$
Aa1 = 6.86 + 0.09' = 6.95 cm²
Aa2 = 0.00 + 0.09' = 0.09 cm²
Aa3 = 0.00 + 0.20' = 0.20 cm²
Aa4 = 0.00 + 0.20' = 0.20 cm²
Aa,uz = 0.00 cm²/m (m=1)
(Usvojeno Aa,uz = Ø8/20(m=2) = 5.03 cm²/m)

$\tau_y = 0.46 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.47 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$

Procent armiranja: 1.07%
) - dodatna podubna armatura za prijem torzije.

Presek 2-2 x = 6.30m



Merodavna kombinacija za savijanje:

1.60xI+1.80xII+1.80xIII
N1u = -160.77 kN
M2u = 0.00 kNm
M3u = -259.37 kNm

Merodavna kombinacija za torziju:

1.60xI+1.80xII+1.80xIII
M1u = 23.32 kNm

Merodavna kombinacija za smicanje:

1.60xI+1.80xII+1.80xIII
T2u = 204.03 kN
T3u = -0.79 kN
M1u = 23.32 kNm

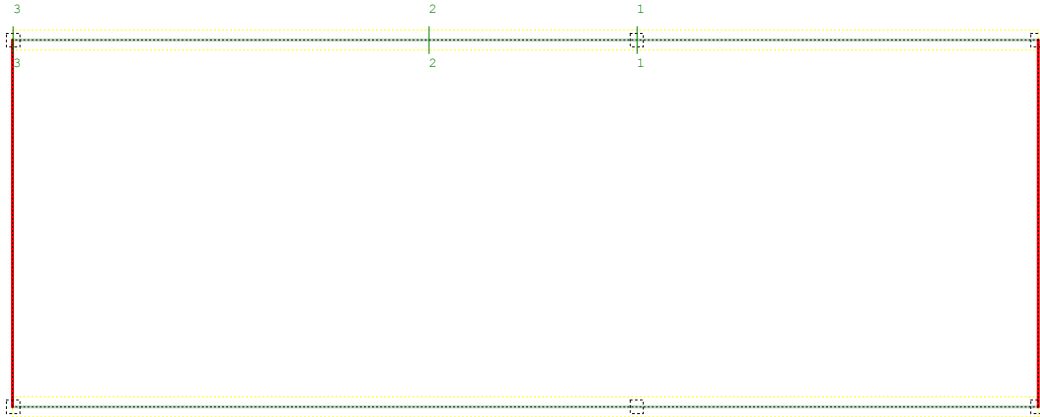
$\epsilon_b/\epsilon_a = -1.696/10.000 \%$
Aa1 = 0.00 + 0.36' = 0.36 cm²
Aa2 = 5.90 + 0.36' = 6.27 cm²
Aa3 = 0.00 + 0.83' = 0.83 cm²
Aa4 = 0.00 + 0.83' = 0.83 cm²
Aa,uz = 8.03 cm²/m (m=1)
(Usvojeno Aa,uz = Ø8/10(m=2) = 10.05 cm²/m)

$\tau_y = 2.76 \text{ MPa} < 3\tau_r, \tau_r = 1.10 \text{ MPa}$
 $\tau_z = 1.86 \text{ MPa} < 3\tau_r, \tau_r = 1.10 \text{ MPa}$

Procent armiranja: 1.07%

GREDA POS G224

Usvojena armatura
PBAB 87, MB 30, B500

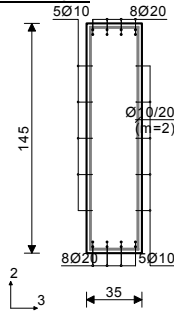


Ram: K_3
Armatura u gredama: Aa2/Aa1

Greda 10077-8456

PBAB 87
MB 30
B500
Kompletna šema opterećenja

Presek 1-1 x = 4.37m



Merodavna kombinacija za savijanje:
1.60xI+1.80xII+1.80xIII
N1u = -96.49 kN
M2u = 0.00 kNm
M3u = 434.13 kNm

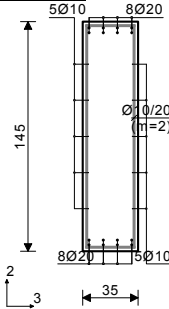
Merodavna kombinacija za torziju:
1.60xI+1.80xII+1.80xIII
M1u = 31.59 kNm

Merodavna kombinacija za smicanje:
1.60xI+1.80xII+1.80xIII
T2u = 6.81 kN
T3u = -0.84 kN
M1u = 31.59 kNm

$\epsilon_b/\epsilon_a = -1.055/10.000 \text{ ‰}$
Aa1 = 5.84 + 0.27' = 6.11 cm²
Aa2 = 0.00 + 0.27' = 0.27 cm²
Aa3 = 0.00 + 1.13' = 1.13 cm²
Aa4 = 0.00 + 1.13' = 1.13 cm²
Aa,uz = 0.69 cm²/m (m=1)
[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]

$\tau_y = 1.41 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$
 $\tau_z = 1.39 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$
Procenat armiranja: 1.15%
) - dodatna podužna armatura za prijem torzije.

Presek 2-2 x = 6.64m



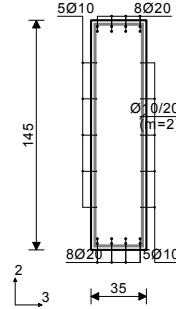
Merodavna kombinacija za savijanje:
1.60xI+1.80xII+1.80xIII
N1u = -99.34 kN
M2u = 0.00 kNm
M3u = 388.30 kNm

Merodavna kombinacija za torziju:
1.60xI+1.80xII+1.80xIII
M1u = 31.62 kNm

Merodavna kombinacija za smicanje:
1.60xI+1.80xII+1.80xIII
T2u = 49.72 kN
T3u = -0.04 kN
M1u = 31.62 kNm

$\epsilon_b/\epsilon_a = -0.997/10.000 \text{ ‰}$
Aa1 = 5.07 + 0.27' = 5.34 cm²
Aa2 = 0.00 + 0.27' = 0.27 cm²
Aa3 = 0.00 + 1.13' = 1.13 cm²
Aa4 = 0.00 + 1.13' = 1.13 cm²
Aa,uz = 1.14 cm²/m (m=1)
[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]
 $\tau_y = 1.51 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$
 $\tau_z = 1.39 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$
Procenat armiranja: 1.15%

Presek 3-3 x = 11.17m



Merodavna kombinacija za savijanje:
1.60xI+1.80xII+1.80xIII
N1u = -105.30 kN
M2u = 0.00 kNm
M3u = -259.14 kNm

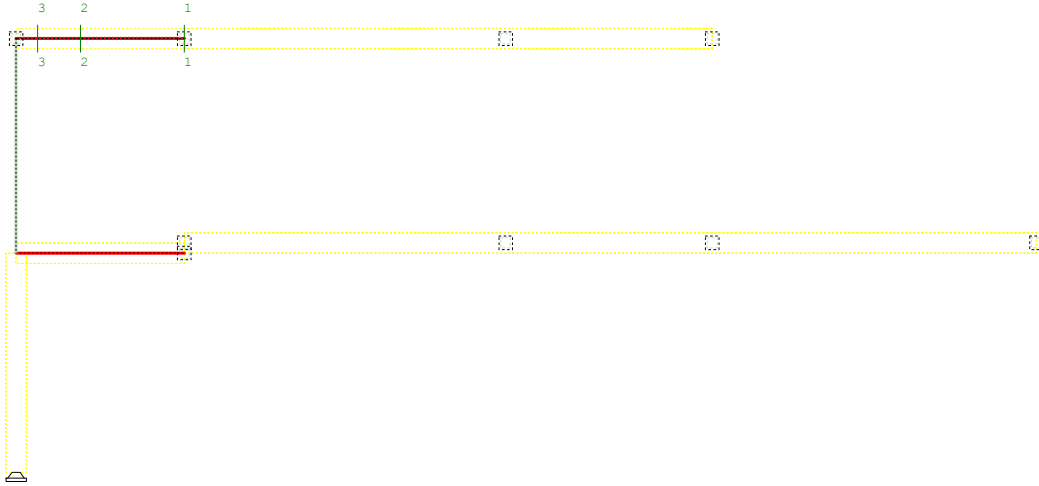
Merodavna kombinacija za torziju:
1.60xI+1.80xII+1.80xIII
M1u = 31.57 kNm

Merodavna kombinacija za smicanje:
1.60xI+1.80xII+1.80xIII
T2u = 242.71 kN
T3u = -29.41 kN
M1u = 31.57 kNm

$\epsilon_b/\epsilon_a = -0.822/10.000 \text{ ‰}$
Aa1 = 0.00 + 0.27' = 0.27 cm²
Aa2 = 2.93 + 0.27' = 3.21 cm²
Aa3 = 0.00 + 1.13' = 1.13 cm²
Aa4 = 0.00 + 1.13' = 1.13 cm²
Aa,uz = 4.25 cm²/m (m=1)
[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]
 $\tau_y = 1.98 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$
 $\tau_z = 1.46 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$
Procenat armiranja: 1.15%

GREDA POS G225

Usvojena armatura
PBAB 87, MB 30, B500

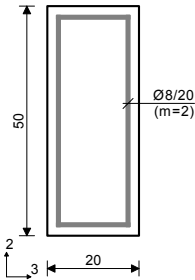


Ram: V_9
Armatura u gredama: Aa2/Aa1

Greda 4987-3933

PBAB 87
MB 30
B500
Kompletna šema opterećenja

Presek 1-1 x = 0.00m



Merodavna kombinacija za savijanje:
1.60xl+1.80xII+1.80xIII

N1u = -0.66 kN
M2u = 0.00 kNm
M3u = -24.62 kNm

Merodavna kombinacija za torziju:
1.60xl+1.80xII

M1u = 1.20 kNm

Merodavna kombinacija za smicanje:
1.60xl+1.80xII

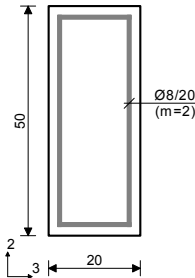
T2u = -19.33 kN
T3u = 1.43 kN
M1u = 1.20 kNm

$\epsilon_b/\epsilon_a = -0.886/10.000 \text{ ‰}$

Aa1 = 0.00 + 0.03' = 0.03 cm²
Aa2 = 1.12 + 0.03' = 1.15 cm²
Aa3 = 0.00 + 0.07' = 0.07 cm²
Aa4 = 0.00 + 0.07' = 0.07 cm²
Aa,uz = 0.00 cm²/m (m=1)
[Usvojeno Aa,uz = Ø8/20(m=2) = 5.03 cm²/m]

$\tau_y = 0.71 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.49 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$
' - dodatna podužna armatura za prijem torzije.

Presek 2-2 x = 2.04m



Merodavna kombinacija za savijanje:
1.30xl+0.65xII-1.30xV

N1u = 11.39 kN
M2u = 0.00 kNm
M3u = 9.13 kNm

Merodavna kombinacija za torziju:
1.60xl+1.80xII

M1u = 1.20 kNm

Merodavna kombinacija za smicanje:
1.60xl+1.80xII

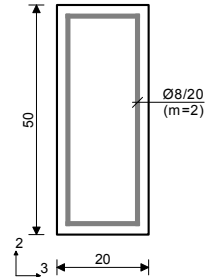
T2u = -3.32 kN
T3u = -0.07 kN
M1u = 1.20 kNm

$\epsilon_b/\epsilon_a = -0.435/10.000 \text{ ‰}$

Aa1 = 0.54 + 0.03' = 0.57 cm²
Aa2 = 0.00 + 0.03' = 0.03 cm²
Aa3 = 0.00 + 0.08' = 0.08 cm²
Aa4 = 0.00 + 0.08' = 0.08 cm²
Aa,uz = 0.00 cm²/m (m=1)
[Usvojeno Aa,uz = Ø8/20(m=2) = 5.03 cm²/m]

$\tau_y = 0.51 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.47 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$

Presek 3-3 x = 2.88m



Merodavna kombinacija za savijanje:
1.60xl+1.80xII+1.80xIII

N1u = 1.96 kN
M2u = 0.00 kNm
M3u = 3.14 kNm

Merodavna kombinacija za torziju:
1.60xl+1.80xII

M1u = 1.21 kNm

Merodavna kombinacija za smicanje:
1.60xl+1.80xII

T2u = 16.39 kN
T3u = 0.18 kN
M1u = 1.21 kNm

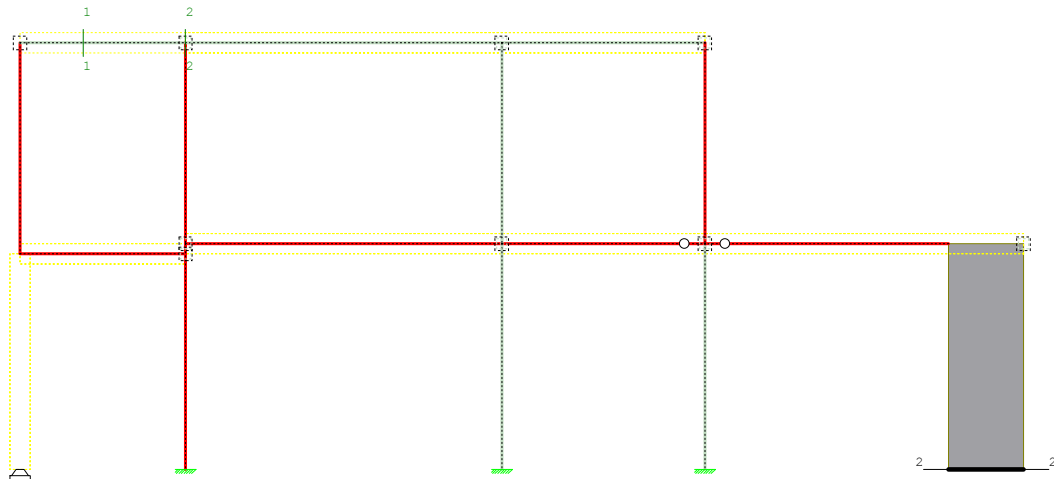
$\epsilon_b/\epsilon_a = -0.274/10.000 \text{ ‰}$

Aa1 = 0.16 + 0.03' = 0.19 cm²
Aa2 = 0.00 + 0.03' = 0.03 cm²
Aa3 = 0.00 + 0.08' = 0.08 cm²
Aa4 = 0.00 + 0.08' = 0.08 cm²
Aa,uz = 0.00 cm²/m (m=1)
[Usvojeno Aa,uz = Ø8/20(m=2) = 5.03 cm²/m]

$\tau_y = 0.68 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.48 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$

GREDA POS G226

Usvojena armatura
PBAB 87, MB 30, B500

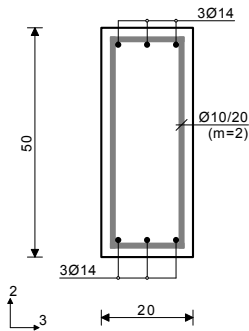


Ram: V_5
Armatura u gredama: Aa2/Aa1

Greda 4877-5944

PBAB 87
MB 30
B500
Kompletna šema opterećenja

Presek 1-1 x = 1.26m



Merodavna kombinacija za savijanje:
1.00xI+1.30xV

N1u = 3.69 kN
M2u = 0.00 kNm
M3u = -3.16 kNm

Merodavna kombinacija za torziju:

1.30xI+0.65xII+1.30xV
M1u = 0.46 kNm

Merodavna kombinacija za smicanje:

1.30xI+1.30xV
T2u = 11.31 kN
T3u = 0.22 kN
M1u = 0.15 kNm

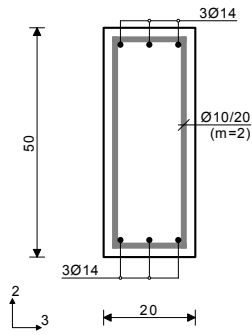
$\epsilon_b/\epsilon_a = -0.431/10.000 \text{ ‰}$

Aa1 = 0.71 cm²
Aa2 = 0.16 cm²
Aa3 = 0.00 cm²
Aa4 = 0.00 cm²
Aa,uz = 0.00 cm²/m
(Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m)

(m=1)

$\tau_y = 0.20 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.06 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$
Procenat armiranja: 0.92%

Presek 2-2 x = 3.30m



Merodavna kombinacija za savijanje:

1.30xI+0.65xII+1.30xV
N1u = 2.15 kN
M2u = 0.00 kNm
M3u = -56.64 kNm

Merodavna kombinacija za torziju:

1.30xI+0.65xII+1.30xV
M1u = 0.47 kNm

Merodavna kombinacija za smicanje:

1.30xI+1.30xV
T2u = 22.09 kN
T3u = -2.69 kN
M1u = 0.17 kNm

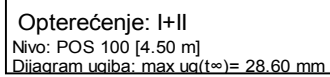
$\epsilon_b/\epsilon_a = -1.452/10.000 \text{ ‰}$

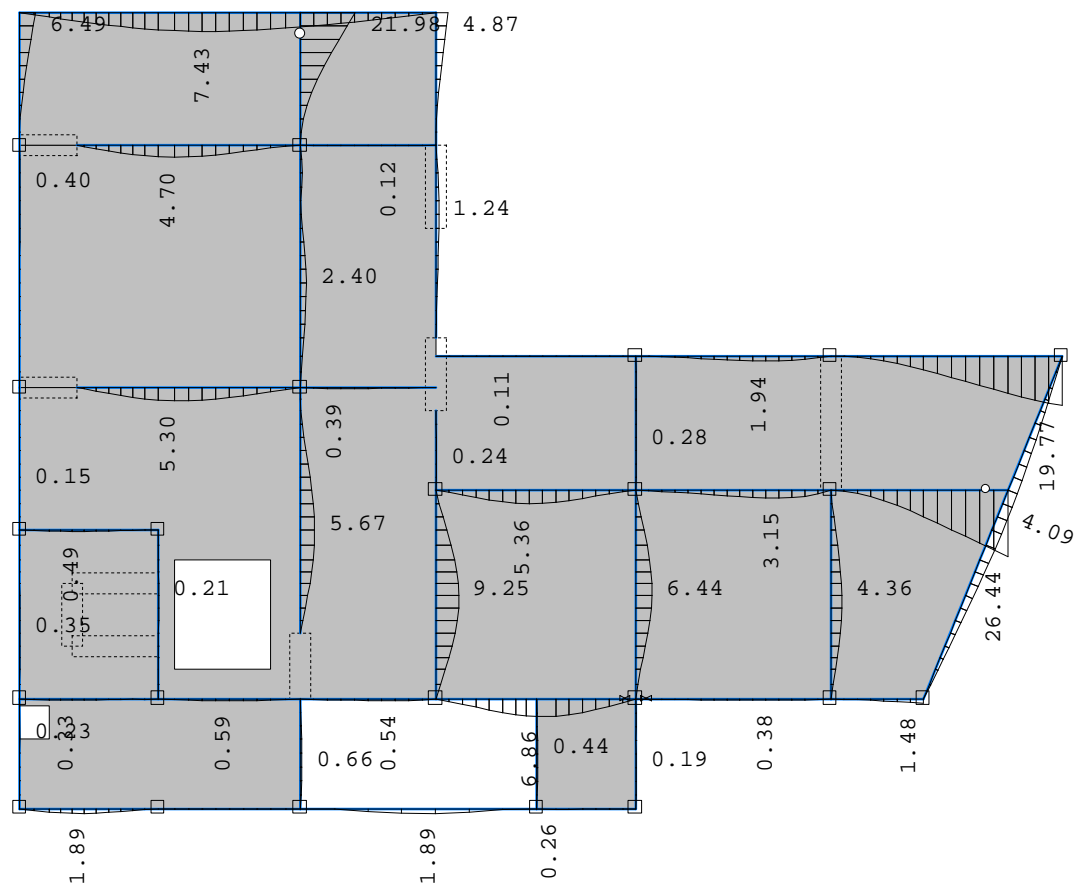
Aa1 = 0.60 cm²
Aa2 = 2.66 cm²
Aa3 = 0.00 cm²
Aa4 = 0.00 cm²
Aa,uz = 0.00 cm²/m
(Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m)

(m=1)

$\tau_y = 0.34 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$
 $\tau_z = 0.10 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$
Procenat armiranja: 0.92%

PBAB 87, MB 30, B500



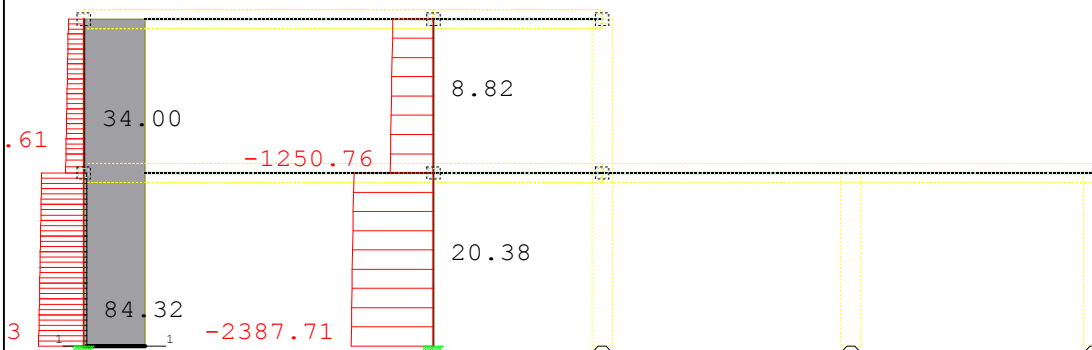


Opterećenje: I+II
 Nivo: POS 200 [8.50 m]
 Dijagram uoiba: max $u_0(t_{\infty}) = 26.44$ mm

7. DIMENZIONISANJE STUBOVA

7.1 UTICAJI

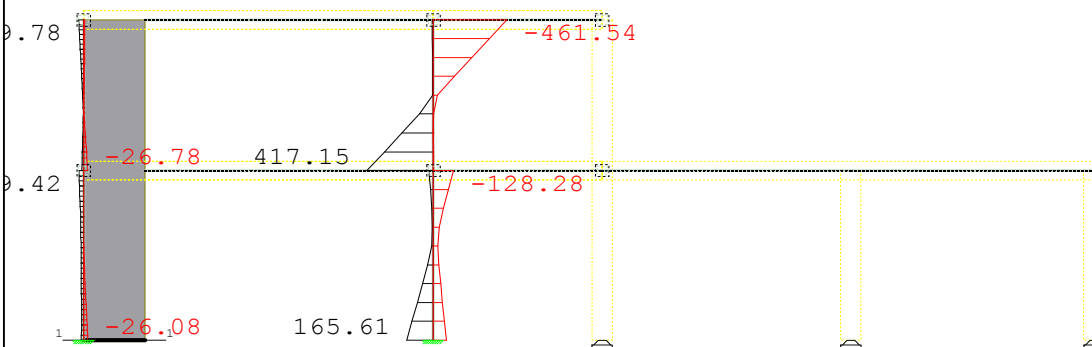
Opt. 30: [Any] 1-29



Ram: H_6

Uticaji u gredi: max N1= 84.32 / min N1= -2387.71 kN

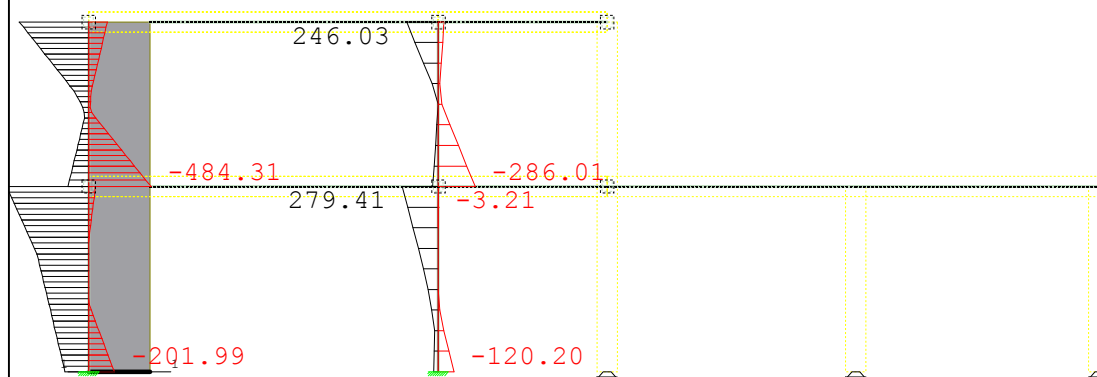
Opt. 30: [Any] 1-29



Ram: H_6

Uticaji u gredi: max M3= 417.15 / min M3= -516.62 kNm

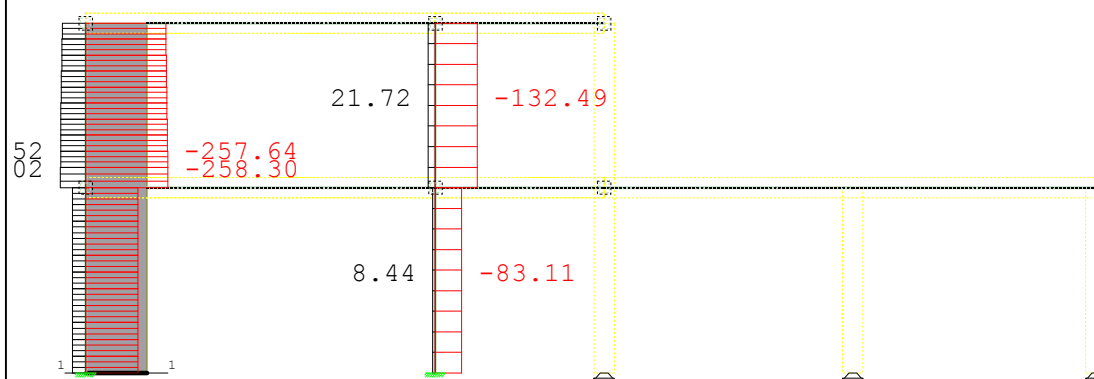
Opt. 30: [Anv] 1-29



Ram: H_6

Uticaji u gredi: max M2= 637.97 / min M2= -484.31 kNm

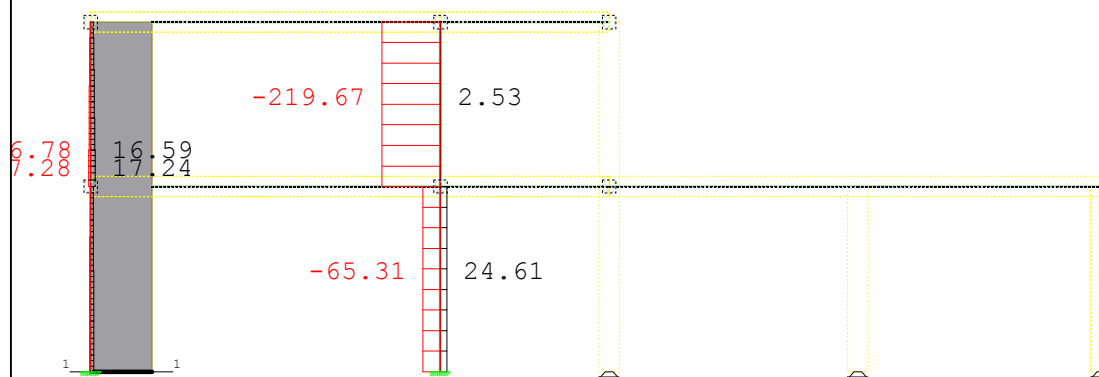
Opt. 30: [Anv] 1-29



Ram: H_6

Uticaji u gredi: max T3= 79.02 / min T3= -258.30 kN

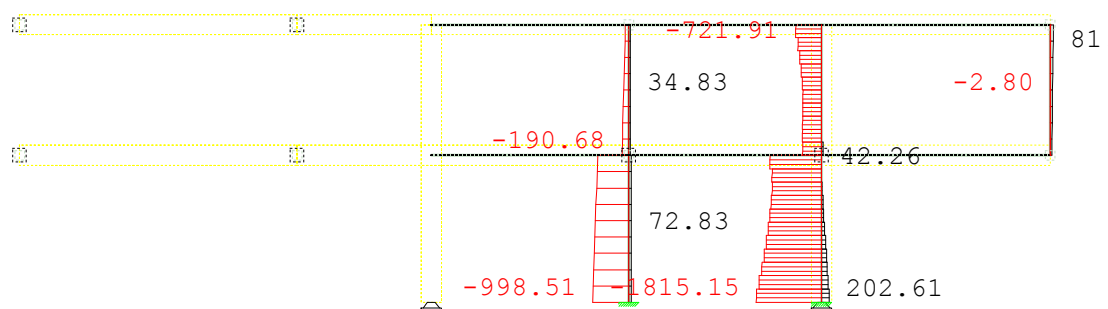
Opt. 30: [Anv] 1-29



Ram: H_6

Uticaji u gredi: max T2= 308.56 / min T2= -236.13 kN

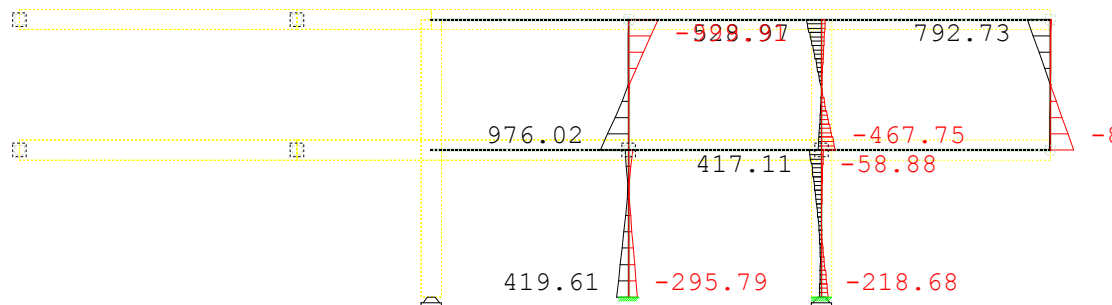
Opt. 30: [Anv] 1-29



Ram: H_5

Uticaji u gredi: max N1= 403.41 / min N1= -1815.15 kN

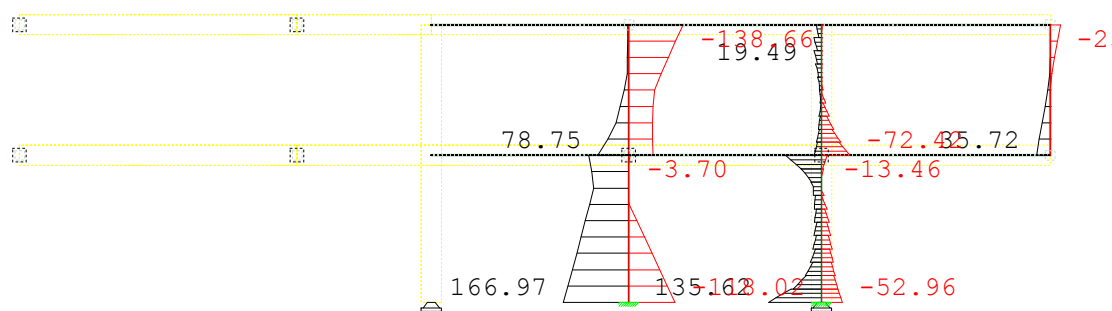
Opt. 30: [Anv] 1-29



Ram: H_5

Uticaji u gredi: max M3= 976.02 / min M3= -2247.51 kNm

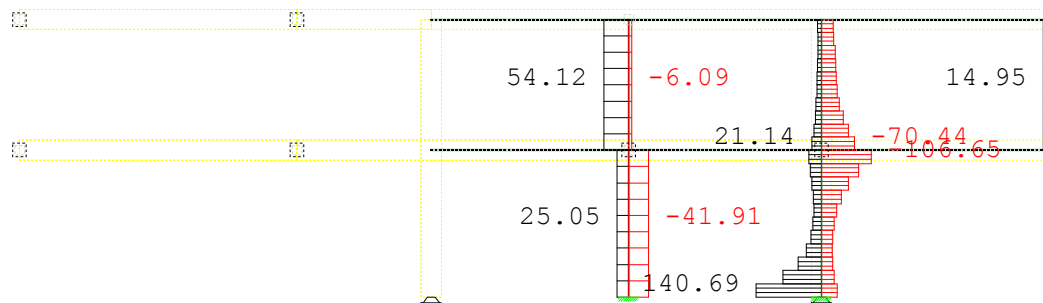
Opt. 30: [Anv] 1-29



Ram: H_5

Uticaji u gredi: max M2= 166.97 / min M2= -138.66 kNm

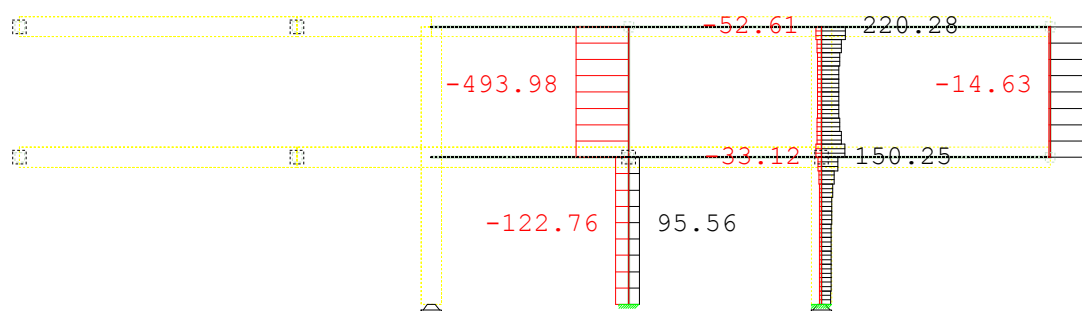
Opt. 30: [Anv] 1-29



Ram: H_5

Uticaji u gredi: max T3= 140.69 / min T3= -106.65 kN

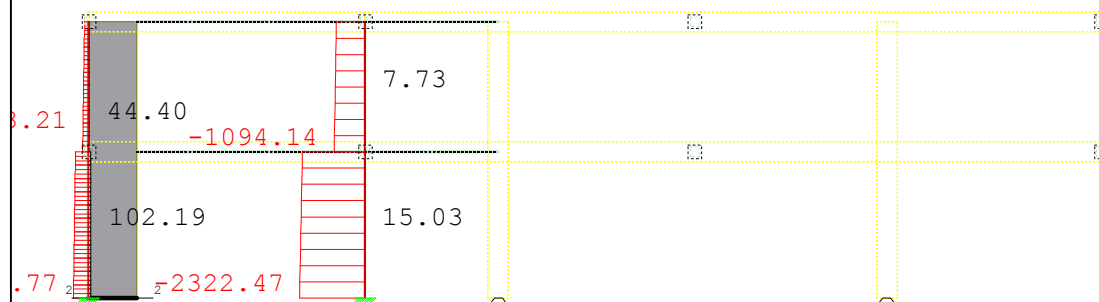
Opt. 30: [Anv] 1-29



Ram: H_5

Uticaji u gredi: max T2= 545.95 / min T2= -607.72 kN

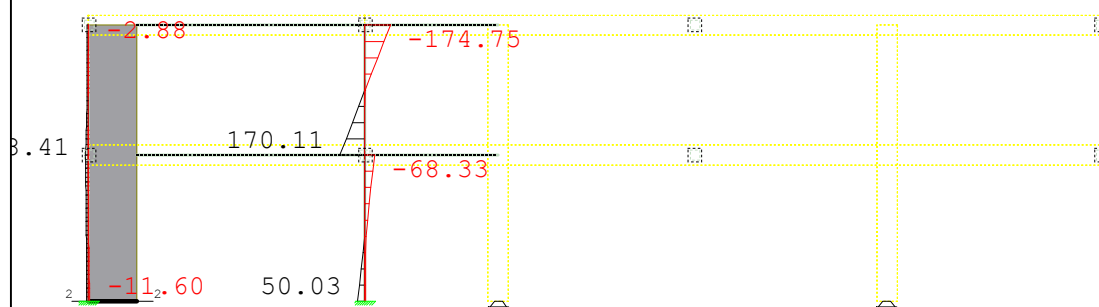
Opt. 30: [Anv] 1-29



Ram: H_4

Uticaji u gredi: max N1= 102.19 / min N1= -2322.47 kN

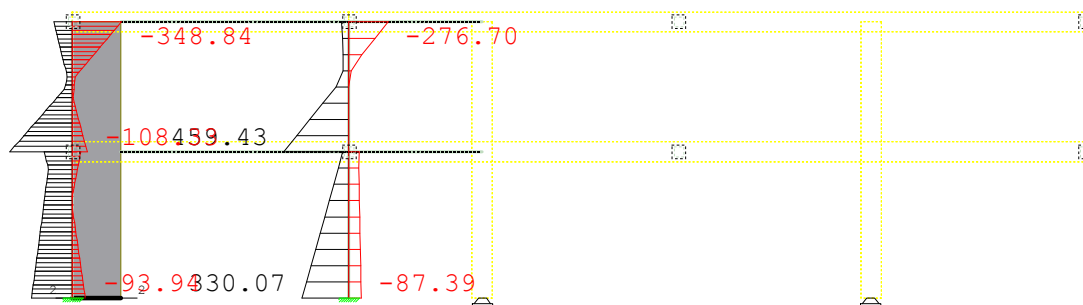
Opt. 30: [Anv] 1-29



Ram: H_4

Uticaji u gredi: max M3= 429.09 / min M3= -444.24 kNm

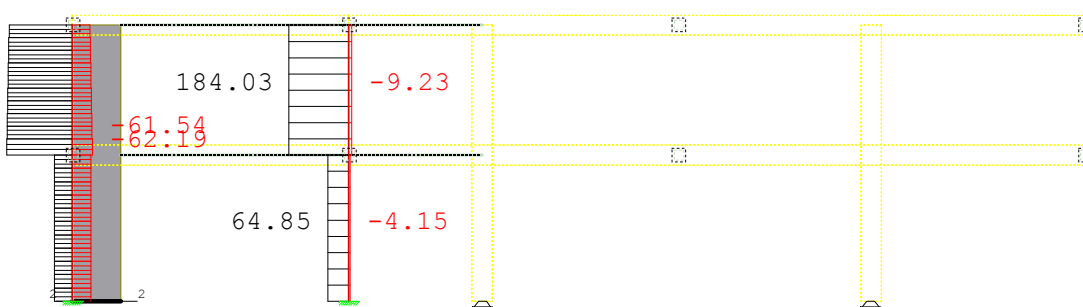
Opt. 30: [Anv] 1-29



Ram: H_4

Uticaji u gredi: max M2= 459.43 / min M2= -348.84 kNm

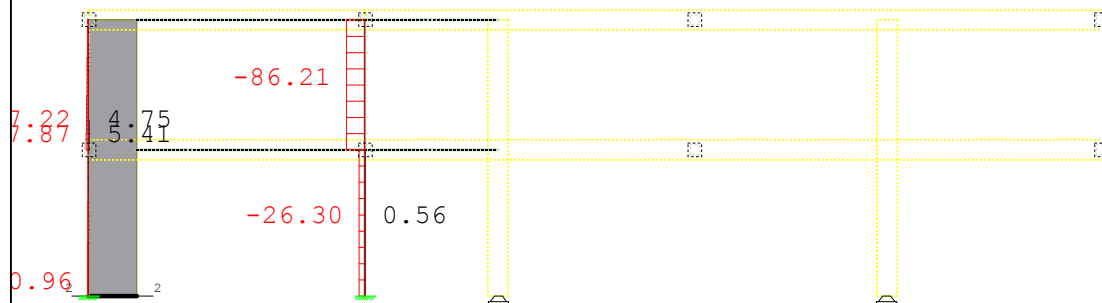
Opt. 30: [Anv] 1-29



Ram: H_4

Uticaji u gredi: max T3= 200.15 / min T3= -62.19 kN

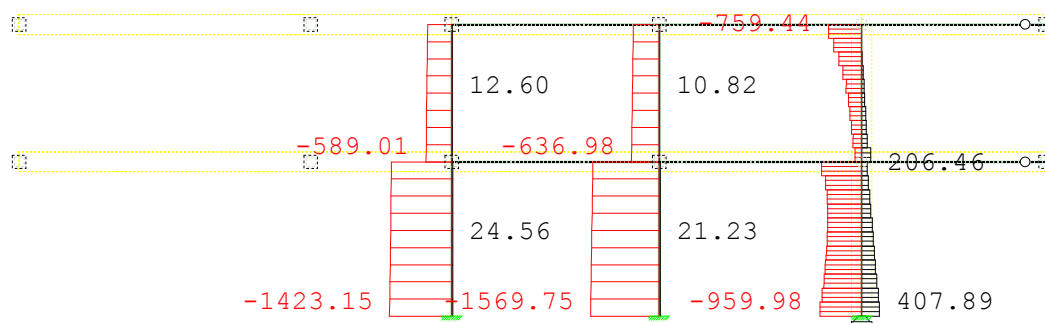
Opt. 30: [Anv] 1-29



Ram: H_4

Uticaji u gredi: max T2= 309.01 / min T2= -284.78 kN

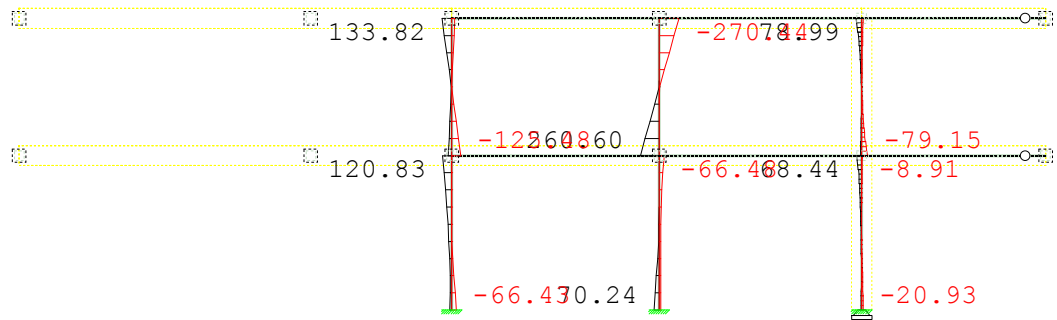
Opt. 30: [Anv] 1-29



Ram: H_3

Uticaji u gredi: max N1= 407.89 / min N1= -1569.75 kN

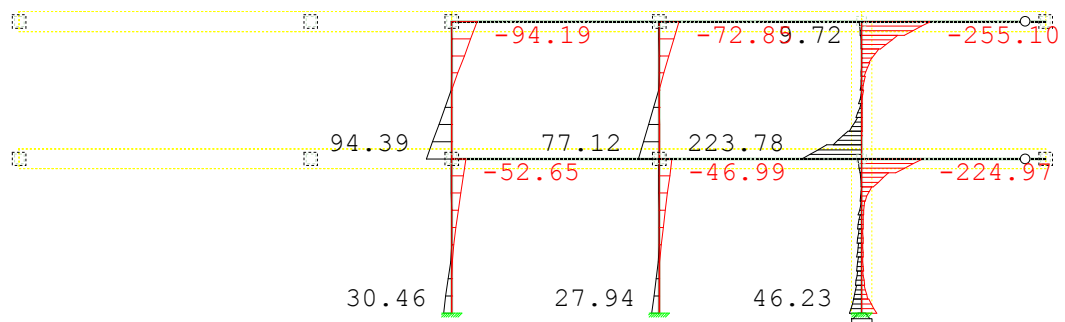
Opt. 30: [Anv] 1-29



Ram: H_3

Uticaji u gredi: max M3= 260.60 / min M3= -942.25 kNm

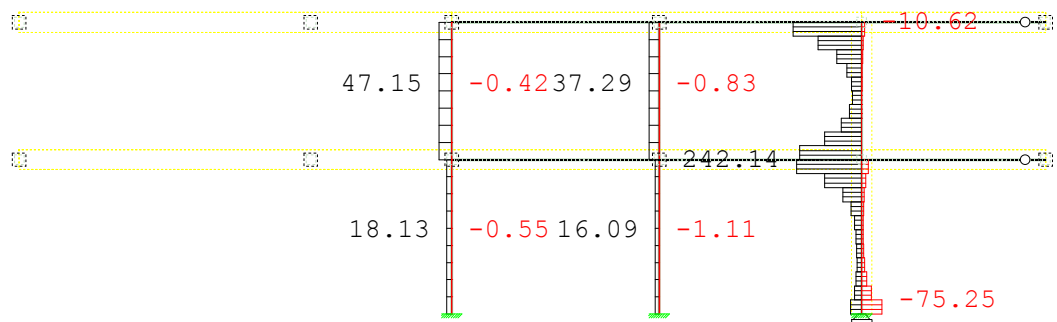
Opt. 30: [Anv] 1-29



Ram: H_3

Uticaji u gredi: max M2= 223.78 / min M2= -255.10 kNm

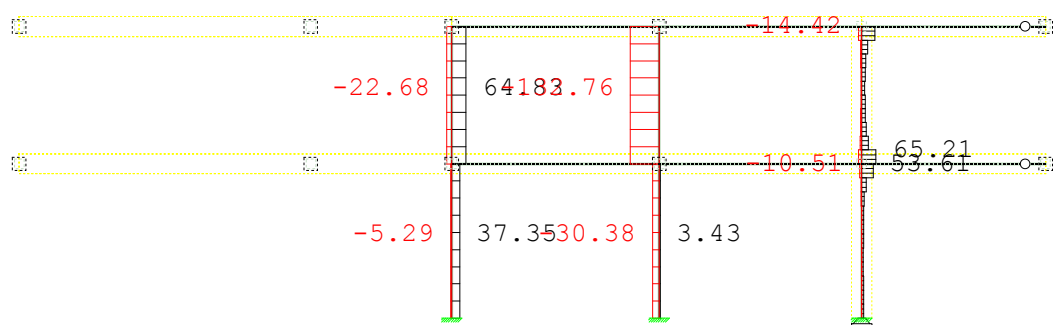
Opt. 30: [Anv] 1-29



Ram: H_3

Uticaji u gredi: max T3= 255.44 / min T3= -75.25 kN

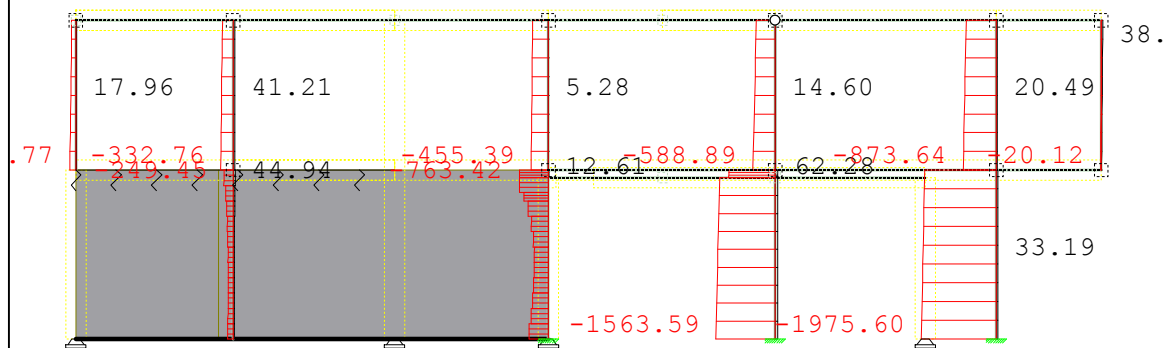
Opt. 30: [Anv] 1-29



Ram: H_3

Uticaji u gredi: max T2= 315.80 / min T2= -274.41 kN

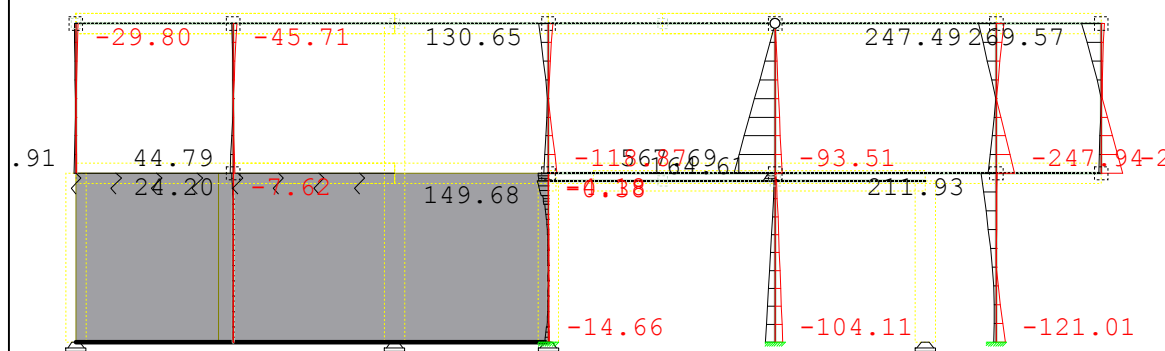
Opt. 30: [Anv] 1-29



Ram: H_2

Uticaji u gredi: max N1= 158.34 / min N1= -1975.60 kN

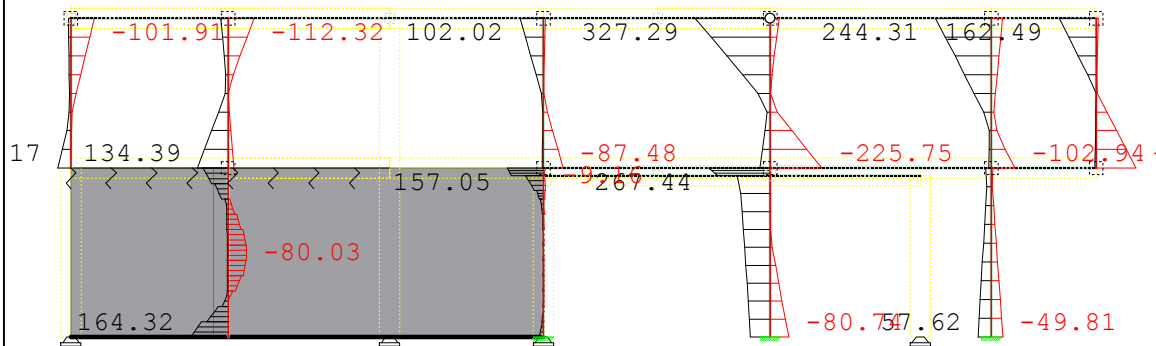
Opt. 30: [Anv] 1-29



Ram: H_2

Uticaji u gredi: max M3= 567.69 / min M3= -1028.94 kNm

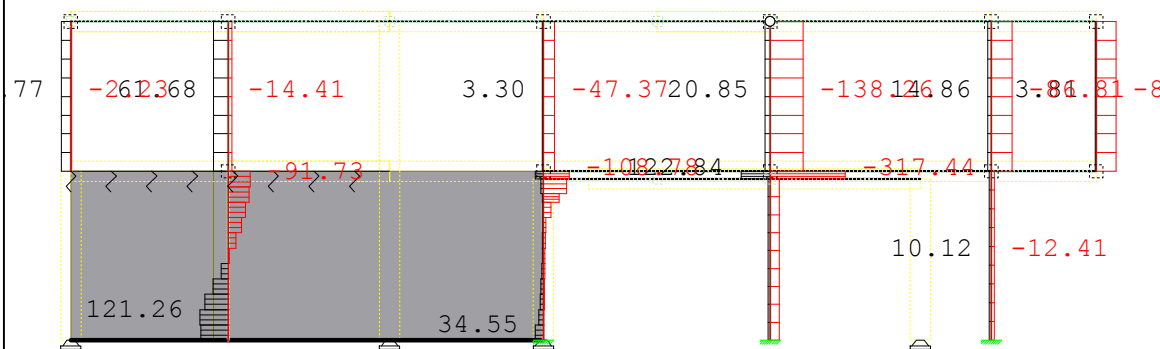
Opt. 30: [Anv] 1-29



Ram: H_2

Uticaji u gredi: max M2= 327.29 / min M2= -225.75 kNm

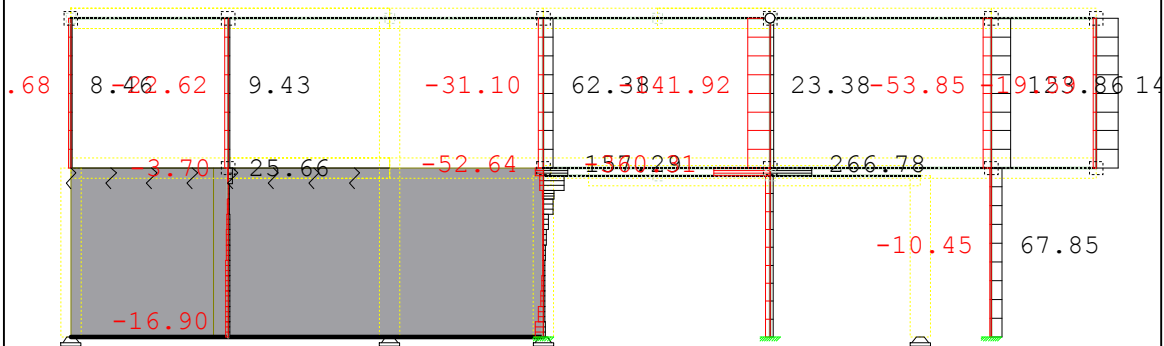
Opt. 30: [Anv] 1-29



Ram: H_2

Uticaji u gredi: max T3= 122.84 / min T3= -317.44 kN

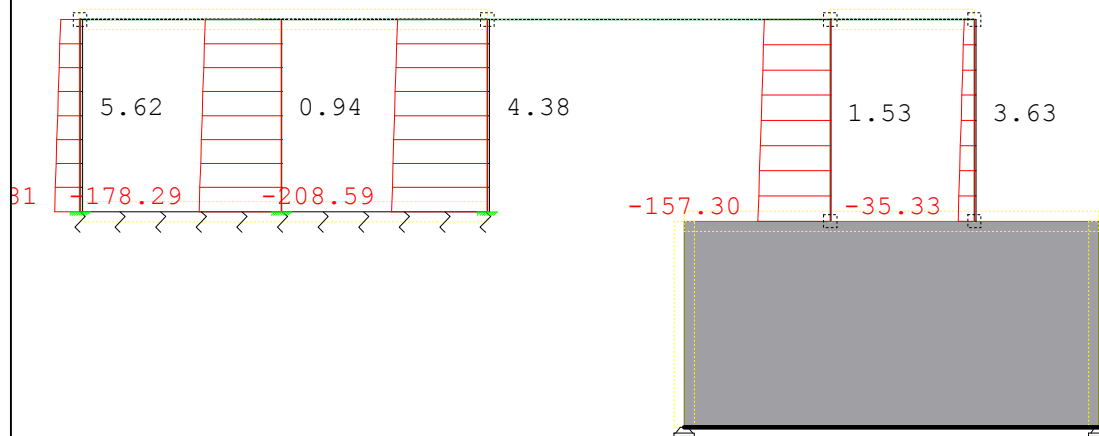
Opt. 30: [Anv] 1-29



Ram: H_2

Uticaji u gredi: max T2= 278.28 / min T2= -480.25 kN

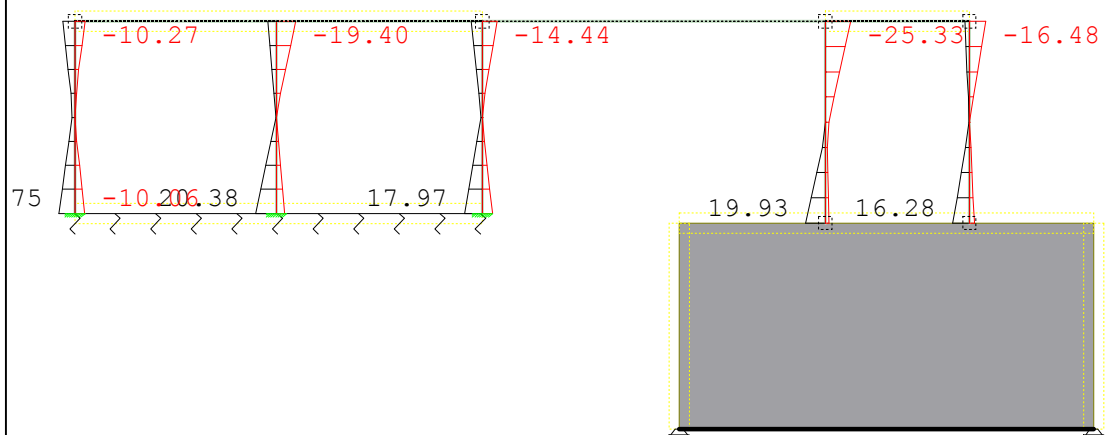
Opt. 30: [Anv] 1-29



Ram: H_1

Uticaji u gredi: max N1= 26.38 / min N1= -208.59 kN

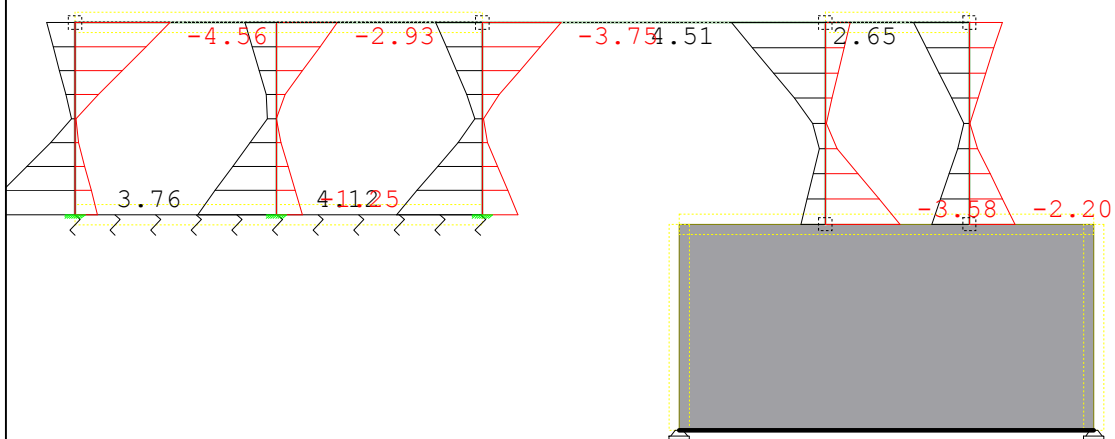
Opt. 30: [Anv] 1-29



Ram: H_1

Uticaji u gredi: max M3= 60.54 / min M3= -95.66 kNm

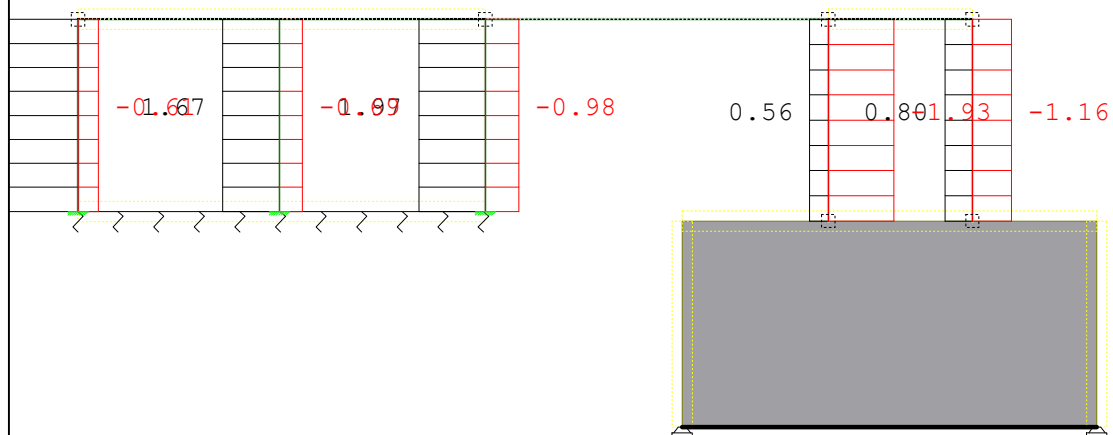
Opt. 30: [Anv] 1-29



Ram: H_1

Uticaji u gredi: max M2= 4.59 / min M2= -4.56 kNm

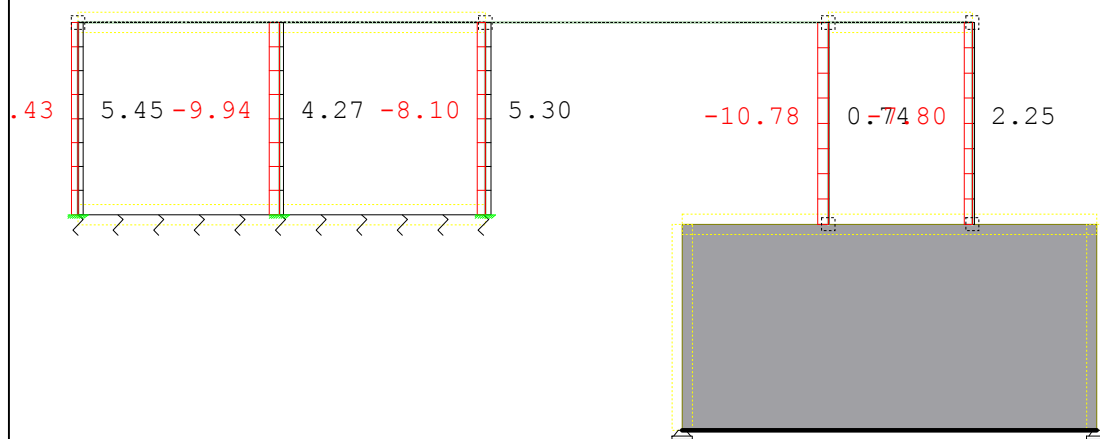
Opt. 30: [Anv] 1-29



Ram: H_1

Uticaji u gredi: max T3= 2.29 / min T3= -2.83 kN

Opt. 30: [Anv] 1-29



Ram: H_1

Uticaji u gredi: max T2= 95.80 / min T2= -84.37 kN

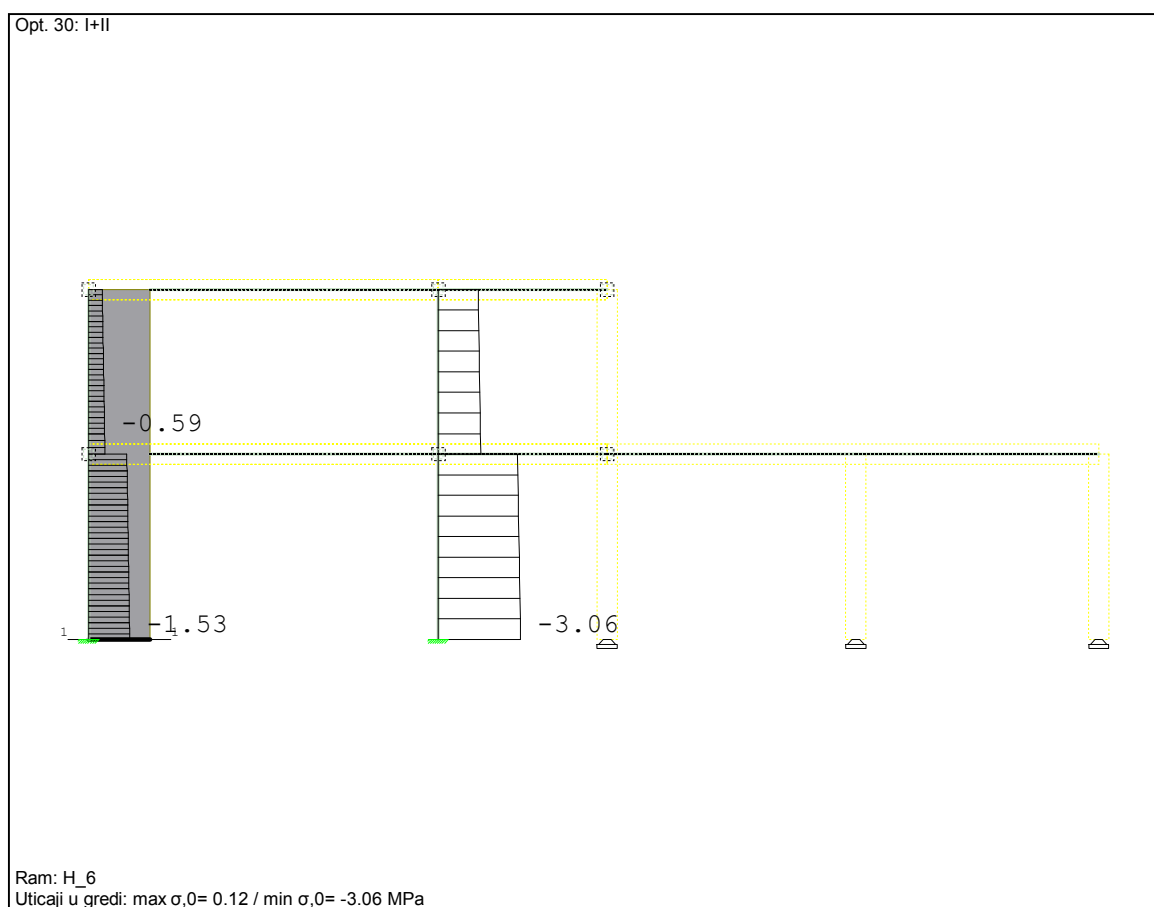
7.2 KONTROLA DOZVOLJENIH NAPONA PRITISKA

$$\sigma_o \leq 0.35 * 0.7 * MB$$

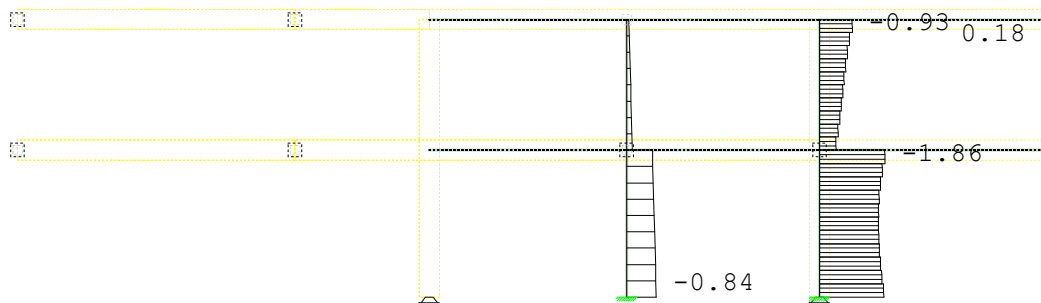
MB 30: $\sigma_o \leq 7.35 \text{ MPa}$

MJERODAVNO OPTEREĆENJE:

1.0g + 1.0p



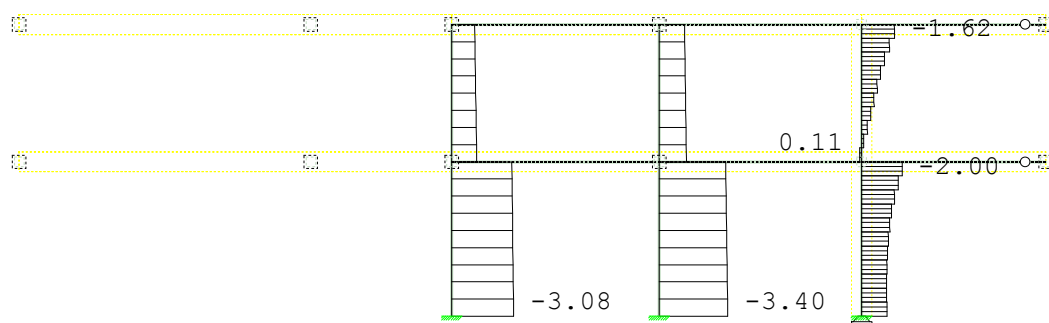
Opt. 30: I+II



Ram: H_5

Uticaji u gredi: max $\sigma_0 = 0.49$ / min $\sigma_0 = -1.87$ MPa

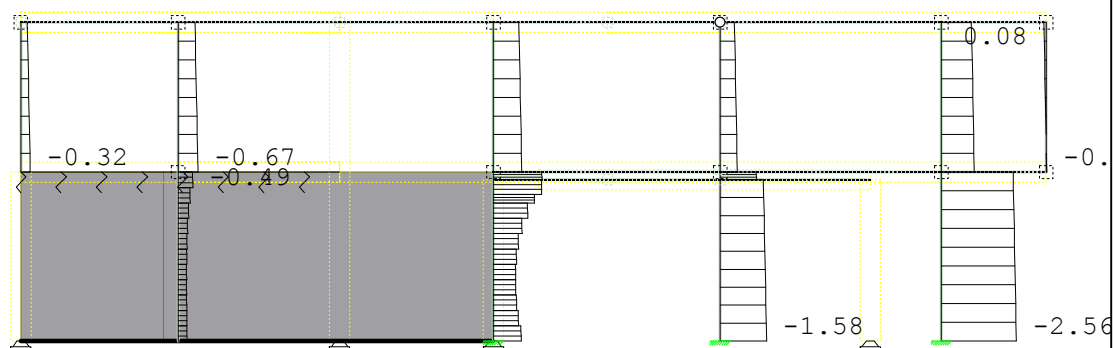
Opt. 30: I+II



Ram: H_3

Uticaji u gredi: max $\sigma_0 = 0.21$ / min $\sigma_0 = -3.40$ MPa

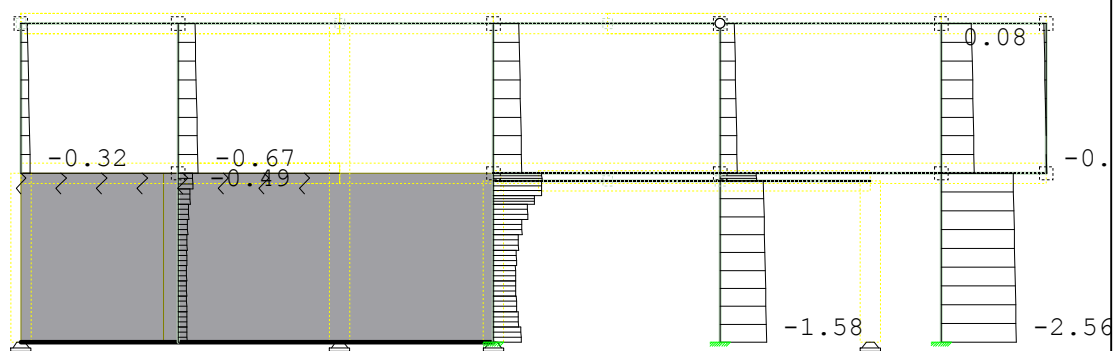
Opt. 30: I+II



Ram: H_2

Uticaji u gredi: max $\sigma_0 = 0.13$ / min $\sigma_0 = -2.56$ MPa

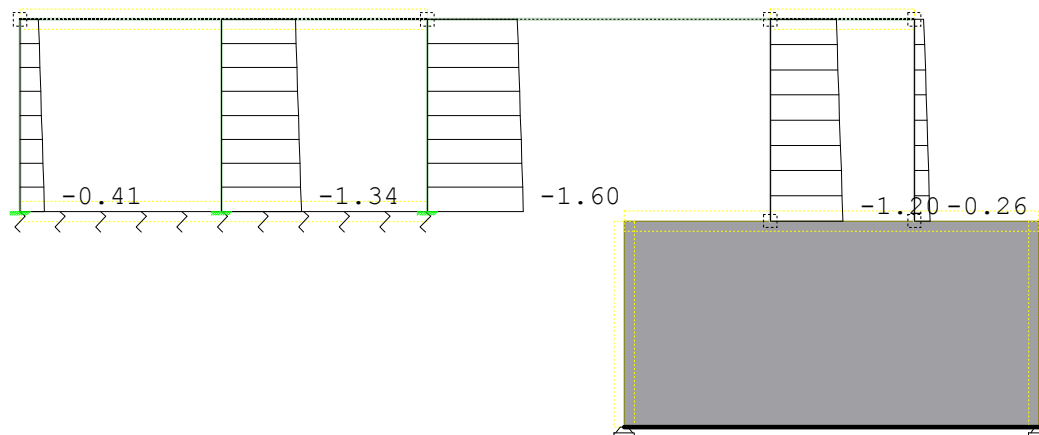
Opt. 30: I+II



Ram: H_2

Uticaji u gredi: max $\sigma_0 = 0.13$ / min $\sigma_0 = -2.56$ MPa

Opt. 30: I+II

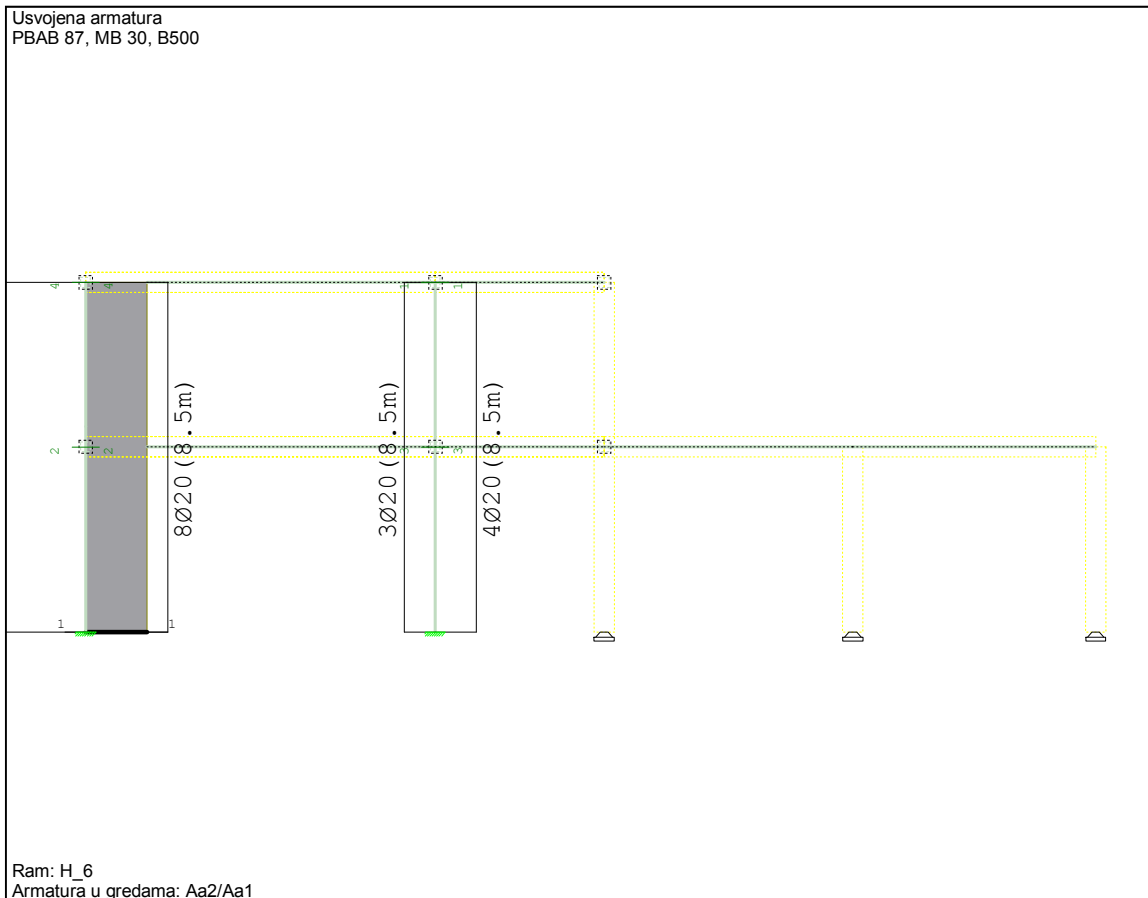


Ram: H_1

Uticaji u gredi: max $\sigma_x = 0.00$ / min $\sigma_x = -1.60$ MPa

7.3 USVOJENA ARMATURA

STUBOVI – OSA B



Greda 4148-2835

PBAB 87

MB 30

B500

Kompletna šema opterećenja

$l_{i,2} = 5.00 \text{ m}$ ($\lambda_2 = 11.55$)

$l_{i,3} = 5.00 \text{ m}$ ($\lambda_3 = 49.49$)

Nepomerljiva konstrukcija

Merodavna kombinacija za savijanje:

$1.30xI + 0.65xII - 1.30xV$

$N_{1u} = -367.86 \text{ kN}$

$M_{2u} = -484.31 \text{ kNm}$

$M_{3u} = -13.54 \text{ kNm}$

$Aa1 = 2.85 + 0.05 = 2.90 \text{ cm}^2$

$Aa2 = 2.84 + 0.05 = 2.89 \text{ cm}^2$

$Aa3 = 0.67 + 0.00 = 0.67 \text{ cm}^2$

$Aa4 = 0.66 + 0.00 = 0.66 \text{ cm}^2$

$Aa_{uz} = 0.00 \text{ cm}^2/\text{m}$ ($m=1$)

[Usvojeno $Aa_{uz} = \emptyset 10/15(m=2) = 10.47 \text{ cm}^2/\text{m}$]

Merodavna kombinacija za torziju:

$1.30xI + 0.65xII + 1.30xIV$

$M_{1u} = -1.36 \text{ kNm}$

$\tau_y = 0.05 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$

$\tau_z = 0.63 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$

Procentat armiranja: 1.08%

^{*)} - dodatna podužna armatura za prijem torzije.

Merodavna kombinacija za smicanje:

$1.30xI - 1.30xV$

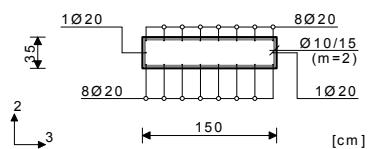
$T_{2u} = 7.84 \text{ kN}$

$T_{3u} = -254.37 \text{ kN}$

$M_{1u} = -0.67 \text{ kNm}$

$\epsilon_b/\epsilon_a = -1.667/10.000 \%$

Presek 2-2 $x = 0.50 \text{ m}$



Greda 5306-4148

PBAB 87

MB 30

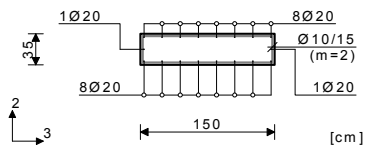
B500

Kompletna šema opterećenja

li,2 = 3.50 m ($\lambda_2 = 8.08$)li,3 = 3.50 m ($\lambda_3 = 34.64$)

Nepomertljiva konstrukcija

Presek 4-4 x = 0.00m



Merodavna kombinacija za savijanje:

1.30xI+0.65xII+1.30xV

N1u = -299.62 kN

M2u = 536.46 kNm

M3u = 18.75 kNm

Merodavna kombinacija za torziju:

1.30xI+0.65xII+1.30xIV

M1u = -1.36 kNm

Merodavna kombinacija za smicanje:

1.30xI-1.30xV

T2u = 7.84 kN

T3u = -247.51 kN

M1u = -0.67 kNm

 $\epsilon_b/\epsilon_a = -1.802/10.000 \%$ Aa1 = 4.13 + 0.05' = 4.18 cm²Aa2 = 4.11 + 0.05' = 4.15 cm²Aa3 = 0.97 + 0.00' = 0.97 cm²Aa4 = 0.95 + 0.00' = 0.95 cm²Aa,uz = 0.00 cm²/m (m=1)[Usvajeno Aa,uz = Ø10/15(m=2) = 10.47 cm²/m] $\tau_y = 0.05 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$ $\tau_z = 0.61 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$

Procenat armiranja: 1.08%

*) - dodatna podužna armatura za prijem torzije.

Greda 6661-5312

PBAB 87

MB 30

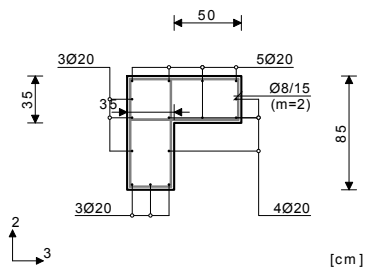
B500

Kompletna šema opterećenja

li,2 = 4.50 m ($\lambda_2 = 18.97$)li,3 = 4.50 m ($\lambda_3 = 18.97$)

Nepomertljiva konstrukcija

Presek 3-3 x = 0.00m



Merodavna kombinacija za savijanje:

1.90xI+2.10xII+2.10xIII

N1u = -2727.49 kN

M2u = 106.59 kNm

M3u = 331.45 kNm

Merodavna kombinacija za torziju:

1.30xI+0.65xII+1.30xIV

M1u = -1.38 kNm

Merodavna kombinacija za smicanje:

1.30xI+0.65xII+1.30xIV

T2u = 65.54 kN

T3u = -65.31 kN

M1u = -1.38 kNm

Aa1 = 0.00 + 0.00' = 0.00 cm²Aa2 = 0.00 + 0.04' = 0.04 cm²Aa3 = 0.00 + 0.04' = 0.04 cm²Aa4 = 0.00 + 0.04' = 0.04 cm²Aa,uz = 0.00 cm²/m (m=1)[Usvajeno Aa,uz = Ø8/15(m=2) = 6.70 cm²/m] $\tau_y = 0.34 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$ $\tau_z = 0.33 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$

Procenat armiranja: 1.00%

*) - dodatna podužna armatura za prijem torzije.

Greda 7896-6661

PBAB 87

MB 30

B500

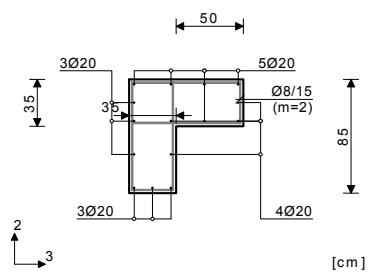
Kompletna šema opterećenja

li,2 = 4.00 m ($\lambda_2 = 16.86$)

li,3 = 4.00 m ($\lambda_3 = 16.86$)

Nepomerljiva konstrukcija

Presek 1-1 x = 0.00m



Merodavna kombinacija za savijanje:

1.30xI+0.65xII+1.30xIV

N1u = -869.19 kN

M2u = 461.54 kNm

M3u = 186.77 kNm

Merodavna kombinacija za torziju:

1.30xI+0.65xII+1.30xIV

M1u = -1.03 kNm

Merodavna kombinacija za smicanje:

1.30xI+0.65xII+1.30xIV

T2u = 103.32 kN

T3u = -219.67 kN

M1u = -1.03 kNm

$\varepsilon_b/\varepsilon_a = -3.500/9.446 \text{ ‰}$

Aa1 = 6.62 cm²

Aa2 = 6.68 cm²

Aa3 = 6.67 cm²

Aa4 = 6.62 cm²

Aa,uz = 0.00 cm²/m (m=1)

[Usvojeno Aa,uz = Ø8/15(m=2) = 6.70 cm²/m]

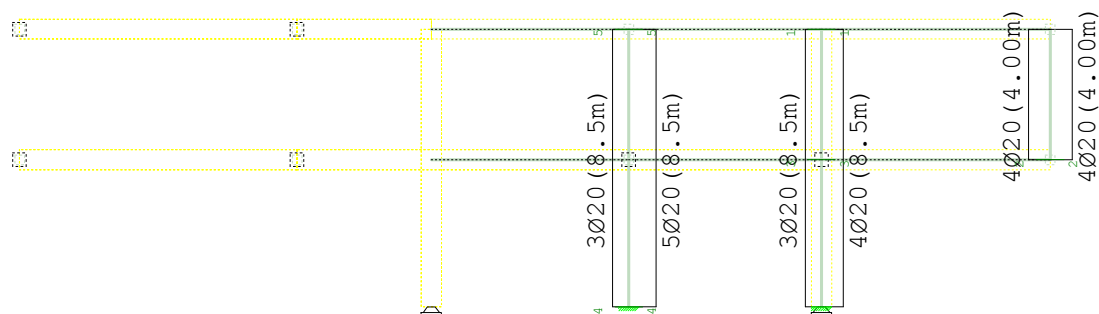
$\tau_y = 0.47 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$

$\tau_z = 0.91 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$

Procenat armiranja: 1.00%

STUBOVI – OSA C'

Usvojena armatura
PBAB 87, MB 30, B500



Ram: H_5
Armatura u gredama: Aa2/Aa1

Greda 7854-6445

PBAB 87

MB 30

B500

Kompletna šema opterećenja

li,2 = 4.50 m ($\lambda_2 = 12.41$)

li,3 = 4.50 m ($\lambda_3 = 13.84$)

Nepomerljiva konstrukcija

Merodavna kombinacija za savijanje:

1.00xI+1.30xIV

N1u = -459.46 kN

M2u = -399.37 kNm

M3u = -40.85 kNm

Merodavna kombinacija za torziju:

1.30xI+0.65xII+1.30xIV

M1u = -1.77 kNm

Merodavna kombinacija za smicanje:

1.30xI+0.65xII+1.30xIV

T2u = 30.84 kN

T3u = -122.76 kN

M1u = -1.77 kNm

$\epsilon_b/\epsilon_a = -2.458/10.000 \%$

Aa1 = 1.56 + 0.00' = 1.56 cm²

Aa2 = 1.57 + 0.06' = 1.63 cm²

Aa3 = 1.57 + 0.05' = 1.62 cm²

Aa4 = 1.55 + 0.05' = 1.60 cm²

Aa,uz = 0.00 cm²/m (m=1)

[Usvojeno Aa,uz = Ø8/15(m=2) = 6.70 cm²/m]

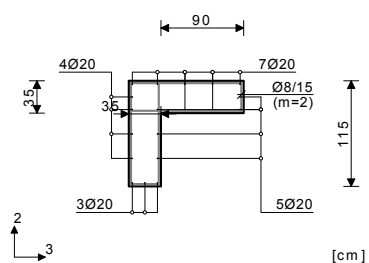
$\tau_y = 0.17 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$

$\tau_z = 0.40 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$

Procenat armiranja: 0.83%

*) - dodatna podužna armatura za prijem torzije.

Presek 4-4 x = 4.50m



Greda 9037-7854

PBAB 87

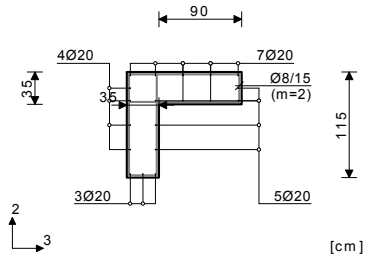
MB 30

B500

Kompletna šema opterećenja

li,2 = 4.00 m ($\lambda_2 = 11.03$)li,3 = 4.00 m ($\lambda_3 = 12.30$)

Nepomertljiva konstrukcija

Presek 5-5 $x = 0.00\text{m}$ 

Merodavna kombinacija za savijanje:

1.30xI+0.65xII+1.30xIV

N1u = -6.84 kN

M2u = 999.91 kNm

M3u = -98.40 kNm

Merodavna kombinacija za torziju:

1.30xI+0.65xII+1.30xV

M1u = -1.97 kNm

Merodavna kombinacija za smicanje:

1.30xI+0.65xII+1.30xIV

T2u = -29.57 kN

T3u = -493.98 kN

M1u = -1.29 kNm

 $\epsilon_b/\epsilon_a = -1.741/10.000 \%$ Aa1 = 24.67 + 0.00' = 24.67 cm²Aa2 = 24.91 + 0.06' = 24.97 cm²Aa3 = 24.87 + 0.05' = 24.92 cm²Aa4 = 24.66 + 0.05' = 24.71 cm²Aa,uz = 2.50 cm²/m (m=1)[Usvajeno Aa,uz = Ø8/15(m=2) = 6.70 cm²/m] $\tau_y = 0.14\text{MPa} < \tau_r = 1.10\text{MPa}$ $\tau_z = 1.35\text{MPa} < 3\tau_r = 1.10\text{MPa}$

Procenat armiranja: 0.83%

*) - dodatna podužna armatura za prijem torzije.

Greda 10066-9453

PBAB 87

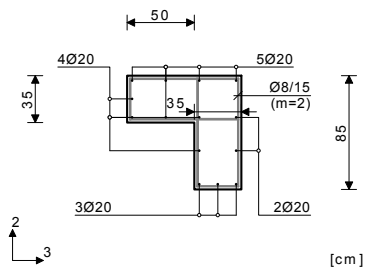
MB 30

B500

Kompletna šema opterećenja

li,2 = 4.00 m ($\lambda_2 = 16.86$)li,3 = 4.00 m ($\lambda_3 = 16.86$)

Nepomertljiva konstrukcija

Presek 1-1 $x = 0.00\text{m}$ 

Merodavna kombinacija za savijanje:

1.30xI+0.65xII-1.30xIV

N1u = -489.52 kN

M2u = -528.97 kNm

M3u = 8.00 kNm

Merodavna kombinacija za torziju:

1.30xI+0.65xII-1.30xIV

M1u = -18.17 kNm

Merodavna kombinacija za smicanje:

1.30xI+0.65xII-1.30xIV

T2u = 9.98 kN

T3u = 220.28 kN

M1u = -18.17 kNm

 $\epsilon_b/\epsilon_a = -1.945/10.000 \%$ Aa1 = 8.56 + 0.26' = 8.82 cm²Aa2 = 8.65 + 0.56' = 9.21 cm²Aa3 = 8.63 + 0.45' = 9.08 cm²Aa4 = 8.56 + 0.45' = 9.01 cm²Aa,uz = 4.33 cm²/m (m=1)[Usvajeno Aa,uz = Ø8/15(m=2) = 6.70 cm²/m] $\tau_y = 1.03\text{MPa} < \tau_r = 1.10\text{MPa}$ $\tau_z = 1.85\text{MPa} < 3\tau_r = 1.10\text{MPa}$

Procenat armiranja: 0.93%

*) - dodatna podužna armatura za prijem torzije.

Greda 9453-8268

PBAB 87

MB 30

B500

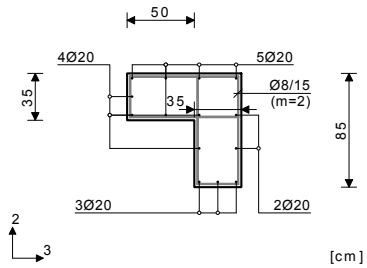
Kompletna šema opterećenja

li,2 = 4.50 m ($\lambda_2 = 18.97$)

li,3 = 4.50 m ($\lambda_3 = 18.97$)

Nepomerljiva konstrukcija

Presek 3-3 x = 0.00m



Merodavna kombinacija za savijanje:

1.30xI+0.65xII-1.30xIV

N1u = -1048.51 kN

M2u = -401.70 kNm

M3u = 45.45 kNm

Merodavna kombinacija za torziju:

1.30xI+0.65xII-1.30xIV

M1u = -26.51 kNm

Merodavna kombinacija za smicanje:

1.30xI+0.65xII-1.30xIV

T2u = 40.32 kN

T3u = 150.25 kN

M1u = -26.51 kNm

$\epsilon_b/\epsilon_a = -2.487/10.000 \text{ ‰}$

Aa1 = 2.35 + 0.38' = 2.73 cm²

Aa2 = 2.38 + 0.82' = 3.20 cm²

Aa3 = 2.37 + 0.65' = 3.03 cm²

Aa4 = 2.35 + 0.65' = 3.01 cm²

Aa,uz = 4.09 cm²/m (m=1)

[Usvojeno Aa,uz = Ø8/15(m=2) = 6.70 cm²/m]

$\tau_y = 1.61 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$

$\tau_z = 2.03 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$

Procenat armiranja: 0.93%

*) - dodatna podužna armatura za prijem torzije.

Greda 10359-10286

PBAB 87

MB 30

B500

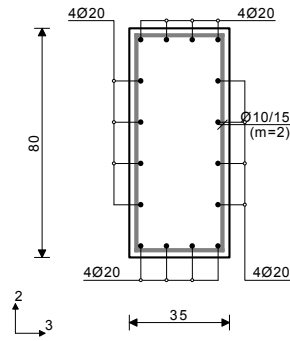
Kompletna šema opterećenja

li,2 = 4.00 m ($\lambda_2 = 39.59$)

li,3 = 4.00 m ($\lambda_3 = 17.32$)

Nepomerljiva konstrukcija

Presek 2-2 x = 4.00m



[cm]

Merodavna kombinacija za savijanje:

1.60xI+1.80xII+1.80xIII

N1u = 31.58 kN

M2u = 35.71 kNm

M3u = -803.13 kNm

Merodavna kombinacija za torziju:

1.60xI+1.80xII+1.80xIII

M1u = -4.16 kNm

Merodavna kombinacija za smicanje:

1.60xI+1.80xII+1.80xIII

T2u = 398.96 kN

T3u = 14.95 kN

M1u = -4.16 kNm

$\epsilon_b/\epsilon_a = -3.500/7.637 \text{ ‰}$

Aa1 = 8.72 + 0.06' = 8.78 cm²

Aa2 = 8.58 + 0.06' = 8.64 cm²

Aa3 = 19.80 + 0.15' = 19.95 cm²

Aa4 = 19.68 + 0.15' = 19.83 cm²

Aa,uz = 9.08 cm²/m (m=1)

[Usvojeno Aa,uz = Ø10/15(m=2) = 10.47 cm²/m]

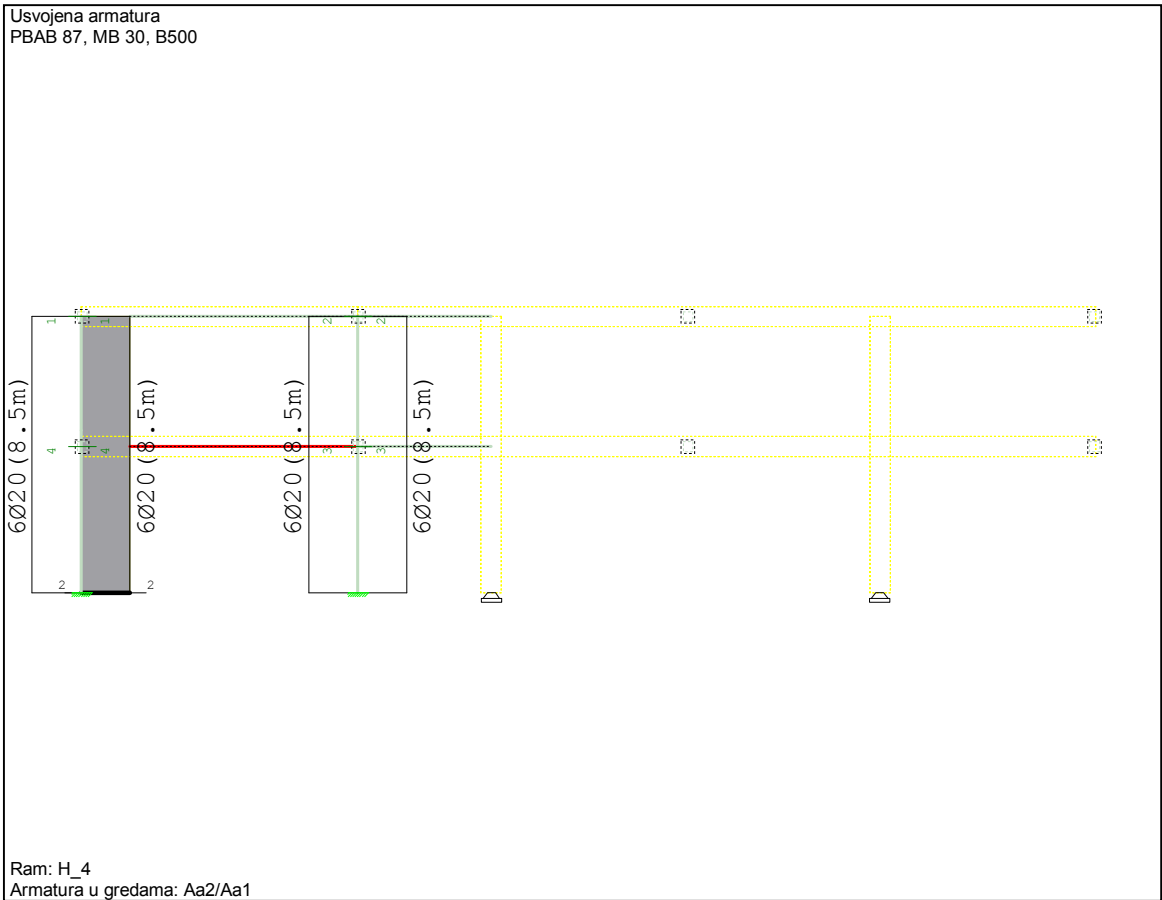
$\tau_y = 2.09 \text{ MPa} < 3\tau_r$, $\tau_r = 1.10 \text{ MPa}$

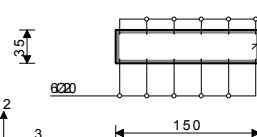
$\tau_z = 0.40 \text{ MPa} < \tau_r$, $\tau_r = 1.10 \text{ MPa}$

Procenat armiranja: 1.80%

*) - dodatna podužna armatura za prijem torzije.

STUBOVI – OSA C



Greda 3127-2266 PBAB 87 MB 30 B500 Kompletna šema opterećenja li,2 = 3.50 m (λ2 = 8.08) li,3 = 3.50 m (λ3 = 34.64) Nepomerljiva konstrukcija	Merodavna kombinacija za savijanje:		Aa1 =	3.85	cm²
	1.30xI+0.65xII+1.30xV		Aa2 =	3.83	cm²
	N1u =	-38.70 kN	Aa3 =	0.91	cm²
	M2u =	-348.84 kNm	Aa4 =	0.89	cm²
	M3u =	1.89 kNm	Aa,uz =	0.00	cm²/m (m=1)
		[Usvojeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]			
 Presek 1-1 x = 0.00m	Merodavna kombinacija za torziju:		ty = 0.02MPa < tr ,	tr = 1.10MPa	
	1.30xI+0.65xII-1.30xV		tz = 0.47MPa < tr ,	tr = 1.10MPa	
	M1u =	-0.61 kNm	Procenat armiranja: 0.72%		
	Merodavna kombinacija za smicanje:				
	1.30xI+0.65xII+1.30xV				
	T2u =	-1.65 kN			
	T3u =	193.30 kN			
	M1u =	0.30 kNm			
	Merodavna kombinacija za smicanje:				
	1.30xI+0.65xII+1.30xV				
		eb/ea = -1.131/10.000 ‰			

Greda 2266-973

PBAB 87

MB 30

B500

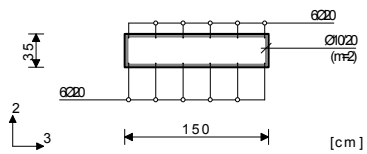
Kompletna šema opterećenja

li,2 = 5.00 m ($\lambda_2 = 11.55$)

li,3 = 5.00 m ($\lambda_3 = 49.49$)

Nepomerljiva konstrukcija

Presek 4-4 x = 0.50m



Merodavna kombinacija za savijanje:

1.30xI+0.65xII+1.30xV

N1u = -106.95 kN

M2u = 439.35 kNm

M3u = 8.50 kNm

Merodavna kombinacija za torziju:

1.30xI+0.65xII-1.30xV

M1u = -0.61 kNm

Merodavna kombinacija za smicanje:

1.30xI+0.65xII+1.30xV

T2u = -1.65 kN

T3u = 200.15 kN

M1u = 0.30 kNm

$\epsilon_b/\epsilon_a = -1.425/10.000 \text{ ‰}$

Aa1 = 4.46 cm²

Aa2 = 4.44 cm²

Aa3 = 1.05 cm²

Aa4 = 1.03 cm²

Aa,uz = 0.00 cm²/m (m=1)

[Usvajeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]

$\tau_y = 0.02 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$

$\tau_z = 0.48 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$

Procenat armiranja: 0.72%

Greda 4370-3131

PBAB 87

MB 30

B500

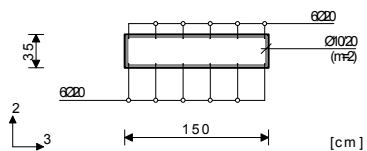
Kompletna šema opterećenja

li,2 = 4.50 m ($\lambda_2 = 10.39$)

li,3 = 4.50 m ($\lambda_3 = 44.54$)

Nepomerljiva konstrukcija

Presek 3-3 x = 0.00m



Merodavna kombinacija za savijanje:

1.90xI+2.10xII+2.10xIII

N1u = -2638.77 kN

M2u = -20.37 kNm

M3u = -74.82 kNm

Merodavna kombinacija za torziju:

1.30xI+0.65xII+1.30xIV

M1u = -1.35 kNm

Merodavna kombinacija za smicanje:

1.30xI+1.30xV

T2u = -13.74 kN

T3u = 64.18 kN

M1u = 0.12 kNm

Aa1 = 0.00 + 0.05' = 0.05 cm²

Aa2 = 0.00 + 0.05' = 0.05 cm²

Aa3 = 0.00 + 0.00' = 0.00 cm²

Aa4 = 0.00 + 0.00' = 0.00 cm²

Aa,uz = 0.00 cm²/m (m=1)

[Usvajeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]

$\tau_y = 0.04 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$

$\tau_z = 0.16 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$

Procenat armiranja: 0.72%

*) - dodatna podužna armatura za prijem torzije.

Greda 5687-4370

PBAB 87

MB 30

B500

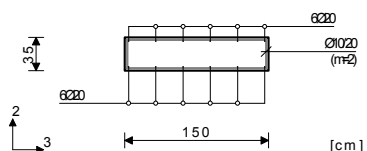
Kompletna šema opterećenja

li,2 = 4.00 m ($\lambda_2 = 9.24$)

li,3 = 4.00 m ($\lambda_3 = 39.59$)

Nepomerljiva konstrukcija

Presek 2-2 x = 0.00m



Merodavna kombinacija za savijanje:

1.30xI+0.65xII+1.30xIV

N1u = -746.04 kN

M2u = -137.64 kNm

M3u = -174.75 kNm

Merodavna kombinacija za torziju:

1.30xI+0.65xII+1.30xIV

M1u = -1.25 kNm

Merodavna kombinacija za smicanje:

1.30xI+1.30xV

T2u = -55.20 kN

T3u = 181.49 kN

M1u = -0.57 kNm

Aa1 = 3.26 + 0.04' = 3.31 cm²

Aa2 = 3.24 + 0.04' = 3.29 cm²

Aa3 = 0.77 + 0.00' = 0.77 cm²

Aa4 = 0.75 + 0.00' = 0.75 cm²

Aa,uz = 0.00 cm²/m (m=1)

[Usvajeno Aa,uz = Ø10/20(m=2) = 7.85 cm²/m]

$\tau_y = 0.15 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$

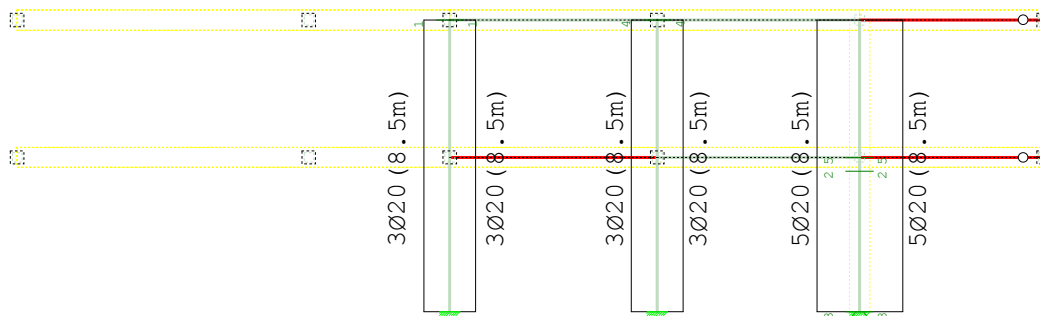
$\tau_z = 0.45 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$

Procenat armiranja: 0.72%

*) - dodatna podužna armatura za prijem torzije.

STUBOVI – OSA D

Usvojena armatura
PBAB 87, MB 30, B500



Ram: H_3
Armatura u gredama: Aa2/Aa1

Greda 5962-4687

PBAB 87

MB 30

B500

Kompletna šema opterećenja

$l_{i,2} = 4.00 \text{ m}$ ($\lambda_2 = 39.59$)

$l_{i,3} = 4.00 \text{ m}$ ($\lambda_3 = 17.32$)

Nepomerljiva konstrukcija

Merodavna kombinacija za savijanje:

$1.30xI + 0.65xII + 1.30xV$

$N_{1u} = -385.37 \text{ kN}$

$M_{2u} = -92.46 \text{ kNm}$

$M_{3u} = 76.28 \text{ kNm}$

$\tau_y = 0.31 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$

$\tau_z = 0.19 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$

Procenat armiranja: 1.35%

Merodavna kombinacija za torziju:

$1.60xI + 1.80xII + 1.80xIII$

$M_{1u} = -0.52 \text{ kNm}$

Merodavna kombinacija za smicanje:

$1.30xI + 0.65xII - 1.30xIV$

$T_{2u} = 64.83 \text{ kN}$

$T_{3u} = 35.84 \text{ kN}$

$M_{1u} = -0.35 \text{ kNm}$

$\epsilon_b/\epsilon_a = -2.869/10.000 \%$

$A_{a1} = 0.72 \text{ cm}^2$

$A_{a2} = 0.71 \text{ cm}^2$

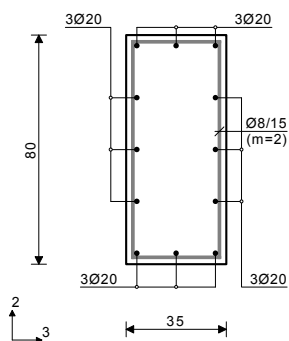
$A_{a3} = 1.65 \text{ cm}^2$

$A_{a4} = 1.64 \text{ cm}^2$

$A_{a,uz} = 0.00 \text{ cm}^2/\text{m}$ ($m=1$)

[Usvojeno $A_{a,uz} = \emptyset 8/15(m=2) = 6.70 \text{ cm}^2/\text{m}$]

Presek 1-1 $x = 0.00 \text{ m}$



[cm]

Greda 7841-6597

PBAB 87

MB 30

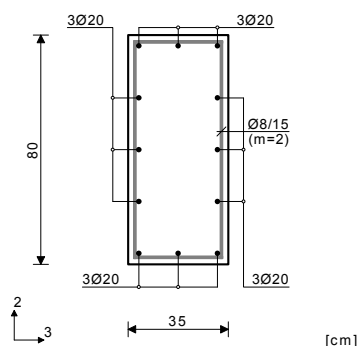
B500

Kompletna šema opterećenja

li,2 = 4.00 m ($\lambda_2 = 39.59$)li,3 = 4.00 m ($\lambda_3 = 17.32$)

Nepomertljiva konstrukcija

Presek 4-4 x = 0.00m



Merodavna kombinacija za savijanje:

1.30xI+0.65xII+1.30xIV

N1u = -431.92 kN

M2u = -52.05 kNm

M3u = -270.44 kNm

 $\tau_y = 0.63 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$ $\tau_z = 0.16 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$

Procenat armiranja: 1.35%

Merodavna kombinacija za torziju:

1.30xI+0.65xII+1.30xV

M1u = -0.72 kNm

Merodavna kombinacija za smicanje:

1.30xI+0.65xII+1.30xIV

T2u = -132.76 kN

T3u = 26.97 kN

M1u = -0.53 kNm

 $\epsilon_b/\epsilon_a = -3.500/9.378 \text{ ‰}$ Aa1 = 1.29 cm²Aa2 = 1.27 cm²Aa3 = 2.92 cm²Aa4 = 2.90 cm²Aa,uz = 0.00 cm²/m (m=1)[Usvajeno Aa,uz = Ø8/15(m=2) = 6.70 cm²/m]**Greda 8431-7021**

PBAB 87

MB 30

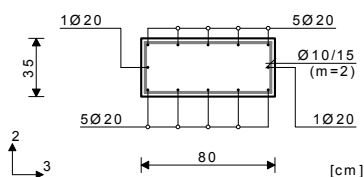
B500

Kompletna šema opterećenja

li,2 = 4.50 m ($\lambda_2 = 19.49$)li,3 = 4.50 m ($\lambda_3 = 44.54$)

Nepomertljiva konstrukcija

Presek 2-2 x = 0.41m



Merodavna kombinacija za smicanje:

1.60xI+1.80xII+1.80xIII

T2u = 52.08 kN

T3u = 242.14 kN

M1u = 15.59 kNm

Merodavna kombinacija za savijanje:

1.00xI+1.30xV

N1u = 220.71 kN

M2u = 46.23 kNm

M3u = -10.40 kNm

Aa1 = 0.00 + 0.56' = 0.56 cm²Aa2 = 0.00 + 0.56' = 0.56 cm²Aa3 = 0.00 + 0.24' = 0.24 cm²Aa4 = 0.00 + 0.24' = 0.24 cm²Aa,uz = 7.50 cm²/m (m=1)[Usvajeno Aa,uz = Ø10/15(m=2) = 10.47 cm²/m] $\tau_y = 1.47 \text{ MPa} < 3\tau_r = 1.10 \text{ MPa}$ $\tau_z = 2.31 \text{ MPa} < 3\tau_r = 1.10 \text{ MPa}$

Procenat armiranja: 1.35%

*) - dodatna poduzna armatura za prijem torzije.

Merodavna kombinacija za torziju:

1.30xI+0.65xII+1.30xIV

M1u = -1.52 kNm

Merodavna kombinacija za smicanje:

1.30xI-1.30xV

T2u = 5.99 kN

T3u = -74.03 kN

M1u = -0.96 kNm

 $\epsilon_b/\epsilon_a = -1.159/10.000 \text{ ‰}$ Aa1 = 2.48 + 0.05' = 2.53 cm²Aa2 = 2.46 + 0.05' = 2.52 cm²Aa3 = 1.09 + 0.02' = 1.11 cm²Aa4 = 1.07 + 0.02' = 1.10 cm²Aa,uz = 0.00 cm²/m (m=1)[Usvajeno Aa,uz = Ø10/15(m=2) = 10.47 cm²/m]

Merodavna kombinacija za savijanje:

1.90xI+2.10xII+2.10xIII

N1u = -1090.90 kN

M2u = -149.11 kNm

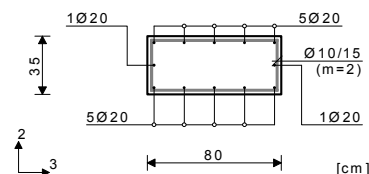
M3u = 55.87 kNm

Merodavna kombinacija za torziju:

1.60xI+1.80xII+1.80xIII

M1u = 15.59 kNm

Presek 3-3 x = 4.50m

 $\tau_y = 0.10 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$ $\tau_z = 0.40 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$

Procenat armiranja: 1.35%

Greda 9428-8431

PBAB 87

MB 30

B500

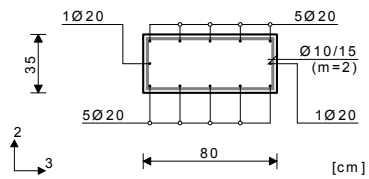
Kompletna šema opterećenja

li,2 = 4.00 m ($\lambda_2 = 17.32$)

li,3 = 4.00 m ($\lambda_3 = 39.59$)

Nepomertljiva konstrukcija

Presek 5-5 x = 4.00m



Merodavna kombinacija za savijanje:

1.30xI+0.65xII+1.30xV

N1u = 202.82 kN

M2u = 187.10 kNm

M3u = -54.37 kNm

Merodavna kombinacija za torziju:

1.30xI+0.65xII-1.30xIV

M1u = 14.70 kNm

Merodavna kombinacija za smicanje:

1.60xI+1.80xII+1.80xIII

T2u = 60.81 kN

T3u = 230.70 kN

M1u = 13.48 kNm

$\epsilon_b/\epsilon_a = -2.885/10.000 \%$

Aa1 = 5.57 + 0.53 = 6.10 cm²

Aa2 = 5.53 + 0.53 = 6.06 cm²

Aa3 = 2.44 + 0.23 = 2.67 cm²

Aa4 = 2.41 + 0.23 = 2.64 cm²

Aa,uz = 6.32 cm²/m (m=1)

[Usvajeno Aa,uz = Ø 10/15(m=2) = 10.47 cm²/m]

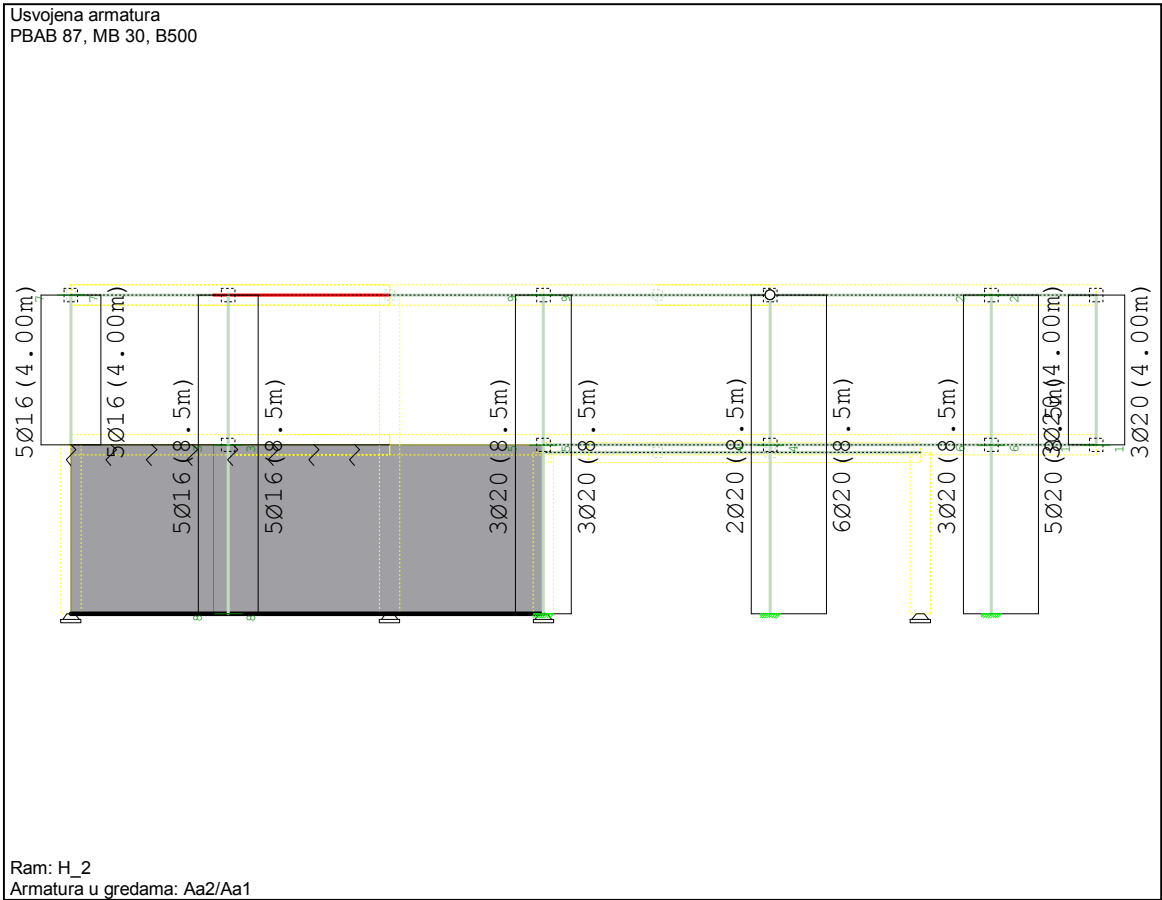
$\tau_y = 1.46 \text{ MPa} < 3\tau_r = 1.10 \text{ MPa}$

$\tau_z = 1.88 \text{ MPa} < 3\tau_r = 1.10 \text{ MPa}$

Procenat armiranja: 1.35%

*) - dodatna podužna armatura za prijem torzije.

STUBOVI – OSA E



Greda 808-237

PBAB 87
MB 30
B500

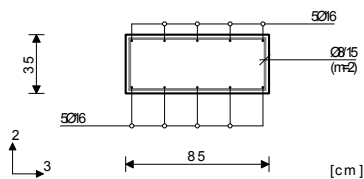
Kompletna šema opterećenja

$l_{i,2} = 4.00 \text{ m}$ ($\lambda_2 = 16.30$)

$l_{i,3} = 4.00 \text{ m}$ ($\lambda_3 = 39.59$)

Nepomerljiva konstrukcija

Presek 7-7 $x = 0.00 \text{ m}$



Merodavna kombinacija za savijanje:

$1.30xI + 0.65xII + 1.30xV$

$N_{1u} = -76.69 \text{ kN}$
 $M_{2u} = -101.91 \text{ kNm}$
 $M_{3u} = -4.44 \text{ kNm}$

Merodavna kombinacija za torziju:

$1.30xI + 0.65xII + 1.30xIV$

$M_{1u} = 3.13 \text{ kNm}$

Merodavna kombinacija za smicanje:

$1.30xI + 1.30xV$

$T_{2u} = -2.83 \text{ kN}$
 $T_{3u} = 38.92 \text{ kN}$
 $M_{1u} = 3.09 \text{ kNm}$

$\epsilon_b/\epsilon_a = -1.214/10.000 \%$

$Aa1 = 1.32 + 0.11' = 1.43 \text{ cm}^2$
 $Aa2 = 1.31 + 0.11' = 1.42 \text{ cm}^2$
 $Aa3 = 0.55 + 0.05' = 0.59 \text{ cm}^2$
 $Aa4 = 0.54 + 0.05' = 0.58 \text{ cm}^2$
 $Aa,uz = 0.00 \text{ cm}^2/\text{m}$ ($m=1$)

[Usvojeno $Aa,uz = 0.015(m=2) = 6.70 \text{ cm}^2/\text{m}$]

$\tau_y = 0.24 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$

$\tau_z = 0.39 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$

Procenat armiranja: 0.68%

*) - dodatna podužna armatura za prijem torzije.

Greda 1817-852

PBAB 87
MB 30
B500

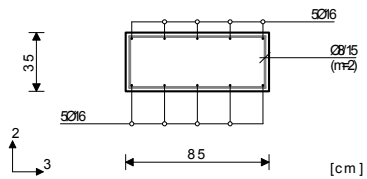
Kompletna šema opterećenja

li,2 = 4.00 m ($\lambda_2 = 16.30$)

li,3 = 4.00 m ($\lambda_3 = 39.59$)

Nepomerljiva konstrukcija

Presek 3-3 x = 4.00m



Merodavna kombinacija za savijanje:

1.00xl+1.30xV

N1u =

-131.56 kN

M2u =

117.58 kNm

M3u =

11.47 kNm

Merodavna kombinacija za torziju:

1.30xl+0.65xII+1.30xIV

M1u =

0.79 kNm

Merodavna kombinacija za smicanje:

1.30xl+1.30xV

T2u =

-7.41 kN

T3u =

60.75 kN

M1u =

-0.26 kNm

$\epsilon_b/\epsilon_a = -1.564/10.000 \text{ ‰}$

Aa1 = 1.24 cm²

Aa2 = 1.24 cm²

Aa3 = 0.51 cm²

Aa4 = 0.51 cm²

Aa,uz = 0.00 cm²/m (m=1)

[Usvojeno Aa,uz = Ø8/15(m=2) = 6.70 cm²/m]

$\tau_y = 0.05 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$

$\tau_z = 0.27 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$

Procenat armiranja: 0.68%

Greda 852-197

PBAB 87

MB 30

B500

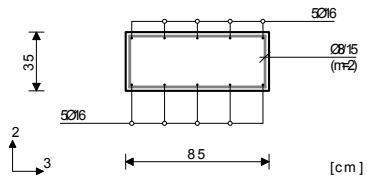
Kompletna šema opterećenja

li,2 = 4.50 m ($\lambda_2 = 18.34$)

li,3 = 4.50 m ($\lambda_3 = 44.54$)

Nepomerljiva konstrukcija

Presek 8-8 x = 4.50m



Merodavna kombinacija za savijanje:

1.60xl

N1u =

-135.33 kN

M2u =

164.32 kNm

M3u =

1.22 kNm

Merodavna kombinacija za torziju:

1.30xl+0.65xII-1.30xV

M1u =

-0.25 kNm

Merodavna kombinacija za smicanje:

1.60xl

T2u =

-5.39 kN

T3u =

116.87 kN

M1u =

-0.07 kNm

$\epsilon_b/\epsilon_a = -1.429/10.000 \text{ ‰}$

Aa1 = 2.12 cm²

Aa2 = 2.11 cm²

Aa3 = 0.88 cm²

Aa4 = 0.86 cm²

Aa,uz = 0.00 cm²/m (m=1)

[Usvojeno Aa,uz = Ø8/15(m=2) = 6.70 cm²/m]

$\tau_y = 0.03 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$

$\tau_z = 0.49 \text{ MPa} < \tau_r, \tau_r = 1.10 \text{ MPa}$

Procenat armiranja: 0.68%

Greda 2928-1780

PBAB 87

MB 30

B500

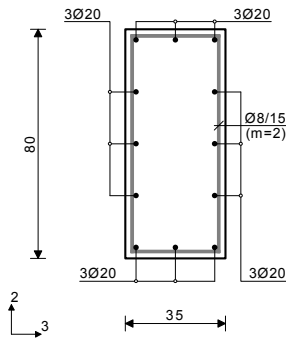
Kompletna šema opterećenja

li,2 = 4.50 m ($\lambda_2 = 44.54$)

li,3 = 4.50 m ($\lambda_3 = 19.49$)

Nepomerljiva konstrukcija

Presek 5-5 x = 0.00m



Merodavna kombinacija za savijanje:

1.60xl+1.80xII

N1u = -748.97 kN

M2u = 157.05 kNm

M3u = 134.93 kNm

Merodavna kombinacija za torziju:

1.30xl+0.65xII-1.30xIV

M1u = 14.55 kNm

Merodavna kombinacija za smicanje:

1.30xl+0.65xII-1.30xIV

T2u = 157.29 kN

T3u = -23.95 kN

M1u = 14.55 kNm

$\epsilon_b/\epsilon_a = -3.500/7.214 \text{ ‰}$

Aa1 =	1.29	+	0.23'	=	1.52 cm ²	$\tau_y = 1.85\text{MPa} < 3\tau_r, \tau_r = 1.10\text{MPa}$
Aa2 =	1.27	+	0.23'	=	1.50 cm ²	$\tau_z = 1.27\text{MPa} < 3\tau_r, \tau_r = 1.10\text{MPa}$
Aa3 =	2.93	+	0.52'	=	3.45 cm ²	Procenat armiranja: 1.35%
Aa4 =	2.91	+	0.52'	=	3.43 cm ²)- dodatna podužna armatura za prijem torzije.
Aa,uz =	3.99	cm ² /m	(m=1)			

[Usvojeno Aa,uz = Ø8/15(m=2) = 6.70 cm²/m]

Greda 3966-2928

PBAB 87

MB 30

B500

Kompletna šema opterećenja

li,2 = 4.00 m ($\lambda_2 = 39.59$)

li,3 = 4.00 m ($\lambda_3 = 17.32$)

Nepomerljiva konstrukcija

Merodavna kombinacija za savijanje:

1.60xI+1.80xII+1.80xIII

N1u = -410.59 kN

M2u = 102.02 kNm

M3u = 72.15 kNm

$\tau_y = 0.28\text{MPa} < \tau_r, \tau_r = 1.10\text{MPa}$

$\tau_z = 0.16\text{MPa} < \tau_r, \tau_r = 1.10\text{MPa}$

Procenat armiranja: 1.35%

Merodavna kombinacija za torziju:

1.30xI+0.65xII+1.30xIV

M1u = -0.95 kNm

Merodavna kombinacija za smicanje:

1.30xI-1.30xIV

T2u = 61.22 kN

T3u = -33.96 kN

M1u = 0.16 kNm

$\epsilon_b/\epsilon_a = -2.901/10.000 \%$

Aa1 = 0.85 cm²

Aa2 = 0.84 cm²

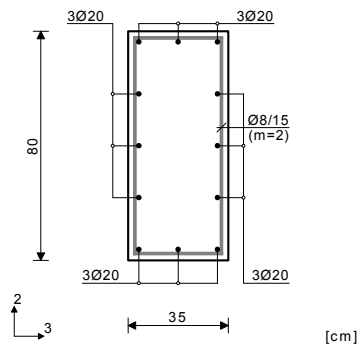
Aa3 = 1.93 cm²

Aa4 = 1.92 cm²

Aa,uz = 0.00 cm²/m (m=1)

[Usvojeno Aa,uz = Ø8/15(m=2) = 6.70 cm²/m]

Presek 9-9 x = 0.00m



Greda 4613-3312

PBAB 87

MB 30

B500

Kompletna šema opterećenja

li,2 = 4.50 m ($\lambda_2 = 12.98$)

li,3 = 4.50 m ($\lambda_3 = 14.39$)

Nepomerljiva konstrukcija

Merodavna kombinacija za torziju:

1.30xI+1.30xIV

M1u = 10.81 kNm

Merodavna kombinacija za smicanje:

1.30xI+0.65xII-1.30xV

T2u = 317.44 kN

T3u = -67.41 kN

M1u = -7.49 kNm

Aa1 = 0.00 + 0.07' = 0.07 cm²

Aa2 = 0.00 + 0.40' = 0.40 cm²

Aa3 = 0.00 + 0.36' = 0.36 cm²

Aa4 = 0.00 + 0.36' = 0.36 cm²

Aa,uz = 3.71 cm²/m (m=1)

[Usvojeno Aa,uz = Ø8/15(m=2) = 6.70 cm²/m]

Merodavna kombinacija za savijanje:

1.90xI+2.10xII+2.10xIII

N1u = -1447.51 kN

M2u = -112.51 kNm

M3u = 315.39 kNm

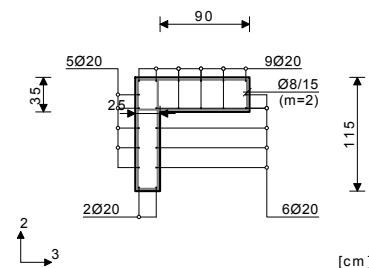
$\tau_y = 1.26\text{MPa} < 3\tau_r, \tau_r = 1.10\text{MPa}$

$\tau_z = 1.58\text{MPa} < 3\tau_r, \tau_r = 1.10\text{MPa}$

Procenat armiranja: 1.15%

)- dodatna podužna armatura za prijem torzije.

Presek 4-4 x = 0.00m



Greda 5902-4613

PBAB 87

MB 30

B500

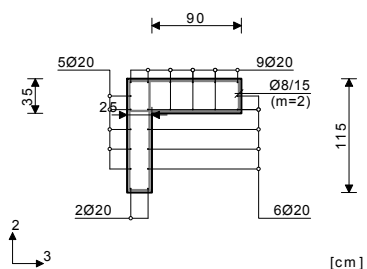
Kompletna šema opterećenja

$l_{i,2} = 4.00 \text{ m}$ ($\lambda_2 = 11.53$)

$l_{i,3} = 4.00 \text{ m}$ ($\lambda_3 = 12.79$)

Nepomerljiva konstrukcija

Presek 4-4 x = 4.00m



Merodavna kombinacija za savijanje:

1.30xI+0.65xII+1.30xIV

$N_{1u} = -426.66 \text{ kN}$

$M_{2u} = -567.69 \text{ kNm}$

$M_{3u} = -160.38 \text{ kNm}$

$A_{a1} = 5.42 + 0.00' = 5.42 \text{ cm}^2$

$A_{a2} = 5.47 + 0.07' = 5.54 \text{ cm}^2$

$A_{a3} = 5.46 + 0.06' = 5.52 \text{ cm}^2$

$A_{a4} = 5.41 + 0.06' = 5.48 \text{ cm}^2$

$A_{a,uz} = 0.00 \text{ cm}^2/\text{m} \quad (m=1)$

[Usvajeno $A_{a,uz} = \emptyset 8/15(m=2) = 6.70 \text{ cm}^2/\text{m}$]

Merodavna kombinacija za torziju:

1.30xI+0.65xII-1.30xIV

$M_{1u} = -1.83 \text{ kNm}$

$\tau_y = 0.58 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$

$\tau_z = 0.25 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$

Procenat armiranja: 1.15%

*) - dodatna podužna armatura za prijem torzije.

Merodavna kombinacija za smicanje:

1.30xI+0.65xII-1.30xV

$T_{2u} = 129.16 \text{ kN}$

$T_{3u} = -71.35 \text{ kN}$

$M_{1u} = -0.89 \text{ kNm}$

$\epsilon_b/\epsilon_a = -3.206/10.000 \%$

Greda 6472-5079

PBAB 87

MB 30

B500

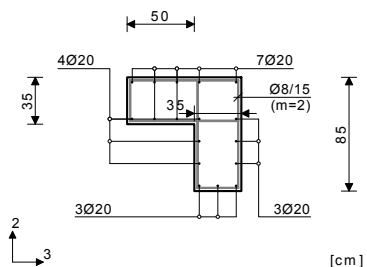
Kompletna šema opterećenja

$l_{i,2} = 4.50 \text{ m}$ ($\lambda_2 = 18.97$)

$l_{i,3} = 4.50 \text{ m}$ ($\lambda_3 = 18.97$)

Nepomerljiva konstrukcija

Presek 6-6 x = 0.00m



Merodavna kombinacija za savijanje:

1.90xI+2.10xII+2.10xIII

$N_{1u} = -2241.47 \text{ kN}$

$M_{2u} = 14.12 \text{ kNm}$

$M_{3u} = 251.33 \text{ kNm}$

$A_{a1} = 0.00 + 0.02' = 0.02 \text{ cm}^2$

$A_{a2} = 0.00 + 0.05' = 0.05 \text{ cm}^2$

$A_{a3} = 0.00 + 0.04' = 0.04 \text{ cm}^2$

$A_{a4} = 0.00 + 0.04' = 0.04 \text{ cm}^2$

$A_{a,uz} = 0.00 \text{ cm}^2/\text{m} \quad (m=1)$

[Usvajeno $A_{a,uz} = \emptyset 8/15(m=2) = 6.70 \text{ cm}^2/\text{m}$]

Merodavna kombinacija za torziju:

1.30xI+0.65xII+1.30xIV

$M_{1u} = -1.62 \text{ kNm}$

$\tau_y = 0.30 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$

$\tau_z = 0.06 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$

Procenat armiranja: 1.13%

*) - dodatna podužna armatura za prijem torzije.

Merodavna kombinacija za smicanje:

1.60xI

$T_{2u} = 62.75 \text{ kN}$

$T_{3u} = -1.39 \text{ kN}$

$M_{1u} = -0.94 \text{ kNm}$

Greda 7721-6472

PBAB 87

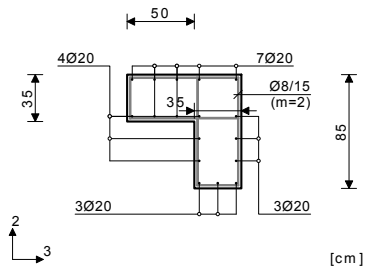
MB 30

B500

Kompletna šema opterećenja

 $l_{i,2} = 4.00 \text{ m}$ ($\lambda_2 = 16.86$) $l_{i,3} = 4.00 \text{ m}$ ($\lambda_3 = 16.86$)

Nepomerljiva konstrukcija

Presek 2-2 $x = 0.00 \text{ m}$ 

Merodavna kombinacija za savijanje:

1.00xI-1.30xIV

 $N_{1u} = -433.05 \text{ kN}$ $M_{2u} = 120.54 \text{ kNm}$ $M_{3u} = 219.31 \text{ kNm}$

Merodavna kombinacija za torziju:

1.30xI+0.65xII+1.30xV

 $M_{1u} = -1.47 \text{ kNm}$

Merodavna kombinacija za smicanje:

1.30xI-1.30xIV

 $T_{2u} = 122.39 \text{ kN}$ $T_{3u} = -61.20 \text{ kN}$ $M_{1u} = -0.25 \text{ kNm}$ $\epsilon_b/\epsilon_a = -1.343/10.000 \text{ ‰}$ $A_{a1} = 1.20 + 0.02' = 1.22 \text{ cm}^2$ $A_{a2} = 1.21 + 0.05' = 1.26 \text{ cm}^2$ $A_{a3} = 1.21 + 0.04' = 1.24 \text{ cm}^2$ $A_{a4} = 1.20 + 0.04' = 1.23 \text{ cm}^2$ $A_{a,uz} = 0.00 \text{ cm}^2/\text{m}$ ($m=1$)[Usvojeno $A_{a,uz} = \phi 8/15(m=2) = 6.70 \text{ cm}^2/\text{m}$] $\tau_y = 0.51 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$ $\tau_z = 0.25 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$

Procenat armiranja: 1.13%

*) - dodatna podužna armatura za prijem torzije.

Greda 8598-7345

PBAB 87

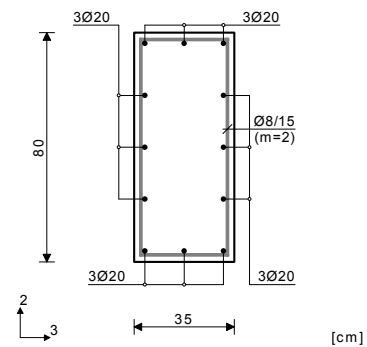
MB 30

B500

Kompletna šema opterećenja

 $l_{i,2} = 4.00 \text{ m}$ ($\lambda_2 = 39.59$) $l_{i,3} = 4.00 \text{ m}$ ($\lambda_3 = 17.32$)

Nepomerljiva konstrukcija

Presek 1-1 $x = 4.00 \text{ m}$ 

Merodavna kombinacija za smicanje:

1.30xI-1.30xIV

 $T_{2u} = 130.67 \text{ kN}$ $T_{3u} = -61.39 \text{ kN}$ $M_{1u} = 0.35 \text{ kNm}$ $\epsilon_b/\epsilon_a = -3.500/6.931 \text{ ‰}$ $A_{a1} = 4.46 \text{ cm}^2$ $A_{a2} = 4.39 \text{ cm}^2$ $A_{a3} = 10.13 \text{ cm}^2$ $A_{a4} = 10.06 \text{ cm}^2$ $A_{a,uz} = 0.00 \text{ cm}^2/\text{m}$ ($m=1$)[Usvojeno $A_{a,uz} = \phi 8/15(m=2) = 6.70 \text{ cm}^2/\text{m}$] $\tau_y = 0.60 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$ $\tau_z = 0.30 \text{ MPa} < \tau_r = 1.10 \text{ MPa}$

Procenat armiranja: 1.35%

Merodavna kombinacija za savijanje:

1.60xI+1.80xII+1.80xIII

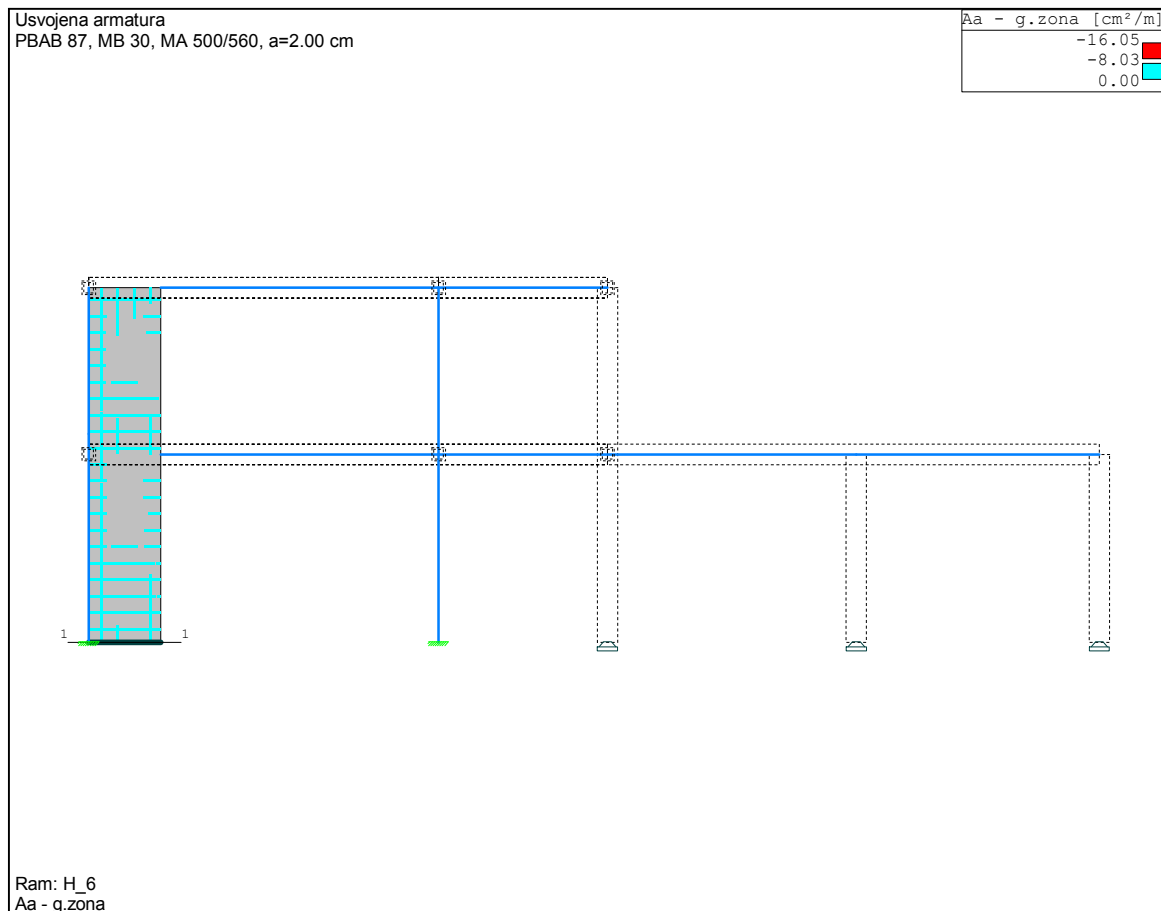
 $N_{1u} = -10.16 \text{ kN}$ $M_{2u} = -171.24 \text{ kNm}$ $M_{3u} = -293.59 \text{ kNm}$

Merodavna kombinacija za torziju:

1.30xI+0.65xII+1.30xIV

 $M_{1u} = -0.36 \text{ kNm}$

8. DIMENZIONISANJE ZIDOVA I ZP



ZP 1

Presek 1 - 1 (Z=0.00m)
PBAB 87
MB 30
Ugaona armatura MA 500/560
Podužna armatura MA 500/560
Kompletna šema opterećenja

Merodavna kombinacija za savijanje:

1.90xI+2.10xII+2.10xIII

Merodavna kombinacija za smicanje:

1.30xI+0.65xII-1.30xIV

Mu = 104.51 kNm

Nu = -1709.78 kN

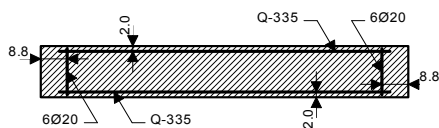
Tu = 128.17 kN

Aa1 = 0.00 cm² (min:9.19) (usv:6Ø20)

Aa2 = 0.00 cm² (min:9.19) (usv:6Ø20)

Aav = ±0.00 cm²/m (min:±2.63)

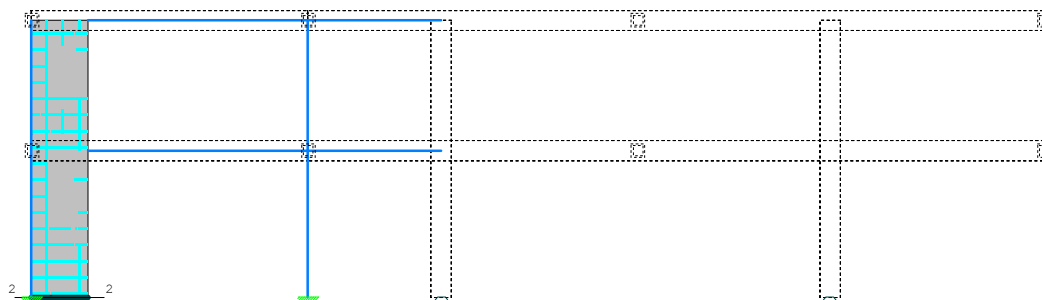
Aah = ±0.81 cm²/m (min:±3.50) (usv:±Q-335)



b/d = 35/175 cm Ab = 6125 cm²

Usvojena armatura
PBAB 87, MB 30, MA 500/560, a=2.00 cm

Aa - g.zona [cm ² /m]	
-22.01	
-11.01	
0.00	



Ram: H_4
Aa - g.zona

ZP 2

Presek 2 - 2 (Z=0.00m)
PBAB 87
MB 30
Ugaona armatura MA 500/560
Podužna armatura MA 500/560
Kompletna šema opterećenja

Merodavna kombinacija za savijanje:

1.90xI+2.10xII+2.10xIII

Merodavna kombinacija za smicanje:

1.60xI+1.80xII+1.80xIII

Mu = 1.16 kNm

Nu = -1495.22 kN

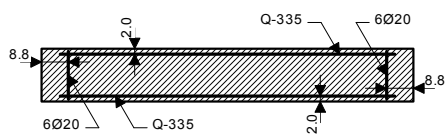
Tu = 122.44 kN

Aa1 = 0.00 cm² (min:9.19) (usv:6Ø20)

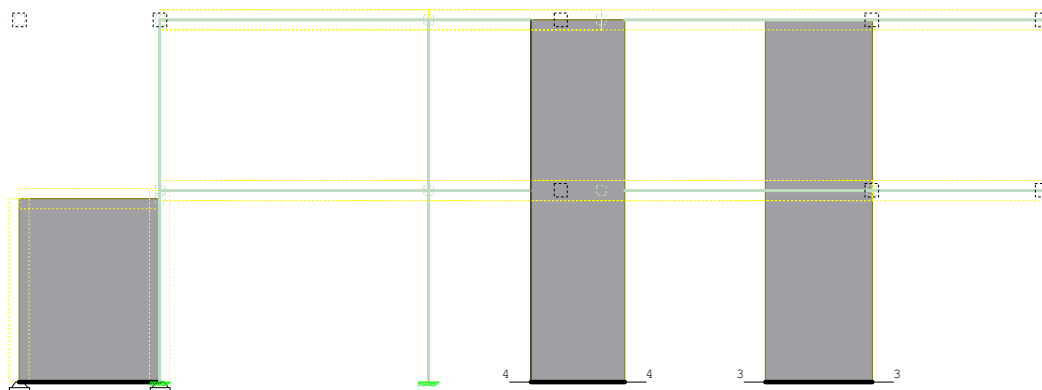
Aa2 = 0.00 cm² (min:9.19) (usv:6Ø20)

Aav = ±0.00 cm²/m (min:±2.63)

Aah = ±0.77 cm²/m (min:±3.50) (usv:±Q-335)



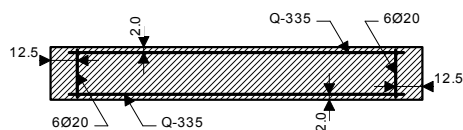
b/d = 35/175 cm Ab = 6125 cm²



Ram: V_8
Dispozicija preseka

ZP 3

PBAB 87
MB 30
Ugaona armatura MA 500/560
Podužna armatura MA 500/560
Kompletna šema opterećenja



$$b/d = 35/250 \text{ cm} \quad A_b = 8750 \text{ cm}^2$$

Merodavna kombinacija za savijanje:

1.90xI+2.10xII+2.10xIII

Merodavna kombinacija za smicanje:

1.30xI+0.65xII-1.30xV

Mu = -107.11 kNm

Nu = -2624.50 kN

Tu = 293.35 kN

Aa1 = 0.00 cm² (min:13.12) (usv:6Ø20)

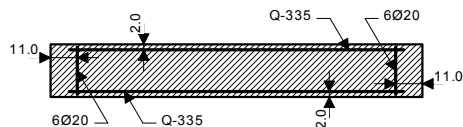
Aa2 = 0.00 cm² (min:13.12) (usv:6Ø20)

Aav = ±0.00 cm²/m (min:±2.63)

Aah = ±1.29 cm²/m (min:±3.50) (usv:±Q-335)

ZP 4

PBAB 87
MB 30
Ugaona armatura MA 500/560
Podužna armatura MA 500/560
Kompletna šema opterećenja



$$b/d = 35/220 \text{ cm} \quad A_b = 7700 \text{ cm}^2$$

Merodavna kombinacija za savijanje: I+1.30xV

Merodavna kombinacija za smicanje: 1.30xI+1.30xV

Mu = -550.00 kNm

Nu = -463.23 kN

Tu = -70.24 kN

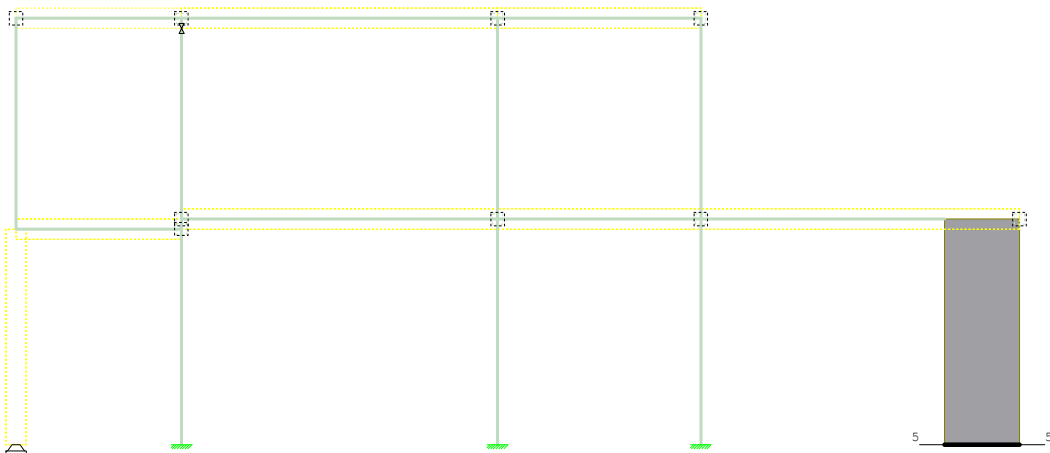
$\varepsilon_b/\varepsilon_a = -0.952/10.000 \text{ ‰}$

Aa1 = 0.00 cm² (min:11.55) (usv:6Ø20)

Aa2 = 0.00 cm² (min:11.55) (usv:6Ø20)

Aav = ±0.35 cm²/m (min:±2.63)

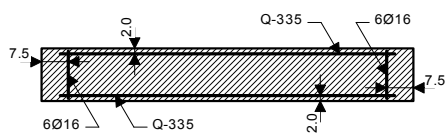
Aah = ±0.35 cm²/m (min:±3.50) (usv:±Q-335)



Ram: V_5
Dispozicija preseka

ZP 5

Presek 5 - 5 (Z=0.00m)
PBAB 87
MB 30
Ugaona armatura MA 500/560
Podužna armatura MA 500/560
Kompletna šema opterećenja



b/d = 35/150 cm Ab = 5250 cm²

Merodavna kombinacija za savijanje:

1.90xI+2.10xII+2.10xIII

Merodavna kombinacija za smicanje:

1.30xI+0.65xII+1.30xV

Mu = 92.03 kNm

Nu = -919.90 kN

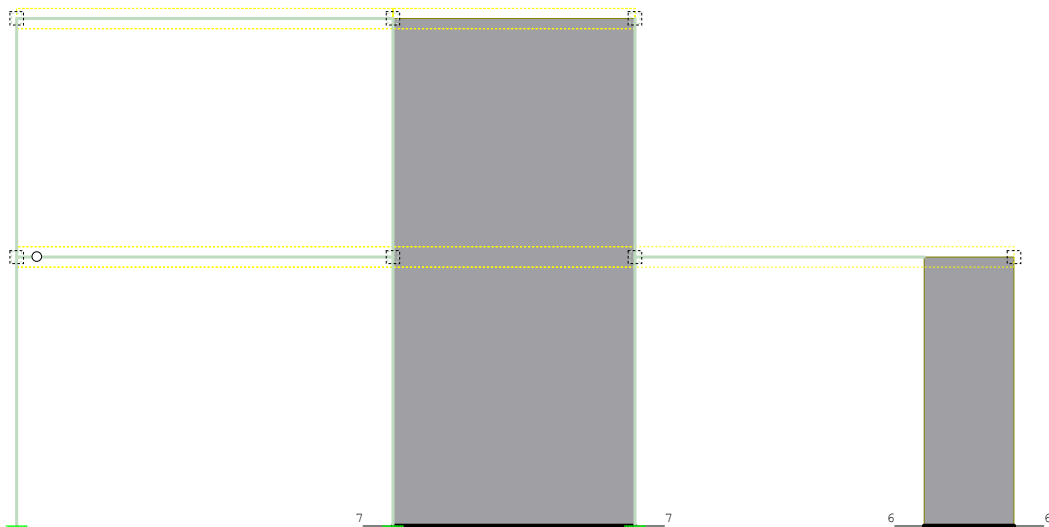
Tu = -52.14 kN

Aa1 = 0.00 cm² (min:7.88) (usv:6Ø16)

Aa2 = 0.00 cm² (min:7.88) (usv:6Ø16)

Aav = ±0.00 cm²/m (min:±2.63)

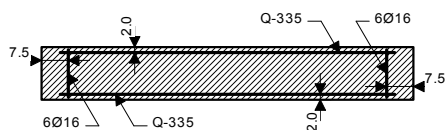
Aah = ±0.38 cm²/m (min:±3.50) (usv:±Q-335)



Ram: V_6
Dispozicija preseka

ZP 6

PBAB 87
MB 30
Ugaona armatura MA 500/560
Podužna armatura MA 500/560
Kompletna šema opterećenja



$$b/d = 35/150 \text{ cm} \quad A_b = 5250 \text{ cm}^2$$

Merodavna kombinacija za savijanje:

I+1.30xV

Merodavna kombinacija za smicanje:

1.30xI+0.65xII+1.30xV

Mu = 216.67 kNm

Nu = -266.93 kN

Tu = -69.71 kN

$\epsilon_b/\epsilon_a = -0.864/10.000 \text{ ‰}$

Aa1 = 0.00 cm² (min:7.88) (usv:6Ø16)

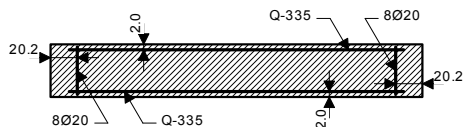
Aa2 = 0.00 cm² (min:7.88) (usv:6Ø16)

Aav = ±0.29 cm²/m (min:±2.63) (usv:±Q-335)

Aah = ±0.51 cm²/m (min:±3.50) (usv:±Q-335)

ZP 7

PBAB 87
MB 30
Ugaona armatura MA 500/560
Podužna armatura MA 500/560
Kompletna šema opterećenja



$$b/d = 35/405 \text{ cm} \quad A_b = 14175 \text{ cm}^2$$

Merodavna kombinacija za savijanje:

1.90xI+2.10xII+2.10xIII

Merodavna kombinacija za smicanje:

1.30xI+0.65xII+1.30xV

Mu = -476.74 kNm

Nu = -4070.12 kN

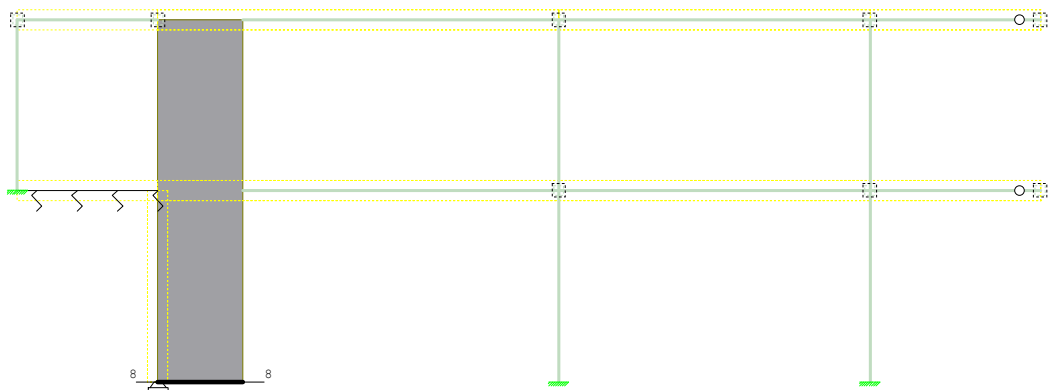
Tu = -686.45 kN

Aa1 = 0.00 cm² (min:21.26) (usv:8Ø20)

Aa2 = 0.00 cm² (min:21.26) (usv:8Ø20)

Aav = ±0.00 cm²/m (min:±2.63) (usv:±Q-335)

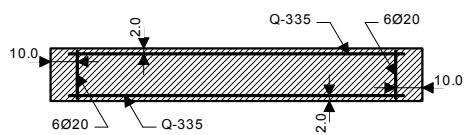
Aah = ±1.86 cm²/m (min:±3.50) (usv:±Q-335)



Ram: V_3
Dispozicija preseka

ZP 8

Presek 8 - 8 (Z=0.00m)
PBAB 87
MB 30
Ugaona armatura MA 500/560
Podužna armatura MA 500/560
Kompletna šema opterećenja



b/d = 35/200 cm Ab = 7000 cm²

Merodavna kombinacija za savijanje:

1.90xI+2.10xII+2.10xIII

Merodavna kombinacija za smicanje:

1.30xI+1.30xV

Mu = -258.17 kNm

Nu = -1151.54 kN

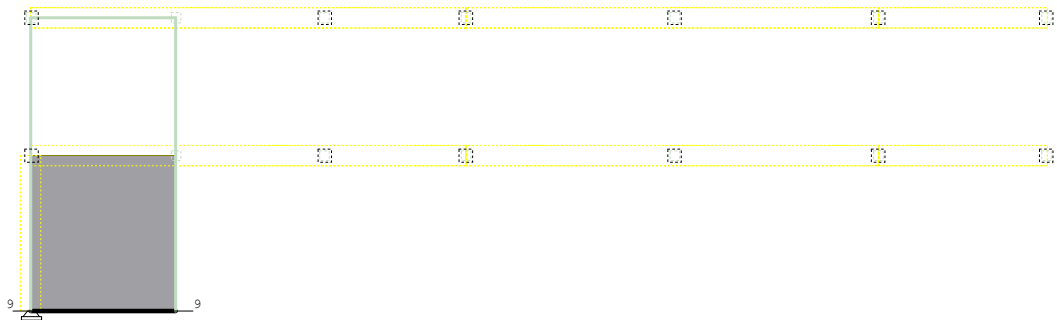
Tu = -145.15 kN

Aa1 = 0.00 cm² (min:10.50) (usv:6Ø20)

Aa2 = 0.00 cm² (min:10.50) (usv:6Ø20)

Aav = ±0.00 cm²/m (min:±2.63)

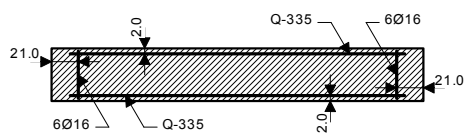
Aah = ±0.80 cm²/m (min:±3.50) (usv:±Q-335)



Ram: H_10
Dispozicija preseka

ZP 10

Presek 9 - 9 (Z=0.00m)
PBAB 87
MB 30
Ugaona armatura MA 500/560
Podužna armatura MA 500/560
Kompletna šema opterećenja



$$b/d = 20/420 \text{ cm} \quad A_b = 8400 \text{ cm}^2$$

Merodavna kombinacija za savijanje:

1.90xI+2.10xII+2.10xIII

Merodavna kombinacija za smicanje:

1.30xI+0.65xII+1.30xIV

Mu = 399.73 kNm

Nu = -941.74 kN

Tu = -602.02 kN

Aa1 = 0.00 cm² (min:12.60) (usv:6Ø16)

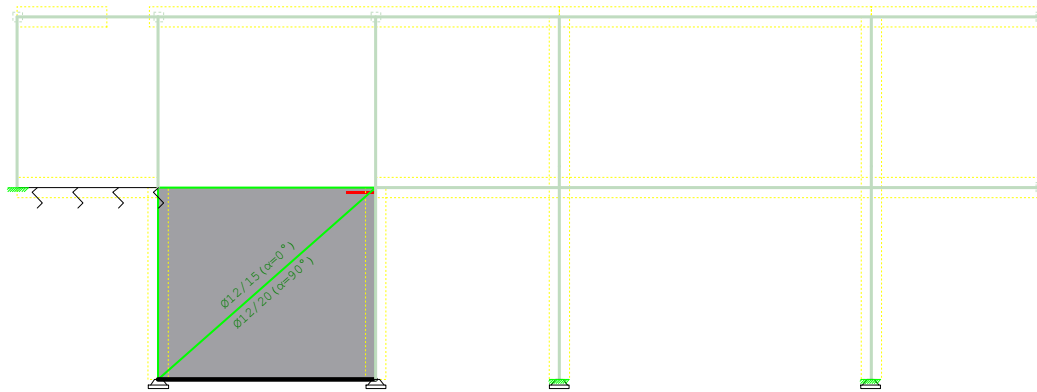
Aa2 = 0.00 cm² (min:12.60) (usv:6Ø16)

Aav = ±0.00 cm²/m (min:±1.50)

Aah = ±1.58 cm²/m (min:±2.00) (usv:±Q-335)

Usvojena armatura
PBAB 87, MB 30, MA 500/560, a=2.00 cm

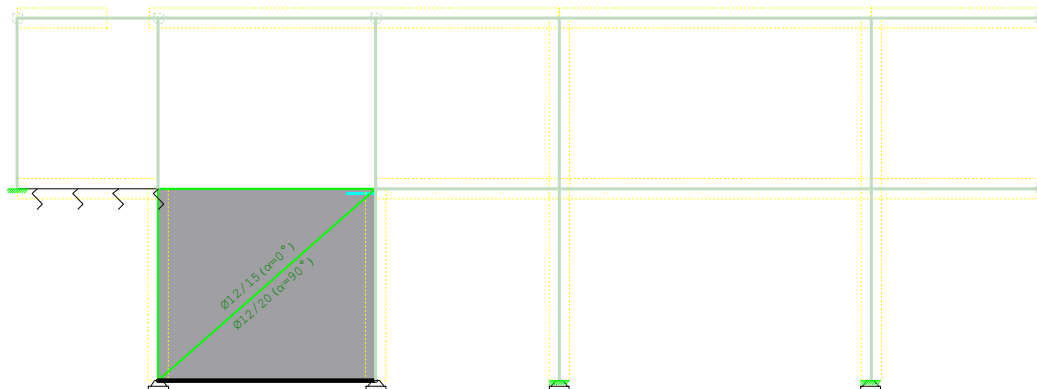
Aa - d.zona [cm ² /m]	
0.00	
8.34	
16.68	



Ram: V_10
Aa - d.zona

Usvojena armatura
PBAB 87, MB 30, MA 500/560, a=2.00 cm

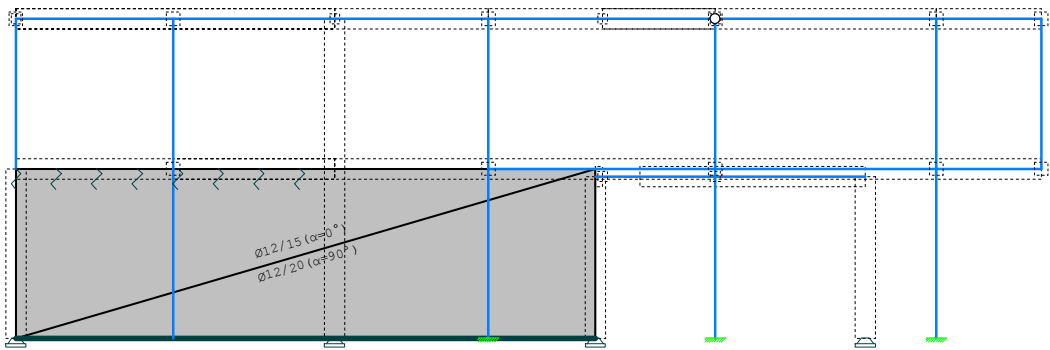
Aa - g.zona [cm ² /m]	
-16.60	
-8.30	
0.00	



Ram: V_10
Aa - g.zona

Usvojena armatura
PBAB 87, MB 30, MA 500/560, a=2.00 cm

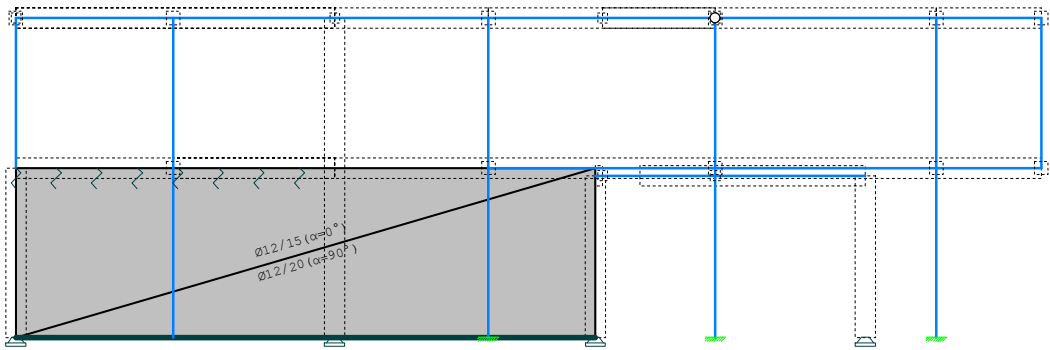
Aa - d.zona [cm ² /m]	
0.00	
3.54	
7.07	



Ram: H_2
Aa - d.zona

Usvojena armatura
PBAB 87, MB 30, MA 500/560, a=2.00 cm

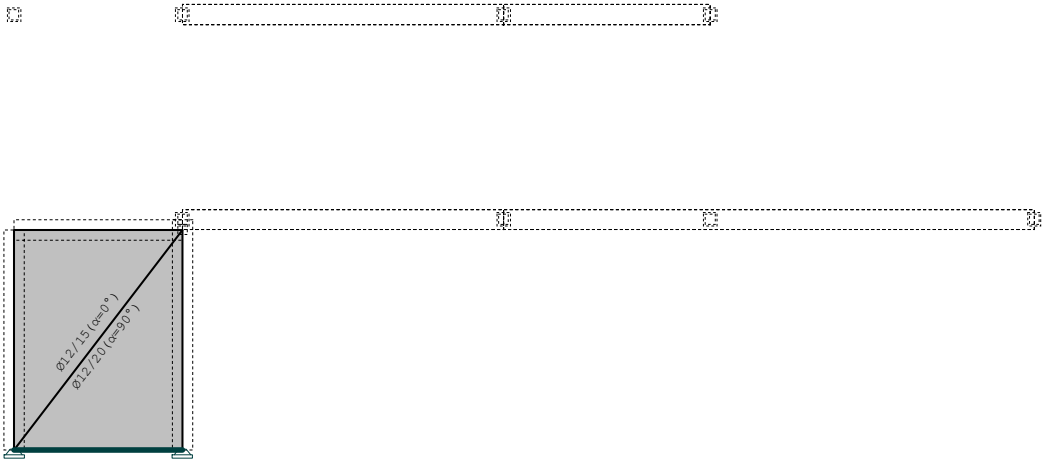
Aa - g.zona [cm ² /m]	
-7.04	
-3.52	
0.00	



Ram: H_2
Aa - g.zona

Usvojena armatura
PBAB 87, MB 30, MA 500/560, a=2.00 cm

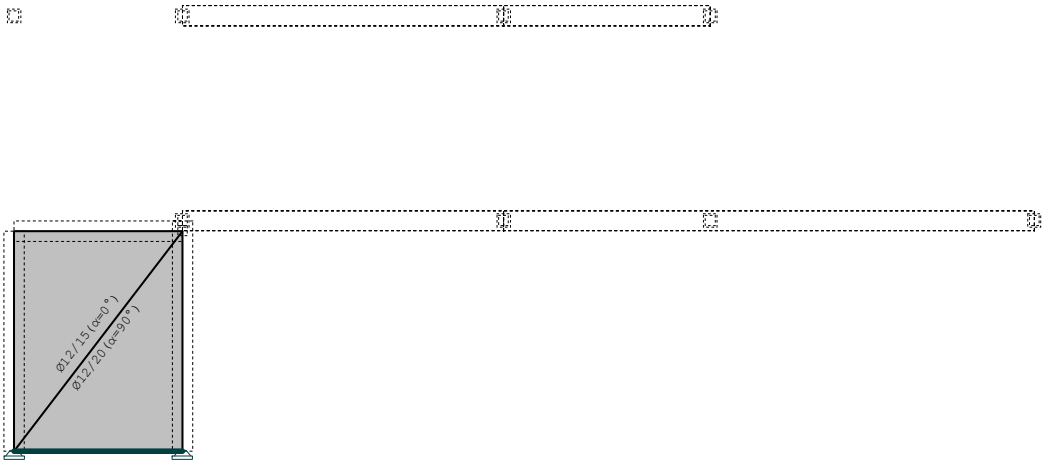
Aa - d.zona [cm ² /m]	
0.00	
2.79	
5.58	



Ram: V_13
Aa - d.zona

Usvojena armatura
PBAB 87, MB 30, MA 500/560, a=2.00 cm

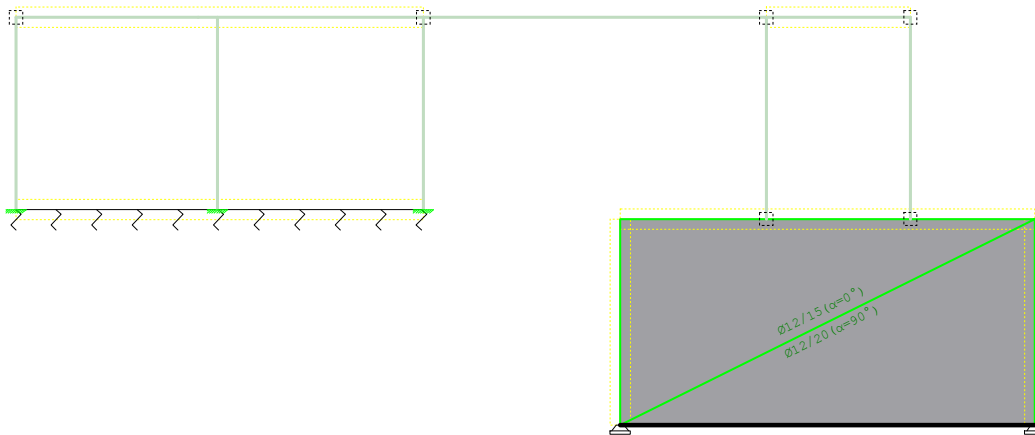
Aa - g.zona [cm ² /m]	
-5.56	
-2.78	
0.00	



Ram: V_13
Aa - g.zona

Usvojena armatura
PBAB 87, MB 30, MA 500/560, a=2.00 cm

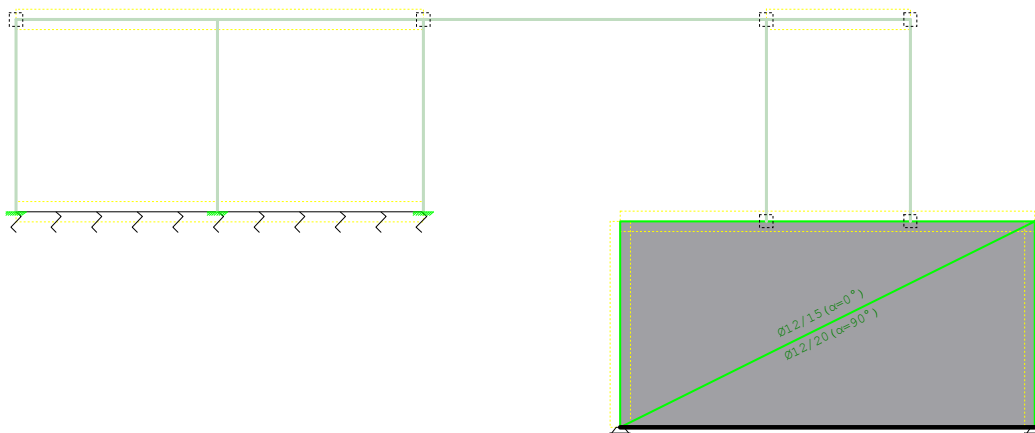
Aa - d.zona [cm ² /m]	
0.00	
2.91	
5.81	



Ram: H_1
Aa - d.zona

Usvojena armatura
PBAB 87, MB 30, MA 500/560, a=2.00 cm

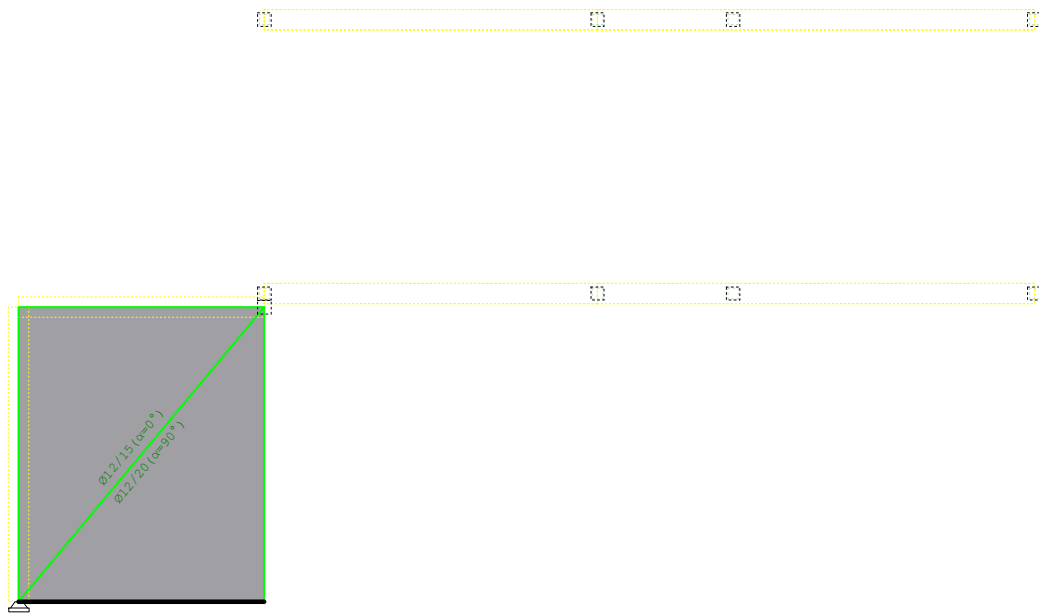
Aa - g.zona [cm ² /m]	
-5.78	
-2.89	
0.00	



Ram: H_1
Aa - g.zona

Usvojena armatura
PBAB 87, MB 30, MA 500/560, a=2.00 cm

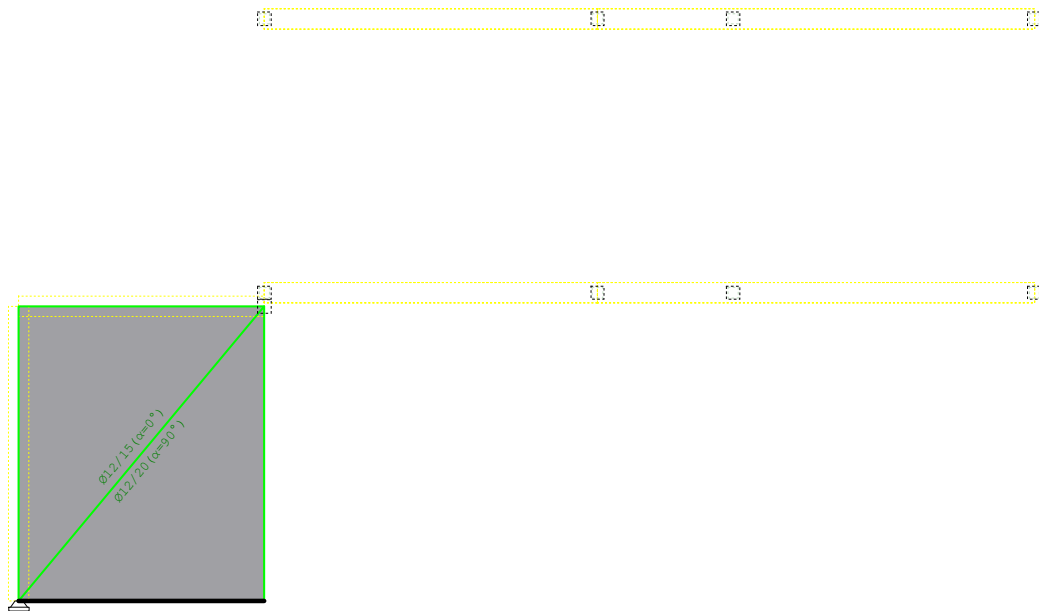
Aa - d.zona [cm ² /m]	
0.00	
3.42	
6.84	



Ram: K_2
Aa - d.zona

Usvojena armatura
PBAB 87, MB 30, MA 500/560, a=2.00 cm

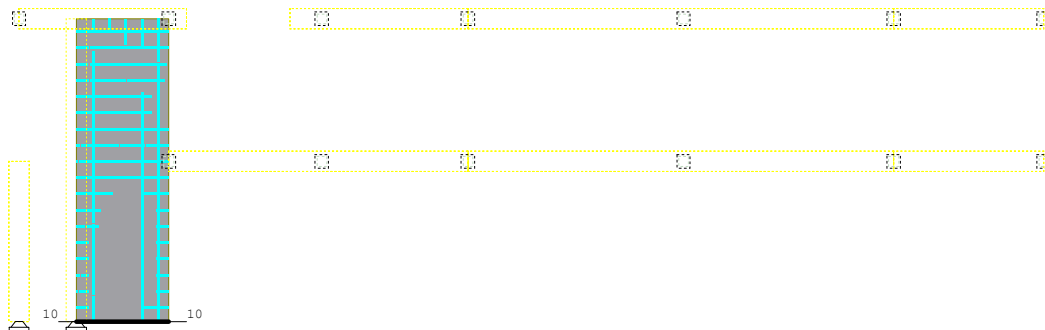
Aa - g.zona [cm ² /m]	
-6.81	
-3.41	
0.00	



Ram: K_2
Aa - g.zona

Usvojena armatura
PBAB 87, MB 30, MA 500/560, a=2.00 cm

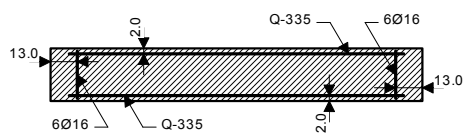
Aa - g.zona [cm ² /m]	
-3.34	
-1.67	
0.00	



Ram: H_9
Aa - g.zona

ZP 16

Presek 10 - 10 (Z=0.00m)
PBAB 87
MB 30
Ugaona armatura MA 500/560
Podužna armatura MA 500/560
Kompletna šema opterećenja



b/d = 20/260 cm Ab = 5200 cm²

Merodavna kombinacija za savijanje:

I-1.30xIV

Merodavna kombinacija za smicanje:

1.30xI+0.65xII+1.30xV

Mu = 273.52 kNm

Nu = -183.10 kN

Tu = -64.48 kN

$\epsilon_b/\epsilon_a = -0.721/10.000 \text{ ‰}$

Aa1 = 0.00 cm² (min:7.80) (usv:6Ø16)

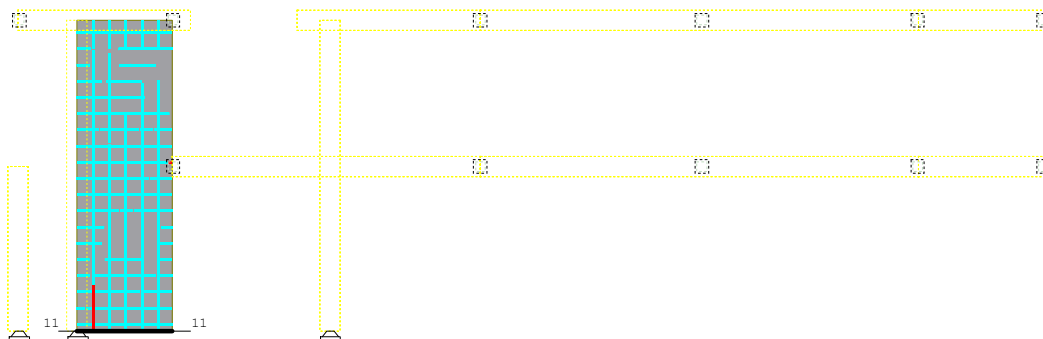
Aa2 = 0.00 cm² (min:7.80) (usv:6Ø16)

Aav = ±0.16 cm²/m (min:±1.50)

Aah = ±0.27 cm²/m (min:±2.00) (usv:±Q-335)

Usvojena armatura
PBAB 87, MB 30, MA 500/560, a=2.00 cm

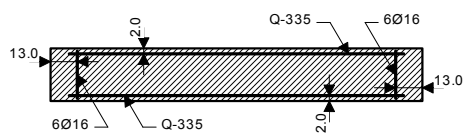
Aa - g.zona [cm ² /m]	
-5.16	
-2.58	
0.00	



Ram: H_8
Aa - g.zona

ZP 17

Presek 11 - 11 (Z=0.00m)
PBAB 87
MB 30
Ugaona armatura MA 500/560
Podužna armatura MA 500/560
Kompletna šema opterećenja



b/d = 20/260 cm Ab = 5200 cm²

Merodavna kombinacija za savijanje:

1.30xI+0.65xII+1.30xV

Merodavna kombinacija za smicanje:

1.30xI+0.65xII+1.30xV

Mu = -167.52 kNm

Nu = 270.15 kN

Tu = 149.91 kN

$\epsilon_b/\epsilon_a = -0.465/10.000 \text{ ‰}$

Aa1 = 0.00 cm² (min:7.80) (usv:6Ø16)

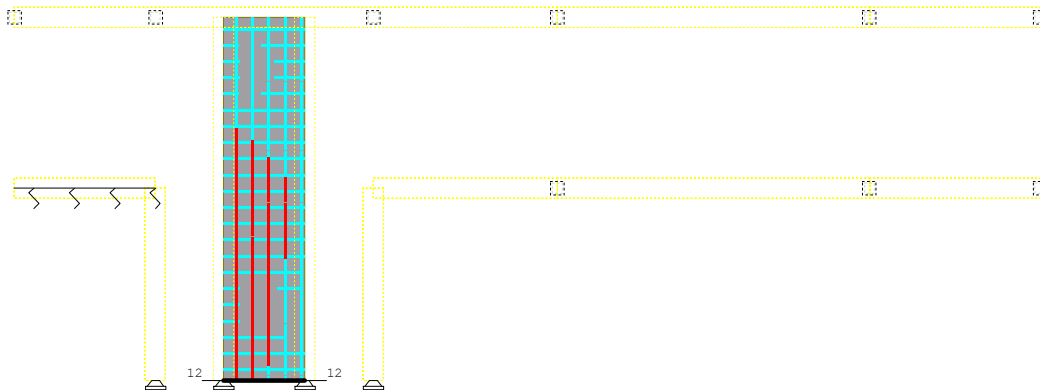
Aa2 = 0.00 cm² (min:7.80) (usv:6Ø16)

Aav = ±1.77 cm²/m (min:±1.50)

Aah = ±0.63 cm²/m (min:±2.00) (usv:±Q-335)

Usvojena armatura
PBAB 87, MB 30, MA 500/560, a=2.00 cm

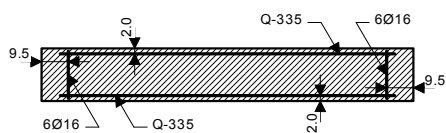
Aa - g.zona [cm ² /m]	
-4.62	
-2.31	
0.00	



Ram: V_12
Aa - g.zona

ZP 18

Presek 12 - 12 (Z=0.00m)
PBAB 87
MB 30
Ugaona armatura MA 500/560
Podužna armatura MA 500/560
Kompletna šema opterećenja



$$b/d = 20/190 \text{ cm} \quad A_b = 3800 \text{ cm}^2$$

Merodavna kombinacija za savijanje:

1.30xI+0.65xII+1.30xIV

Merodavna kombinacija za smicanje:

1.30xI+0.65xII+1.30xV

Mu = 119.01 kNm

Nu = 423.31 kN

Tu = -187.23 kN

$\epsilon_b/\epsilon_a = -0.493/10.000 \text{ ‰}$

Aa1 = 0.00 cm² (min:5.70) (usv:6Ø16)

Aa2 = 0.00 cm² (min:5.70) (usv:6Ø16)

Aav = ±3.32 cm²/m (min:±1.50)

Aah = ±1.08 cm²/m (min:±2.00) (usv:±Q-335)

9. DIMENZIONISANJE TEMELJA

9.1 OSNOVNE KARAKTERISTIKE PRORAČUNSKOG MODELA

Šema nivoa

Naziv	z [m]	h [m]
-------	-------	-------

POS 200	8.50	4.00
POS 100	4.50	0.20
POS 100'	4.30	4.30

POS 000	0.00	
---------	------	--

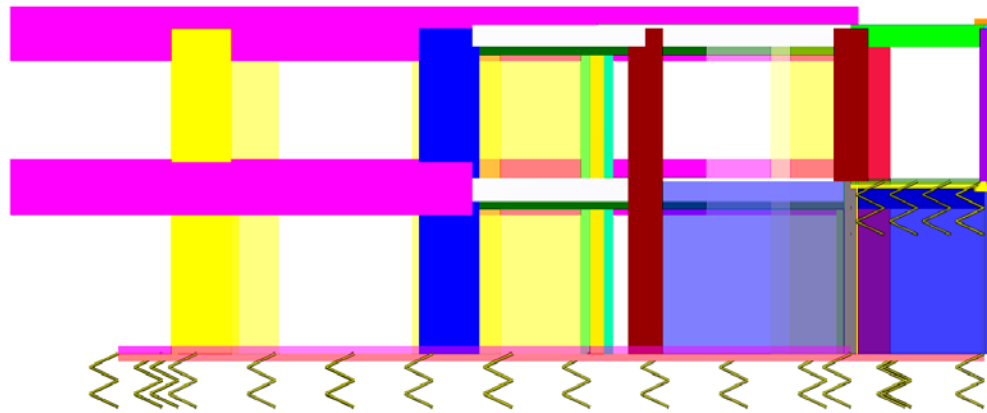
Setovi ploča

No	d[m]	e[m]	Materijal	Tip proračuna	Ortotropija	E2[kN/m2]	G[kN/m2]	α
----	------	------	-----------	---------------	-------------	-----------	----------	----------

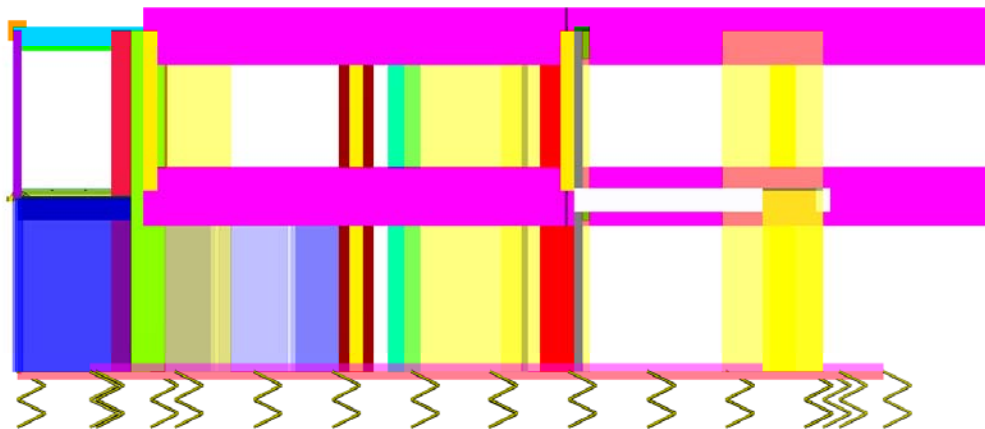
<1>	0.350	0.175	1	Tanka ploča	Izotropna			
<2>	0.250	0.125	1	Tanka ploča	Izotropna			
<3>	0.200	0.100	1	Tanka ploča	Izotropna			
<4>	0.160	0.080	1	Tanka ploča	Izotropna			
<5>	0.400	0.200	1	Tanka ploča	Izotropna			
<6>	0.210	0.105	1	Tanka ploča	Izotropna			

Setovi površinskih oslonaca

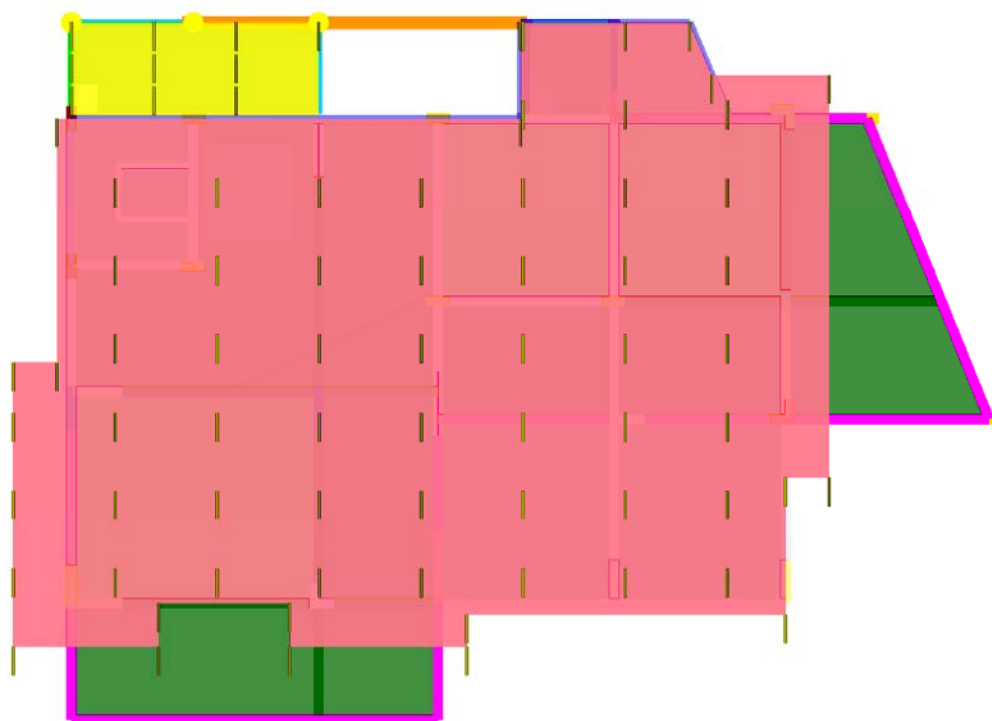
Set	K,R1	K,R2	K,R3
1	6.000e+4	6.000e+4	6.000e+4



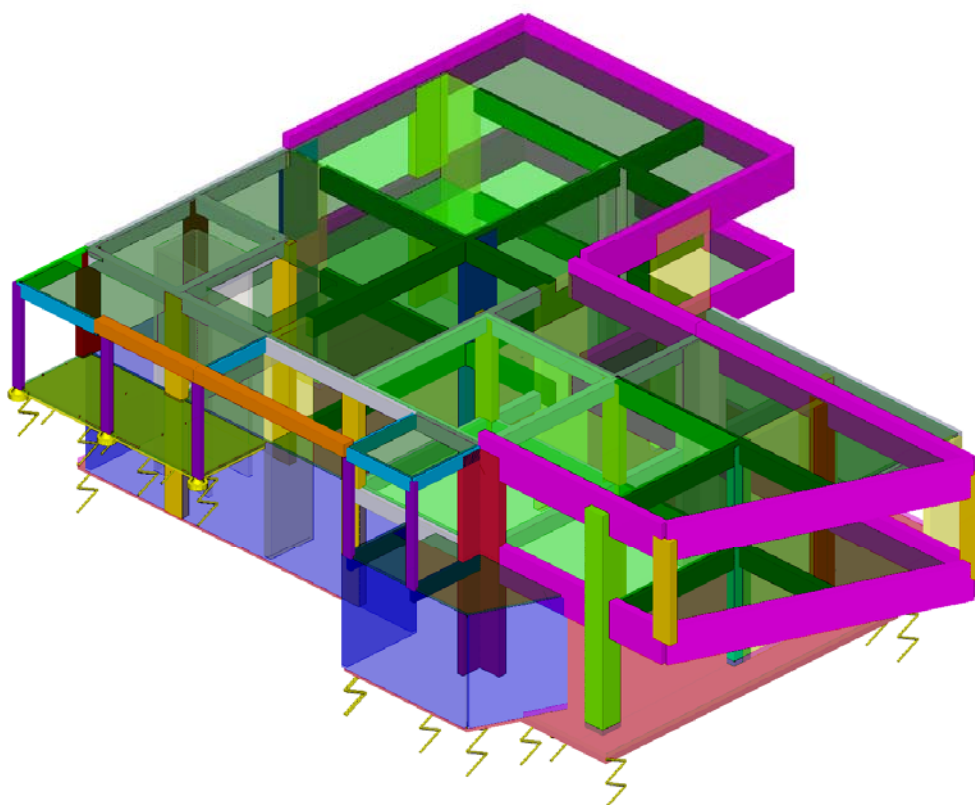
Izometrija (Left)



Izometrija (Right)



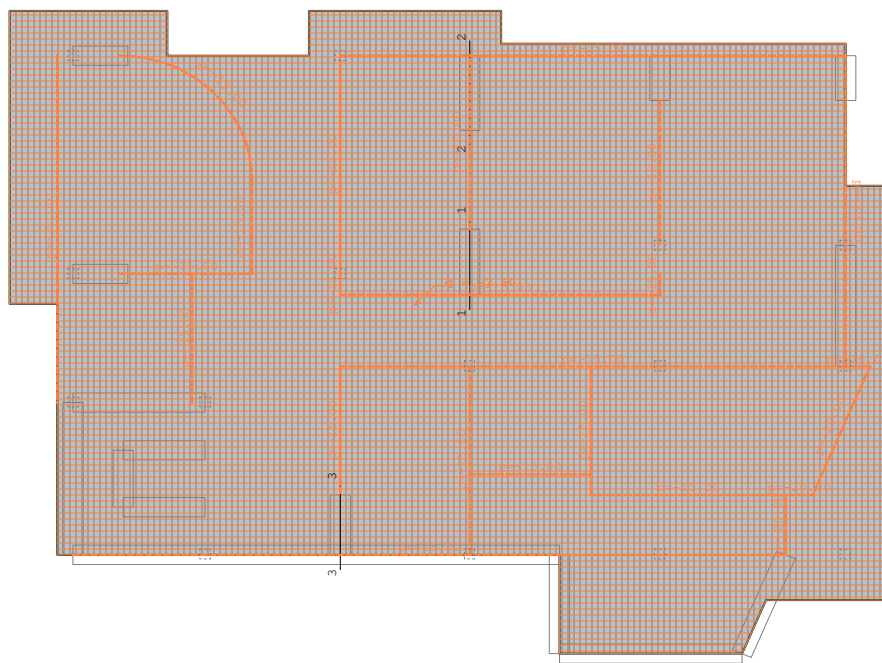
Izometrija (Bottom)



Izometrija

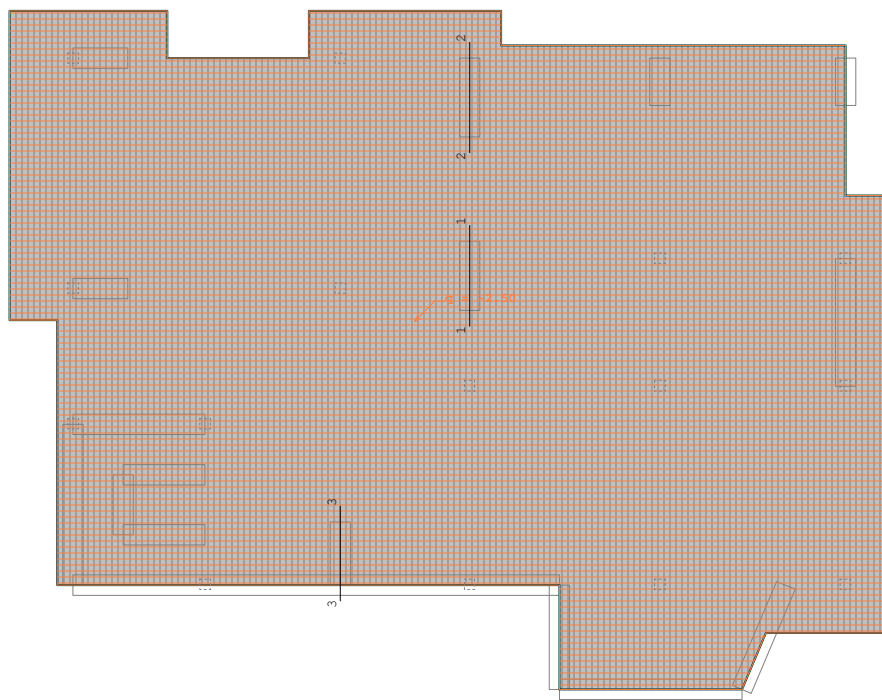
9.2 OPTEREČENJE NA MODELU

Opt. 1: stalno (g)



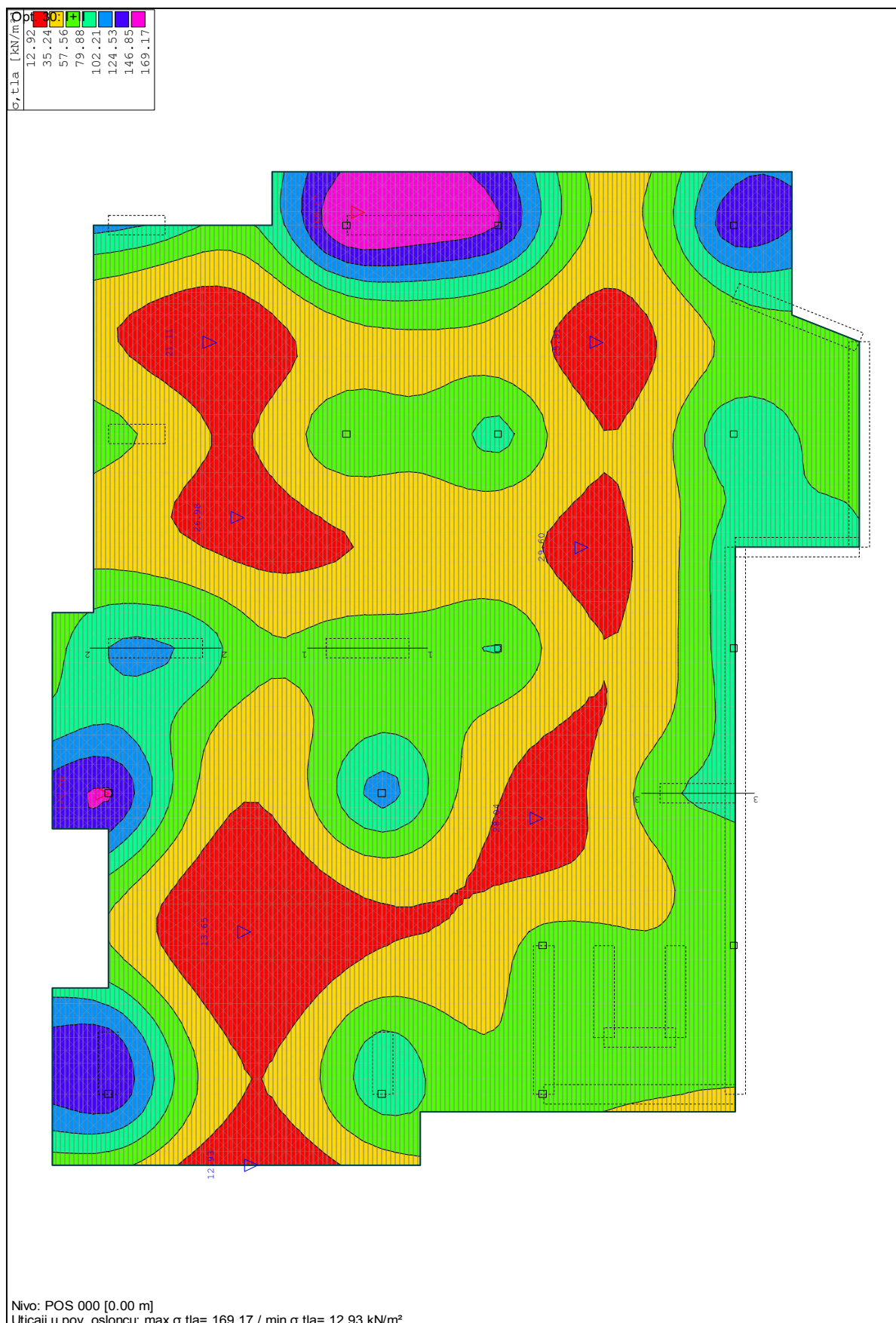
Nivo: POS 000 [0.00 m]

Opt. 2: povremeno

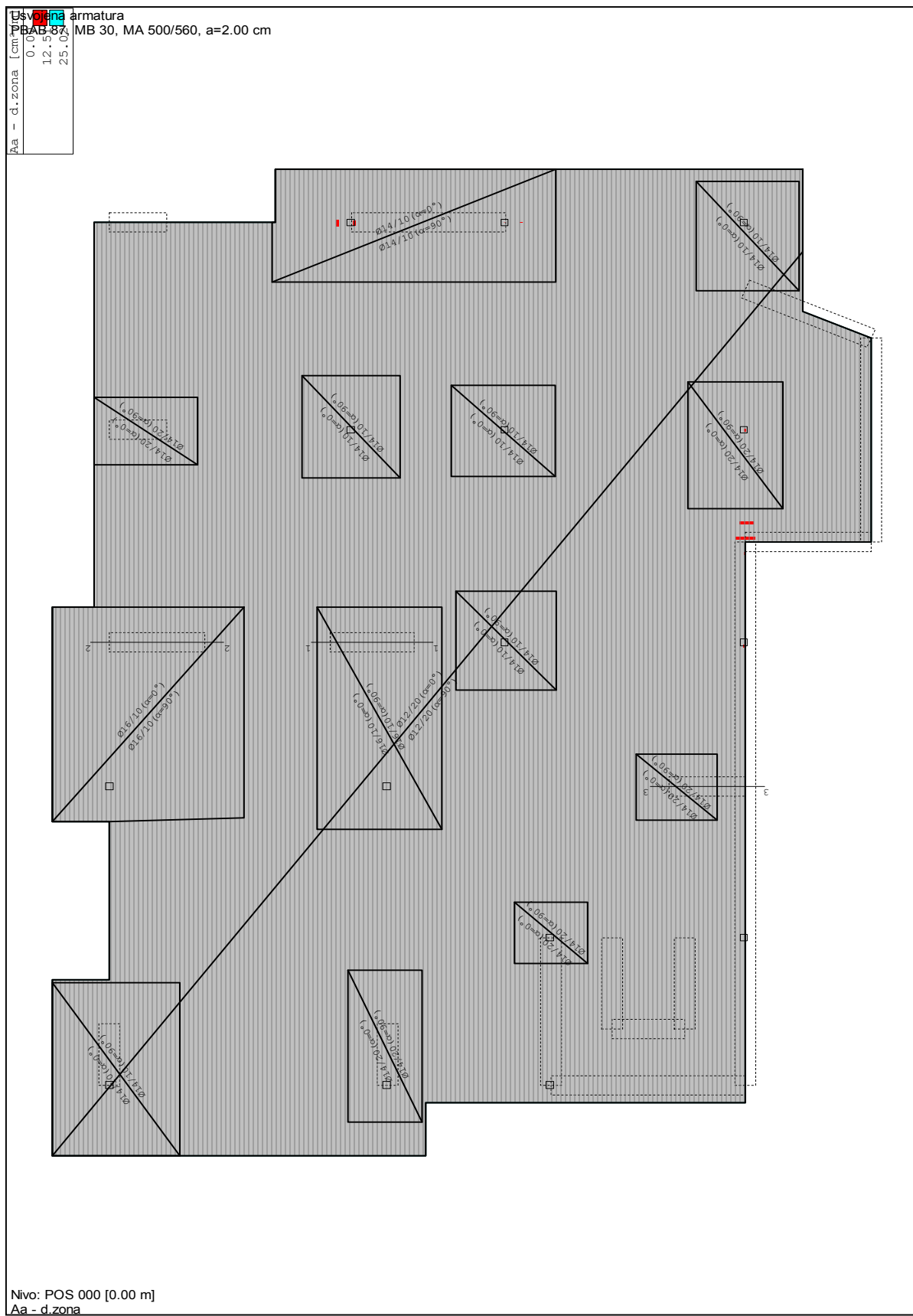


Nivo: POS 000 [0.00 m]

9.3 KONTROLA NAPONA U TLU



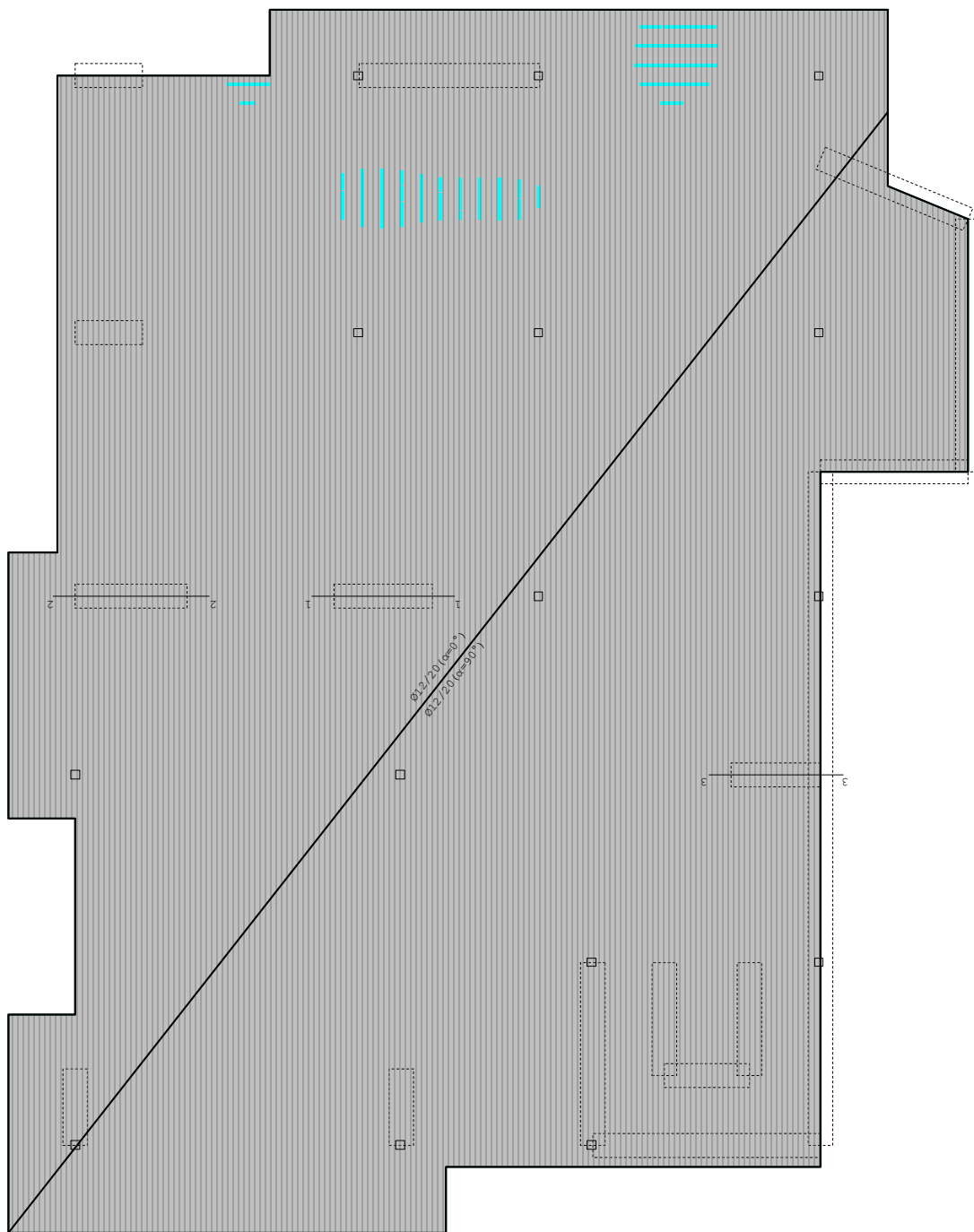
9.4 USVOJENA ARMATURA



Aa - g.zona [cm]	0.00
	-3.38
	-6.77
	0.00

Usvojena armatura

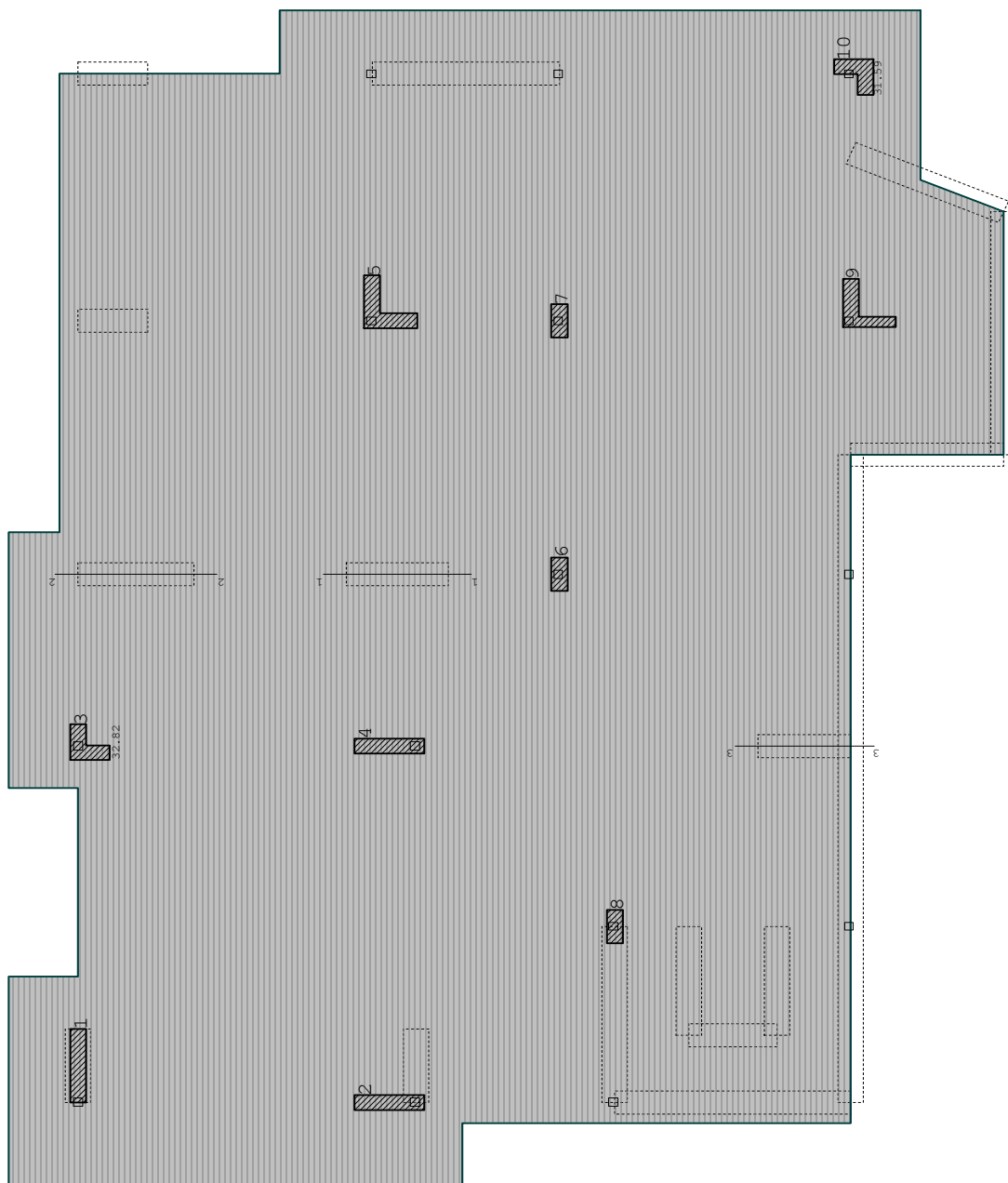
BAB 87 MB 30, MA 500/560, a=2.00 cm



Nivo: POS 000 [0.00 m]

Aa - g.zona

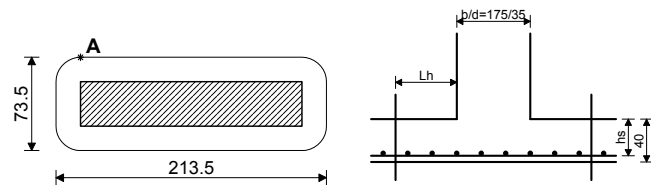
9.5 KONTROLA TEMELJNE PLOČE NA PROBOJ



Nivo: POS 000 [0.00 m]
Kontrola ploča na probijanje - dispozicija

Kontrola ploča na probijanje

Nivo: POS 000 [0.00 m]
 Presek 1 (1.38,20.00,0.00)
 MB 30

**KONTROLA KRITIČNOG PRESEKA 1. (Lh = 0.19m od ivice stuba)**

Merodavna kombinacija: I	
Sila u stubu	N = 838.64 kN
Merodavni smičući napon (tačka A)	$\tau = 0.403 \text{ MPa}$
Debljina ploče	d,pl = 0.400 m
Statička visina ploče	hs = 0.385 m
Obim kritičnog preseka	O _{kp} = 5.410 m
Postojeća armatura u ploči	
Površina armature - pravac 1	A _{a,1} = 3.351 cm ²
Procenat armiranja - pravac 1	$\mu_1 = 0.087 \%$
Površina armature - pravac 2	A _{a,2} = 3.351 cm ²
Procenat armiranja - pravac 2	$\mu_2 = 0.087 \%$
Srednja vrednost procenta armiranja (usvojena)	$\mu = 0.500 \%$
Koeficijent	$\alpha_a = 1.400$
Koeficijent	$\gamma_1 = 1.287$
Koeficijent	$\gamma_2 = 0.445$
Dopušteni glavni napon zatezanja	$\tau_a = 0.800$
Dopušteni glavni napon zatezanja	$\tau_b = 2.200$
Maksimalna otpornost ($\gamma_2 \times \tau_b$)	$\tau_{\text{max}} = 0.980 \text{ MPa}$

Uslov: $\tau \leq \tau_{\text{max}}$ (0.40 ≤ 0.98)

Uslov je ispunjen.

Otpornost na probijanje ploče bez dodatne armature za obezbeđenje ($2/3 \times \gamma_1 \times \tau_a$)

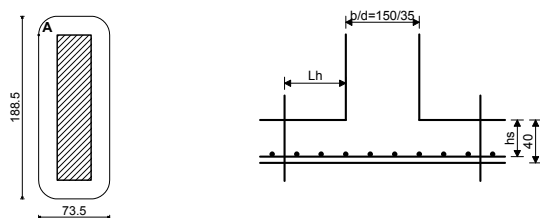
$\tau_{\text{gr}} = 0.686 \text{ MPa}$

Uslov: $\tau \leq \tau_{\text{gr}}$ (0.40 ≤ 0.69)

Uslov je ispunjen, nije potrebna dodatna armatura za obezbeđenje od probijanja ploče.

Kontrola ploča na probijanje

Nivo: POS 000 [0.00 m]
 Presek 2 (0.50,12.70,0.00)
 MB 30

**KONTROLA KRITIČNOG PRESEKA 1. (Lh = 0.19m od ivice stuba)**

Merodavna kombinacija: I	
Sila u stubu	N = 298.30 kN
Merodavni smičući napon (tačka A)	$\tau = 0.158 \text{ MPa}$
Debljina ploče	d,pl = 0.400 m
Statička visina ploče	hs = 0.385 m
Obim kritičnog preseka	O _{kp} = 4.910 m
Postojeća armatura u ploči	
Površina armature - pravac 1	A _{a,1} = 3.351 cm ²
Procenat armiranja - pravac 1	$\mu_1 = 0.087 \%$
Površina armature - pravac 2	A _{a,2} = 3.351 cm ²
Procenat armiranja - pravac 2	$\mu_2 = 0.087 \%$
Srednja vrednost procenta armiranja (usvojena)	$\mu = 0.500 \%$
Koeficijent	$\alpha_a = 1.400$
Koeficijent	$\gamma_1 = 1.287$
Koeficijent	$\gamma_2 = 0.445$
Dopušteni glavni napon zatezanja	$\tau_a = 0.800$
Dopušteni glavni napon zatezanja	$\tau_b = 2.200$
Maksimalna otpornost ($\gamma_2 \times \tau_b$)	$\tau_{\text{max}} = 0.980 \text{ MPa}$

Uslov: $\tau \leq \tau_{\text{max}}$ (0.16 ≤ 0.98)

Uslov je ispunjen.

Otpornost na probijanje ploče bez dodatne armature za obezbeđenje ($2/3 \times \gamma_1 \times \tau_a$)

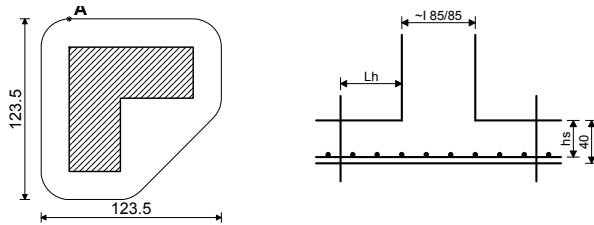
$\tau_{\text{gr}} = 0.686 \text{ MPa}$

$$\text{Uslov: } \tau \leq \tau_{gr} (0.16 \leq 0.69)$$

Uslov je ispunjen, nije potrebna dodatna armatura za obezbeđenje od probijanja ploče.

Kontrola ploča na probijanje

Nivo: POS 000 [0.00 m]
Presek 3 (9.00,20.00,0.00)
MB 30



KONTROLA KRITIČNOG PRESEKA 1. (Lh = 0.19m od ivice stuba)

Merodavna kombinacija: I	
Sila u stubu	N = 1215.5 kN
Merodavni smičući napon (tačka A)	$\tau = 0.731 \text{ MPa}$
Debljina ploče	d,pl = 0.400 m
Statička visina ploče	hs = 0.385 m
Obim kritičnog preseka	Okp = 4.317 m
Postojeća armatura u ploči	
Površina armature - pravac 1	Aa,1 = 3.351 cm ²
Procenat armiranja - pravac 1	$\mu_1 = 0.087 \%$
Površina armature - pravac 2	Aa,2 = 3.351 cm ²
Procenat armiranja - pravac 2	$\mu_2 = 0.087 \%$
Srednja vrednost procenta armiranja (usvojena)	$\mu = 0.500 \%$
Koeficijent	$\alpha_a = 1.400$
Koeficijent	$\gamma_1 = 1.287$
Koeficijent	$\gamma_2 = 0.445$
Dopušteni glavni napon zatezanja	$\tau_a = 0.800$
Dopušteni glavni napon zatezanja	$\tau_b = 2.200$
Maksimalna otpornost ($\gamma_2 \times \tau_b$)	$\tau_{max} = 0.980 \text{ MPa}$

$$\text{Uslov: } \tau \leq \tau_{max} (0.73 \leq 0.98)$$

Uslov je ispunjen.

Otpornost na probijanje ploče bez dodatne armature za obezbeđenje ($2/3 \times \gamma_1 \times \tau_a$)	$\tau_{gr} = 0.686 \text{ MPa}$
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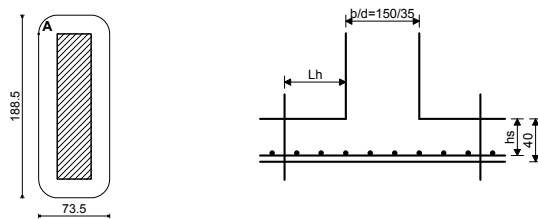
$$\text{Uslov: } \tau \leq \tau_{gr} (0.73 \leq 0.69)$$

Potrebna je dodatna armatura za obezbeđenje od probijanja ploče.

Armatura za obezbeđenje od probijanja ploče B500B	
Potrebna površina armature	Aak = 32.819 cm ²

Kontrola ploča na probijanje

Nivo: POS 000 [0.00 m]
Presek 4 (9.00,12.70,0.00)
MB 30



KONTROLA KRITIČNOG PRESEKA 1. (Lh = 0.19m od ivice stuba)

Merodavna kombinacija: I	
Sila u stubu	N = 1141.6 kN
Merodavni smičući napon (tačka A)	$\tau = 0.604 \text{ MPa}$
Debljina ploče	d,pl = 0.400 m
Statička visina ploče	hs = 0.385 m
Obim kritičnog preseka	Okp = 4.910 m
Postojeća armatura u ploči	
Površina armature - pravac 1	Aa,1 = 3.351 cm ²
Procenat armiranja - pravac 1	$\mu_1 = 0.087 \%$
Površina armature - pravac 2	Aa,2 = 3.351 cm ²
Procenat armiranja - pravac 2	$\mu_2 = 0.087 \%$
Srednja vrednost procenta armiranja (usvojena)	$\mu = 0.500 \%$
Koeficijent	$\alpha_a = 1.400$
Koeficijent	$\gamma_1 = 1.287$
Koeficijent	$\gamma_2 = 0.445$

Dopušteni glavni napon zatezanja	$\tau_a =$	0.800
Dopušteni glavni napon zatezanja	$\tau_b =$	2.200
Maksimalna otpornost($\gamma_2 \times \tau_b$)	$\tau_{max} =$	0.980 MPa

$$\text{Uslov: } \tau \leq \tau_{max} (0.60 \leq 0.98)$$

Uslov je ispunjen.

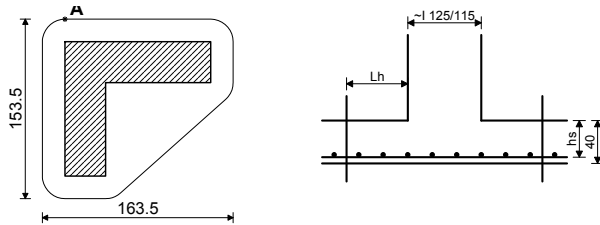
Otpornost na probijanje ploče bez dodatne armature za obezbeđenje ($2/3 \times \gamma_1 \times \tau_a$)	$\tau_{gr} =$	0.686 MPa
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$$\text{Uslov: } \tau \leq \tau_{gr} (0.60 \leq 0.69)$$

Uslov je ispunjen, nije potrebna dodatna armatura za obezbeđenje od probijanja ploče.

Kontrola ploča na probijanje

Nivo: POS 000 [0.00 m]
Presek 5 (19.15,13.65,0.00)
MB 30



KONTROLA KRITIČNOG PRESEKA 1. ($L_h = 0.19m$ od ivice stuba)

Merodavna kombinacija: I	N =	793.15 kN
Sila u stubu	$\tau =$	0.374 MPa
Merodavni smičući napon (tačka A)	$d_{pl} =$	0.400 m
Debljina ploče	$h_s =$	0.385 m
Statička visina ploče		
Obim kritičnog preseka	Okp =	5.514 m
Postojeća armatura u ploči		
Površina armature - pravac 1	$A_{a,1} =$	3.351 cm ²
Procenat armiranja - pravac 1	$\mu_1 =$	0.087 %
Površina armature - pravac 2	$A_{a,2} =$	3.351 cm ²
Procenat armiranja - pravac 2	$\mu_2 =$	0.087 %
Srednja vrednost procenta armiranja (usvojena)	$\mu =$	0.500 %
Koeficijent	$\alpha_a =$	1.400
Koeficijent	$\gamma_1 =$	1.287
Koeficijent	$\gamma_2 =$	0.445
Dopušteni glavni napon zatezanja	$\tau_a =$	0.800
Dopušteni glavni napon zatezanja	$\tau_b =$	2.200
Maksimalna otpornost($\gamma_2 \times \tau_b$)	$\tau_{max} =$	0.980 MPa

$$\text{Uslov: } \tau \leq \tau_{max} (0.37 \leq 0.98)$$

Uslov je ispunjen.

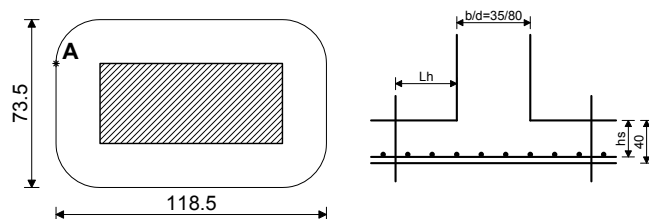
Otpornost na probijanje ploče bez dodatne armature za obezbeđenje ($2/3 \times \gamma_1 \times \tau_a$)	$\tau_{gr} =$	0.686 MPa
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$$\text{Uslov: } \tau \leq \tau_{gr} (0.37 \leq 0.69)$$

Uslov je ispunjen, nije potrebna dodatna armatura za obezbeđenje od probijanja ploče.

Kontrola ploča na probijanje

Nivo: POS 000 [0.00 m]
Presek 6 (13.10,9.60,0.00)
MB 30



KONTROLA KRITIČNOG PRESEKA 1. ($L_h = 0.19m$ od ivice stuba)

Merodavna kombinacija: I	N =	732.45 kN
Sila u stubu	$\tau =$	0.542 MPa
Merodavni smičući napon (tačka A)	$d_{pl} =$	0.400 m
Debljina ploče	$h_s =$	0.385 m
Statička visina ploče		
Obim kritičnog preseka	Okp =	3.510 m
Postojeća armatura u ploči		
Površina armature - pravac 1	$A_{a,1} =$	3.351 cm ²

Procenat armiranja - pravac 1	$\mu_1 =$	0.087 %
Površina armature - pravac 2	$A_{a,2} =$	3.351 cm ²
Procenat armiranja - pravac 2	$\mu_2 =$	0.087 %
Srednja vrednost procenta armiranja (usvojena)	$\mu =$	0.500 %
Koeficijent	$\alpha_a =$	1.400
Koeficijent	$\gamma_1 =$	1.287
Koeficijent	$\gamma_2 =$	0.445
Dopušteni glavni napon zatezanja	$\tau_a =$	0.800
Dopušteni glavni napon zatezanja	$\tau_b =$	2.200
Maksimalna otpornost ($\gamma_2 \times \tau_b$)	$\tau_{max} =$	0.980 MPa

Uslov: $\tau \leq \tau_{max}$ (0.54 \leq 0.98)

Uslov je ispunjen.

Otpornost na probijanje ploče bez dodatne armature za obezbeđenje (2/3 x $\gamma_1 \times \tau_a$)

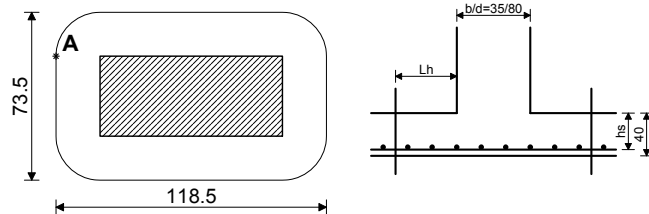
$\tau_{gr} =$ 0.686 MPa

Uslov: $\tau \leq \tau_{gr}$ (0.54 \leq 0.69)

Uslov je ispunjen, nije potrebna dodatna armatura za obezbeđenje od probijanja ploče.

Kontrola ploča na probijanje

Nivo: POS 000 [0.00 m]
Presek 7 (19.15,9.60,0.00)
MB 30



KONTROLA KRITIČNOG PRESEKA 1. ($L_h = 0.19$ m od ivice stuba)

Merodavna kombinacija: I	N =	877.75 kN
Sila u stubu	$\tau =$	0.650 MPa
Merodavni smičući napon (tačka A)	$d_{pl} =$	0.400 m
Debljina ploče	$h_s =$	0.385 m
Statička visina ploče	Okp =	3.510 m
Obim kritičnog preseka		
Postojeća armatura u ploči	$A_{a,1} =$	3.351 cm ²
Površina armature - pravac 1	$\mu_1 =$	0.087 %
Procenat armiranja - pravac 1	$A_{a,2} =$	3.351 cm ²
Površina armature - pravac 2	$\mu_2 =$	0.087 %
Procenat armiranja - pravac 2	$\mu =$	0.500 %
Srednja vrednost procenta armiranja (usvojena)	$\alpha_a =$	1.400
Koeficijent	$\gamma_1 =$	1.287
Koeficijent	$\gamma_2 =$	0.445
Dopušteni glavni napon zatezanja	$\tau_a =$	0.800
Dopušteni glavni napon zatezanja	$\tau_b =$	2.200
Maksimalna otpornost ($\gamma_2 \times \tau_b$)	$\tau_{max} =$	0.980 MPa

Uslov: $\tau \leq \tau_{max}$ (0.65 \leq 0.98)

Uslov je ispunjen.

Otpornost na probijanje ploče bez dodatne armature za obezbeđenje (2/3 x $\gamma_1 \times \tau_a$)

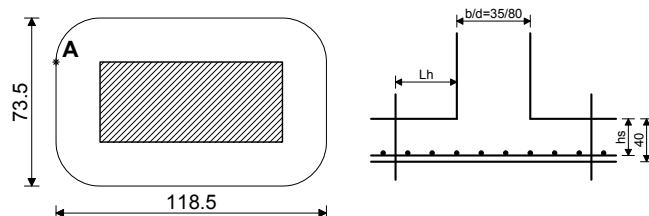
$\tau_{gr} =$ 0.686 MPa

Uslov: $\tau \leq \tau_{gr}$ (0.65 \leq 0.69)

Uslov je ispunjen, nije potrebna dodatna armatura za obezbeđenje od probijanja ploče.

Kontrola ploča na probijanje

Nivo: POS 000 [0.00 m]
Presek 8 (4.70,8.40,0.00)
MB 30



KONTROLA KRITIČNOG PRESEKA 1. ($L_h = 0.19$ m od ivice stuba)

Merodavna kombinacija: I	N =	324.63 kN
Sila u stubu		

Merodavni smičući napon (tačka A)	$\tau =$	0.240 MPa
Debljina ploče	$d, pl =$	0.400 m
Statička visina ploče	$hs =$	0.385 m
Obim kritičnog preseka	$Okp =$	3.510 m
Postojeća armatura u ploči		
Površina armature - pravac 1	$Aa,1 =$	3.351 cm ²
Procenat armiranja - pravac 1	$\mu,1 =$	0.087 %
Površina armature - pravac 2	$Aa,2 =$	3.351 cm ²
Procenat armiranja - pravac 2	$\mu,2 =$	0.087 %
Srednja vrednost procenta armiranja (usvojena)	$\mu =$	0.500 %
Koeficijent	$\alpha a =$	1.400
Koeficijent	$\gamma 1 =$	1.287
Koeficijent	$\gamma 2 =$	0.445
Dopušteni glavni napon zatezanja	$\tau a =$	0.800
Dopušteni glavni napon zatezanja	$\tau b =$	2.200
Maksimalna otpornost ($\gamma 2 \times \tau b$)	$\tau, max =$	0.980 MPa

Uslov: $\tau \leq \tau, max$ (0.24 \leq 0.98)

Uslov je ispunjen.

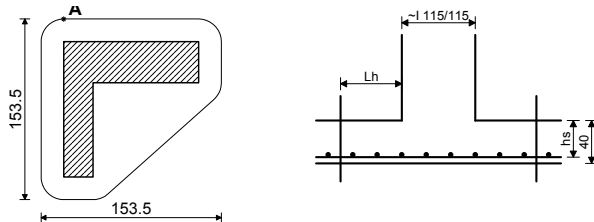
Otpornost na probijanje ploče bez dodatne armature za obezbeđenje ($2/3 \times \gamma 1 \times \tau a$)	$\tau, gr =$	0.686 MPa
---	--------------	-----------

Uslov: $\tau \leq \tau, gr$ (0.24 \leq 0.69)

Uslov je ispunjen, nije potrebna dodatna armatura za obezbeđenje od probijanja ploče.

Kontrola ploča na probijanje

Nivo: POS 000 [0.00 m]
Presek 9 (19.15,3.30,0.00)
MB 30



KONTROLA KRITIČNOG PRESEKA 1. ($Lh = 0.19m$ od ivice stuba)

Merodavna kombinacija: I		
Sila u stubu	$N =$	835.22 kN
Merodavni smičući napon (tačka A)	$\tau =$	0.408 MPa
Debljina ploče	$d, pl =$	0.400 m
Statička visina ploče	$hs =$	0.385 m
Obim kritičnog preseka	$Okp =$	5.314 m
Postojeća armatura u ploči		
Površina armature - pravac 1	$Aa,1 =$	3.351 cm ²
Procenat armiranja - pravac 1	$\mu,1 =$	0.087 %
Površina armature - pravac 2	$Aa,2 =$	3.351 cm ²
Procenat armiranja - pravac 2	$\mu,2 =$	0.087 %
Srednja vrednost procenta armiranja (usvojena)	$\mu =$	0.500 %
Koeficijent	$\alpha a =$	1.400
Koeficijent	$\gamma 1 =$	1.287
Koeficijent	$\gamma 2 =$	0.445
Dopušteni glavni napon zatezanja	$\tau a =$	0.800
Dopušteni glavni napon zatezanja	$\tau b =$	2.200
Maksimalna otpornost ($\gamma 2 \times \tau b$)	$\tau, max =$	0.980 MPa

Uslov: $\tau \leq \tau, max$ (0.41 \leq 0.98)

Uslov je ispunjen.

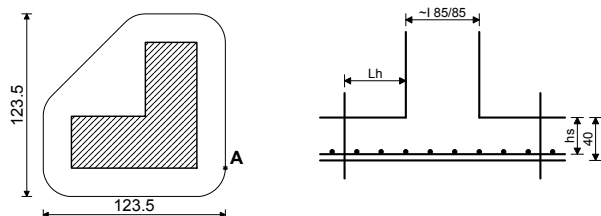
Otpornost na probijanje ploče bez dodatne armature za obezbeđenje ($2/3 \times \gamma 1 \times \tau a$)	$\tau, gr =$	0.686 MPa
---	--------------	-----------

Uslov: $\tau \leq \tau, gr$ (0.41 \leq 0.69)

Uslov je ispunjen, nije potrebna dodatna armatura za obezbeđenje od probijanja ploče.

Kontrola ploča na probijanje

Nivo: POS 000 [0.00 m]
Presek 10 (25.05,3.30,0.00)
MB 30



KONTROLA KRITIČNOG PRESEKA 1. (Lh = 0.19m od ivice stuba)

Merodavna kombinacija: I	
Sila u stubu	N = 1170.0 kN
Merodavni smičući napon (tačka A)	$\tau = 0.704 \text{ MPa}$
Debljina ploče	d,pl = 0.400 m
Statička visina ploče	hs = 0.385 m
Obim kritičnog preseka	O _{kp} = 4.317 m
Postojeća armatura u ploči	
Površina armature - pravac 1	A _{a,1} = 3.351 cm ²
Procenat armiranja - pravac 1	$\mu_1 = 0.087 \%$
Površina armature - pravac 2	A _{a,2} = 3.351 cm ²
Procenat armiranja - pravac 2	$\mu_2 = 0.087 \%$
Srednja vrednost procenta armiranja (usvojena)	$\mu = 0.500 \%$
Koeficijent	$\alpha_a = 1.400$
Koeficijent	$\gamma_1 = 1.287$
Koeficijent	$\gamma_2 = 0.445$
Dopušteni glavni napon zatezanja	$\tau_a = 0.800$
Dopušteni glavni napon zatezanja	$\tau_b = 2.200$
Maksimalna otpornost ($\gamma_2 \times \tau_b$)	$\tau_{\text{max}} = 0.980 \text{ MPa}$

Uslov: $\tau \leq \tau_{\text{max}}$ (0.70 ≤ 0.98)

Uslov je ispunjen.

Otpornost na probijanje ploče bez dodatne armature za obezbeđenje ($2/3 \times \gamma_1 \times \tau_a$)	$\tau_{\text{gr}} = 0.686 \text{ MPa}$
---	--

Uslov: $\tau \leq \tau_{\text{gr}}$ (0.70 ≤ 0.69)

Potrebna je dodatna armatura za obezbeđenje od probijanja ploče.

Armatura za obezbeđenje od probijanja ploče B500B	
Potrebna površina armature	A _{ak} = 31.591 cm ²

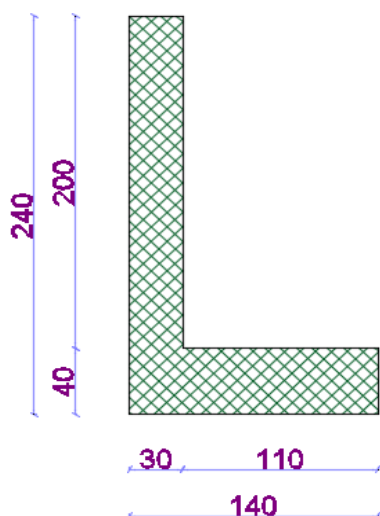
*Armatura za obezbeđenje temeljne ploče od proboja je ipak usvojena zbog velikih dimenzija i težine vertikalnih elemenata

10. DIMENZIONISANJE POTPORNIH ZIDOVA

*Potporni zidovi 1, 2a, 3a, 9 su malih dimenzija i neznatno opterećeni aktivnim pritiskom tla pa je za iste usvojena armatura iz uslova minimuma armiranja.

POTPORNI ZID PZ4,5,6 visine $h_{k\max}=2.00\text{ m}$

POS PZ4,5,6



1. Karakteristike potpornog zida

Slobodna visina zida $h_k = 2.00\text{ m}$

Dubina fundiranja $D_f = 0.40\text{ m}$

Ukupna visina $H = 2.40\text{ m}$

MB30. B500B

$F_{kl} = 1.5\text{ (1.8)}$

$F_{pr} = 1.5$

Geomehaničke karakteristike tla

$\gamma = 20.00\text{ kN/m}^3$ -težina tla

$\varphi = 25^\circ$ -ugao unutrašnjeg trenja tla

2.Proračun zemljanih pritisaka

2.1.Aktivni pritisak tla (Rankin)

$$k_a = \tan^2(45 - \varphi/2) = \tan^2(45 - 25/2) = 0.40$$

$$e_a = 2.40 \times 20.0 \times 0.40 = 19.20 \text{ kN/m}^2$$

$$E_a = H_1 = \frac{1}{2} \times 2.40 \times 19.20 = 23.04 \text{ kN/m}$$

$$z_1 = 2.40/3 = 0.80 \text{ m} \quad \text{položaj sile } H_1$$

3.Kontrola stabilnosti potpornog zida

3.1. Vertikalna opterećenja i statičke veličine

$$V_1 = 0.30 \times 2.0 \times 25.0 = 15.00 \text{ kN/m}^1$$

$$V_2 = 1.40 \times 0.4 \times 25.0 = 14.00 \text{ kN/m}^1$$

$$V_3 = 1.10 \times 2.0 \times 20.0 = 44.00 \text{ kN/m}^1$$

$$\Sigma V = 73.00 \text{ kN}$$

$$\Sigma H = 23.04 \text{ kN}$$

3.2.Proračun koeficijenata sigurnosti

3.2.1.Kontrola klizanja potpornog zida

$$\Sigma N = 73.00 \text{ kN}$$

$$\Sigma T = 23.04 \text{ kN}$$

$$F_{kl} = \frac{\Sigma N \cdot \tan \varphi_2}{\Sigma T} = 73.00 \times \tan 25^\circ / 23.04 = 1.48 \approx 1.5$$

3.2.2.Kontrola preturanja potpornog zida

-Moment otpora oko tačke 1

$$M_s = 15.00 \times 0.15 + 14.00 \times 0.7 + 44.00 \times 0.85 = 49.45 \text{ kNm/m}^1$$

-Moment preturanja oko tačke 1 (od aktivnog zemjanog pritiska E_a)

$$M_{a_{pr}} = 23.04 \times 0.80 = 18.43 \text{ kNm}$$

-Koeficijent sigurnosti na preturanje

$$F_{pr} = 49.45 / 18.43 = 2.68 > 1.5$$

4.Dimenzionisanje

-presjek A-A

Za dimenzioniranje vertikalnog zida mjerodavan je koeficijent bočnog mirnog pritiska

$$k_o = (1 - \sin\phi) = (1 - 0.42) = 0.58$$

$$e_{o1} = 2.40 \times 20.0 \times 0.58 = 27.71 \text{ kN/m}^2$$

$$E_{o1} = \frac{1}{2} \times 2.40 \times 27.71 = 33.26 \text{ kN/m}$$

$$z_{o1} = 2.40/3 = 0.80 \text{ m} \quad \text{položaj sile } E_{o1}$$

$$M_u^g = 1.65 \times 33.26 = 54.87 \text{ kNm}$$

Potrebna površina armature je:

$$F_a = 5487 / 0.9 \times 30 \times 50 = 4.06 \text{ cm}^2/\text{m}^1 \quad \min F_a = 0.15 \times 30 = 4.50 \text{ cm}^2/\text{m}$$

-presjek B-B

$$\min F_a = 0.15 \times 40 = 6.00 \text{ cm}^2/\text{m}$$

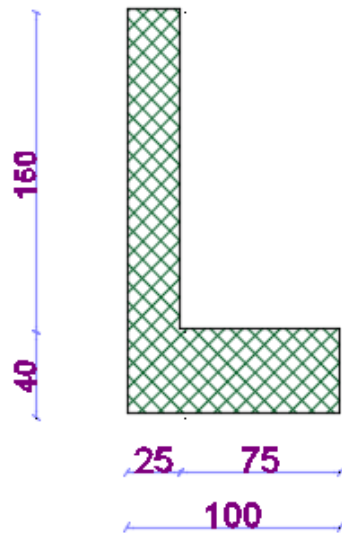
Usvaja se armatura :

Glavna armatura RØ12/15 (7.53 cm²/m¹)

Podeona armatura RØ10/20 (3.93 cm²/m¹)

POTPORNI ZID PZ7,8 visine $h_{k\max}=2.00$ m

POS PZ7,8



1. Karakteristike potpornog zida

Slobodna visina zida $h_k = 1.50$ m

Dubina fundiranja $D_f = 0.40$ m

Ukupna visina $H = 1.90$ m

MB30. B500B

$F_{kl} = 1.5$ (1.8)

$F_{pr} = 1.5$

Geomehaničke karakteristike tla

$\gamma = 20.00$ kN/m³ -težina tla

$\varphi = 25^\circ$ -ugao unutrašnjeg trenja tla

2.Proračun zemljanih pritisaka

2.1.Aktivni pritisak tla (Rankin)

$$k_a = \tan^2(45 - \varphi/2) = \tan^2(45 - 25/2) = 0.40$$

$$e_a = 1.90 \times 20.0 \times 0.40 = 15.20 \text{ kN/m}^2$$

$$E_a = H_1 = \frac{1}{2} \times 1.90 \times 19.20 = 14.44 \text{ kN/m}$$

$$z_1 = 1.90/3 = 0.63 \text{ m} \quad \text{položaj sile } H_1$$

3.Kontrola stabilnosti potpornog zida

3.1. Vertikalna opterećenja i statičke veličine

$$V_1 = 0.25 \times 1.50 \times 25.0 = 9.375 \text{ kN/m}^1$$

$$V_2 = 1.00 \times 0.4 \times 25.0 = 10.00 \text{ kN/m}^1$$

$$V_3 = 0.75 \times 1.50 \times 20.0 = 22.50 \text{ kN/m}^1$$

$$\Sigma V = 41.875 \text{ kN}$$

$$\Sigma H = 14.44 \text{ kN}$$

3.2.Proračun koeficijenata sigurnosti

3.2.1.Kontrola klizanja potpornog zida

$$\Sigma N = 41.875 \text{ kN}$$

$$\Sigma T = 14.44 \text{ kN}$$

$$F_{kl} = \frac{\Sigma N \cdot \tan \varphi_2}{\Sigma T} = 41.875 \times \tan 25^\circ / 14.44 = 1.35 \approx 1.5$$

3.2.2.Kontrola preturanja potpornog zida

-Moment otpora oko tačke 1

$$M_s = 9.375 \times 0.125 + 10.00 \times 0.5 + 22.50 \times 0.625 = 20.23 \text{ kNm/m}^1$$

-Moment preturanja oko tačke 1 (od aktivnog zemjanog pritiska E_a)

$$M_{a_{pr}} = 14.44 \times 0.63 = 9.10 \text{ kNm}$$

-Koeficijent sigurnosti na preturanje

$$F_{pr} = 20.23/9.10 = 2.22 > 1.5$$

4.Dimenzionisanje

-presjek A-A

Za dimenzioniranje vertikalnog zida mjerodavan je koeficijent bočnog mirnog pritiska

$$k_o = (1 - \sin \varphi) = (1 - 0.42) = 0.58$$

$$e_{o1} = 1.90 \times 20.0 \times 0.58 = 22.04 \text{ kN/m}^2$$

$$E_{o1} = \frac{1}{2} \times 1.90 \times 22.04 = 20.94 \text{ kN/m}$$

$$z_{o1} = 1.90/3 = 0.63 \text{ m} \quad \text{položaj sile } E_{o1}$$

$$M_u^g = 1.65 \times 20.94 = 34.55 \text{ kNm}$$

Potrebna površina armature je:

$$F_a = 3455/0.9 \times 25 \times 50 = 3.07 \text{ cm}^2/\text{m}^1 \quad \min F_a = 0.15 \times 25 = 3.75 \text{ cm}^2/\text{m}$$

-presjek B-B

$$\min F_a = 0.15 \times 40 = 6.00 \text{ cm}^2/\text{m}$$

Usvaja se armatura :

Glavna armatura RØ12/17.5 (6.45 cm²/m¹)

Podeona armatura RØ10/20 (3.93 cm²/m¹)

POTPORNI ZIDOVI PZ2 i PZ3 visine $h_{k\max}=4.18\text{ m}$

Ulazni podaci - Konstrukcija

Sema nivoa

Naziv	z [m]	h [m]
POS 100	4.18	3.30
POS 000'	0.88	0.88
POS 000	0.00	

Tabela materijala

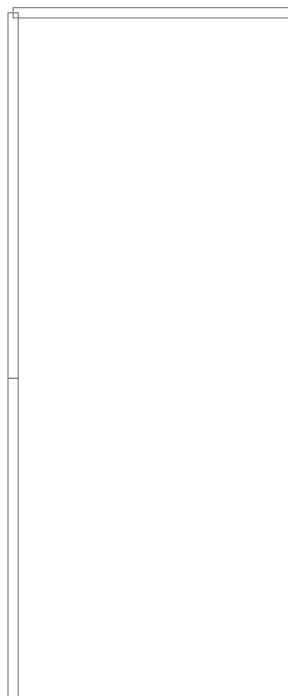
No	Naziv materijala	E[kN/m ²]	μ	γ [kN/m ³]	α [1/C]	Em[kN/m ²]	μ_m
1	Beton MB 30	3.150e+7	0.20	25.00	1.000e-5	3.150e+7	0.20

Setovi ploča

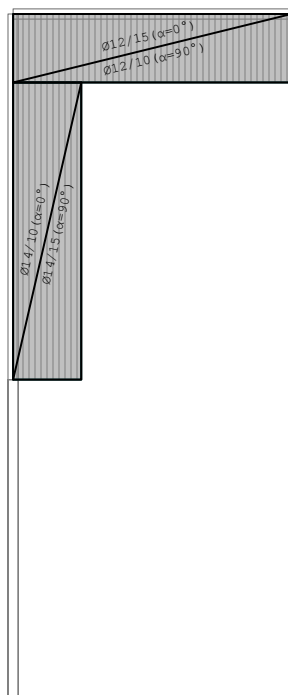
No	d[m]	e[m]	Materijal	Tip proračuna	Ortotropija	E2[kN/m ²]	G[kN/m ²]	α
<1>	0.350	0.175	1	Tanka ploča	Izotropna			
<2>	0.300	0.150	1	Tanka ploča	Izotropna			
<3>	0.400	0.200	1	Tanka ploča	Izotropna			

Setovi površinskih oslonaca

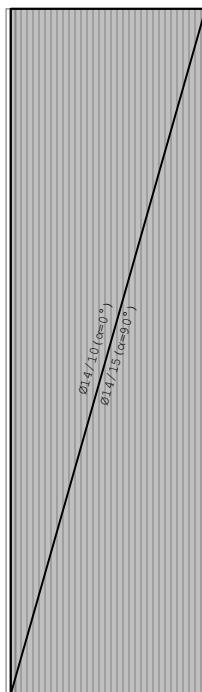
Set	K,R1	K,R2	K,R3
1	6.000e+4	6.000e+4	6.000e+4



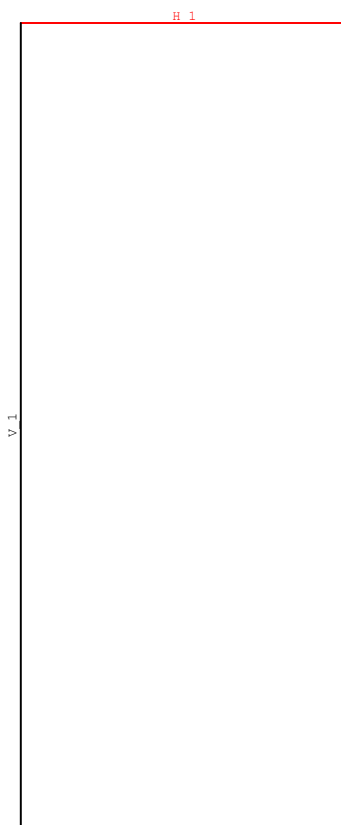
Nivo: POS 100 [4.18 m]



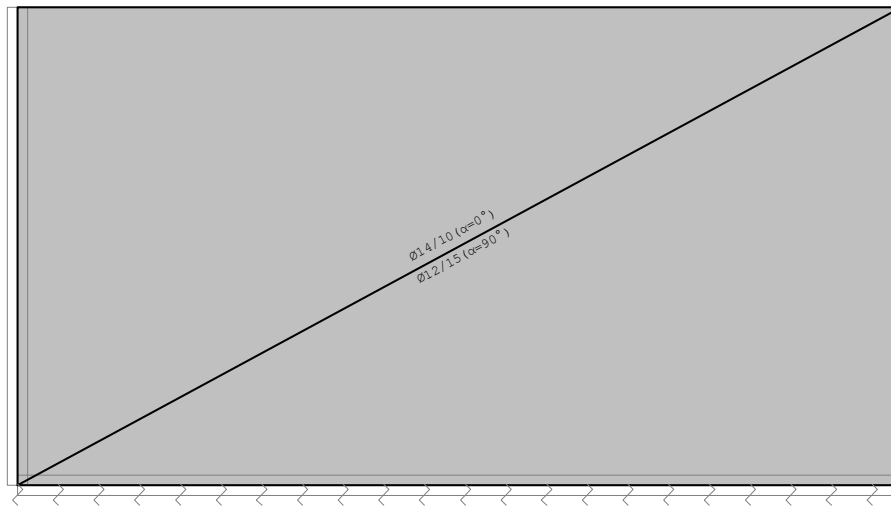
Nivo: POS 000' [0.88 m]



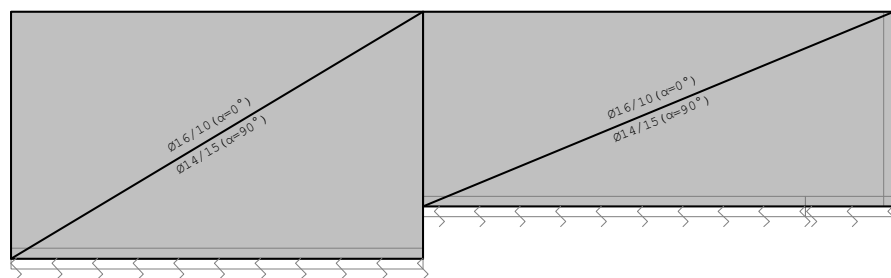
Nivo: POS 000 [0.00 m]



Dispozicija ramova



Ram: H_1



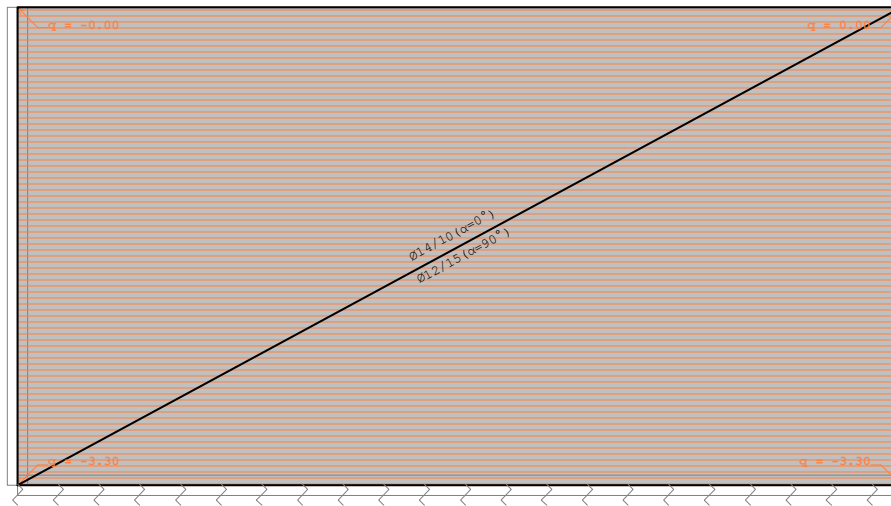
Ram: V_1

Ulazni podaci - Opterećenje

Lista slučajeva opterećenja

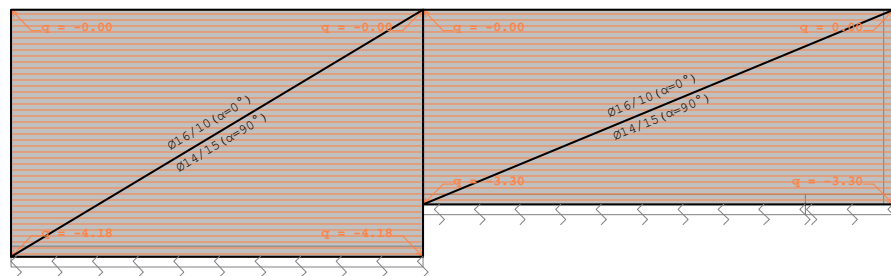
LC	Naziv	pX [kN]	pY [kN]	pZ [kN]
1	stalno (g)	-104.71	33.32	-967.80
2	povremeno	-445.28	161.57	0.00
3	Komb.: 1.6xl+1.8xII	-969.05	344.14	-1548.47
4	Komb.: I+1.8xII	-906.22	324.15	-967.80
5	Komb.: 1.6xl	-167.54	53.32	-1548.47
6	Komb.: I	-104.71	33.32	-967.80

Opt. 1: stalno (g)



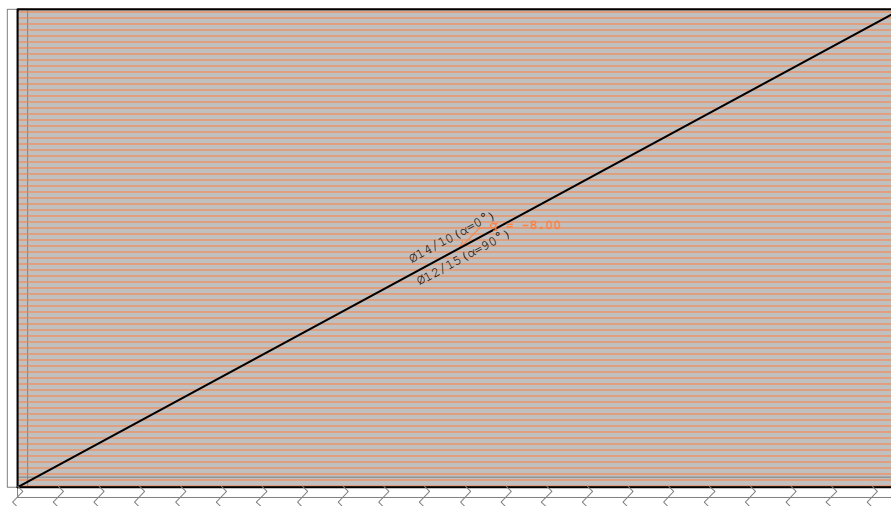
Ram: H_1

Opt. 1: stalno (g)



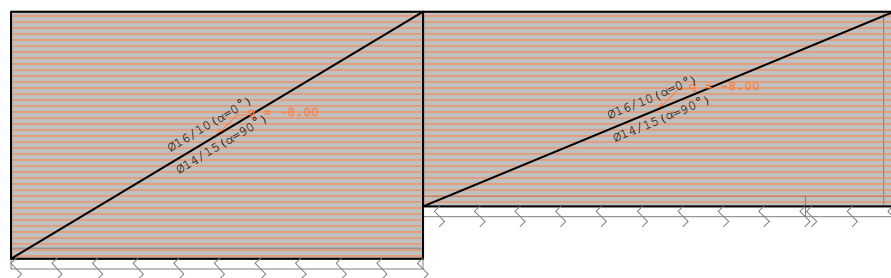
Ram: V_1

Opt. 2: povremeno



Ram: H_1

Opt. 2: povremeno

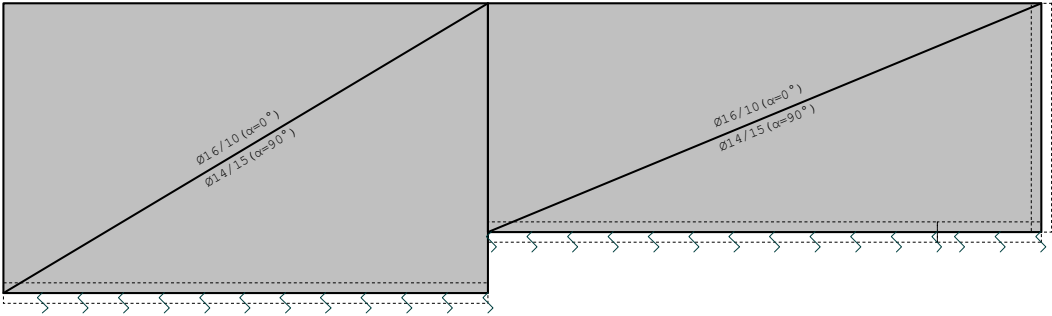


Ram: V_1

Dimenzionisanje (beton)

Usvojena armatura
PBAB 87, MB 30, MA 500/560, a=2.00 cm

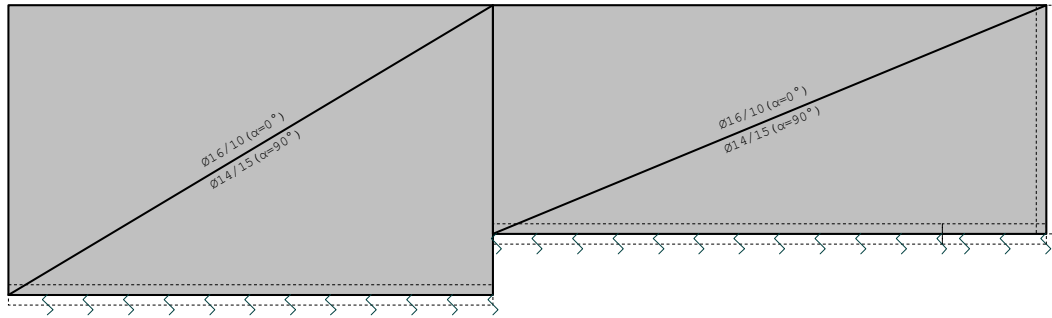
Aa - d.zona [cm ² /m]	
0.00	
4.38	
8.76	



Ram: V_1
Aa - d.zona

Usvojena armatura
PBAB 87, MB 30, MA 500/560, a=2.00 cm

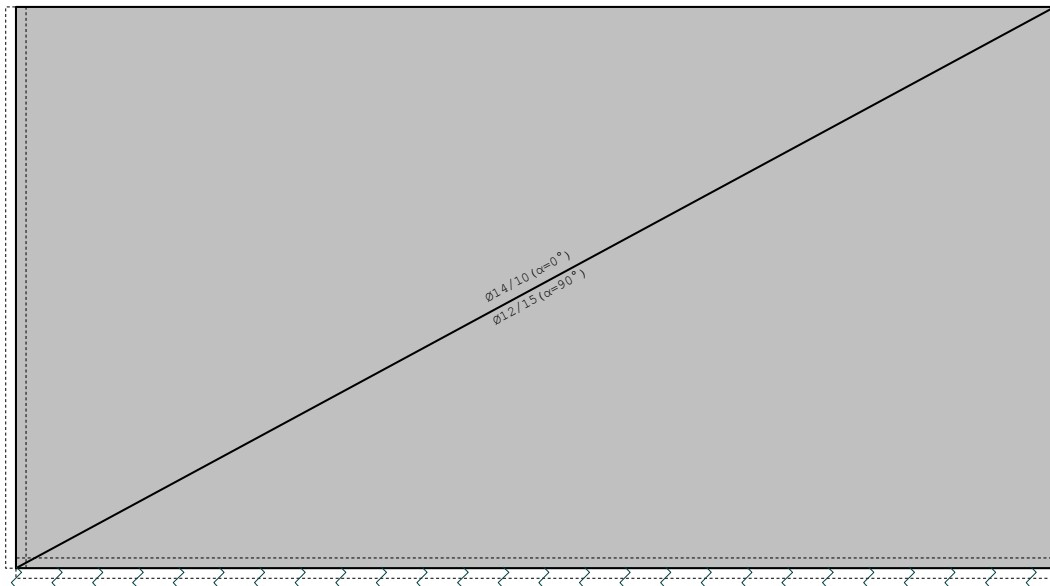
Aa - g.zona [cm ² /m]	
-8.72	
-4.36	
0.00	



Ram: V_1
Aa - g.zona

Usvojena armatura
PBAB 87, MB 30, MA 500/560, a=2.00 cm

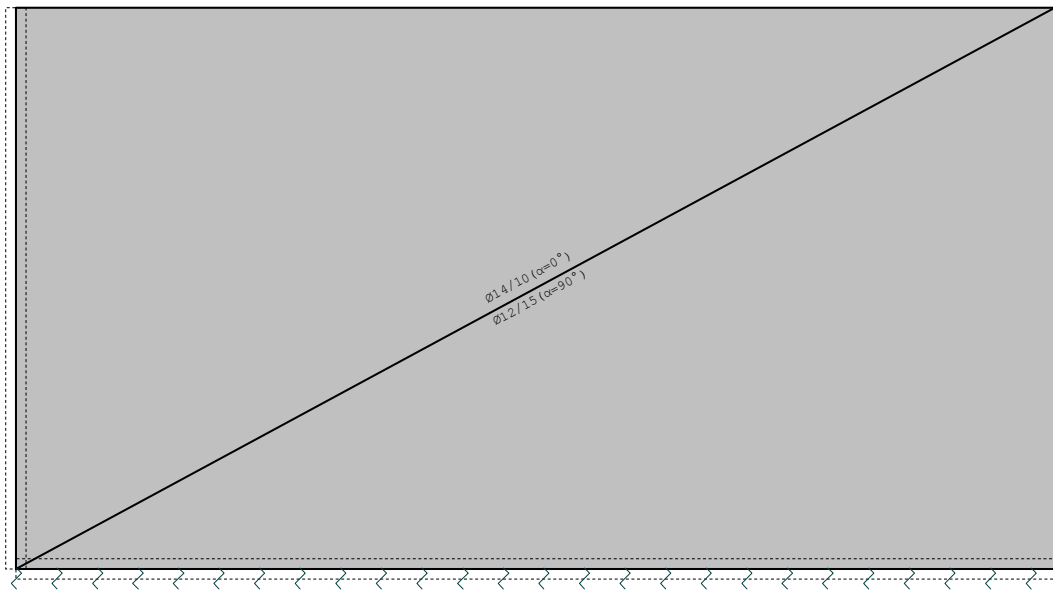
Aa - d.zona [cm ² /m]	
0.00	
6.13	
12.25	



Ram: H_1
Aa - d.zona

Usvojena armatura
PBAB 87, MB 30, MA 500/560, a=2.00 cm

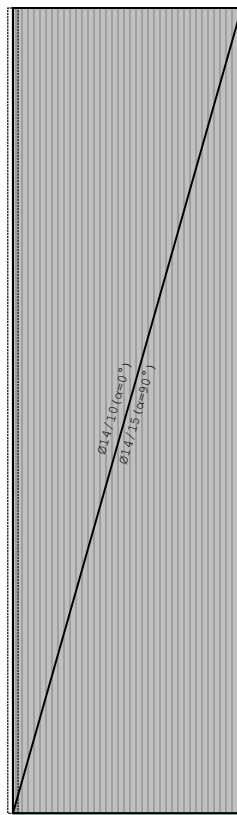
Aa - g.zona [cm ² /m]	
-12.20	
-6.10	
0.00	



Ram: H_1
Aa - g.zona

Usvojena armatura
PBAB 87, MB 30, MA 500/560, a=2.00 cm

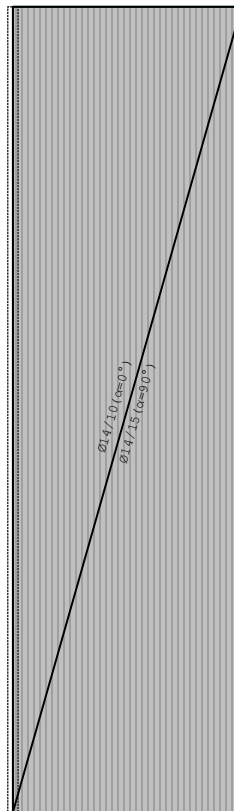
Aa - d.zona [cm ² /m]	
0.00	
0.53	
1.06	



Nivo: POS 000 [0.00 m]
Aa - d.zona

Usvojena armatura
PBAB 87, MB 30, MA 500/560, a=2.00 cm

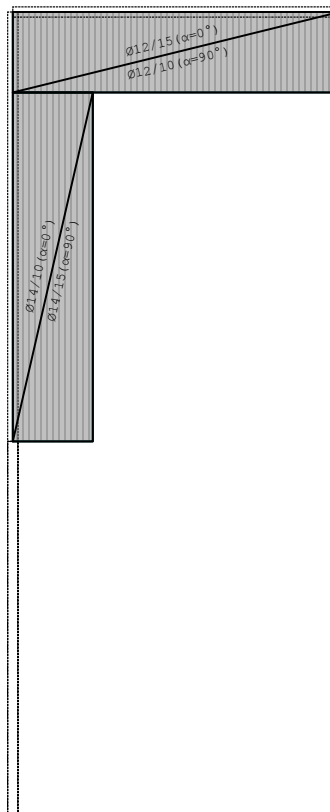
Aa - g.zona [cm ² /m]	
-6.21	
-3.11	
0.00	



Nivo: POS 000 [0.00 m]
Aa - g.zona

Usvojena armatura
PBAB 87, MB 30, MA 500/560, a=2.00 cm

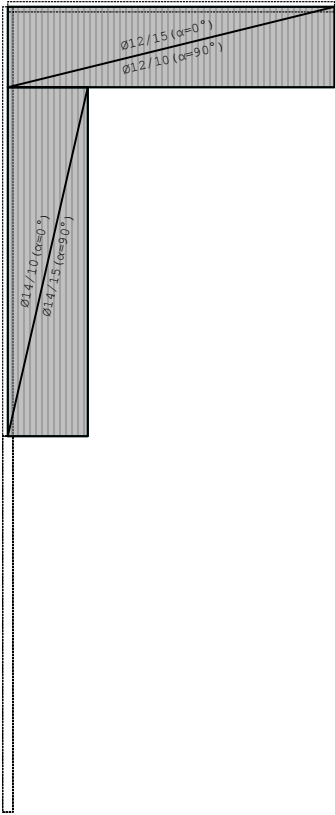
Aa - d.zona [cm ² /m]	
0.00	
0.91	
1.82	



Nivo: POS 000' [0.88 m]
Aa - d.zona

Usvojena armatura
PBAB 87, MB 30, MA 500/560, a=2.00 cm

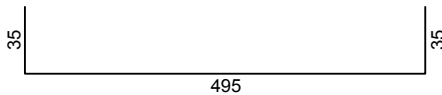
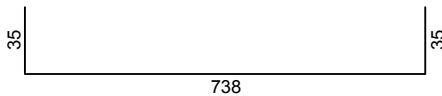
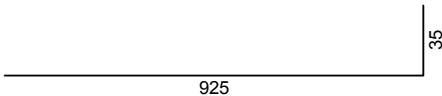
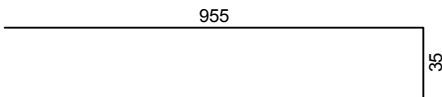
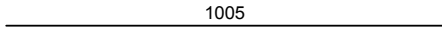
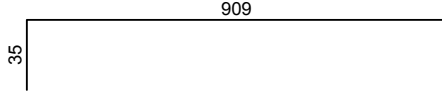
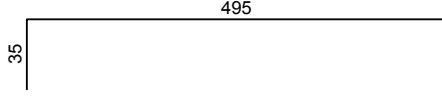
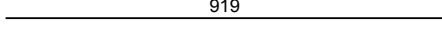
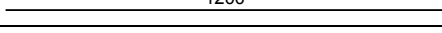
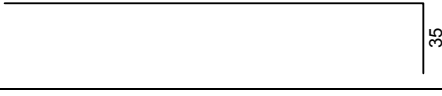

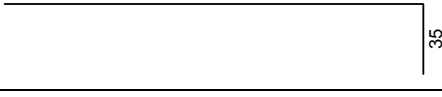
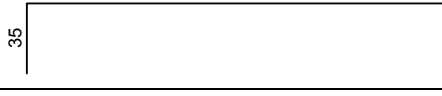
Aa - g.zona [cm ² /m]	
-5.85	
-2.93	
0.00	

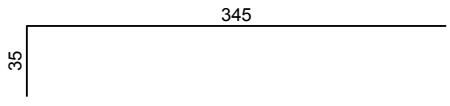
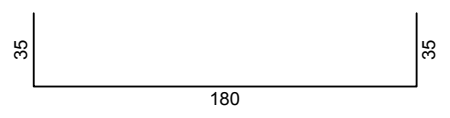
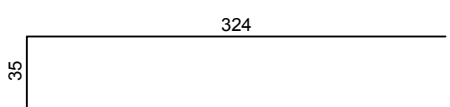
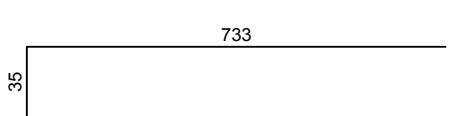
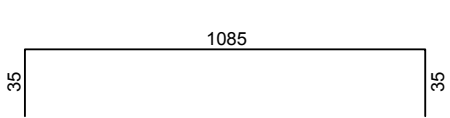
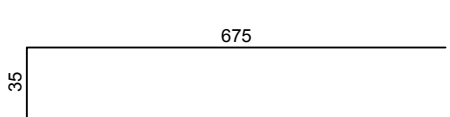

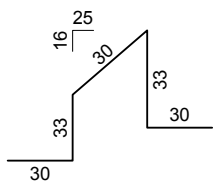
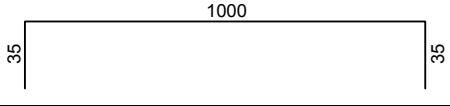
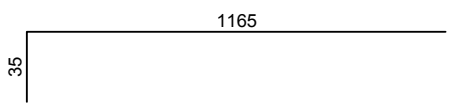
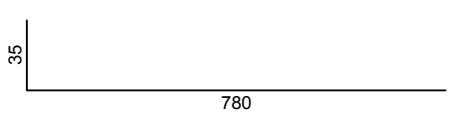
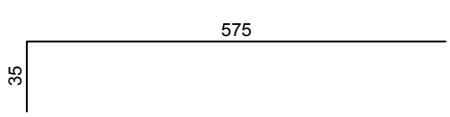


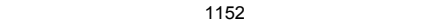

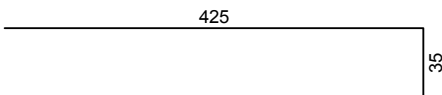
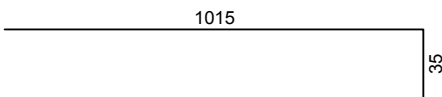
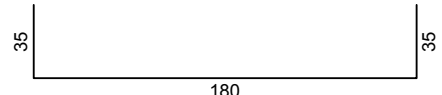
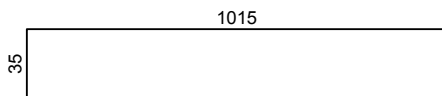
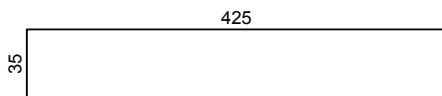
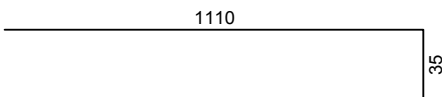
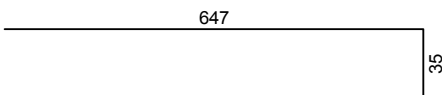
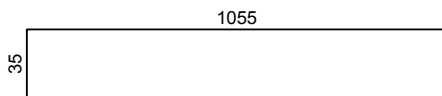
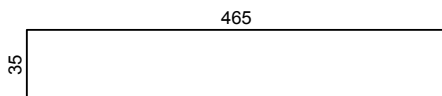
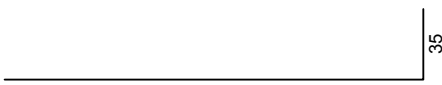
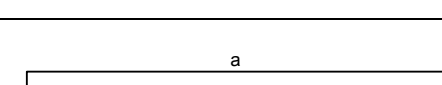
Nivo: POS 000' [0.88 m]
Aa - g.zona

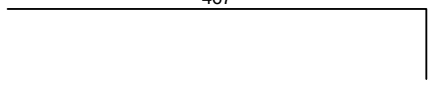
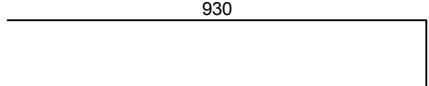
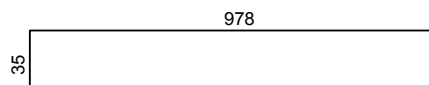
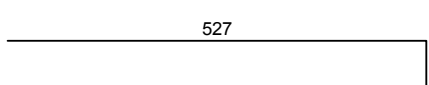
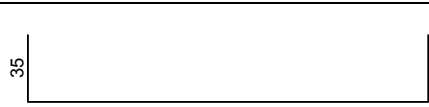
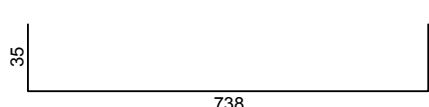


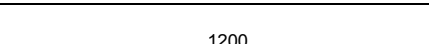




11. SPECIFIKACIJA I REKAPITULACIJA ARMATURE

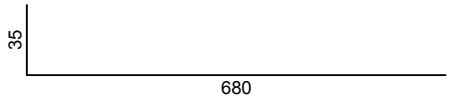
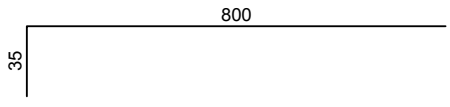
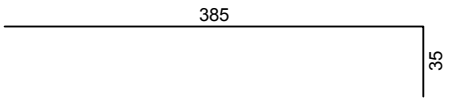
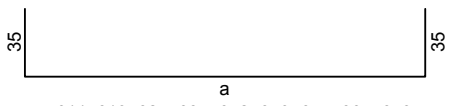
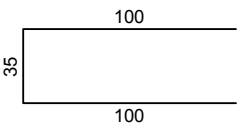
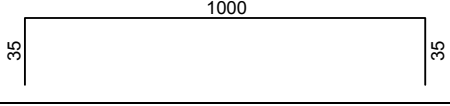
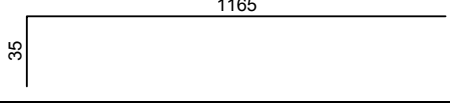
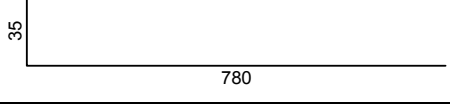
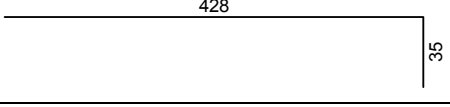
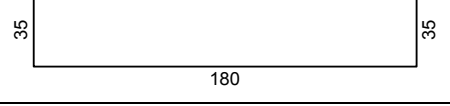
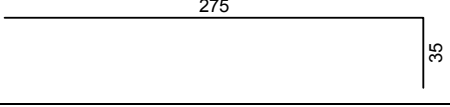
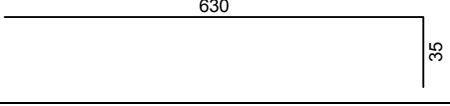
11.1 OBJEKAT

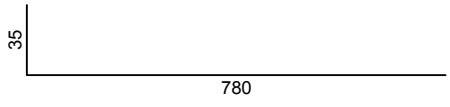
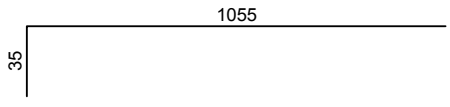
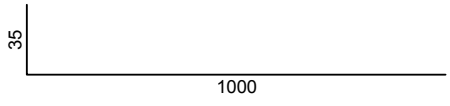
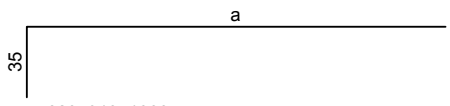
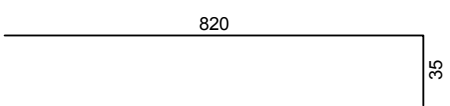
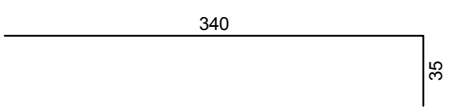
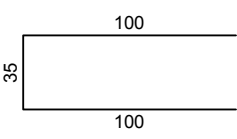
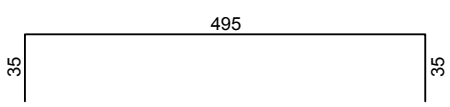
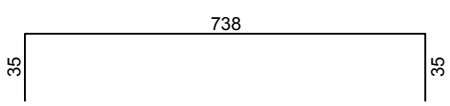
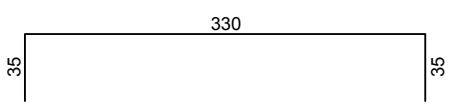
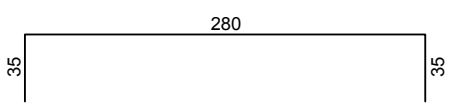
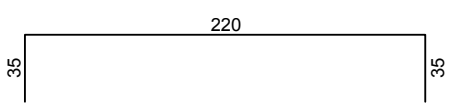
Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
POS TP - donja zona - X pravac (1 kom)						
1		12	5.65	8	45.20	
2		12	8.08	6	48.48	
3		12	9.60	3	28.80	
4		12	9.90	15	148.50	
5		12	10.05	43	432.15	
6		12	9.44	22	207.68	
7		12	5.30	22	116.60	
8		12	9.19	40	367.60	
9		12	12.00	43	516.00	
10		12	3.92	12	47.04	
11		12	11.40	32	364.80	
12		12	5.42	36	195.12	
13		12	7.94	19	150.86	

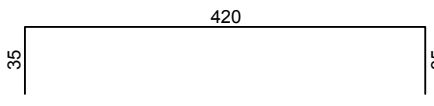
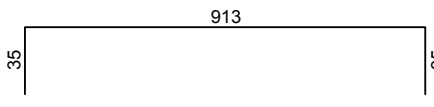
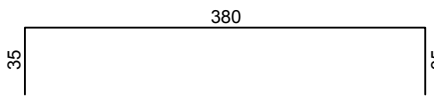
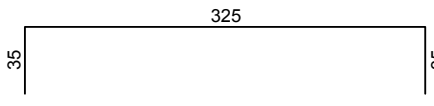
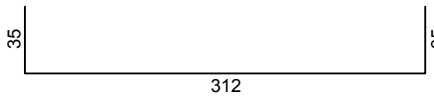
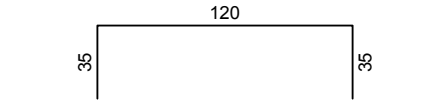
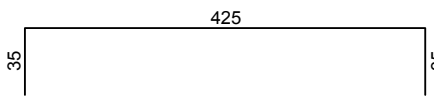
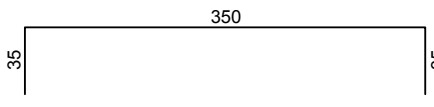
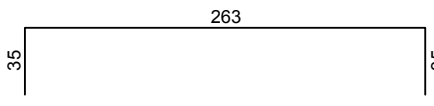
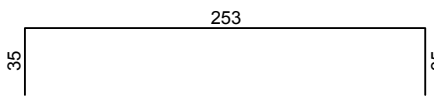
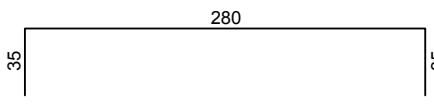
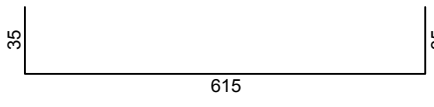
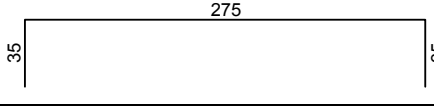
Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
14		12	3.80	19	72.20	
15		12	2.50	10	25.00	
16		12	3.59	5	17.95	
17		12	7.68	5	38.40	
18		12	11.55	5	57.75	
19		12	7.10	5	35.50	
20	 a a = 613, 621, 628, 635, 643, 650, 658, 665, 673, 680	12	*7.17	1 x 10	71.66	
21		8	1.56	520	811.20	
POS TP - donja zona - Y pravac (1 kom)						
1		12	10.70	8	85.60	
2		12	12.00	29	348.00	
3		12	8.15	34	277.10	
4		14	6.10	29	176.90	

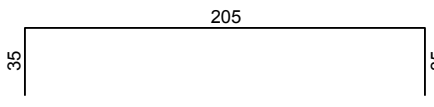
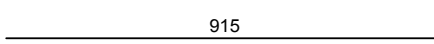
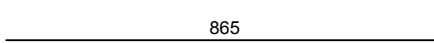
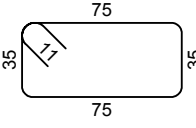
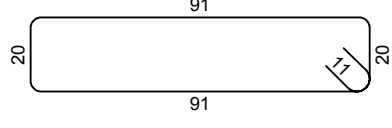
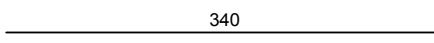
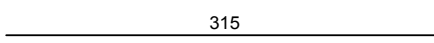
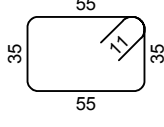
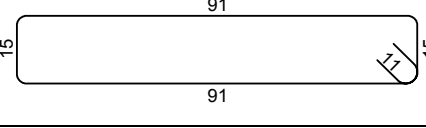
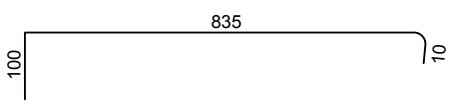
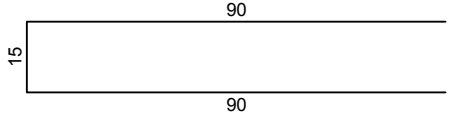
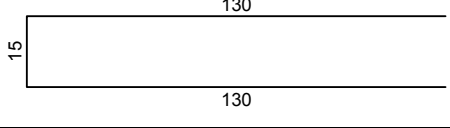
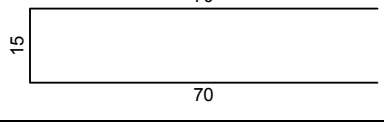
Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
5		12	11.52	58	668.16	
6		12	3.53	34	120.02	
7		12	4.60	8	36.80	
8		12	10.50	8	84.00	
9		12	2.50	14	35.00	
10		12	10.50	11	115.50	
11		12	4.60	11	50.60	
12		12	11.45	16	183.20	
13		12	6.82	16	109.12	
14		12	10.90	27	294.30	
15		14	5.00	27	135.00	
16	 a = 647, 557, 467	12	*5.92	1 x 3	17.76	
17	 a = 930, 1020, 1110	12	*10.55	1 x 3	31.65	

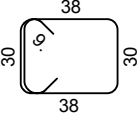
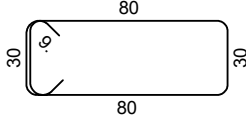
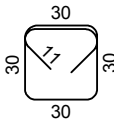
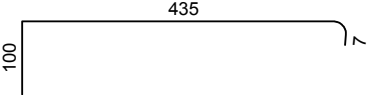
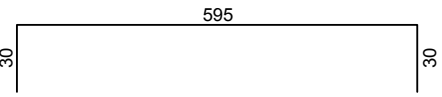
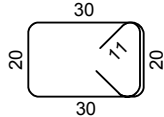
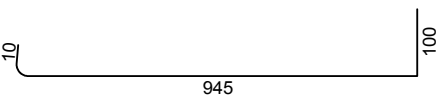
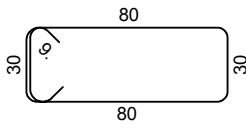
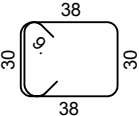
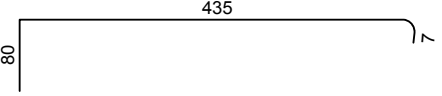
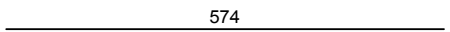
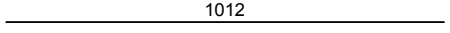
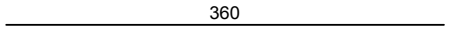
Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
18		12	5.02	7	35.14	
19		12	9.65	7	67.55	
20		12	10.13	10	101.30	
21		12	5.62	10	56.20	
POS TP - gornja zona - X pravac (1 kom)						
1		12	5.65	8	45.20	
2		12	8.08	6	48.48	
3		12	11.50	101	1161.50	
4		12	7.50	3	22.50	
5		12	12.00	87	1044.00	
6		12	6.80	65	442.00	
7		12	8.30	33	273.90	
8		12	2.50	10	25.00	
9		12	2.45	5	12.25	

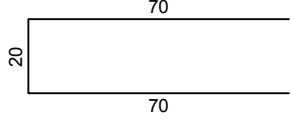
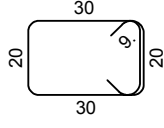
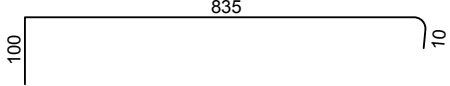
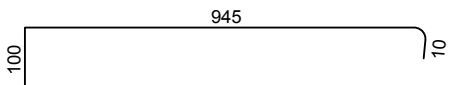
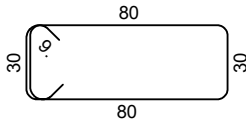
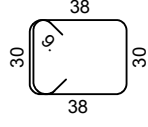
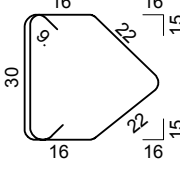
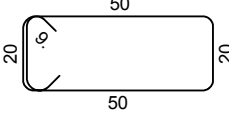
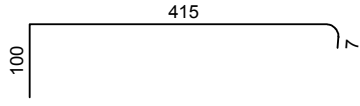
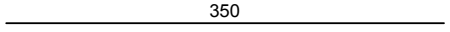
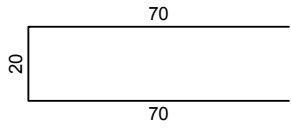
Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
10		12	7.15	5	35.75	
11		12	8.35	10	83.50	
12		12	4.20	10	42.00	
13	 a a = 611, 619, 627, 634, 642, 650, 657, 665, 673, 680	12	*7.16	1 x 10	71.58	
14		12	2.35	266	625.10	
POS TP - gornja zona - Y pravac (1 kom)						
1		12	10.70	8	85.60	
2		12	12.00	145	1740.00	
3		12	8.15	40	326.00	
4		12	4.63	12	55.56	
5		12	2.50	15	37.50	
6		12	3.10	6	18.60	
7		12	6.65	16	106.40	

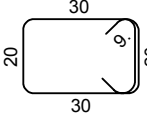
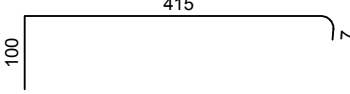
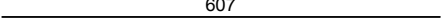
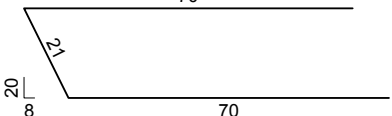
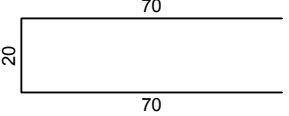
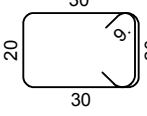
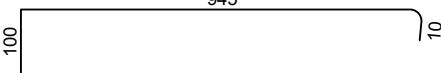
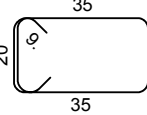
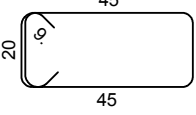
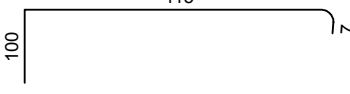
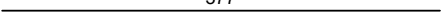
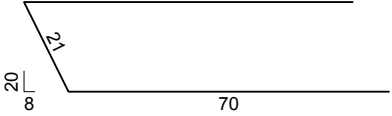
Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
8		12	8.15	15	122.25	
9		12	10.90	6	65.40	
10		12	10.35	32	331.20	
11	 a = 820, 910, 1000	12	*9.45	1 x 3	28.35	
12		12	8.55	14	119.70	
13		12	3.75	10	37.50	
14		12	2.35	311	730.85	
POS TP - dodatna armatura (1 kom)						
1		14	5.65	114	644.10	
2		16	8.08	158	1276.64	
3		14	4.00	28	112.00	
4		14	3.50	120	420.00	
5		14	2.90	144	417.60	

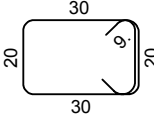
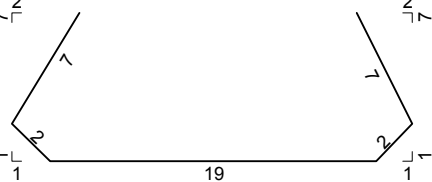
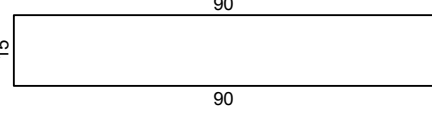
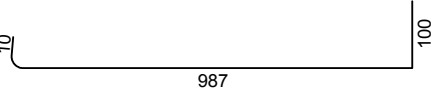
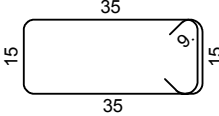
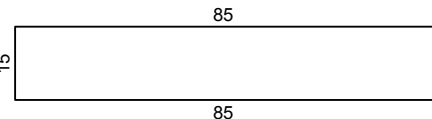
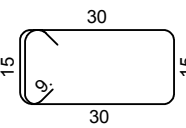
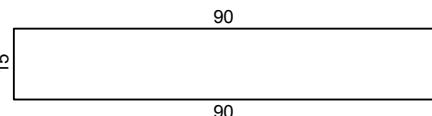
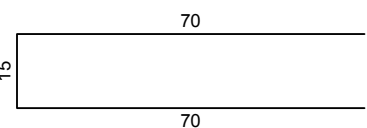
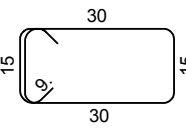
Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
6		14	4.90	58	284.20	
7		14	9.83	58	570.14	
8		14	4.50	126	567.00	
9		14	3.95	100	395.00	
10		14	3.82	52	198.64	
11		14	1.90	52	98.80	
12		16	4.95	150	742.50	
13		16	4.20	150	630.00	
14		14	3.33	64	213.12	
15		14	3.23	24	77.52	
16		14	3.50	270	945.00	
17		14	6.85	78	534.30	
POS TP' (1 kom)						
1		14	3.45	42	144.90	

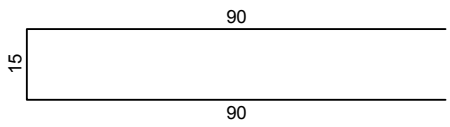
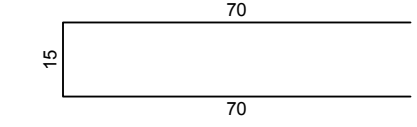
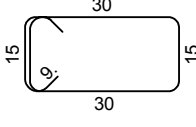
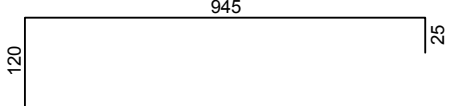
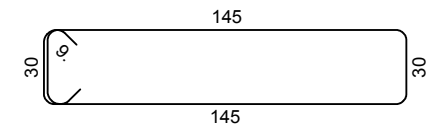
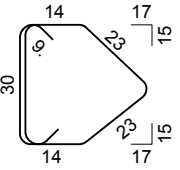
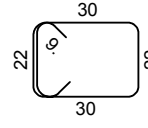
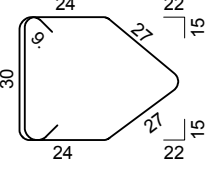
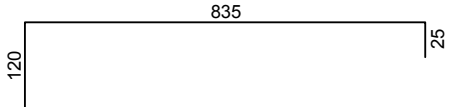
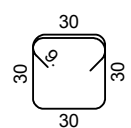
Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
2		14	2.75	58	159.50	
POS TT (1 kom)						
1		12	9.15	12	109.80	
2		12	8.65	6	51.90	
3		10	2.42	46	111.32	
4		10	2.44	44	107.36	
5		12	3.40	16	54.40	
6		12	3.15	12	37.80	
7		10	2.02	28	56.56	
8		10	2.34	32	74.88	
POS ZP10 (pos S11) (1 kom)						
1		16	9.45	10	94.50	
2		8	1.95	26	50.70	
3		8	2.75	27	74.25	
4		8	1.55	27	41.85	

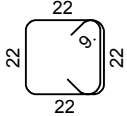
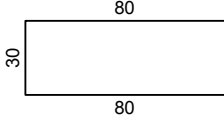
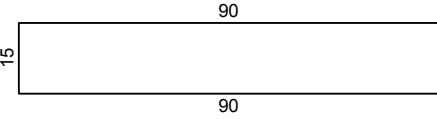
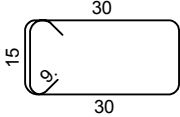
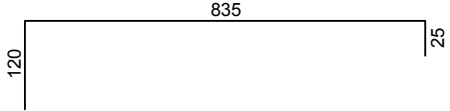
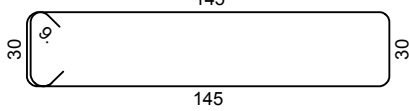
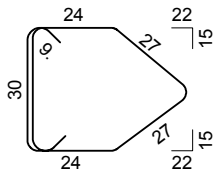
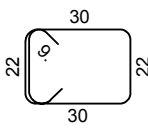
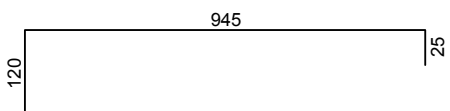
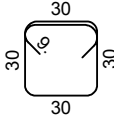
Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
5		8	1.84	72	132.48	
6		8	2.68	72	192.96	
7		10	1.72	12	20.64	
POS ZP11 (pos S10, S12) (1 kom)						
1		12	5.42	60	325.20	
2		12	6.55	42	275.10	
3		10	1.42	23	32.66	
4		16	10.55	20	211.00	
5		8	2.68	172	460.96	
6		8	1.84	172	316.48	
POS ZP12 (pos S13, S14, S7) (1 kom)						
1		12	5.22	202	1054.44	
2		12	5.74	44	252.56	
3		12	10.12	44	445.28	
4		12	3.60	42	151.20	

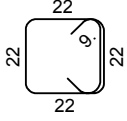
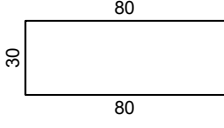
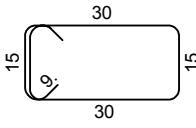
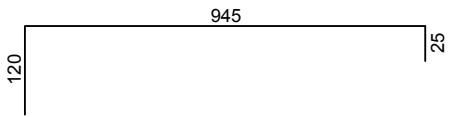
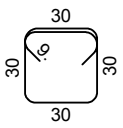
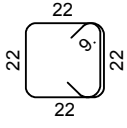
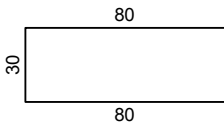
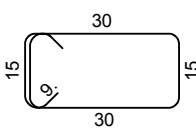
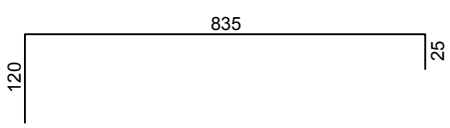
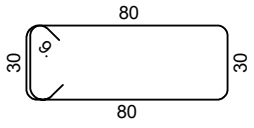
Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
5		10	1.60	54	86.40	
6		8	1.38	79	109.02	
7		16	9.45	10	94.50	
8		16	10.55	20	211.00	
9		8	2.68	158	423.44	
10		8	1.84	72	132.48	
11		8	1.54	172	264.88	
12		8	1.78	86	153.08	
POS ZP13 (1 kom)						
1		12	5.22	42	219.24	
2		12	3.50	44	154.00	
3		10	1.60	52	83.20	

Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
4		8	1.38	17	23.46	
POS ZP14 (pos S18, S19) (1 kom)						
1		12	5.22	108	563.76	
2		12	6.07	52	315.64	
3		10	1.61	26	41.86	
4		10	1.60	26	41.60	
5		8	1.38	38	52.44	
6		16	10.55	12	126.60	
7		8	1.48	86	127.28	
8		8	1.68	86	144.48	
POS ZP15 (1 kom)						
1		12	5.22	78	407.16	
2		12	3.77	52	196.04	
3		10	1.61	52	83.72	

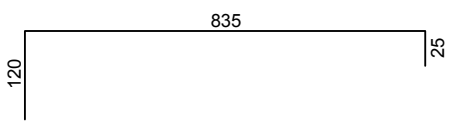
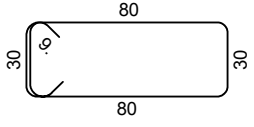
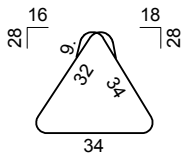
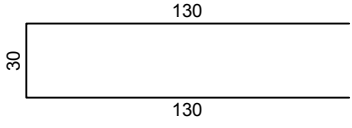
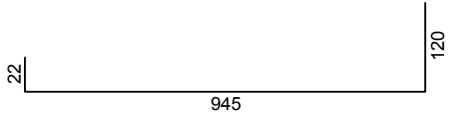
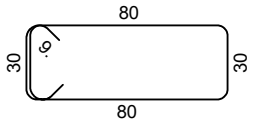
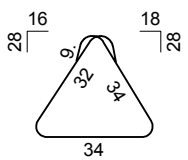
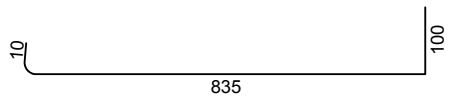
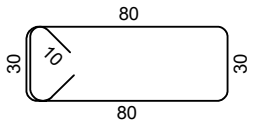
Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
4		8	1.38	20	27.60	
5		8	0.37	230	85.10	
POS ZP16, ZP7 (2 kom)						
1		8	1.95	30	58.50	
2		16	10.97	24	263.28	
3		8	1.33	256	340.48	
4		8	1.85	256	473.60	
5		8	1.23	30	36.90	
POS ZP18 (1 kom)						
1		8	1.95	12	23.40	
2		8	1.55	128	198.40	
3		8	1.23	12	14.76	

Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
POS ZP19 (1 kom)						
1		8	1.95	12	23.40	
2		8	1.55	22	34.10	
3		8	1.23	12	14.76	
POS S20(ZP1), S21(ZP2) (2 kom)						
1		20	10.90	36	392.40	
2		8	3.98	204	811.92	
3		8	1.52	204	310.08	
4		8	1.44	204	293.76	
5		8	1.80	204	367.20	
6		20	9.80	16	156.80	
7		8	1.68	108	181.44	

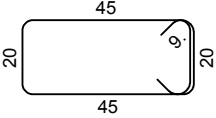
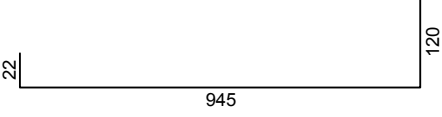
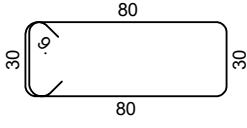
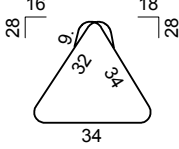

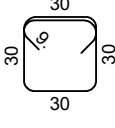
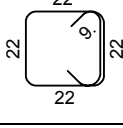
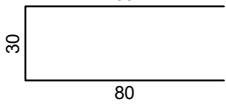
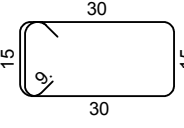
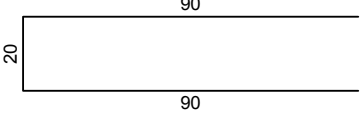
Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
8		8	1.28	108	138.24	
9		8	1.90	216	410.40	
10		8	1.95	18	35.10	
11		8	1.23	18	22.14	
POS S22 (1 kom)						
1		20	9.80	18	176.40	
2		8	3.98	87	346.26	
3		8	1.80	174	313.20	
4		8	1.44	87	125.28	
POS ZP3 (1 kom)						
1		20	10.90	16	174.40	
2		8	1.68	122	204.96	

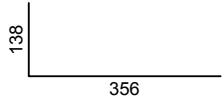
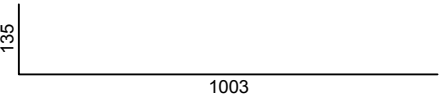
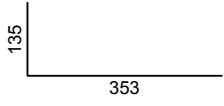
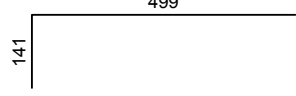
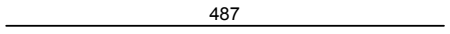
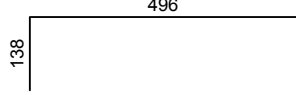
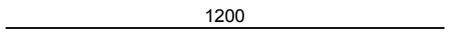
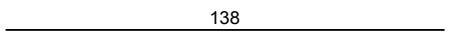
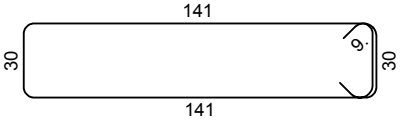
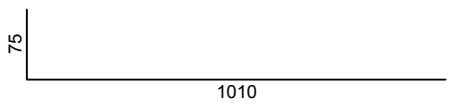
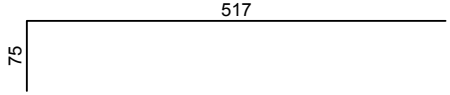
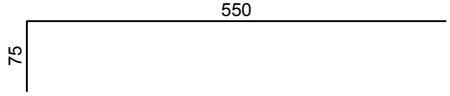
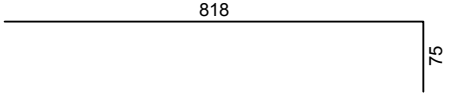
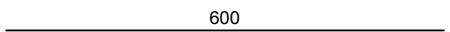
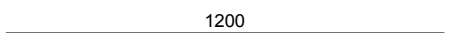
Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
3		8	1.28	122	156.16	
4		8	1.90	122	231.80	
5		8	1.23	13	15.99	
POS ZP4 (1 kom)						
1		20	10.90	16	174.40	
2		8	1.68	122	204.96	
3		8	1.28	122	156.16	
4		8	1.90	122	231.80	
5		8	1.23	13	15.99	
POS S1 (1 kom)						
1		20	9.80	15	147.00	
2		8	2.68	174	466.32	

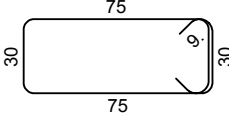
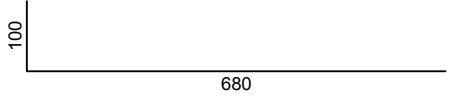
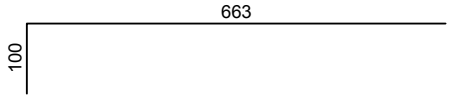
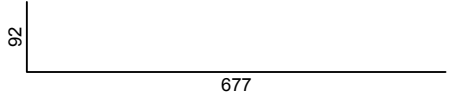
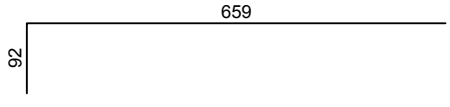
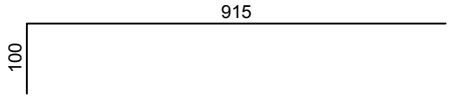
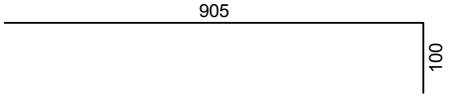
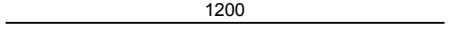
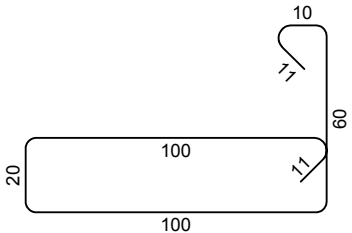
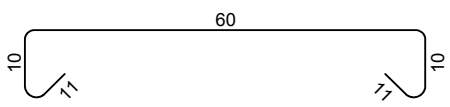
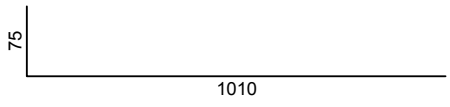
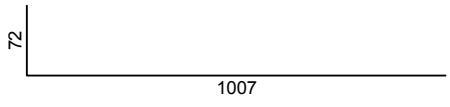
Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
3		8	1.18	174	205.32	
POS S2 (1 kom)						
1		20	10.85	23	249.55	
2		8	3.48	102	354.96	
3		8	3.28	102	334.56	
4		8	1.86	102	189.72	
5		8	1.76	102	179.52	
POS ZP5,ZP6 (2 kom)						
1		16	5.45	24	130.80	
2		8	1.78	108	192.24	
3		8	2.10	12	25.20	
4		8	1.68	12	20.16	

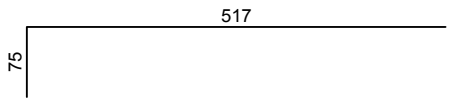
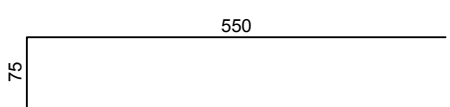
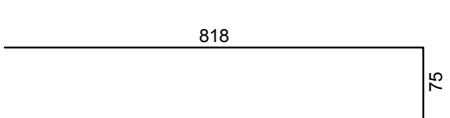
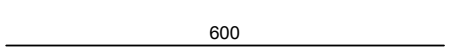
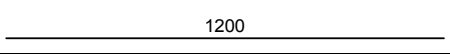
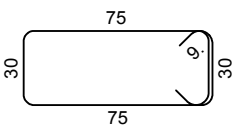
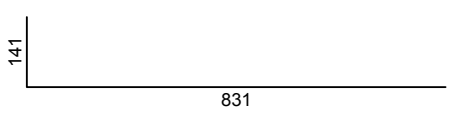
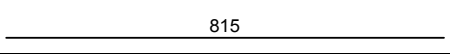
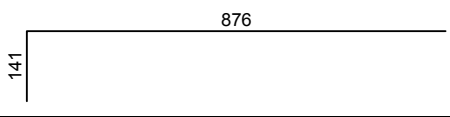
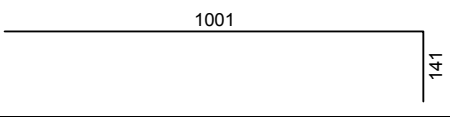
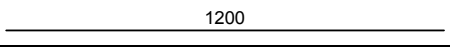
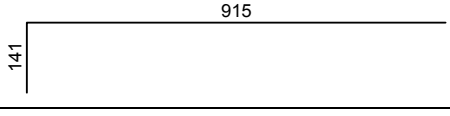
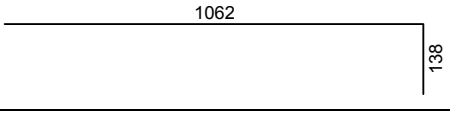
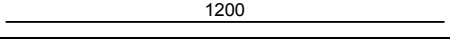
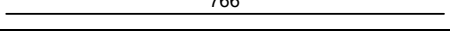
Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
POS S6 (1 kom)						
1		20	9.80	15	147.00	
2		8	2.68	174	466.32	
3		8	1.18	174	205.32	
POS ZP7 (1 kom)						
7		8	2.90	108	313.20	
POS S3 (1 kom)						
4		20	10.87	16	173.92	
5		8	2.68	204	546.72	
6		8	1.18	204	240.72	
POS S4,S5 (2 kom)						
1		16	9.45	28	264.60	
2		8	2.70	174	469.80	

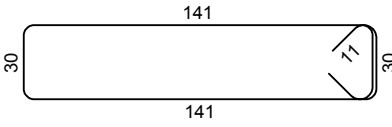
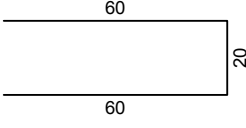
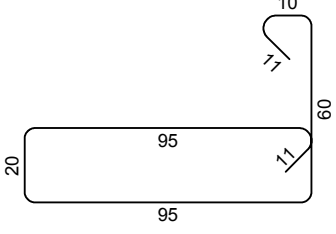
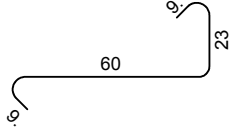

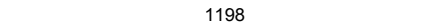
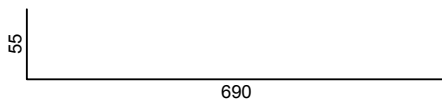
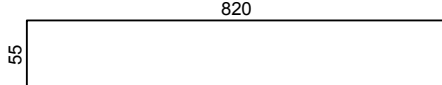
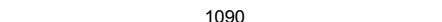
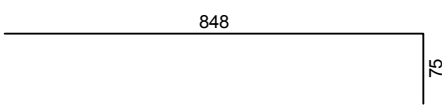
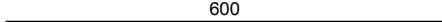
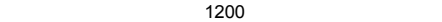
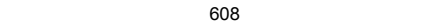
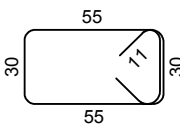
Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
3		8	1.54	348	535.92	
POS ZP8 (1 kom)						
1		16	9.80	10	98.00	
2		8	1.68	108	181.44	
3		8	1.28	54	69.12	
4		8	1.90	108	205.20	
5		8	2.00	10	20.00	
POS S8 (1 kom)						
1		20	10.85	22	238.70	
2		8	3.48	102	354.96	
3		8	2.98	102	303.96	
4		8	1.86	102	189.72	

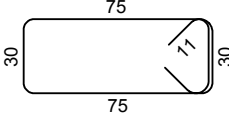
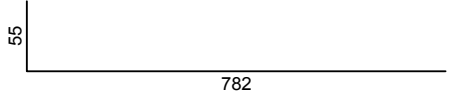
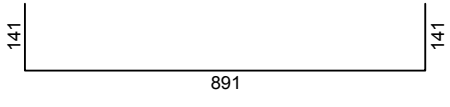
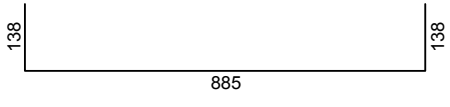
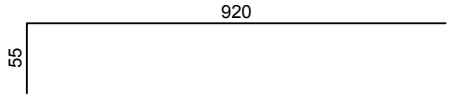
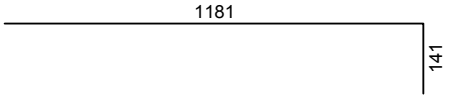
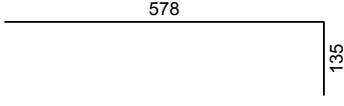
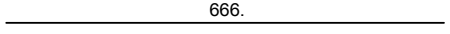
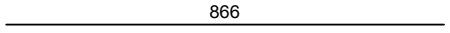
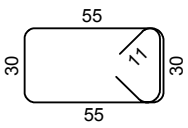
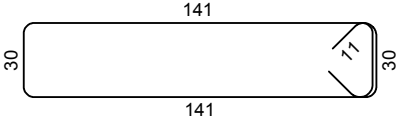
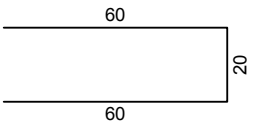
Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
5		8	1.68	102	171.36	
POS S9 (ZP9) (1 kom)						
1		20	10.87	15	163.05	
2		8	2.68	204	546.72	
3		8	1.18	204	240.72	
4		16	5.80	8	46.40	
5		8	1.68	27	45.36	
6		8	1.28	27	34.56	
7		8	1.90	27	51.30	
8		8	1.23	8	9.84	
9		8	2.00	8	16.00	

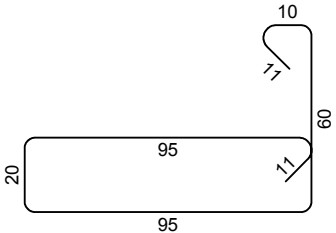
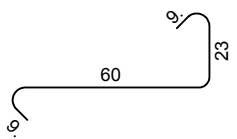
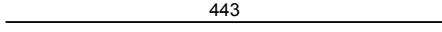
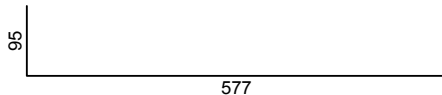
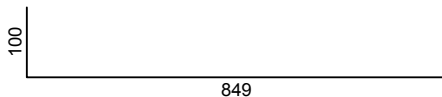
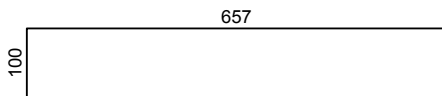
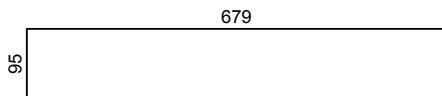
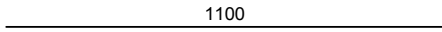
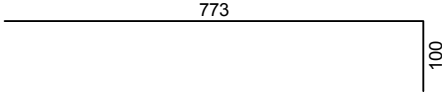
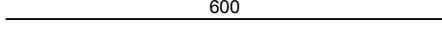
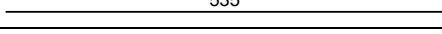
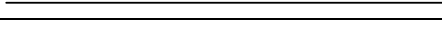
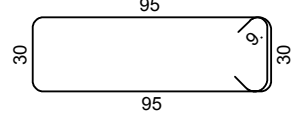
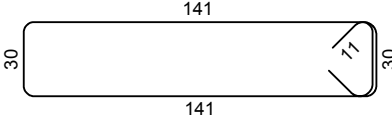
Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
4		16	4.94	3	14.82	
5		16	11.38	3	34.14	
6		16	4.88	3	14.64	
7		16	6.40	6	38.40	
8		16	4.87	6	29.22	
9		16	6.34	6	38.04	
10		10	12.00	10	120.00	
11		10	1.38	10	13.80	
12		8	3.90	119	464.10	
POS G102 (1 kom)						
1		16	10.85	6	65.10	
2		16	5.92	4	23.68	
3		16	6.25	4	25.00	
4		16	8.93	4	35.72	
5		16	6.00	4	24.00	
6		10	12.00	6	72.00	

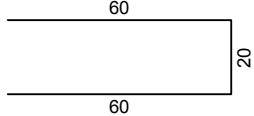
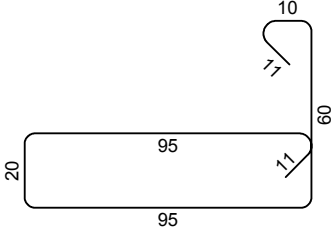
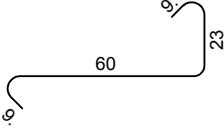
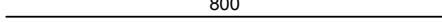
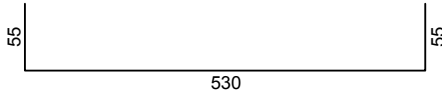

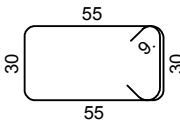
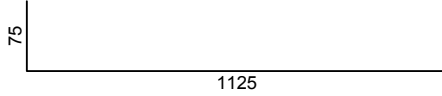
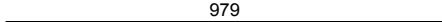
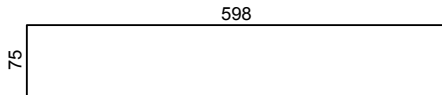
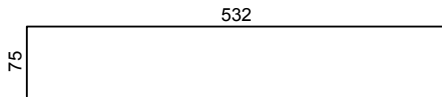
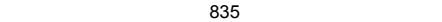
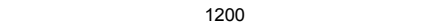
Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
7		8	2.58	77	198.66	
POS G103 (1 kom)						
1		14	7.80	3	23.40	
2		14	7.63	3	22.89	
3		14	7.69	3	23.07	
4		14	7.51	3	22.53	
5		14	10.15	3	30.45	
6		14	10.05	3	30.15	
7		10	12.00	12	144.00	
8		10	3.12	92	287.04	
9		10	1.02	92	93.84	
POS G104 (1 kom)						
1		16	10.85	4	43.40	
2		16	10.79	4	43.16	

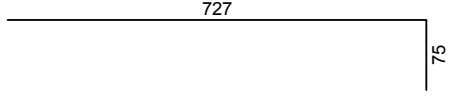
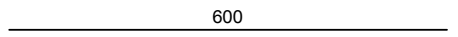
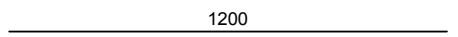
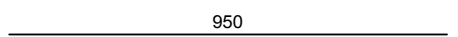
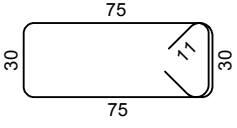
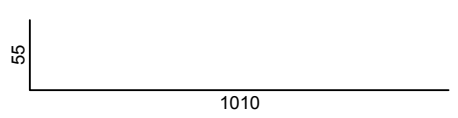
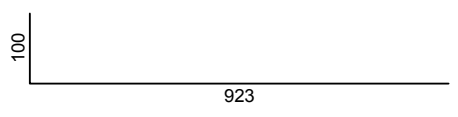
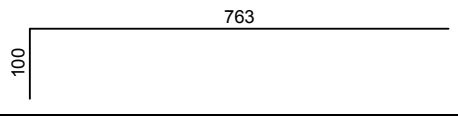
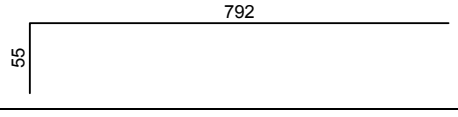
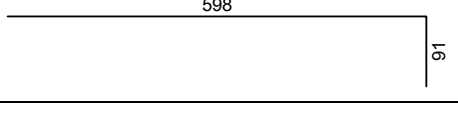
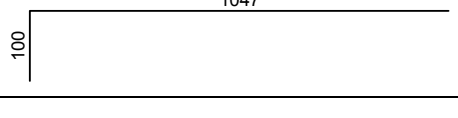
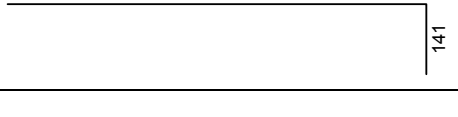
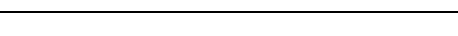
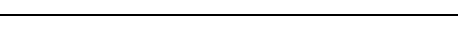
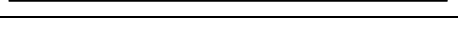
Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
3		16	5.92	4	23.68	
4		16	6.25	4	25.00	
5		16	8.93	4	35.72	
6		16	6.00	4	24.00	
7		10	12.00	6	72.00	
8		8	2.58	82	211.56	
POS G106(G105) (1 kom)						
1		20	9.72	6	58.32	
2		20	8.15	6	48.90	
3		20	10.17	6	61.02	
4		20	11.42	4	45.68	
5		20	12.00	4	48.00	
6		20	10.56	4	42.24	
7		20	12.00	4	48.00	
8		10	12.00	18	216.00	
9		10	7.66	10	76.60	

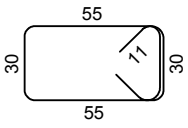
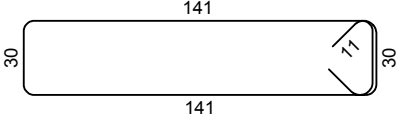
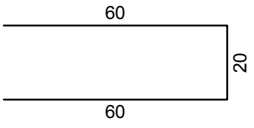
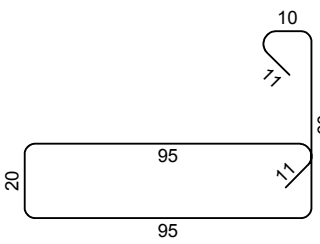
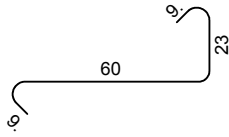
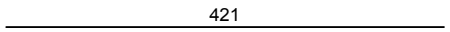
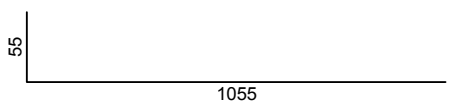
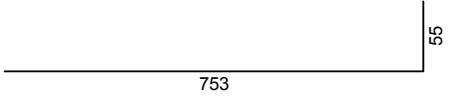
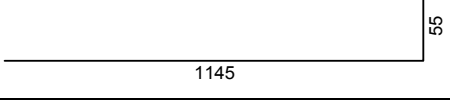

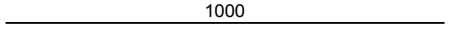
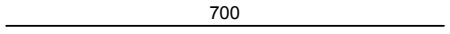
Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
10		10	3.94	142	559.48	
11		10	1.40	91	127.40	
12		10	3.02	91	274.82	
13		8	1.01	104	105.04	
14		10	4.22	8	33.76	
POS G107 (G108) (1 kom)						
1		20	11.98	4	47.92	
2		20	7.45	4	29.80	
3		20	8.75	4	35.00	
4		20	10.90	4	43.60	
5		20	9.23	4	36.92	
6		20	6.00	4	24.00	
7		10	12.00	6	72.00	
8		10	6.08	4	24.32	
9		10	2.22	38	84.36	

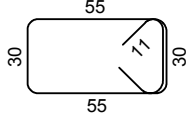
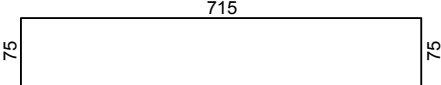
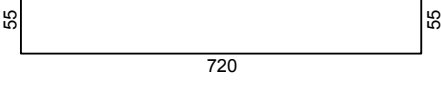
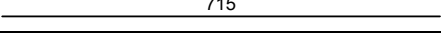
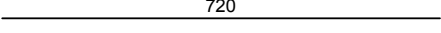

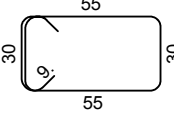
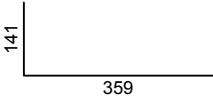
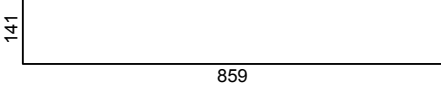
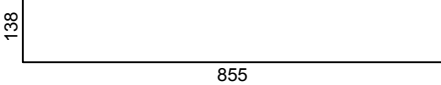
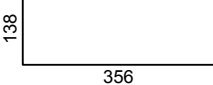
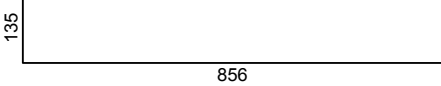
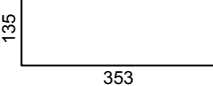
Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
10		10	2.62	91	238.42	
G110 (G109) (1 kom)						
1		20	8.37	4	33.48	
2		20	11.73	3	35.19	
3		20	11.61	3	34.83	
4		20	9.75	4	39.00	
5		20	13.22	4	52.88	
6		20	7.13	4	28.52	
7		10	6.66	2	13.32	
8		10	8.66	10	86.60	
9		10	2.22	46	102.12	
10		10	3.94	77	303.38	
11		10	1.40	31	43.40	

Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
12		10	3.02	31	93.62	
13		8	1.01	31	31.31	
14		10	4.43	8	35.44	
POS G112(G111) (1 kom)						
1		20	6.72	3	20.16	
2		20	9.49	6	56.94	
3		20	7.57	6	45.42	
4		20	7.74	4	30.96	
5		20	11.00	4	44.00	
6		20	8.73	4	34.92	
7		20	6.00	4	24.00	
8		10	5.35	16	85.60	
9		10	10.50	10	105.00	
10		8	2.98	29	86.42	
11		10	3.94	77	303.38	

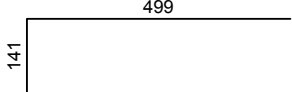

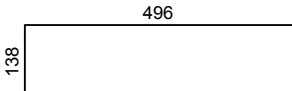
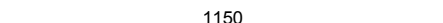
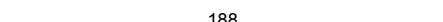
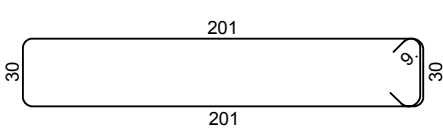
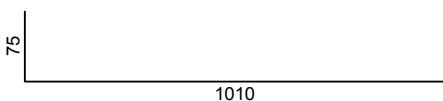
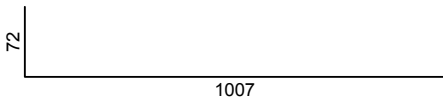
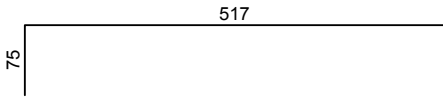
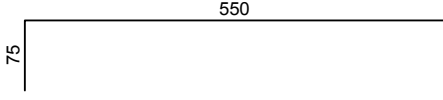
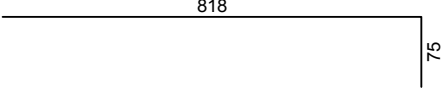
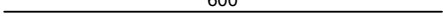
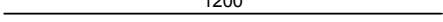
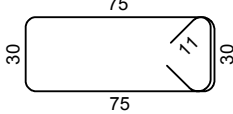
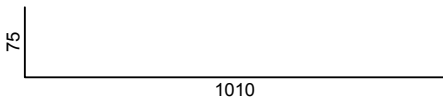
Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
12		10	1.40	69	96.60	
13		10	3.02	69	208.38	
14		8	1.01	86	86.86	
15		10	8.00	8	64.00	
POS G113 (1 kom)						
1		20	6.40	6	38.40	
2		10	5.30	2	10.60	
3		8	2.18	37	80.66	
POS G114(G115) (1 kom)						
1		20	12.00	4	48.00	
2		20	9.79	4	39.16	
3		20	6.73	4	26.92	
4		20	6.07	4	24.28	
5		20	8.35	4	33.40	
6		20	12.00	4	48.00	

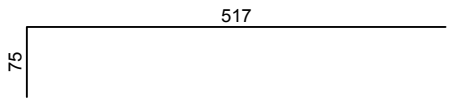
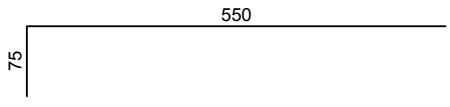
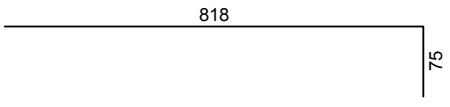
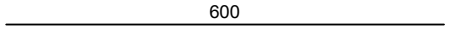
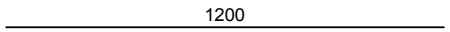
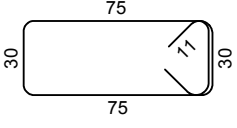
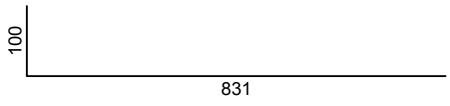
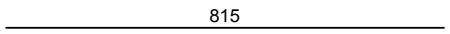
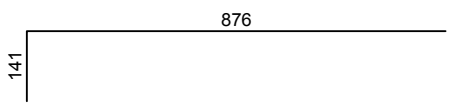
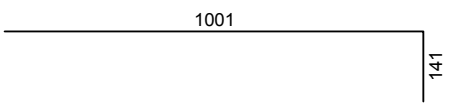
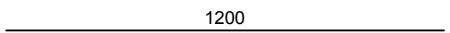
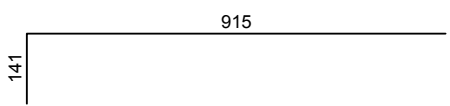
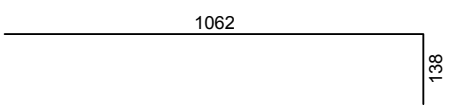
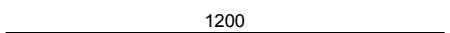

Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
7		20	8.02	4	32.08	
8		20	6.00	4	24.00	
9		10	12.00	4	48.00	
10		10	9.50	4	38.00	
11		10	2.62	141	369.42	
POS G116(G117) (1 kom)						
1		20	10.65	4	42.60	
2		20	10.23	6	61.38	
3		20	8.63	6	51.78	
4		20	8.47	4	33.88	
5		20	6.89	4	27.56	
6		20	11.47	4	45.88	
7		20	10.14	4	40.56	
8		20	6.00	2	12.00	
9		10	10.10	4	40.40	
10		10	12.20	10	122.00	

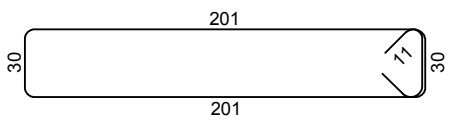
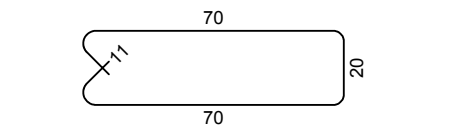
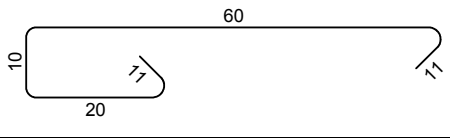
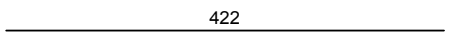
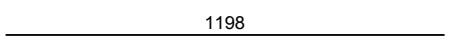
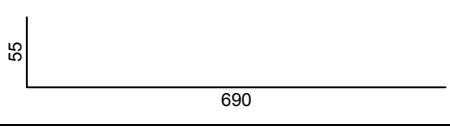
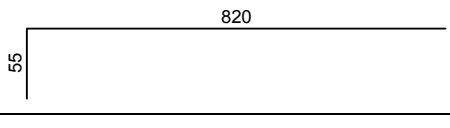
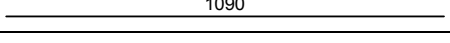
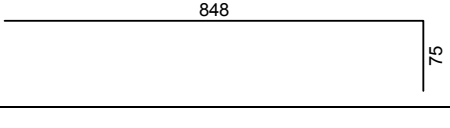
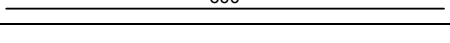
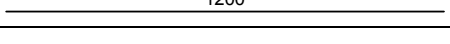
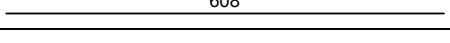
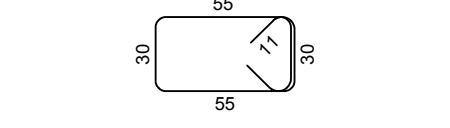
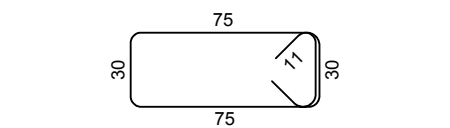
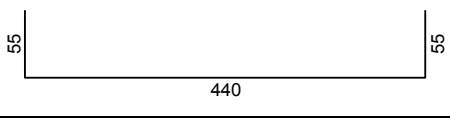
Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
11		10	2.22	61	135.42	
12		10	3.94	69	271.86	
13		10	1.40	29	40.60	
14		10	3.02	29	87.58	
15		8	1.01	29	29.29	
16		10	4.21	8	33.68	
POS G118 (1 kom)						
1		20	11.10	4	44.40	
2		20	8.08	3	24.24	
3		20	12.00	8	96.00	
4		20	3.00	2	6.00	
5		10	10.00	2	20.00	
6		10	7.00	2	14.00	

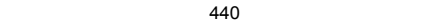
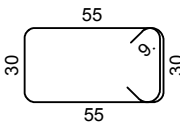
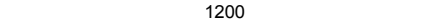
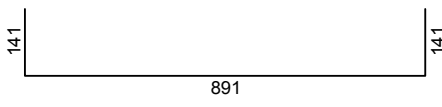
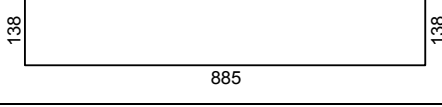
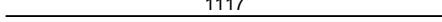
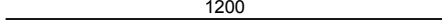
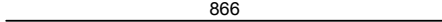
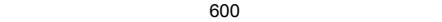
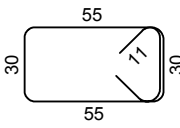
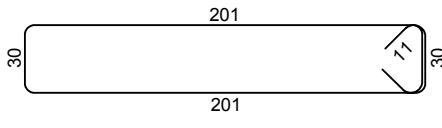
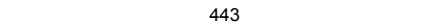
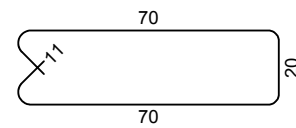
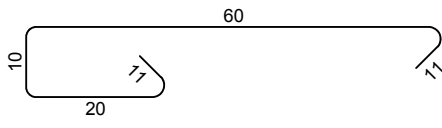
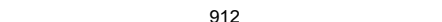
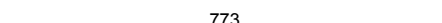
Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
7		10	2.22	113	250.86	
POS G119 (1 kom)						
1		20	8.65	8	69.20	
2		20	8.30	6	49.80	
3		10	7.15	4	28.60	
4		10	7.20	2	14.40	
5		10	2.62	45	117.90	
6		8	2.18	40	87.20	
POS G120 (1 kom)						
1		16	5.00	3	15.00	
2		16	10.00	3	30.00	
3		16	9.93	3	29.79	
4		16	4.94	3	14.82	
5		16	9.91	3	29.73	
6		16	4.88	3	14.64	

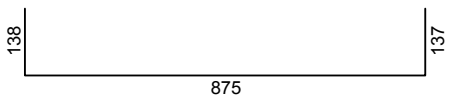
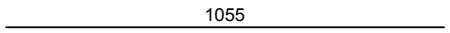
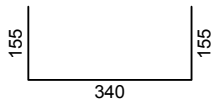
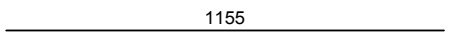
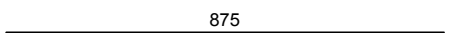
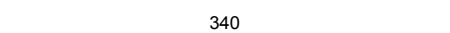

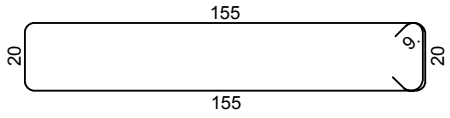
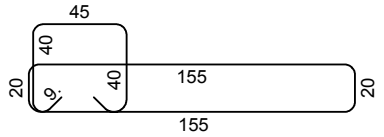
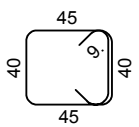
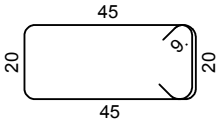
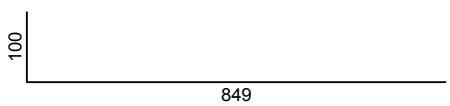
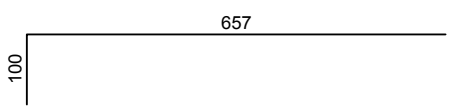
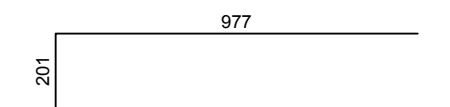
Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
7		16	6.89	6	41.34	
8		16	6.86	6	41.16	
9		10	11.37	10	113.70	
10		8	3.90	82	319.80	
POS G121 (1 kom)						
1		14	4.50	6	27.00	
2		10	3.60	2	7.20	
3		8	1.68	18	30.24	
POS G201 (1 kom)						
1		16	4.50	3	13.50	
2		16	12.00	3	36.00	
3		16	11.94	3	35.82	
4		16	4.44	3	13.32	
5		16	11.88	3	35.64	
6		16	4.38	3	13.14	

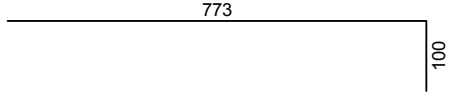
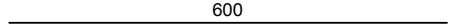
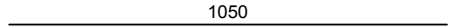
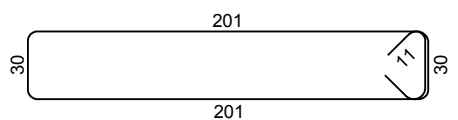

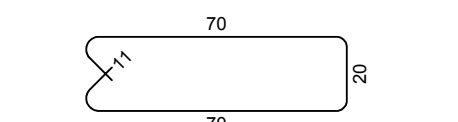
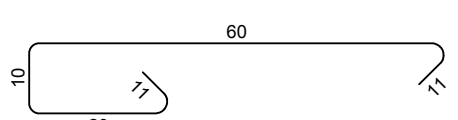

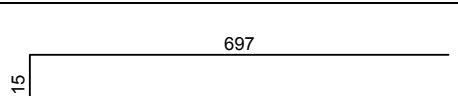
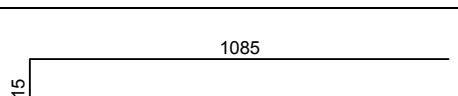
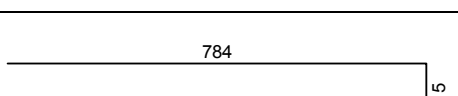
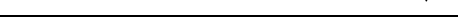
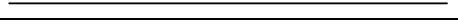
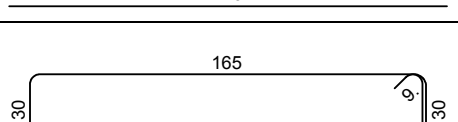
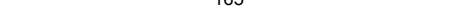
Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
7		16	6.40	6	38.40	
8		16	4.87	6	29.22	
9		16	6.34	6	38.04	
10		10	11.50	12	138.00	
11		10	1.88	12	22.56	
12		8	5.10	119	606.90	
POS G203 (1 kom)						
1		16	10.85	4	43.40	
2		16	10.79	4	43.16	
3		16	5.92	4	23.68	
4		16	6.25	4	25.00	
5		16	8.93	4	35.72	
6		16	6.00	4	24.00	
7		10	12.00	6	72.00	
8		10	2.62	82	214.84	
POS G202 (1 kom)						
1		16	10.85	6	65.10	

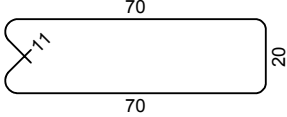
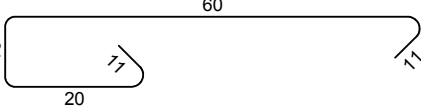
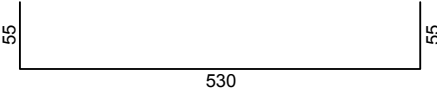
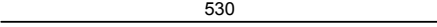
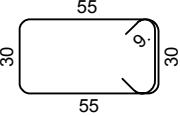
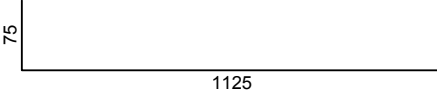
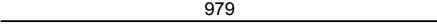
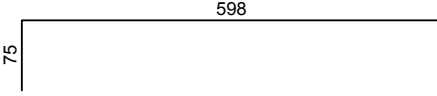
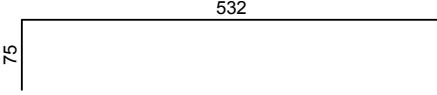
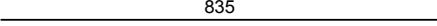
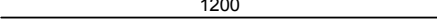
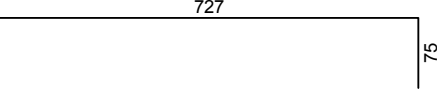
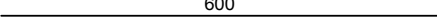
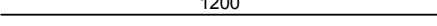
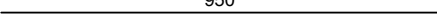
Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
2		16	5.92	4	23.68	
3		16	6.25	4	25.00	
4		16	8.93	4	35.72	
5		16	6.00	4	24.00	
6		10	12.00	6	72.00	
7		10	2.62	77	201.74	
G205(G204) (1 kom)						
1		20	9.31	6	55.86	
2		20	8.15	6	48.90	
3		20	10.17	6	61.02	
4		20	11.42	4	45.68	
5		20	12.00	4	48.00	
6		20	10.56	4	42.24	
7		20	12.00	4	48.00	
8		10	12.00	20	240.00	
9		10	7.66	14	107.24	

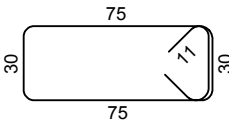
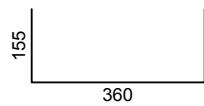
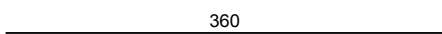
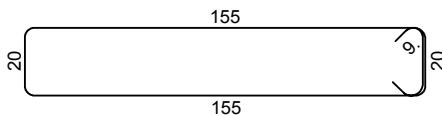
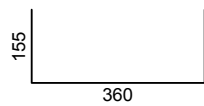

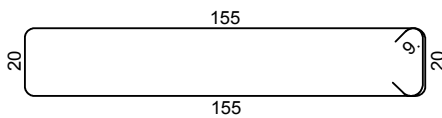
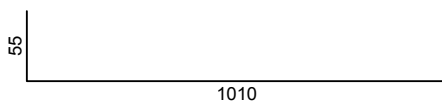
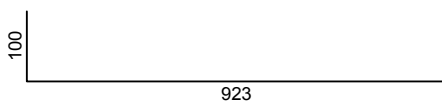
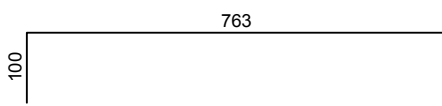
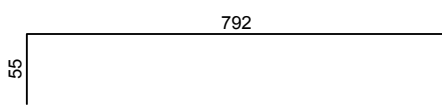
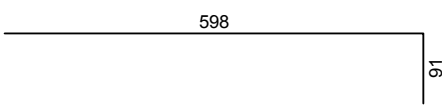
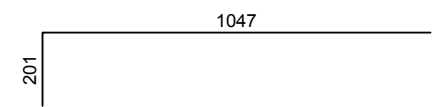
Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
10		10	5.14	142	729.88	
11		10	1.82	91	165.62	
12		10	1.12	91	101.92	
13		10	4.22	6	25.32	
POS G207(G206) (1 kom)						
1		20	11.98	4	47.92	
2		20	7.45	4	29.80	
3		20	8.75	4	35.00	
4		20	10.90	4	43.60	
5		20	9.23	4	36.92	
6		20	6.00	4	24.00	
7		10	12.00	6	72.00	
8		10	6.08	4	24.32	
9		10	2.22	38	84.36	
10		10	2.62	91	238.42	
POS G208 (1 kom)						
1		16	5.50	8	44.00	

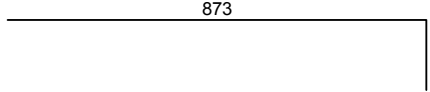

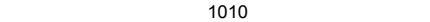
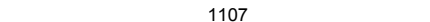
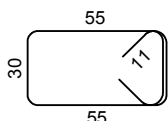
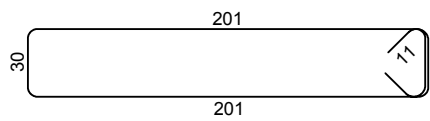

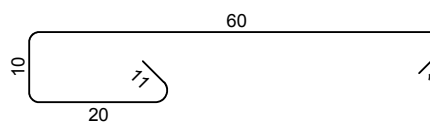
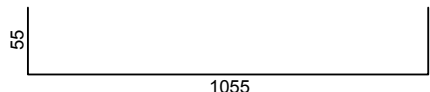
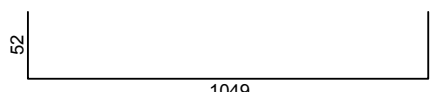
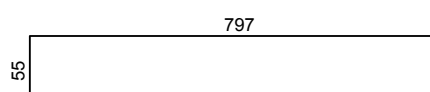
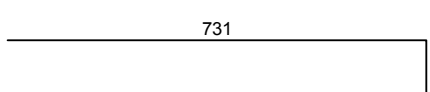

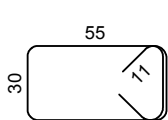
Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
2		10	4.40	2	8.80	
3		8	2.18	29	63.22	
G210 (G209) (1 kom)						
1		20	12.00	8	96.00	
2		20	11.73	7	82.11	
3		20	11.61	7	81.27	
4		20	11.17	4	44.68	
5		10	12.00	2	24.00	
6		10	8.66	14	121.24	
7		20	6.00	4	24.00	
8		10	2.22	138	306.36	
9		10	5.14	77	395.78	
10		10	4.43	6	26.58	
11		10	1.82	28	50.96	
12		10	1.12	28	31.36	
13		20	9.12	4	36.48	
14		10	7.73	2	15.46	

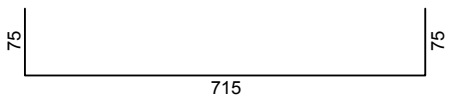
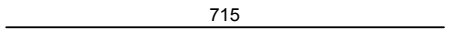
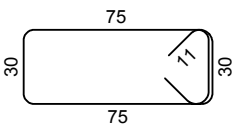
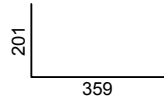
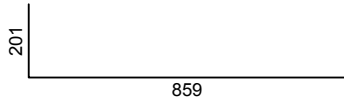
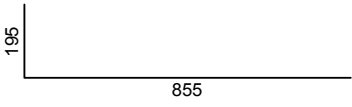
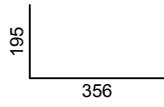
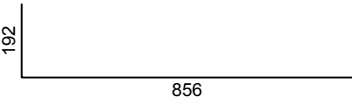
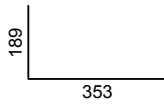
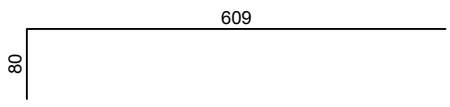
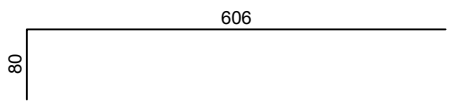
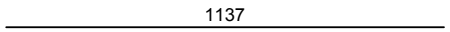
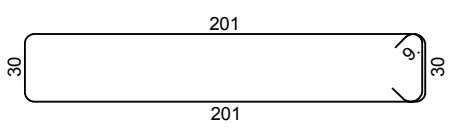
Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
POS G211(212,211') (1 kom)						
1		14	11.50	6	69.00	
2		14	10.55	6	63.30	
3		14	6.50	6	39.00	
4		10	11.55	6	69.30	
5		10	8.75	8	70.00	
6		10	3.40	8	27.20	
7		10	4.50	1	4.50	
8		8	3.88	52	201.76	
9		8	4.93	29	142.97	
10		8	2.28	54	123.12	
11		8	1.68	54	90.72	
POS G213 (1 kom)						
1		20	9.49	6	56.94	
2		20	7.57	6	45.42	
3		20	11.78	4	47.12	

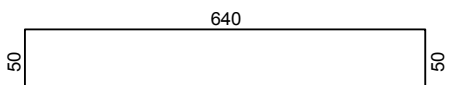
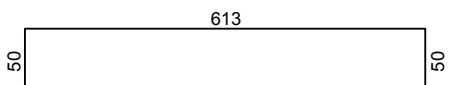
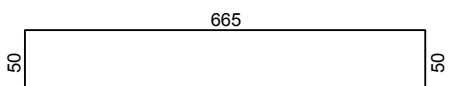
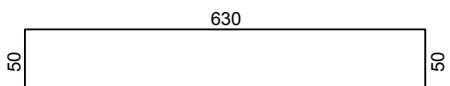
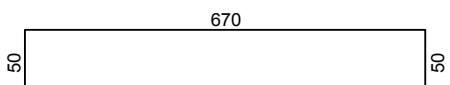
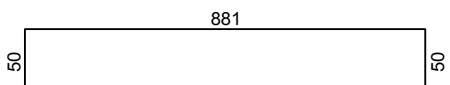
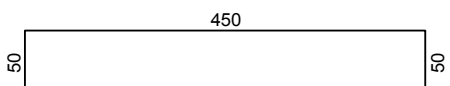
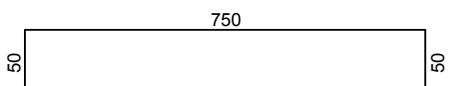
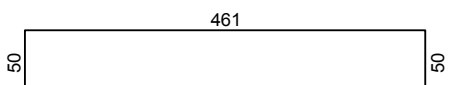
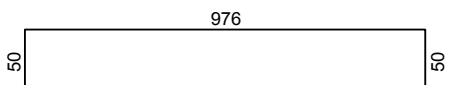
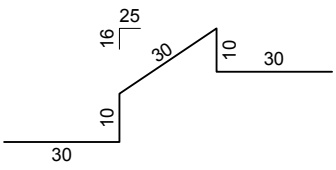
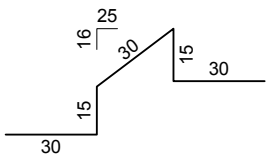
Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
4		20	8.73	4	34.92	
5		20	6.00	4	24.00	
6		10	10.50	14	147.00	
7		10	5.14	77	395.78	
8		10	8.00	6	48.00	
9		10	1.82	59	107.38	
10		10	1.12	59	66.08	
POS G214 (1 kom)						
1		16	10.48	4	41.92	
2		16	8.12	4	32.48	
3		16	12.00	4	48.00	
4		16	8.99	4	35.96	
5		10	12.00	10	120.00	
6		10	2.70	10	27.00	
7		8	4.38	91	398.58	
8		10	4.10	8	32.80	

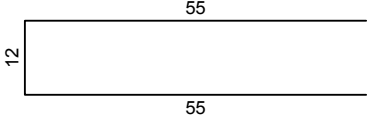
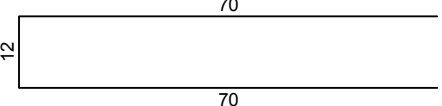
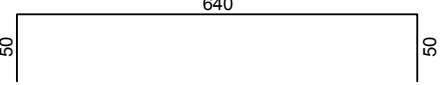
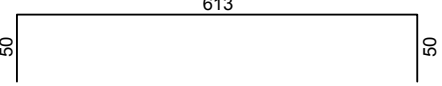
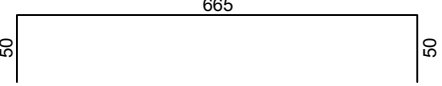
Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
9		10	1.82	28	50.96	
10		10	1.12	28	31.36	
POS G215 (1 kom)						
1		20	6.40	6	38.40	
2		10	5.30	2	10.60	
3		8	2.18	37	80.66	
POS G216(217) (1 kom)						
1		20	12.00	4	48.00	
2		20	9.79	4	39.16	
3		20	6.73	4	26.92	
4		20	6.07	4	24.28	
5		20	8.35	4	33.40	
6		20	12.00	4	48.00	
7		20	8.02	4	32.08	
8		20	6.00	4	24.00	
9		10	12.00	4	48.00	
10		10	9.50	4	38.00	

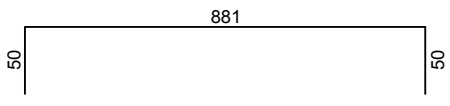
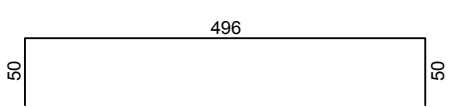
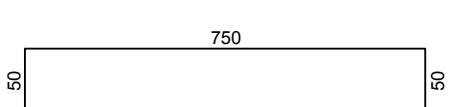
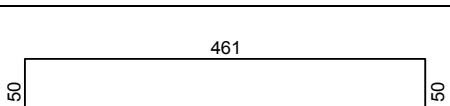
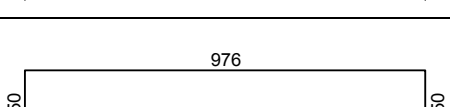
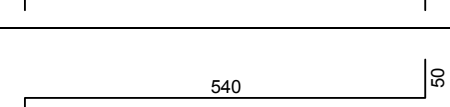

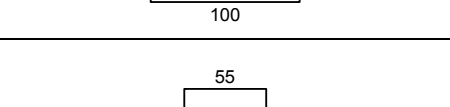
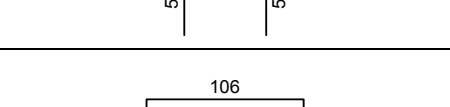
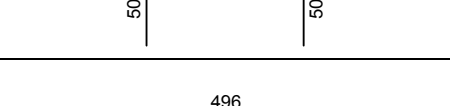


Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
11		10	2.62	141	369.42	
POS G218 i G225 (1 kom)						
1		14	6.70	6	40.20	
2		10	3.60	8	28.80	
3		8	3.88	26	100.88	
POS G226 (1 kom)						
1		14	6.70	6	40.20	
2		10	3.60	8	28.80	
3		8	3.88	18	69.84	
POS G219 (220, 221) (1 kom)						
1		20	10.65	4	42.60	
2		20	10.23	6	61.38	
3		20	8.63	6	51.78	
4		20	8.47	4	33.88	
5		20	6.89	4	27.56	
6		20	12.48	4	49.92	

Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
7		20	10.14	4	40.56	
8		20	6.00	2	12.00	
9		10	10.10	4	40.40	
10		10	11.07	14	154.98	
11		10	2.22	61	135.42	
12		10	5.14	69	354.66	
13		10	4.20	30	126.00	
15		10	1.12	24	26.88	
POS G222 (1 kom)						
1		20	11.65	4	46.60	
2		20	11.53	2	23.06	
3		20	8.52	4	34.08	
4		20	7.86	4	31.44	
5		10	10.55	2	21.10	
6		10	2.22	71	157.62	

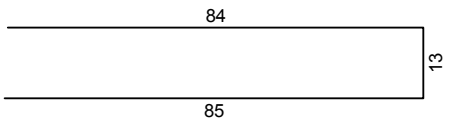
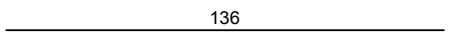
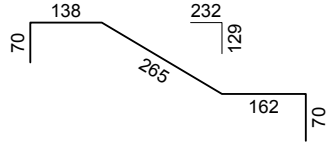
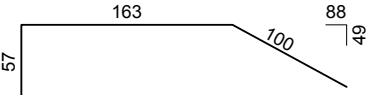
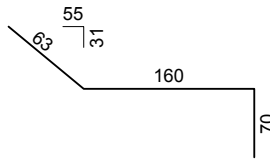
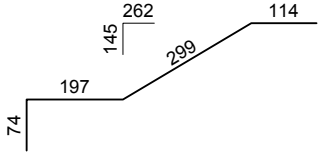
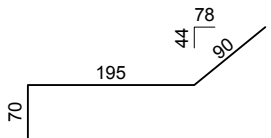
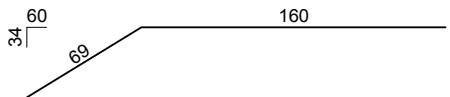
Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
POS G223 (1 kom)						
1		20	8.65	8	69.20	
2		10	7.15	4	28.60	
3		10	2.62	45	117.90	
POS G224 (1 kom)						
1		16	5.60	3	16.80	
2		16	10.60	3	31.80	
3		16	10.50	3	31.50	
4		16	5.51	3	16.53	
5		16	10.48	3	31.44	
6		16	5.42	3	16.26	
7		16	6.89	6	41.34	
8		16	6.86	6	41.16	
9		10	11.37	12	136.44	
10		8	5.10	82	418.20	

Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
POS P100 - donja zona (1 kom)						
1		10	7.40	45	333.00	
2		10	7.13	91	648.83	
3		10	7.65	83	634.95	
4		10	7.30	46	335.80	
5		10	7.70	83	639.10	
6		10	9.81	81	794.61	
7		10	5.50	35	192.50	
8		10	8.50	60	510.00	
9		10	5.61	30	168.30	
10		10	10.76	31	333.56	
11		8	1.10	540	594.00	
12		8	1.20	62	74.40	

Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
POS P100 - gornja zona (1 kom)						
1	550	12	5.50	130	715.00	
2	1068	12	10.68	69	736.92	
3	600	12	6.00	45	270.00	
4	800	12	8.00	25	200.00	
5	450	12	4.50	87	391.50	
6	435	10	4.35	31	134.85	
7	453	10	4.53	46	208.38	
8	435	12	4.35	64	278.40	
9	345	10	3.45	20	69.00	
10	285	10	2.85	18	51.30	
11	295	10	2.95	33	97.35	
12	645	10	6.45	16	103.20	
13	345	10	3.45	9	31.05	
14	478	10	4.78	48	229.44	
15		8	1.22	382	466.04	
16		8	1.52	387	588.24	
POS P200 - donja zona (1 kom)						
1		10	7.40	45	333.00	
2		10	7.13	45	320.85	
3		10	7.65	83	634.95	

Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
4		10	9.81	81	794.61	
5		10	5.96	14	83.44	
6		10	8.50	60	510.00	
7		10	5.61	29	162.69	
8		10	10.76	13	139.88	
9		10	6.40	21	134.40	
10		10	2.00	20	40.00	
11		10	1.55	23	35.65	
12		10	2.06	23	47.38	
13		12	5.96	12	71.52	
14		12	10.76	12	129.12	
15		8	1.63	92	149.96	

Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
16		8	1.10	540	594.00	
17		8	1.20	62	74.40	
POS P200 - gornja zona (1 kom)						
1	550	12	5.50	130	715.00	
2	1068	12	10.68	69	736.92	
3	600	12	6.00	69	414.00	
4	450	12	4.50	87	391.50	
5	435	10	4.35	31	134.85	
6	453	10	4.53	46	208.38	
7	435	12	4.35	31	134.85	
8	345	10	3.45	20	69.00	
9	285	10	2.85	18	51.30	
10		8	1.22	357	435.54	
11		8	1.52	466	708.32	
12	325	10	3.25	8	26.00	
13	365	10	3.65	8	29.20	
POS St (1 kom)						
1		14	5.66	15	84.90	
2		14	2.82	15	42.30	

Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
3		10	1.82	60	109.20	
4		12	1.36	53	72.08	
5		14	7.05	15	105.75	
6		14	3.20	15	48.00	
7		12	2.93	15	43.95	
8		14	6.84	15	102.60	
9		14	3.55	15	53.25	
10		14	2.29	15	34.35	

Šipke - rekapitulacija			
Ø [mm]	lgn [m]	Jedinična težina [kg/m']	Težina [kg]
B500B			
8	24611.79	0.40	9721.66
10	22727.64	0.62	14022.95
12	23356.24	0.89	20740.34
14	6996.06	1.21	8465.23
16	6202.95	1.58	9800.66
20	6397.34	2.47	15850.43
Ukupno (B500B)			78601.28
Ukupno			78601.28

Mreže - specifikacija							
Pozicija	Oznaka mreže	B [cm]	L [cm]	n	Jedinična težina [kg/m2]	Ukupna težina [kg]	Napomena
POS ZP10 (pos S11) (1 kom)							
I-1	Q-335	205	398	2	5.26	85.72	
I-2	Q-335	215	398	2	5.26	89.91	
I-3	Q-335	110	398	2	5.26	46.00	
Ukupno						221.63	
POS ZP16, ZP7 (2 kom)							
I-1	Q-335	160	605	8	5.26	407.33	
I-2	Q-335	160	389	8	5.26	262.24	
Ukupno						669.58	
POS ZP18 (1 kom)							
I-1	Q-335	205	605	2	5.26	130.47	
I-2	Q-335	205	390	2	5.26	84.00	
Ukupno						214.47	
POS ZP19 (1 kom)							
I-1	Q-335	205	150	2	5.26	32.24	
Ukupno						32.24	
POS S20(ZP1), S21(ZP2) (2 kom)							
I-1	Q-335	118	605	4	5.26	149.72	
I-2	Q-335	118	237	4	5.26	58.78	
I-3	Q-335	55	605	4	5.26	69.86	
I-4	Q-335	55	237	4	5.26	27.42	
Ukupno						305.78	
POS ZP3 (1 kom)							
I	Q-335	215	605	2	5.26	136.84	
I-1	Q-335	215	347	2	5.26	78.60	
I-2	Q-335	75	605	2	5.26	47.73	
I-3	Q-335	75	347	2	5.26	27.42	
Ukupno						290.59	
POS ZP4 (1 kom)							
I	Q-335	215	605	2	5.26	136.84	
I-1	Q-335	215	347	2	5.26	78.60	
Ukupno						215.44	
POS ZP5,ZP6 (2 kom)							
I-1	Q-335	145	397	4	5.26	121.27	
Ukupno						121.27	
POS ZP7 (1 kom)							
I	Q-335	215	605	4	5.26	273.68	

Mreže - specifikacija							
Pozicija	Oznaka mreže	B [cm]	L [cm]	n	Jedinična težina [kg/m2]	Ukupna težina [kg]	Napomena
I-1	Q-335	215	238	4	5.26	107.44	
I-2	Q-335	80	605	2	5.26	50.92	
I-3	Q-335	80	238	2	5.26	19.99	
Ukupno						452.02	
POS ZP8 (1 kom)							
I-1	Q-335	195	605	2	5.26	124.11	
I-2	Q-335	195	237	2	5.26	48.72	
Ukupno						172.83	
POS S9 (ZP9) (1 kom)							
I-1	Q-335	119	397	2	5.26	49.71	
I-2	Q-335	143	397	2	5.26	59.86	
Ukupno						109.57	
POS P100 - donja zona (1 kom)							
I-1	Q-188	165	340	1	2.96	16.59	
I-2	Q-188	215	340	3	2.96	64.86	
I-3	Q-188	185	340	1	2.96	18.60	
II-1	Q-257	215	533	4	4.02	184.10	
II-2	Q-257	75	533	1	4.02	16.05	
II-3	Q-257	215	604	1	4.02	52.16	
II-4	Q-257	215	535	1	4.02	46.23	
II-5	Q-257	215	466	1	4.02	40.29	
II-6	Q-257	158	397	1	4.02	25.24	
II-7	Q-257	189	468	1	4.02	35.57	
II-8	Q-257	215	468	3	4.02	121.35	
II-9	Q-257	71	468	1	4.02	13.38	
II-10	Q-257	215	515	1	4.02	44.51	
II-11	Q-257	45	515	1	4.02	9.32	
II-12	Q-257	215	515	1	4.02	44.51	
II-13	Q-257	215	515	1	4.02	44.51	
II-14	Q-257	215	515	1	4.02	44.51	
II-15	Q-257	215	515	1	4.02	44.51	
II-16	Q-257	215	515	1	4.02	44.51	
II-17	Q-257	206	515	1	4.02	42.55	
II-18	Q-257	170	478	1	4.02	32.67	
II-19	Q-257	215	478	6	4.02	247.88	
II-20	Q-257	144	478	1	4.02	27.57	
II-21	Q-257	100	351	1	4.02	14.04	
II-22	Q-257	215	351	1	4.02	30.29	
II-23	Q-257	215	351	1	4.02	30.29	
II-24	Q-257	215	350	1	4.02	30.29	

Mreže - specifikacija							
Pozicija	Oznaka mreže	B [cm]	L [cm]	n	Jedinična težina [kg/m2]	Ukupna težina [kg]	Napomena
II-25	Q-257	189	350	1	4.02	26.62	
III-1	Q-335	215	532	1	5.26	60.22	
III-2	Q-335	50	532	1	5.26	14.01	
III-3	Q-335	215	532	1	5.26	60.22	
III-4	Q-335	215	532	1	5.26	60.22	
III-5	Q-335	215	532	1	5.26	60.22	
III-6	Q-335	215	532	1	5.26	60.22	
III-7	Q-335	123	532	1	5.26	34.45	
Ukupno						1742.61	
POS P100 - gornja zona (1 kom)							
I-1	Q-188	215	125	1	2.96	7.95	
I-2	Q-188	215	125	1	2.96	7.95	
I-3	Q-188	215	125	1	2.96	7.95	
I-4	Q-188	215	308	1	2.96	19.60	
I-5	Q-188	90	223	1	2.96	5.96	
I-6	Q-188	215	195	1	2.96	12.44	
I-7	Q-188	215	222	1	2.96	14.11	
I-8	Q-188	134	189	1	2.96	7.49	
I-9	Q-188	45	127	1	2.96	1.69	
I-10	Q-188	170	183	1	2.96	9.23	
I-11	Q-188	170	213	1	2.96	10.72	
I-12	Q-188	215	213	1	2.96	13.56	
I-13	Q-188	180	213	1	2.96	11.32	
I-14	Q-188	215	183	1	2.96	11.68	
I-15	Q-188	215	341	3	2.96	65.15	
I-16	Q-188	70	341	1	2.96	7.07	
II-1	Q-257	170	472	1	4.02	32.26	
II-2	Q-257	215	125	2	4.02	21.61	
II-3	Q-257	215	298	1	4.02	25.75	
II-4	Q-257	170	256	1	4.02	17.53	
II-5	Q-257	215	425	1	4.02	36.77	
II-6	Q-257	123	125	1	4.02	6.18	
II-7	Q-257	215	125	2	4.02	21.61	
II-8	Q-257	95	125	1	4.02	4.77	
II-9	Q-257	215	256	1	4.02	22.17	
II-10	Q-257	215	256	1	4.02	22.17	
II-11	Q-257	215	256	1	4.02	22.17	
II-12	Q-257	215	256	1	4.02	22.17	
II-13	Q-257	215	256	1	4.02	22.17	
II-14	Q-257	144	256	1	4.02	14.80	
II-15	Q-257	168	231	1	4.02	15.57	

Mreže - specifikacija							
Pozicija	Oznaka mreže	B [cm]	L [cm]	n	Jedinična težina [kg/m2]	Ukupna težina [kg]	Napomena
II-16	Q-257	100	351	1	4.02	14.04	
II-17	Q-257	215	351	1	4.02	30.29	
II-18	Q-257	215	351	1	4.02	30.29	
II-19	Q-257	215	350	1	4.02	30.29	
II-20	Q-257	189	350	1	4.02	26.62	
II-21	Q-257	168	265	1	4.02	17.90	
II-24	Q-257	168	237	1	4.02	16.04	
II-25	Q-257	150	206	1	4.02	12.42	
III-1	Q-335	185	435	1	5.26	42.33	
III-2	Q-335	185	345	2	5.26	67.14	
III-3	Q-335	165	345	1	5.26	29.94	
III-4	Q-335	185	302	1	5.26	29.34	
IV-1	Q-424	215	45	1	6.66	6.44	
IV-2	Q-424	215	395	1	6.66	56.56	
IV-3	Q-424	45	395	1	6.66	11.84	
IV-4	Q-424	215	395	1	6.66	56.56	
IV-5	Q-424	180	395	1	6.66	47.48	
IV-6	Q-424	215	385	6	6.66	330.77	
IV-7	Q-424	155	385	1	6.66	39.75	
IV-8	Q-424	206	385	1	6.66	52.69	
V-3	Q-524	215	390	1	8.22	68.92	
V-4	Q-524	215	390	2	8.22	137.85	
V-5	Q-524	215	390	2	8.22	137.85	
V-6	Q-524	215	390	2	8.22	137.85	
V-7	Q-524	215	390	2	8.22	137.85	
V-8	Q-524	215	390	1	8.22	68.92	
V-9	Q-524	114	281	1	8.22	26.21	
V-10	Q-524	155	390	1	8.22	49.69	
V-11	Q-524	206	395	1	8.22	66.90	
Ukupno						2302.34	
POS P200 - donja zona (1 kom)							
II-1	Q-257	165	340	1	4.02	22.53	
II-2	Q-257	215	340	4	4.02	117.45	
II-3	Q-257	215	532	1	4.02	46.02	
II-4	Q-257	50	532	1	4.02	10.71	
II-5	Q-257	215	532	1	4.02	46.02	
II-6	Q-257	215	532	1	4.02	46.02	
II-7	Q-257	215	532	1	4.02	46.02	
II-8	Q-257	189	468	1	4.02	35.57	
II-9	Q-257	215	468	3	4.02	121.35	
II-10	Q-257	170	478	1	4.02	32.67	

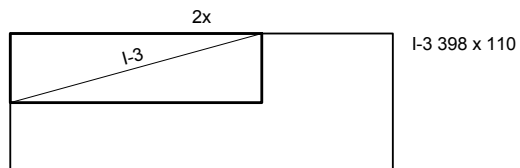
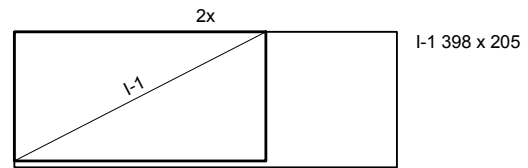
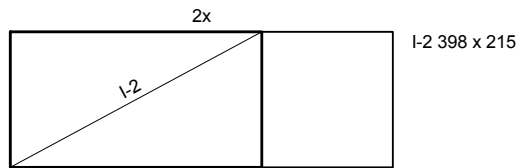
Mreže - specifikacija							
Pozicija	Oznaka mreže	B [cm]	L [cm]	n	Jedinična težina [kg/m ²]	Ukupna težina [kg]	Napomena
II-11	Q-257	215	478	6	4.02	247.88	
II-12	Q-257	144	478	1	4.02	27.57	
II-13	Q-257	215	486	1	4.02	41.96	
II-14	Q-257	215	485	1	4.02	41.95	
II-15	Q-257	215	485	1	4.02	41.94	
II-16	Q-257	215	485	1	4.02	41.93	
II-17	Q-257	75	485	1	4.02	14.62	
II-18	Q-257	215	468	1	4.02	40.41	
II-19	Q-257	45	468	1	4.02	8.46	
II-20	Q-257	215	468	1	4.02	40.42	
II-21	Q-257	210	541	1	4.02	45.68	
II-22	Q-257	215	541	1	4.02	46.77	
II-23	Q-257	105	541	1	4.02	22.84	
II-24	Q-257	75	340	1	4.02	10.24	
II-28	Q-257	215	468	1	4.02	40.43	
II-29	Q-257	215	468	1	4.02	40.43	
II-30	Q-257	215	468	1	4.02	40.44	
II-31	Q-257	215	468	1	4.02	40.44	
II-32	Q-257	206	468	1	4.02	38.66	
II-33	Q-257	71	468	1	4.02	13.38	
II-34	Q-257	215	604	1	4.02	52.16	
II-35	Q-257	215	535	1	4.02	46.23	
II-36	Q-257	215	466	1	4.02	40.29	
II-37	Q-257	158	397	1	4.02	25.24	
II-38	Q-257	215	532	1	4.02	46.02	
II-39	Q-257	123	532	1	4.02	26.33	
Ukupno						1647.14	
POS P200 - gornja zona (1 kom)							
I-1	Q-188	150	125	1	2.96	5.55	
I-2	Q-188	215	125	1	2.96	7.95	
I-3	Q-188	215	308	1	2.96	19.60	
I-4	Q-188	90	223	1	2.96	5.96	
I-5	Q-188	215	115	3	2.96	21.96	
I-6	Q-188	215	195	1	2.96	12.44	
I-7	Q-188	215	222	1	2.96	14.11	
I-8	Q-188	134	189	1	2.96	7.49	
I-9	Q-188	45	127	1	2.96	1.69	
I-10	Q-188	215	253	1	2.96	16.12	
I-11	Q-188	141	253	1	2.96	10.54	
II-1	Q-257	150	605	1	4.02	36.36	
II-2	Q-257	150	573	1	4.02	34.41	

Mreže - specifikacija							
Pozicija	Oznaka mreže	B [cm]	L [cm]	n	Jedinična težina [kg/m ²]	Ukupna težina [kg]	Napomena
II-3	Q-257	170	209	1	4.02	14.29	
II-4	Q-257	141	209	1	4.02	11.81	
II-5	Q-257	205	342	1	4.02	28.22	
II-6	Q-257	215	342	1	4.02	29.60	
II-7	Q-257	170	256	1	4.02	17.53	
II-8	Q-257	170	215	1	4.02	14.67	
II-9	Q-257	215	256	1	4.02	22.17	
II-10	Q-257	215	256	1	4.02	22.17	
II-11	Q-257	215	256	1	4.02	22.17	
II-12	Q-257	215	256	1	4.02	22.17	
II-13	Q-257	215	125	1	4.02	10.80	
II-14	Q-257	215	256	1	4.02	22.17	
II-15	Q-257	144	256	1	4.02	14.80	
II-16	Q-257	141	215	1	4.02	12.14	
II-17	Q-257	213	605	1	4.02	51.80	
II-18	Q-257	213	203	1	4.02	17.34	
II-19	Q-257	215	125	2	4.02	21.61	
II-20	Q-257	95	125	1	4.02	4.77	
II-21	Q-257	68	125	1	4.02	3.39	
II-22	Q-257	67	342	1	4.02	9.29	
II-24	Q-257	168	237	1	4.02	16.04	
II-25	Q-257	150	206	2	4.02	24.85	
III-1	Q-335	215	398	1	5.26	44.95	
III-2	Q-335	172	398	1	5.26	36.07	
IV-1	Q-424	215	45	1	6.66	6.45	
IV-2	Q-424	215	285	1	6.66	40.80	
IV-3	Q-424	215	390	1	6.66	55.84	
IV-4	Q-424	215	390	2	6.66	111.69	
IV-5	Q-424	215	390	2	6.66	111.69	
IV-6	Q-424	215	390	2	6.66	111.69	
IV-7	Q-424	215	390	2	6.66	111.69	
IV-8	Q-424	215	390	1	6.66	55.84	
IV-9	Q-424	114	281	1	6.66	21.24	
IV-10	Q-424	155	390	1	6.66	40.26	
IV-11	Q-424	208	285	1	6.66	39.38	
IV-12	Q-424	215	285	1	6.66	40.80	
IV-13	Q-424	215	217	1	6.66	31.14	
IV-14	Q-424	140	217	1	6.66	20.35	
IV-15	Q-424	170	302	1	6.66	34.25	
IV-16	Q-424	215	302	1	6.66	43.31	
IV-17	Q-424	140	302	1	6.66	28.20	

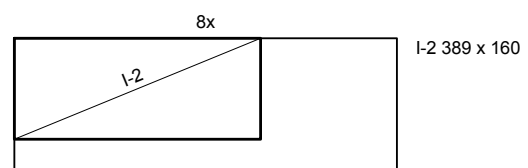
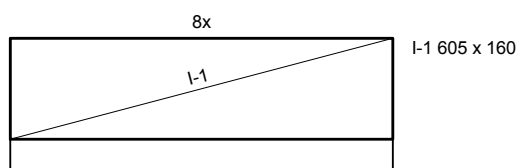
Mreže - specifikacija							
Pozicija	Oznaka mreže	B [cm]	L [cm]	n	Jedinična težina [kg/m ²]	Ukupna težina [kg]	Napomena
V-1	Q-524	185	435	1	8.22	66.15	
V-2	Q-524	170	605	1	8.22	84.54	
V-3	Q-524	170	209	1	8.22	29.23	
V-4	Q-524	80	605	1	8.22	39.78	
V-5	Q-524	80	209	1	8.22	13.75	
V-6	Q-524	215	212	2	8.22	74.81	
V-7	Q-524	100	212	1	8.22	17.35	
V-8	Q-524	206	395	1	8.22	66.90	
V-9	Q-524	163	435	1	8.22	58.23	
Ukupno						2044.36	

Mreže - rekapitulacija						
Oznaka mreže	B [cm]	L [cm]	n	Jedinična težina [kg/m2]	Ukupna težina [kg]	Neto ugrađena težina [kg]
Q-335	215	605	75	5.26	5131.46	3404.74
Q-257	215	605	97	4.02	5072.14	3717.95
Q-188	215	605	16	2.96	616.04	382.13
Q-424	215	605	27	6.66	2339.01	1479.83
Q-524	215	605	19	8.22	2031.51	1261.60
Ukupno					15190.16	10246.26

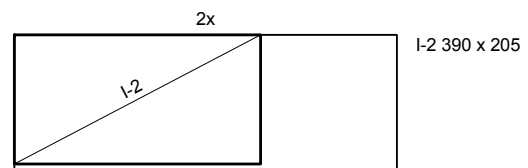
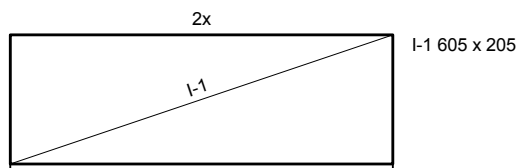
Mreže - plan sečenja
POS ZP10 (pos S11)
Q-335 (605 cm x 215 cm)



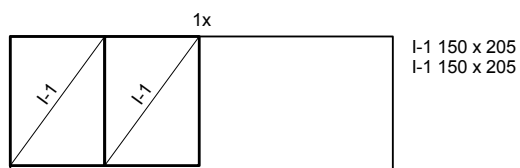
POS ZP16, ZP7
Q-335 (605 cm x 215 cm)



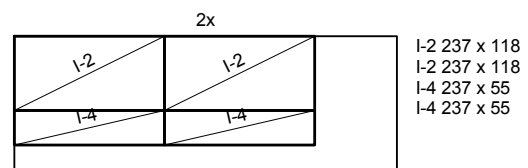
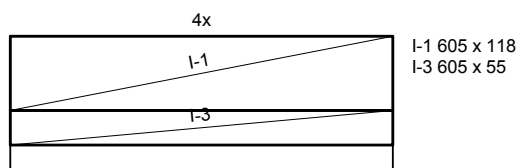
POS ZP18
Q-335 (605 cm x 215 cm)



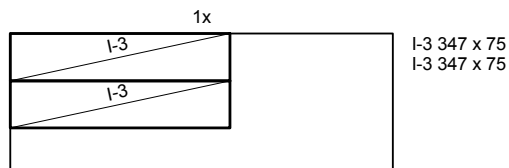
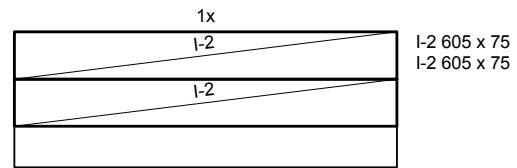
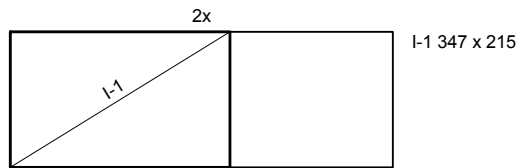
POS ZP19
Q-335 (605 cm x 215 cm)



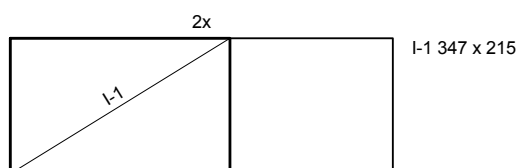
POS S20(ZP1), S21(ZP2)
Q-335 (605 cm x 215 cm)



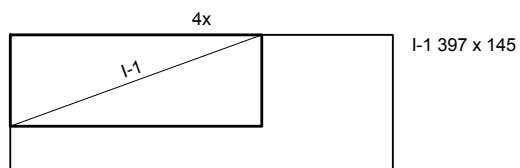
Mreže - plan sečenja
POS ZP3
Q-335 (605 cm x 215 cm)



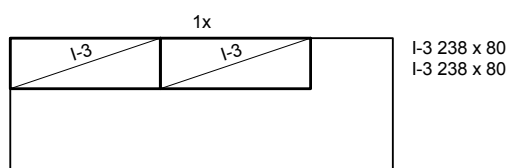
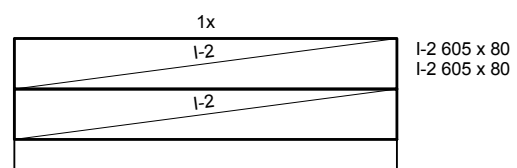
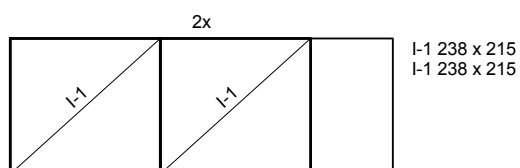
POS ZP4
Q-335 (605 cm x 215 cm)



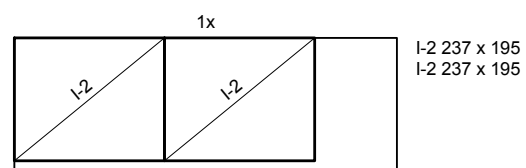
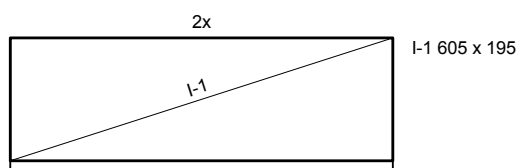
POS ZP5,ZP6
Q-335 (605 cm x 215 cm)



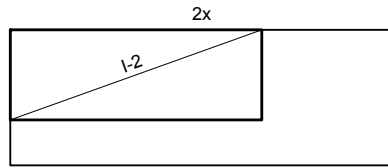
POS ZP7
Q-335 (605 cm x 215 cm)



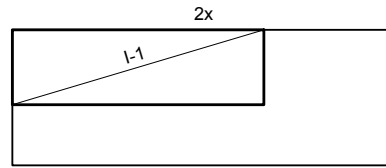
POS ZP8
Q-335 (605 cm x 215 cm)



Mreže - plan sečenja
POS S9 (ZP9)
Q-335 (605 cm x 215 cm)

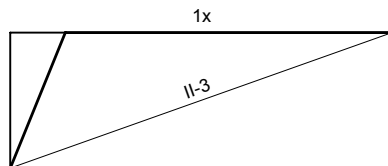


I-2 397 x 143

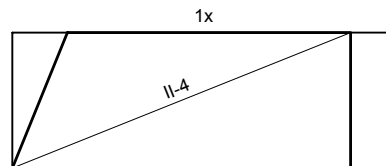


I-1 397 x 119

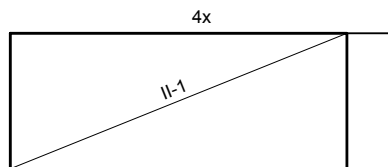
POS P100 - donja zona
Q-257 (605 cm x 215 cm)



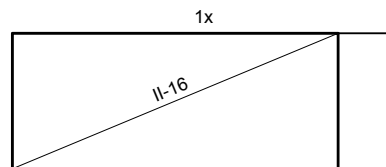
II-3 604 x 215



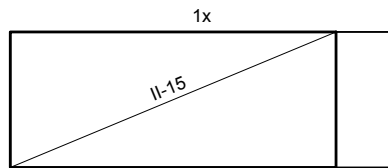
II-4 535 x 215



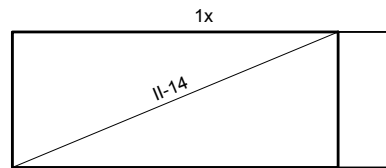
II-1 533 x 215



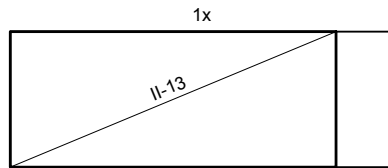
II-16 515 x 215



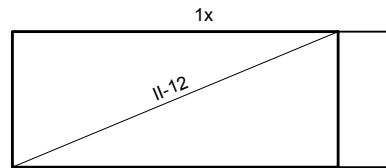
II-15 515 x 215



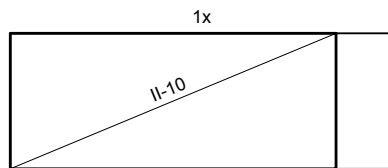
II-14 515 x 215



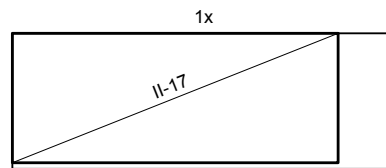
II-13 515 x 215



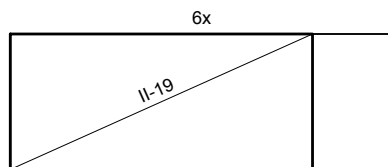
II-12 515 x 215



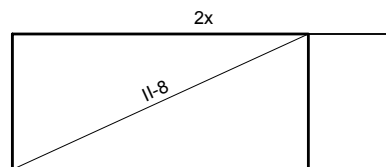
II-10 515 x 215



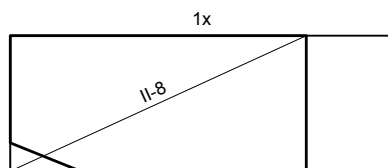
II-17 515 x 206



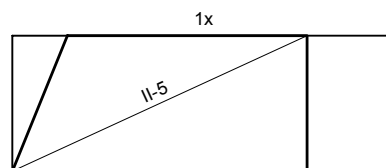
II-19 478 x 215



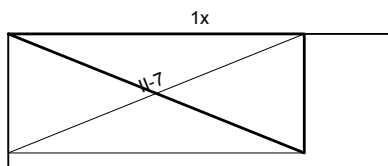
II-8 468 x 215



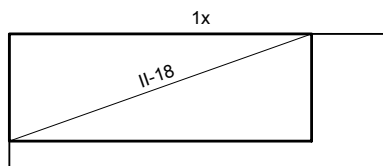
II-8 468 x 215



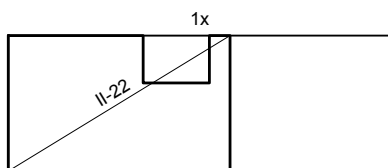
II-5 466 x 215



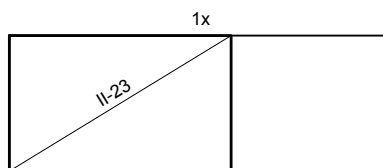
II-7 468 x 189



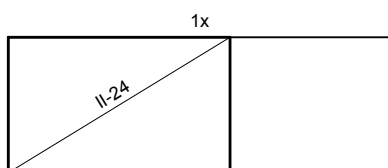
II-18 478 x 170



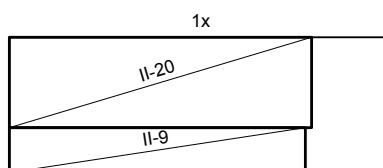
II-22 351 x 215



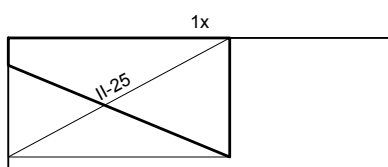
II-23 351 x 215



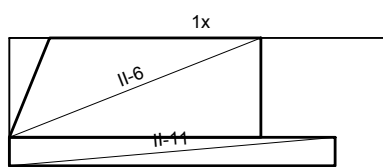
II-24 350 x 215



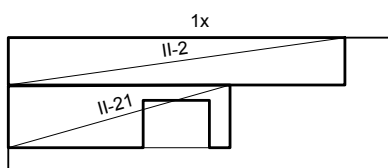
II-20 478 x 144
II-9 468 x 71



II-25 350 x 189

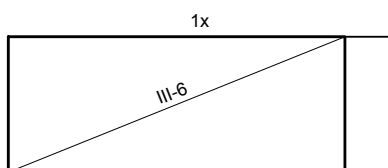


II-6 397 x 158
II-11 515 x 45

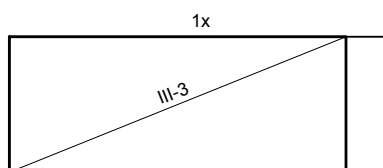


II-2 533 x 75
II-21 351 x 100

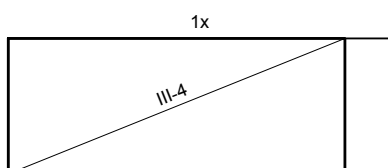
Q-335 (605 cm x 215 cm)



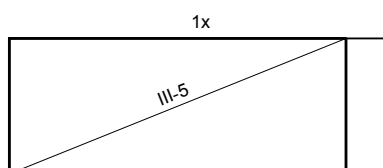
III-6 532 x 215



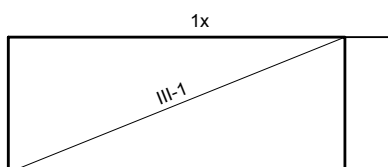
III-3 532 x 215



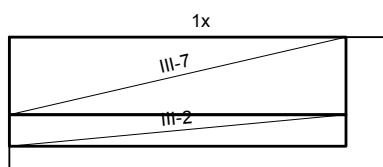
III-4 532 x 215



III-5 532 x 215

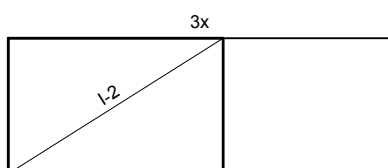


III-1 532 x 215

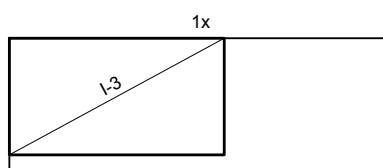


III-7 532 x 123
III-2 532 x 50

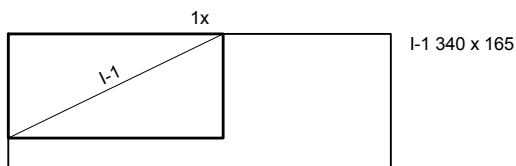
Q-188 (605 cm x 215 cm)



I-2 340 x 215

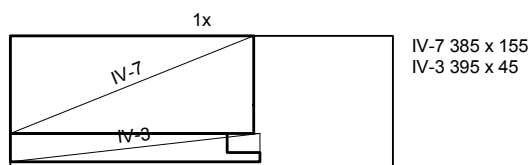
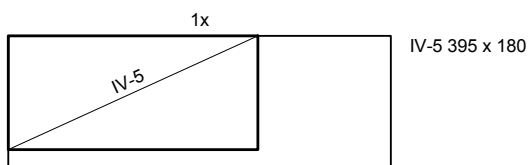
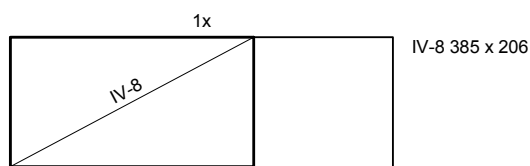
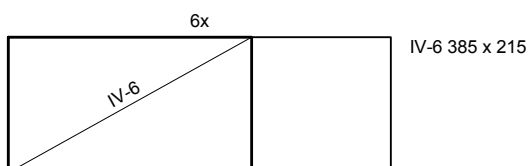
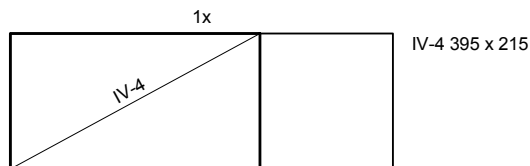
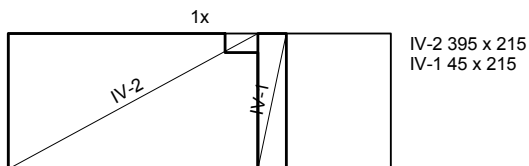


I-3 340 x 185

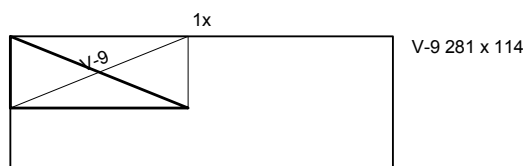
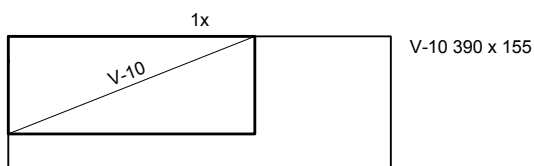
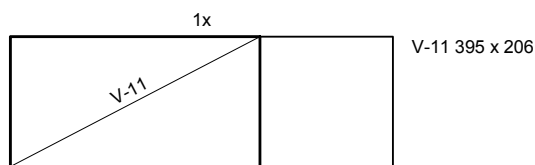
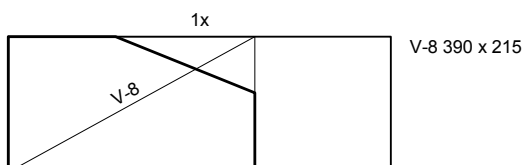
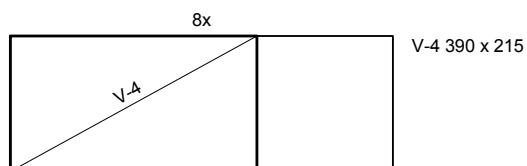
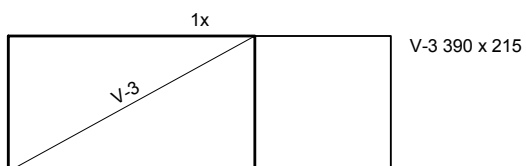


POS P100 - gornja zona

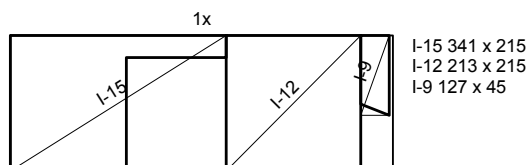
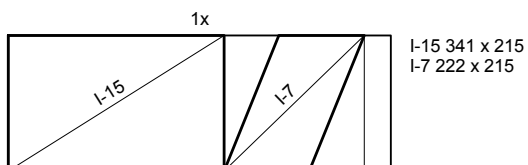
Q-424 (605 cm x 215 cm)

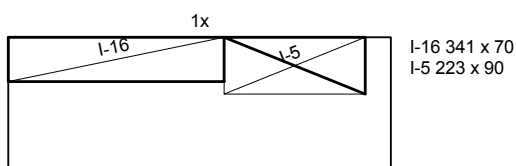
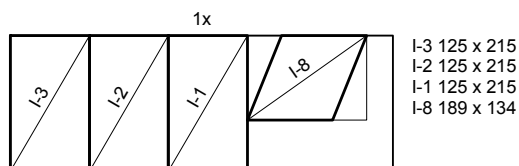
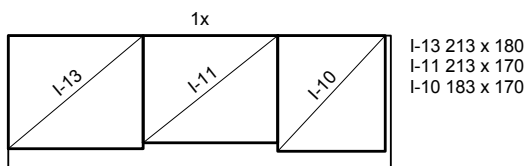
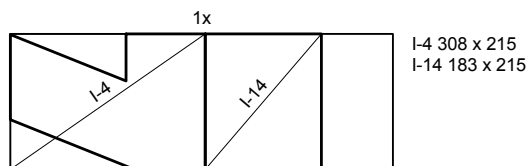
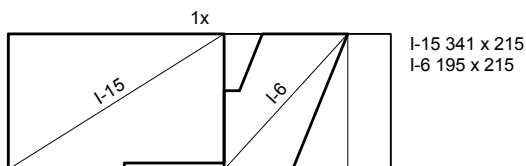


Q-524 (605 cm x 215 cm)

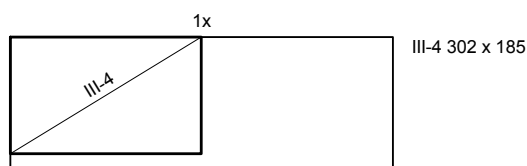
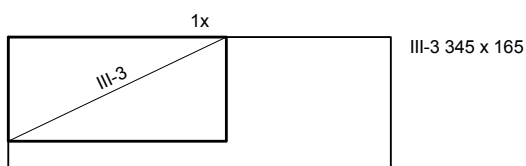
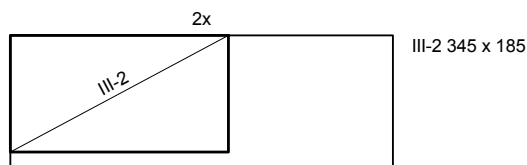
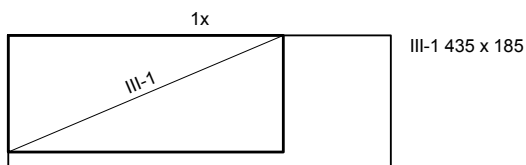


Q-188 (605 cm x 215 cm)

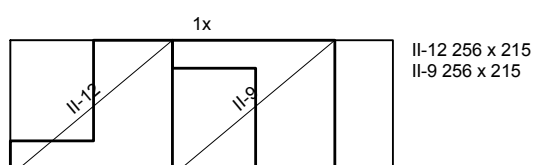
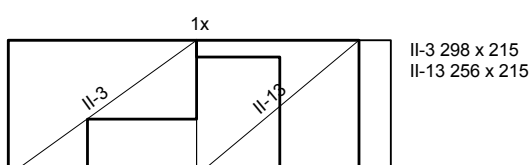
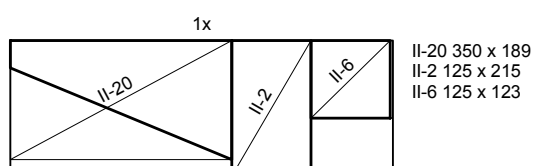
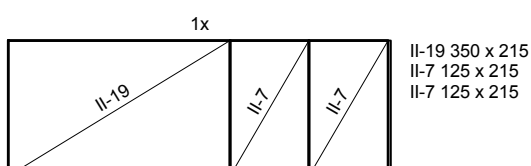
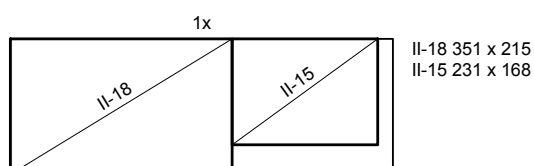
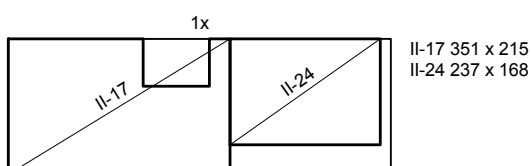
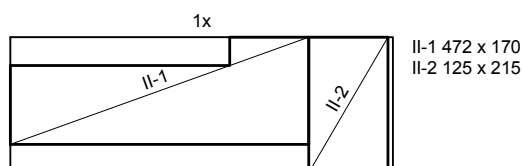
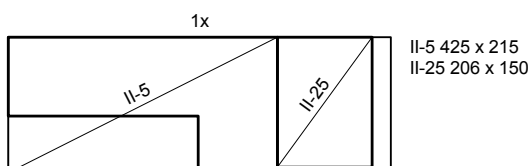


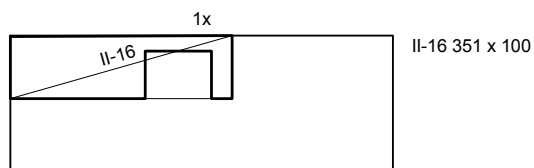
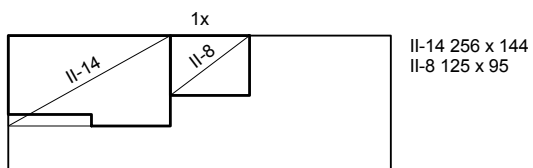
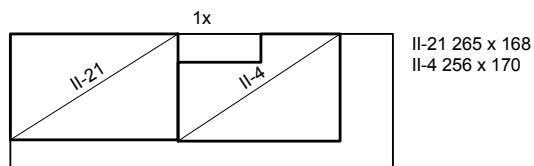
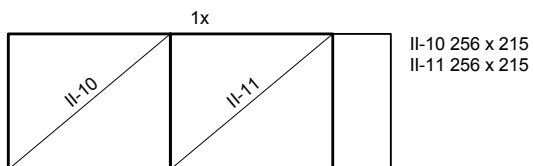


Q-335 (605 cm x 215 cm)



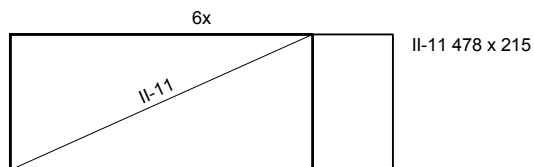
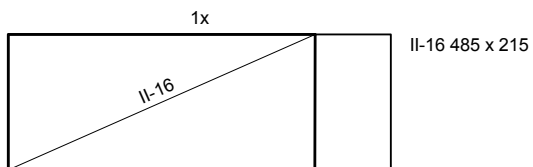
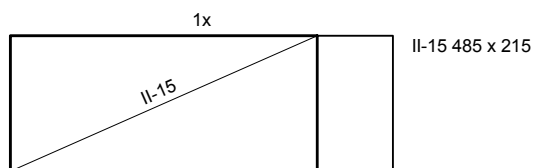
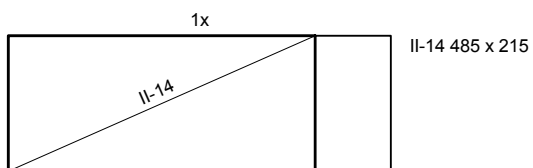
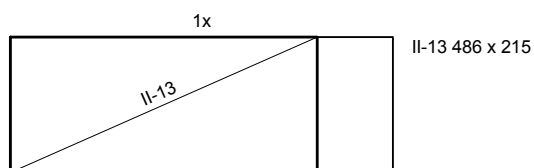
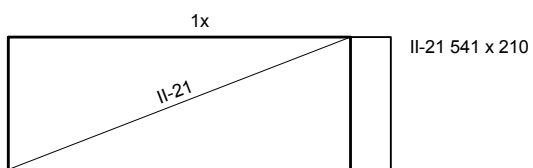
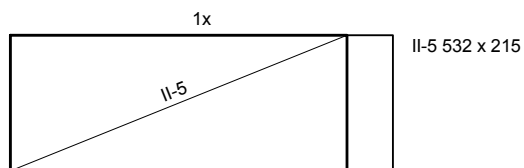
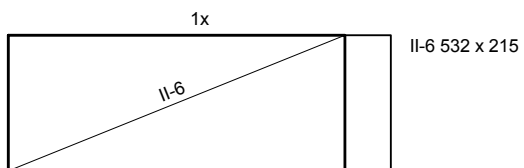
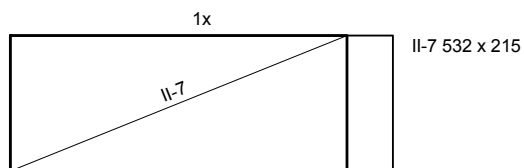
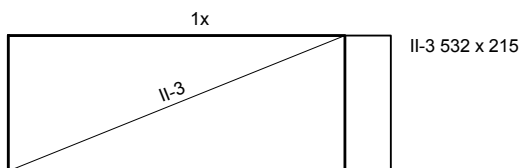
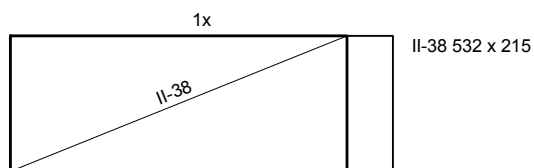
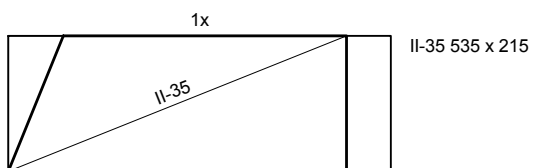
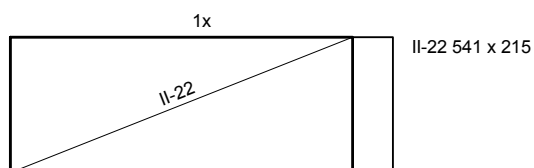
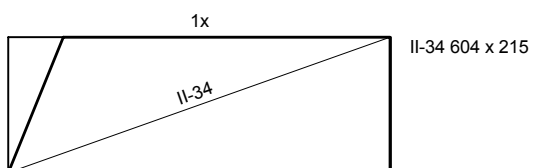
Q-257 (605 cm x 215 cm)

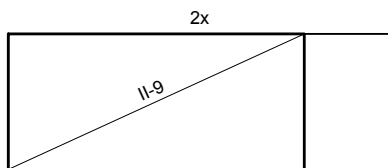




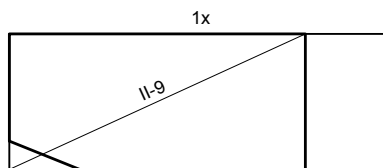
POS P200 - donja zona

Q-257 (605 cm x 215 cm)

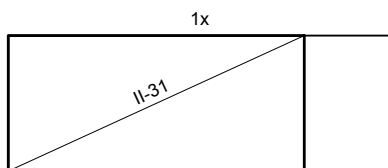




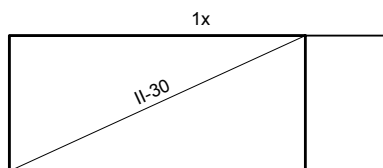
II-9 468 x 215



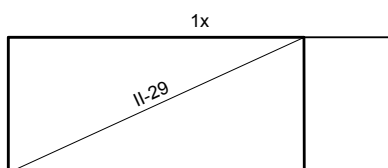
II-9 468 x 215



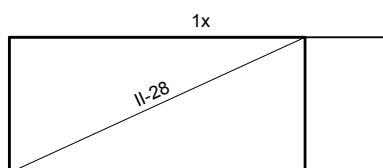
II-31 468 x 215



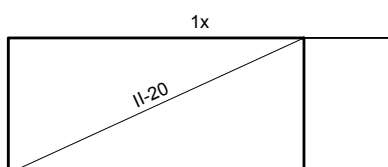
II-30 468 x 215



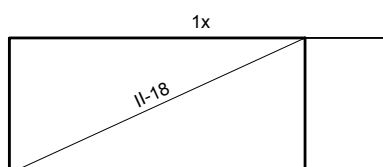
II-29 468 x 215



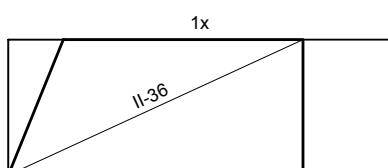
II-28 468 x 215



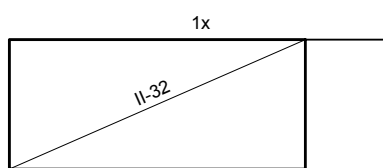
II-20 468 x 215



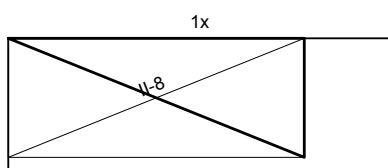
II-18 468 x 215



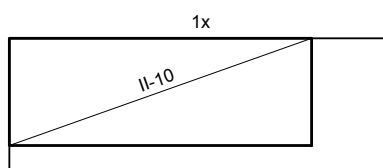
II-36 466 x 215



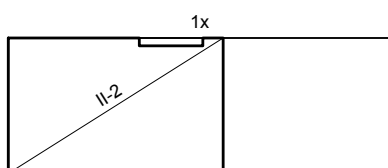
II-32 468 x 206



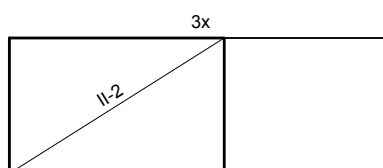
II-8 468 x 189



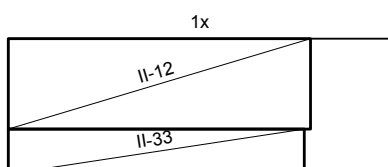
II-10 478 x 170



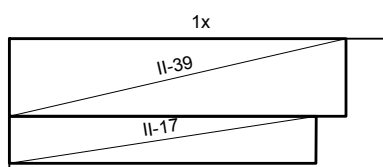
II-2 340 x 215



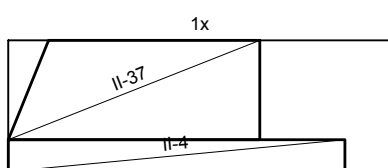
II-2 340 x 215



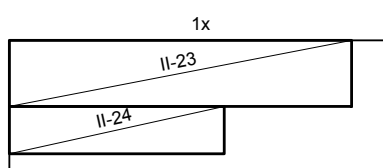
II-12 478 x 144
II-33 468 x 71



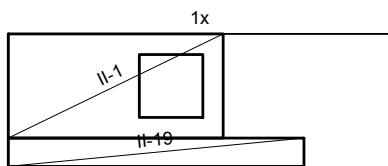
II-39 532 x 123
II-17 485 x 75



II-37 397 x 158
II-4 532 x 50



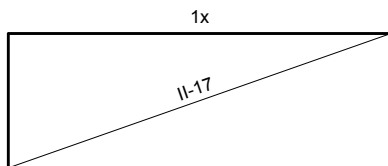
II-23 541 x 105
II-24 340 x 75



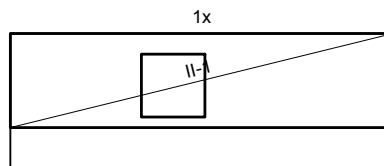
II-1 340 x 165
II-19 468 x 45

POS P200 - gornja zona

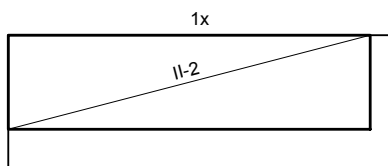
Q-257 (605 cm x 215 cm)



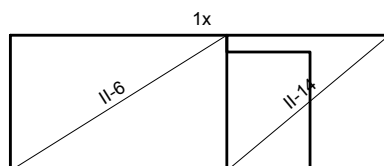
II-17 605 x 213



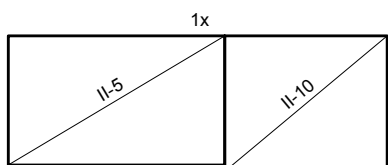
II-1 605 x 150



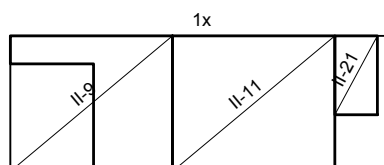
II-2 573 x 150



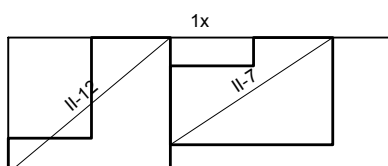
II-6 342 x 215
II-14 256 x 215



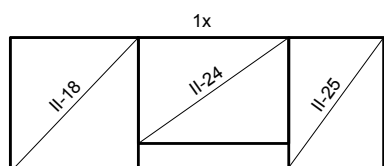
II-5 342 x 205
II-10 256 x 215



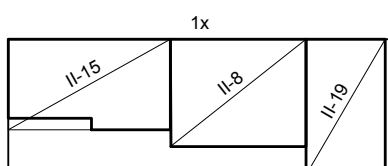
II-9 256 x 215
II-11 256 x 215
II-21 125 x 68



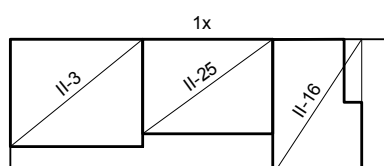
II-12 256 x 215
II-7 256 x 170



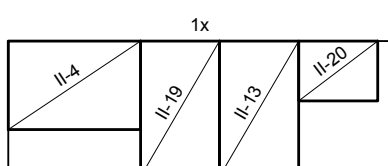
II-18 203 x 213
II-24 237 x 168
II-25 206 x 150



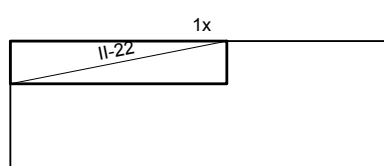
II-15 256 x 144
II-8 215 x 170
II-19 125 x 215



II-3 209 x 170
II-25 206 x 150
II-16 215 x 141

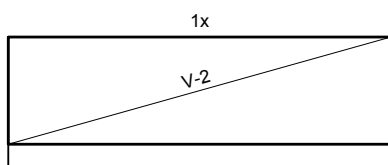


II-4 209 x 141
II-19 125 x 215
II-13 125 x 215
II-20 125 x 95

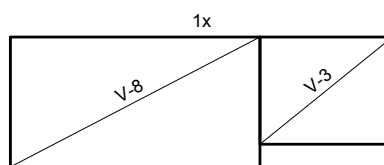


II-22 342 x 67

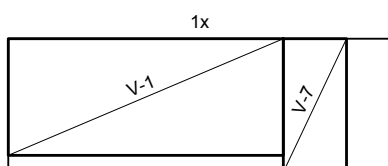
Q-524 (605 cm x 215 cm)



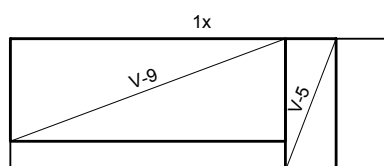
V-2 605 x 170



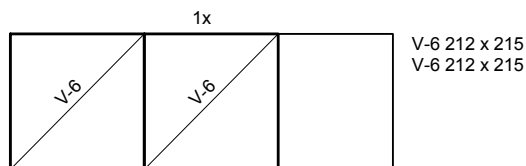
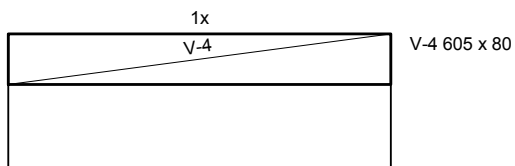
V-8 395 x 206
V-3 209 x 170



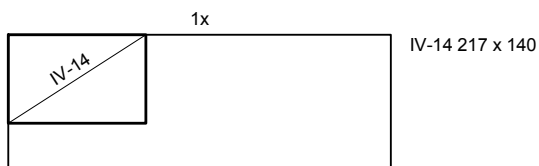
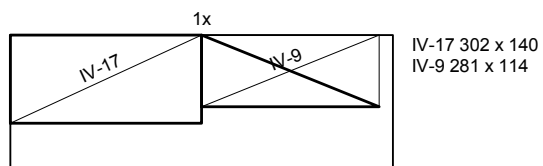
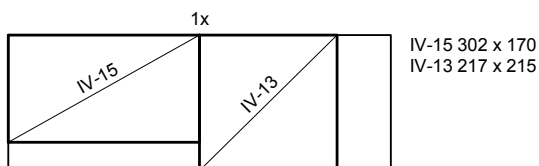
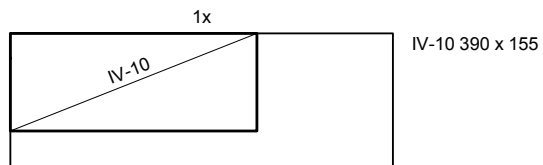
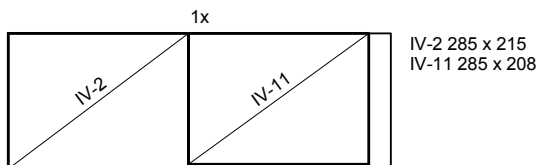
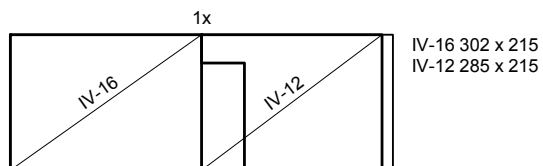
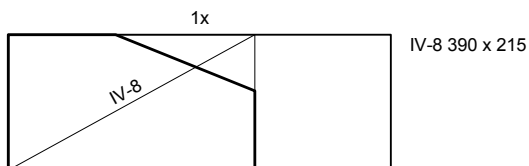
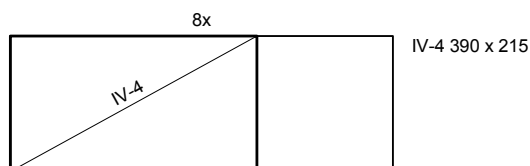
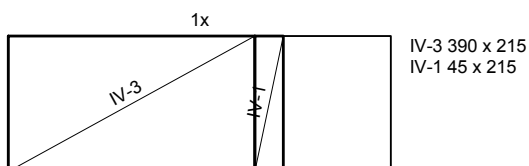
V-1 435 x 185
V-7 212 x 100



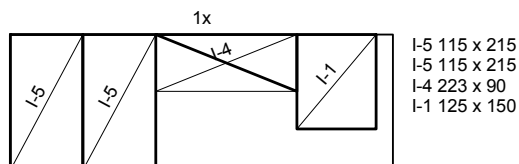
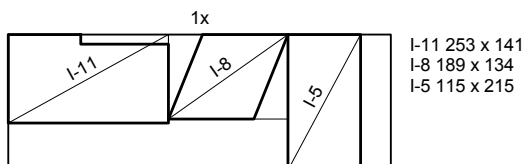
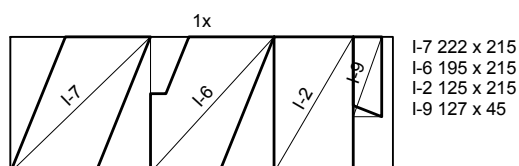
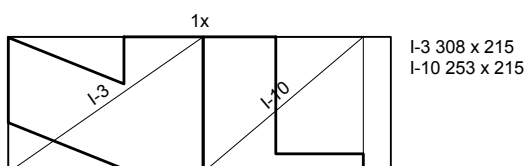
V-9 435 x 163
V-5 209 x 80



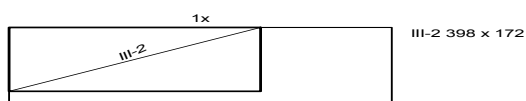
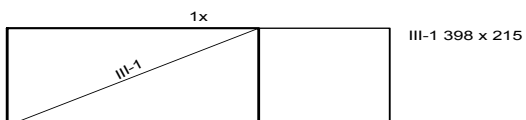
Q-424 (605 cm x 215 cm)



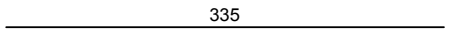
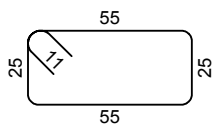
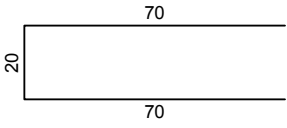
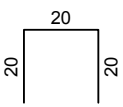
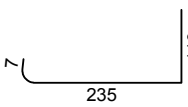

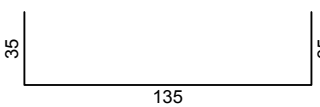
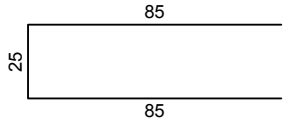
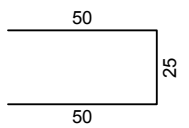
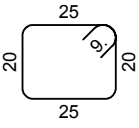
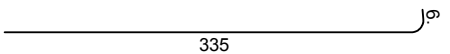
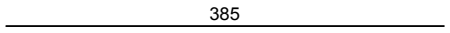
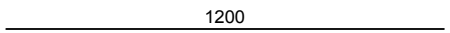
Q-188 (605 cm x 215 cm)

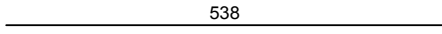
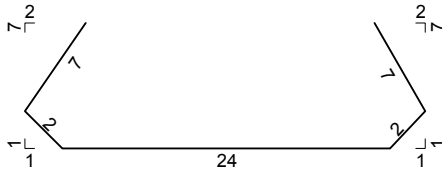

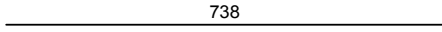
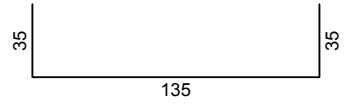
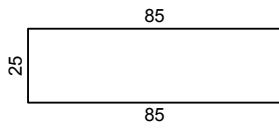
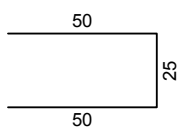
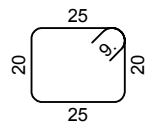
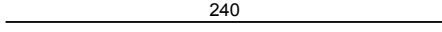
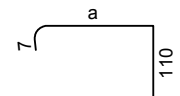
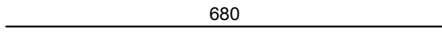
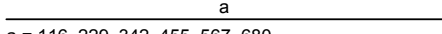


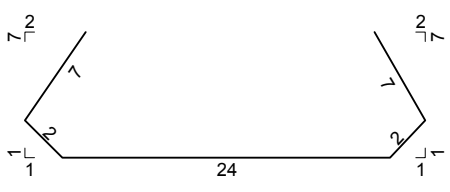
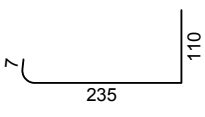
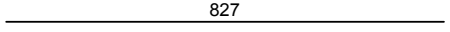
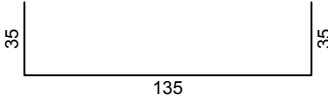
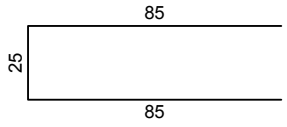
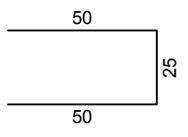
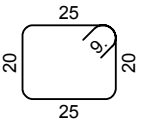
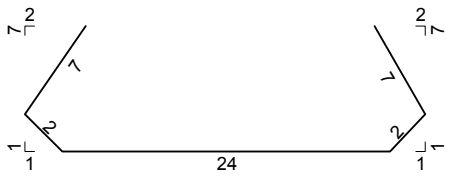
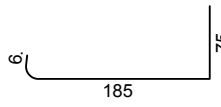
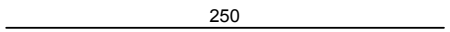
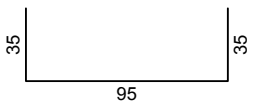
Q-335 (605 cm x 215 cm)

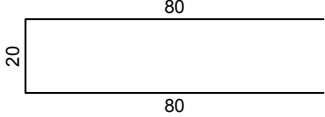
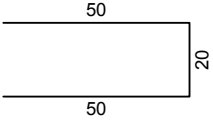
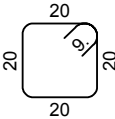
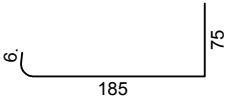
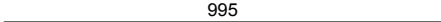

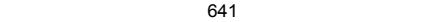
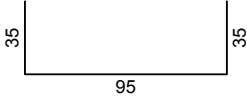
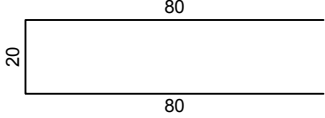
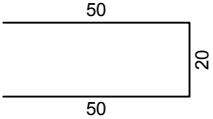
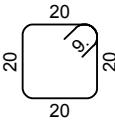
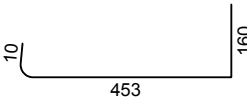
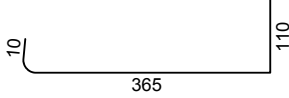


11.2 UREĐENJE TERENA – POTPORNİ ZIDOVİ

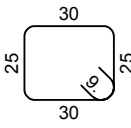
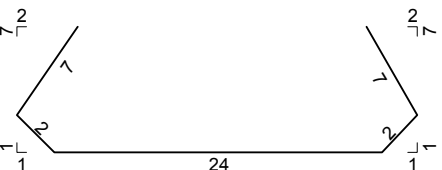
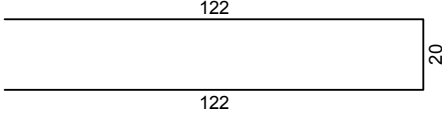
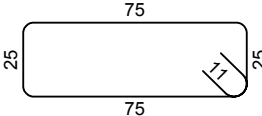
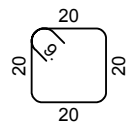

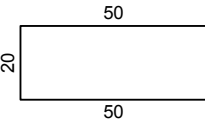
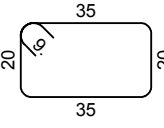
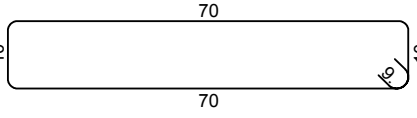

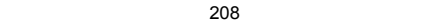
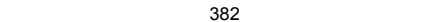
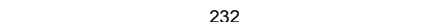
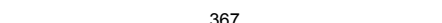
Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
PZ9 (1 kom)						
1		12	3.35	10	33.50	
2		10	1.82	23	41.86	
3		8	1.60	15	24.00	
4		8	0.60	18	10.80	
PZ6 (1 kom)						
1		12	3.52	231	813.12	
2		10	9.95	26	258.70	
3		12	2.05	231	473.55	
4		10	1.95	231	450.45	
5		10	1.25	46	57.50	
6		8	1.08	231	249.48	
7		10	3.41	26	88.66	
8		10	3.85	26	100.10	
9		10	12.00	36	432.00	

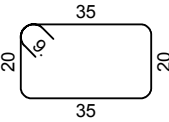
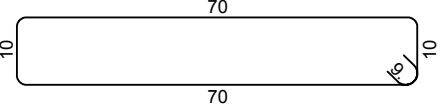
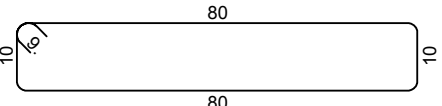
Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
10		10	5.38	36	193.68	
11		8	0.42	140	58.80	
PZ4 (1 kom)						
1		12	3.52	67	235.84	
2		10	7.38	26	191.88	
3		12	2.05	113	231.65	
4		10	1.95	113	220.35	
5		10	1.25	60	75.00	
6		8	1.08	113	122.04	
7		10	2.40	26	62.40	
8	 a = 115, 118, 121, 123, 126, 129, 131, 134, 137, 139, 142, 145, 147, 150, 152, 155, 158, 160, 163, 166, 168, 171, 174, 176, 179, 182, 184, 187, 190, 192, 195, 197, 200, 203, 205, 208, 211, 213, 216, 219, 221, 224, 227, 229, 232, 235	12	*2.92	1 x 46	134.31	
9		10	6.80	21	142.80	
10	 a = 116, 229, 342, 455, 567, 680	10	*3.98	1 x 6	23.89	

Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
11		8	0.42	60	25.20	
PZ5 (1 kom)						
1		12	3.52	56	197.12	
2		10	8.27	26	215.02	
3		12	2.05	56	114.80	
4		10	1.95	56	109.20	
5		10	1.25	22	27.50	
6		8	1.08	56	60.48	
7		8	0.42	32	13.44	
PZ8 (1 kom)						
1		10	2.66	15	39.90	
2		10	2.50	23	57.50	
5		10	1.65	18	29.70	

Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
6		8	1.80	18	32.40	
7		10	1.20	8	9.60	
8		8	0.98	13	12.74	
PZ7 (1 kom)						
1		10	2.66	227	603.82	
2		10	9.95	23	228.85	
3		10	12.00	42	504.00	
4		10	6.41	21	134.61	
5		10	1.65	264	435.60	
6		8	1.80	264	475.20	
7		10	1.20	16	19.20	
8		8	0.98	199	195.02	
PZ2 (1 kom)						
1		16	6.23	142	884.66	
2		16	4.85	160	776.00	

Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
3		14	6.97	30	209.10	
4		14	12.00	100	1200.00	
5		14	4.50	100	450.00	
6		14	2.65	71	188.15	
7		14	2.15	80	172.00	
8		12	2.60	56	145.60	
9		10	1.42	76	107.92	
10		14	7.94	16	127.04	
11		8	0.47	100	47.00	
PZ3 (1 kom)						
1		14	4.88	124	605.12	
2		12	6.07	62	376.34	
3		12	2.15	62	133.30	
4		10	1.65	23	37.95	
5		10	2.35	23	54.05	

Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
6		8	1.28	31	39.68	
7		8	0.42	20	8.40	
PZ3a (1 kom)						
1		10	2.64	58	153.12	
2		10	2.22	58	128.76	
3		8	0.98	58	56.84	
4		10	8.56	20	171.20	
5		8	1.20	12	14.40	
PZ2a (1 kom)						
1		8	1.28	93	119.04	
2		8	1.78	92	163.76	
3		8	1.00	14	14.00	
4		8	2.08	14	29.12	
5		8	3.82	14	53.48	
6		8	2.32	14	32.48	
7		8	3.67	14	51.38	

Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
8	201	8	2.01	14	28.14	
PZ1 (1 kom)						
1		8	1.28	333	426.24	
2		8	1.78	293	521.54	
3		8	1.98	40	79.20	
4	190	8	1.90	56	106.40	
5	775	8	7.75	14	108.50	
6	1200	8	12.00	14	168.00	
7	795	8	7.95	14	111.30	
8	385	8	3.85	42	161.70	
9	162	8	1.62	14	22.68	

Šipke - rekapitulacija			
Ø [mm]	lgn [m]	Jedinična težina [kg/m]	Težina [kg]
B500B			
8	3642.88	0.40	1438.94
10	5406.77	0.62	3335.98
12	2889.13	0.89	2565.55
14	2951.41	1.21	3571.21
16	1660.66	1.58	2623.84
Ukupno (B500B)			13535.51
Ukupno			13535.51

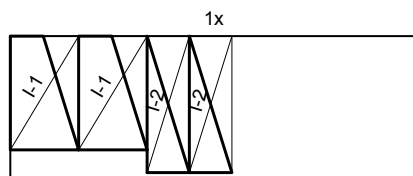
Mreže - specifikacija							
Pozicija	Oznaka mreže	B [cm]	L [cm]	n	Jedinična težina [kg/m2]	Ukupna težina [kg]	Napomena
PZ9 (1 kom)							
I-1	Q-335	170	102	2	5.26	18.17	
I-2	Q-335	204	63	2	5.26	13.52	
Ukupno						31.70	
PZ6 (1 kom)							
I-1	Q-335	215	197	15	5.26	335.03	
I-3	Q-335	145	197	1	5.26	15.06	
I-4	Q-335	170	198	2	5.26	35.32	
I-5	Q-335	210	198	1	5.26	21.82	
I-6	Q-335	90	198	1	5.26	9.35	
I-7	Q-335	158	198	1	5.26	16.39	
Ukupno						432.97	
PZ4 (1 kom)							
I-1	Q-335	215	198	4	5.26	89.34	
I-2	Q-335	58	198	1	5.26	5.98	
I-3	Q-335	170	197	1	5.26	17.66	
I-4	Q-335	115	197	1	5.26	11.95	
I-5	Q-335	215	197	1	5.26	22.28	
I-6	Q-335	215	167	1	5.26	18.91	
I-7	Q-335	215	137	1	5.26	15.55	
I-8	Q-335	170	108	1	5.26	9.63	
Ukupno						191.30	
PZ5 (1 kom)							
I-1	Q-335	215	198	4	5.26	89.34	
I-2	Q-335	147	198	1	5.26	15.27	
Ukupno						104.61	
PZ8 (1 kom)							
I-1	Q-335	215	148	1	5.26	16.68	
I-2	Q-335	80	148	1	5.26	6.21	
Ukupno						22.90	
PZ7 (1 kom)							
I-1	Q-335	215	148	22	5.26	366.98	
I-2	Q-335	145	148	1	5.26	11.25	
I-3	Q-335	51	148	1	5.26	3.98	
Ukupno						382.21	

Mreže - rekapitulacija						
Oznaka mreže	B [cm]	L [cm]	n	Jedinična težina [kg/m2]	Ukupna težina [kg]	Neto ugrađena težina [kg]
Q-335	215	605	21	5.26	1436.81	1146.51
Ukupno					1436.81	1146.51

Mreže - plan sečenja

PZ9

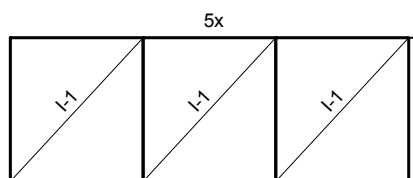
Q-335 (605 cm x 215 cm)



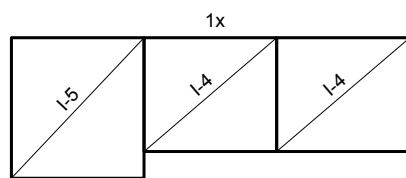
I-1 102 x 170
I-1 102 x 170
I-2 63 x 204
I-2 63 x 204

PZ6

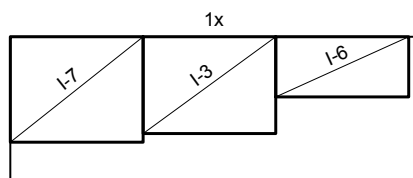
Q-335 (605 cm x 215 cm)



I-1 197 x 215
I-1 197 x 215
I-1 197 x 215



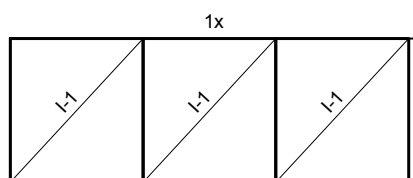
I-5 198 x 210
I-4 198 x 170
I-4 198 x 170



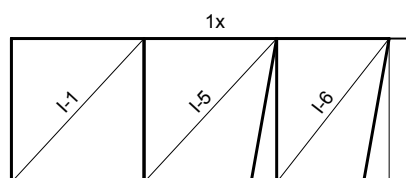
I-7 198 x 158
I-3 197 x 145
I-6 198 x 90

PZ4

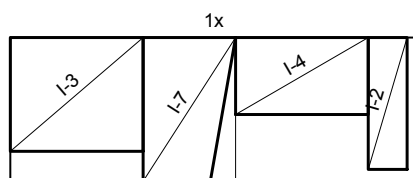
Q-335 (605 cm x 215 cm)



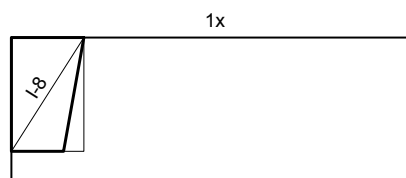
I-1 198 x 215
I-1 198 x 215
I-1 198 x 215



I-1 198 x 215
I-5 197 x 215
I-6 167 x 215



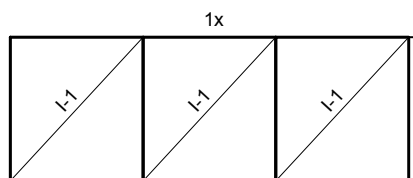
I-3 197 x 170
I-7 137 x 215
I-4 197 x 115
I-2 198 x 58



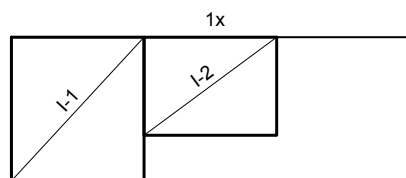
I-8 108 x 170

PZ5

Q-335 (605 cm x 215 cm)



I-1 198 x 215
I-1 198 x 215
I-1 198 x 215

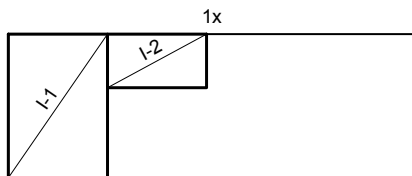


I-1 198 x 215
I-2 198 x 147

Mreže - plan sečenja

PZ8

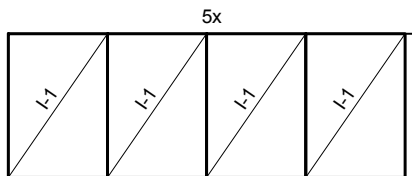
Q-335 (605 cm x 215 cm)



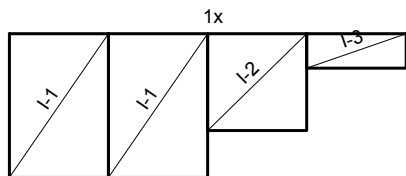
I-1 148 x 215
I-2 148 x 80

PZ7

Q-335 (605 cm x 215 cm)



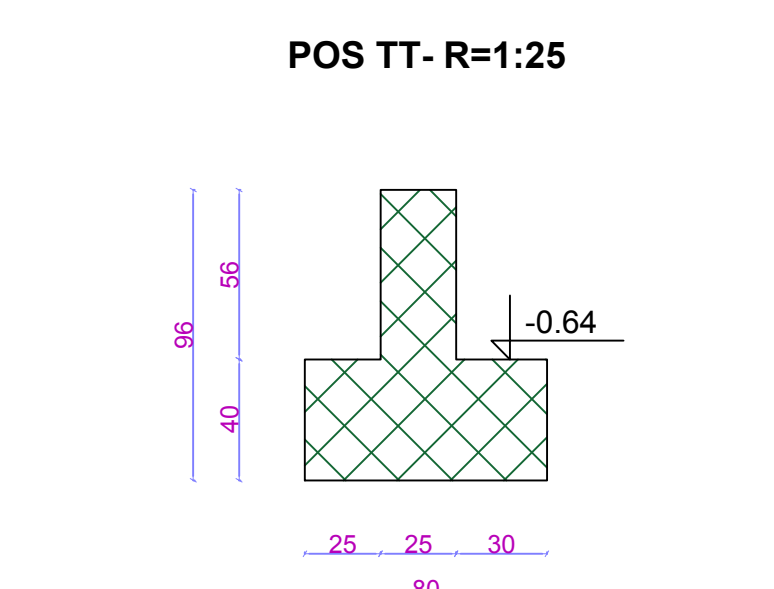
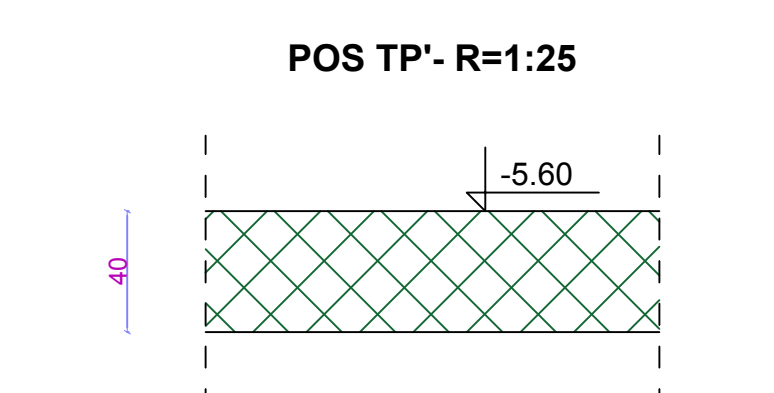
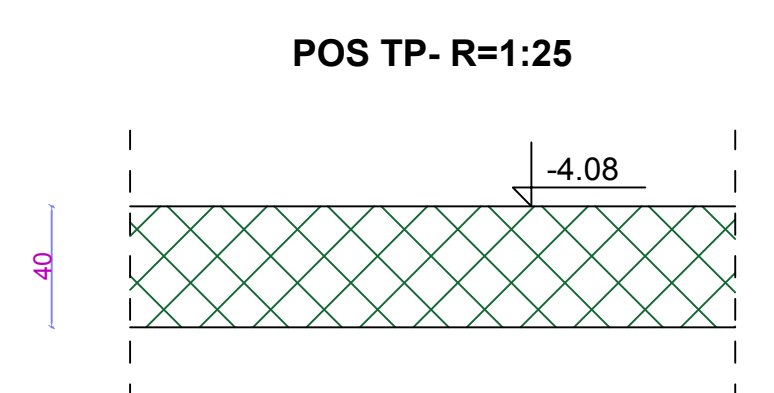
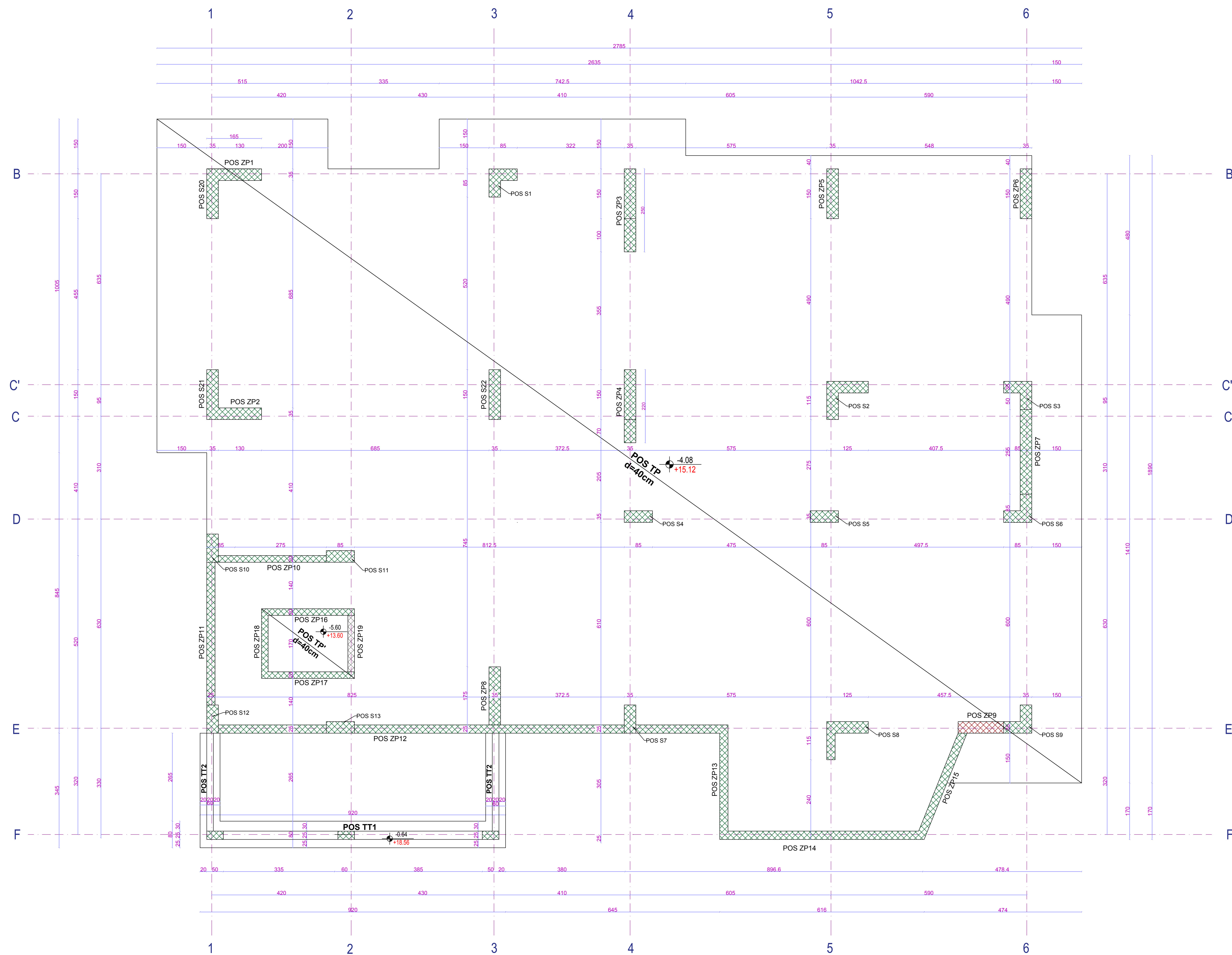
I-1 148 x 215
I-1 148 x 215
I-1 148 x 215
I-1 148 x 215



I-1 148 x 215
I-1 148 x 215
I-2 148 x 145
I-3 148 x 51

12. GRAFIČKI PRILOZI

Plan pozicija temelja - POS TP



PROJEKTANT: EUROZOX d.o.o. <small>Spol: bb</small> <small>DANILUVRAD</small>		Investitor: OPŠTINA BAR	
Objekat:	DNEVNI CENTAR ZA DJECU SA SMETNJAMA U RAZVOJU	Lokacija: UP 2286, BLOK 1 "Dolje Zapljavo" u Baru kp 2286, KO Polje,Bar	
Glavni inženjer	arh.Dragana Čukić, dipl.ing.	Vrsta tehničke dokumentacije:	Glavni projekat
Odgovorni inženjer	Draško Bašović, Spec.Sci.građ.	Dio tehničke dokumentacije:	KONSTRUKCIJA
Saradnik	Andrija Krivokapić, Spec.Sci.građ.	Prilog: Plan pozicija - POS TP	Br. priloga 1.1
Datum izrade i M.P.: novembar 2021		Datum revizije i M.P.:	
		R=1:50 296	

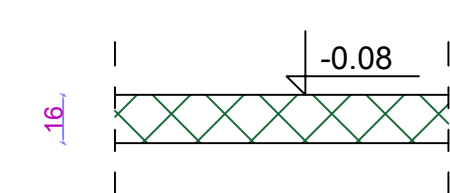


Diagram of a beam cross-section showing a rectangular section with a width of 16 and a depth of 28. The top reinforcement is at a depth of -0.28 from the top surface.

A rectangular field with a diagonal cross-hatch pattern. The width is labeled 35 and the length is labeled 146.

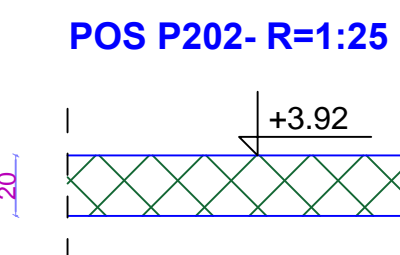
POS G102,G104,G107,G113
G114,G115,G119- R=1:25

A rectangular rug with a green diamond pattern. The rug is 80 inches long and 35 inches wide.

A diagram of a composite figure consisting of a rectangle with a smaller rectangle attached to its top-right side. The dimensions are labeled as follows:

- The total width of the figure is 65.
- The width of the bottom rectangle is 25.
- The width of the top rectangle is 40.
- The height of the bottom rectangle is 146.
- The height of the top rectangle is 10.
- The total height of the figure is 58.

PROJEKTANT: EUROZOJ d.o.o. <small>Sput bb DANILUVRAD</small>		Investitor: OPŠTINA BAR	
Objekat:	DNEVNI CENTAR ZA DJECU SA SMETNJAMA U RAZVOJU	Lokacija: UP 2286, BLOK 1 "Opće Zajeljevo" u Baru kp 2286, KO Polje,Bar	
Glavni inženjer	arh.Dragana Čukić, dipl.ing.	Vrsta tehničke dokumentacije:	Glavni projektat
Odgovorni inženjer	Draško Bašović, Spec.Sci.jgrađ.	Dio tehničke dokumentacije:	KONSTRUKCIJA
Saradnik	Andrija Krivokapić, Spec.Sci.jgrađ.	Prilog: Plan pozicija - POS 100	R=1:50 <small>br. stran</small> 1.2 297
Datum izrade i M.P.: novembar 2021		Datum revizije i M.P.:	

[illegible]

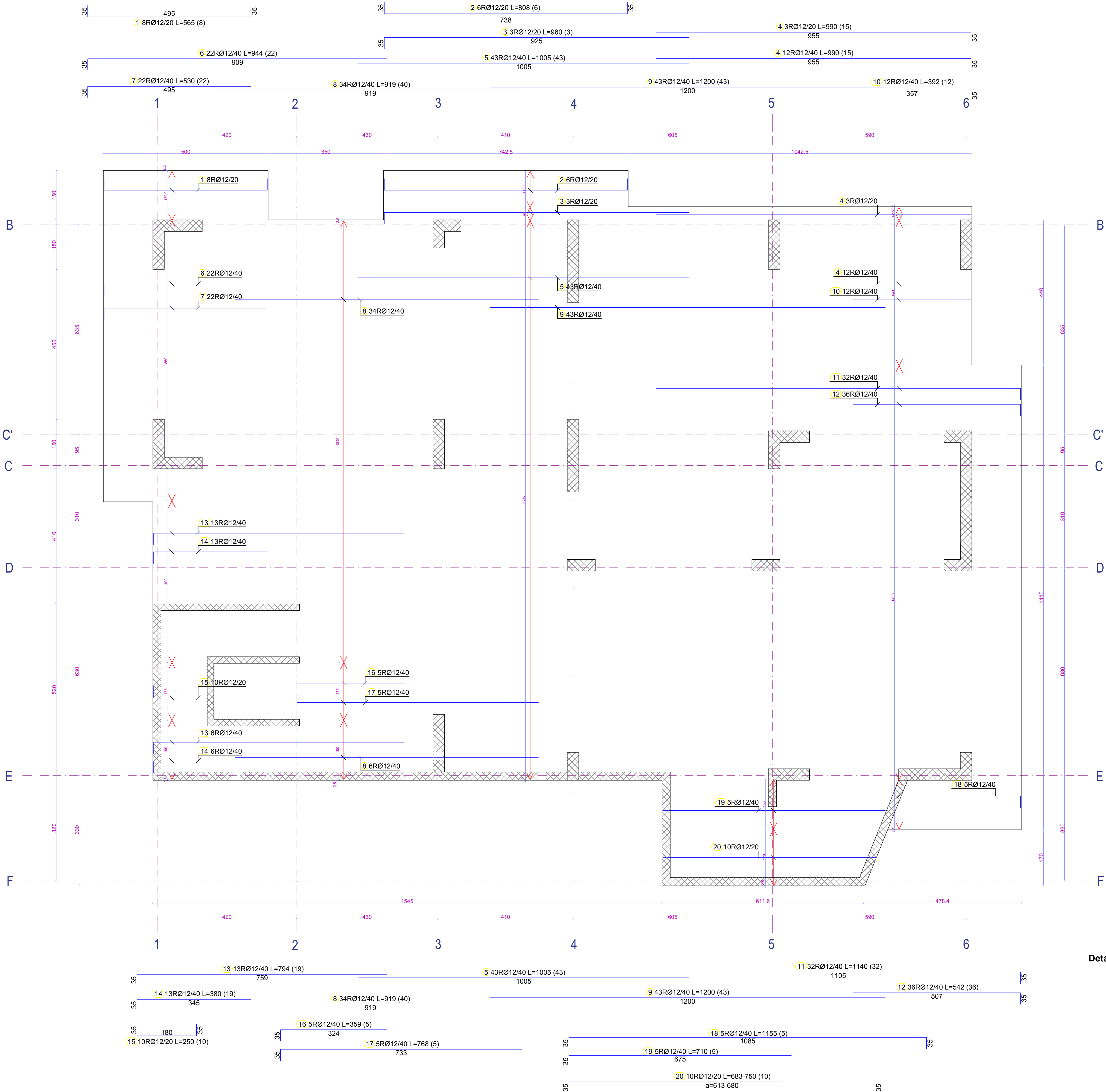
320

75

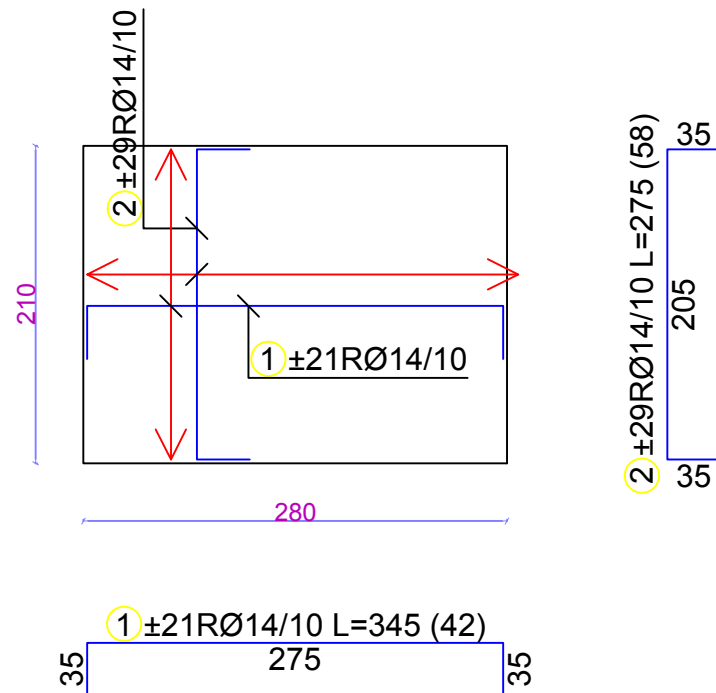
A diagram of a rectangular field. The field is divided into four triangular sections by two diagonal lines crossing at the center. The left vertical side is labeled with a dimension of 50, and the bottom horizontal side is labeled with a dimension of 25.

PROJEKTANT: EUROZOX d.o.o. Sput bi DANLOVGRAD		Investitor: OPŠTINA BAR	
Objekat:	DNEVNI CENTAR ZA DJECU SA SMETNJAMA U RAZVOJU	Lokacija:	UP 2286, BLOK 1 "Dolje Polje Zajljevo" u Baru kp 2286, KO Polje,Bar
Glavni inženjer	arh.Dragana Čukić, dipl.ing.	Vrsta tehničke dokumentacije:	Glavni projekat
Odgovorni inženjer	Draško Bašovič, Spec.Sci.ingrad.	Dio tehničke dokumentacije:	KONSTRUKCIJA
Saradnik	Andrija Krivokapić, Spec.Sci.ingrad.	Prilog:	Br. priloga R=1:50 Br. strane
Datum izrade i M.P.: novembar 2021		Datum revizije i M.P.:	
		Plan pozicija - POS 200 1.3 298	

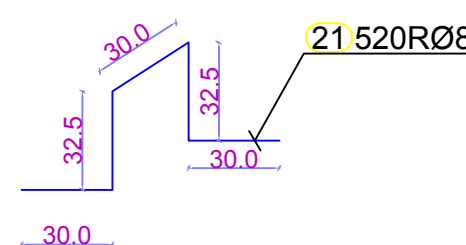
Plan armiranja temelja - POS TP - donja zona - X pravac
MB 30, B500B, ao=2.5cm



Plan armiranja temelja - POS TP'
MB 30, B500B, ao=2.5cm



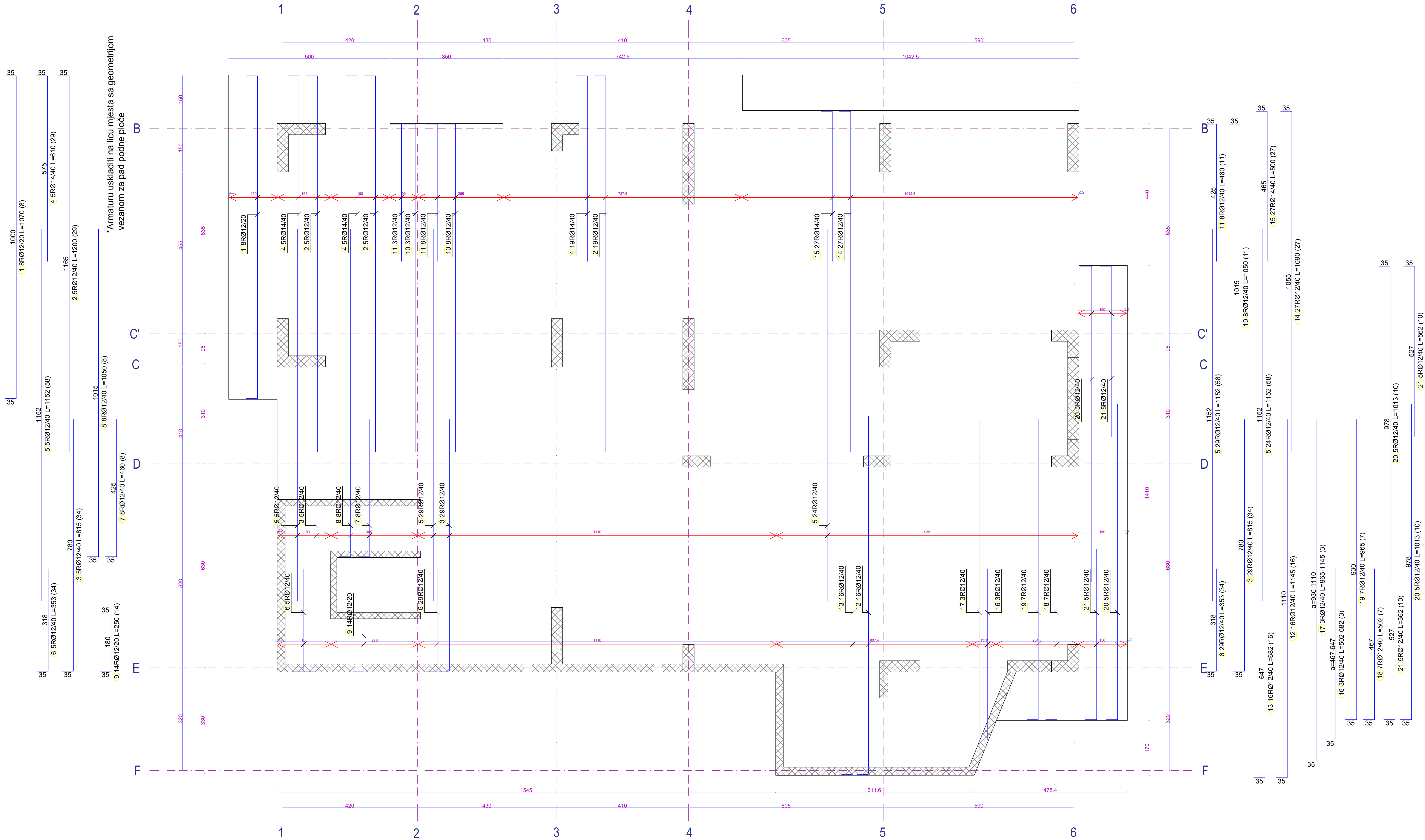
Detalj jahača za temeljnu ploču (1kom/m2)
R=1:25



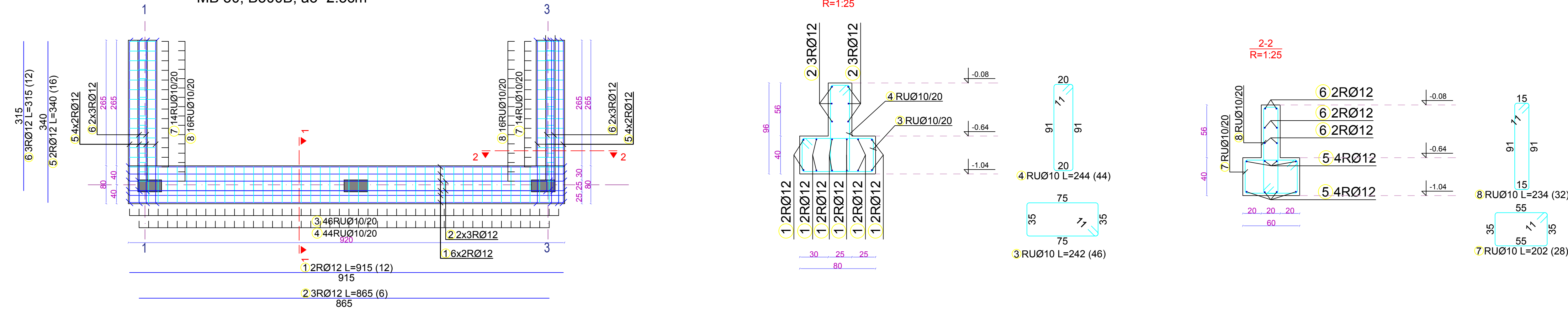
Opis - specifikacija		Ø	l ₁ [m]	n kom	gr [m]	Napomena
red.	opis i mere [mm]	POS TP - donja zona - X pravac (1 kom)				
1	8RØ12/20 L=565 (8)	12	5.65	8	45.20	
2	6RØ12/20 L=808 (6)	12	8.08	6	48.48	
3	3RØ12/20 L=960 (3)	12	9.60	3	28.80	
4	3RØ12/20 L=990 (15)	12	9.90	15	148.50	
5	43RØ12/40 L=1005 (43)	12	10.05	43	432.15	
6	22RØ12/40 L=944 (22)	12	9.44	22	207.68	
7	22RØ12/40 L=530 (22)	12	5.30	22	116.60	
8	34RØ12/40 L=919 (40)	12	9.19	40	367.60	
9	43RØ12/40 L=1200 (43)	12	12.00	43	516.00	
10	12RØ12/40 L=990 (15)	12	9.90	15	148.50	
11	32RØ12/40 L=1140 (32)	12	11.40	32	364.80	
12	36RØ12/40 L=542 (36)	12	5.42	36	195.12	
13	13RØ12/40 L=794 (19)	12	7.94	19	150.86	
14	13RØ12/40 L=380 (19)	12	3.80	19	72.20	
15	10RØ12/20 L=250 (10)	12	2.50	10	25.00	
16	5RØ12/40 L=359 (5)	12	3.59	5	17.95	
17	5RØ12/40 L=768 (5)	12	7.68	5	38.40	
18	5RØ12/40 L=1155 (5)	12	11.55	5	57.75	
19	5RØ12/40 L=710 (5)	12	7.10	5	35.50	
20	10RØ12/20 L=683-750 (10) a=613-680	12	7.17	1 x 10	71.65	
21	520RØ8	8	1.56	620	811.20	
POS TP (1 kom)						
1	8RØ12/20 L=565 (8)	14	3.45	42	144.90	
2	6RØ12/20 L=808 (6)	14	2.75	68	189.50	

PROJEKTANT: EUROZOX d.o.o. <small>Špiljska 1b DARUVAR</small>		Investitor: OPŠTINA BAR	
Objekat:	DNEVNI CENTAR ZA DJECU SA SMETNJAMA U RAZVOJU	Lokacija: UP 2286, BLOK 1-DUP "Polje Zaljevo" u Baru kp 2286, KO Polje,Bar	
Glavni inženjer	arh.Dragana Čukić, dipl.ing.	Vrsta tehnicke dokumentacije: Glavni projekat	
Odgovorni inženjer	Draško Bašović, Spec.Sci.grad.	Dio tehnicke dokumentacije: KONSTRUKCIJA	
Saradnik	Andrija Krivokapić, Spec.Sci.grad.	Prilog: Plan armiranja temelja POS TP - donja zona - X pravac i POS TP'	Br. priloga 2.1 Br. strane 299
Datum izrade i M.P.: novembar 2021		Datum revizije i M.P.:	

Plan armiranja temelja - POS TP - donja zona - Y pravac
MB 30, B500B, ao=2.5cm



Plan armiranja temeljnih traka - POS TT
MB 30, B500B, ao=2.5cm

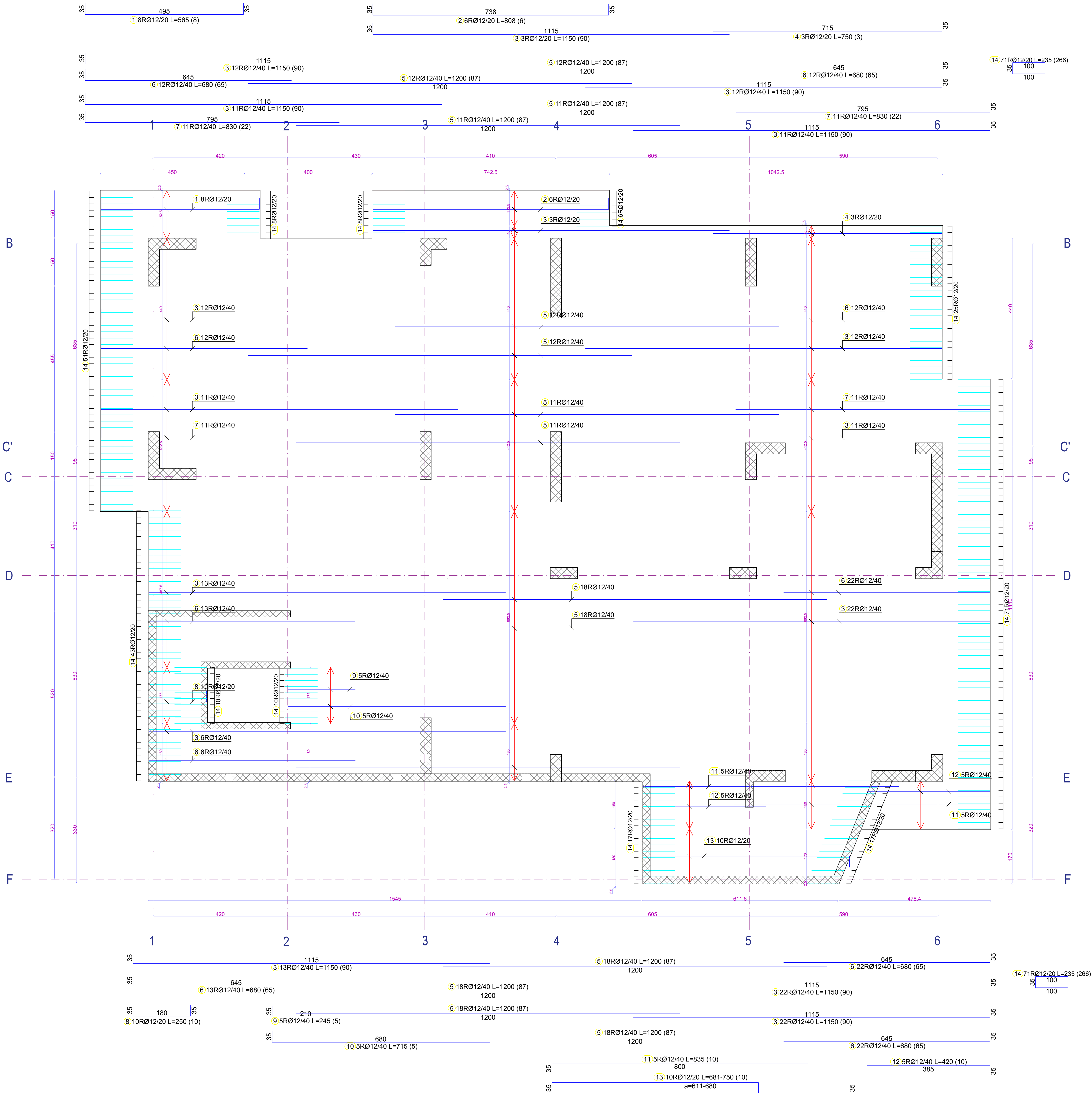


Sipke - specifikacija		ozn.	ozn. i mere (mm)	Ø	lg (m)	n (kom)	lg (m)	Napomena
POS TP - donja zona - Y pravac (1 kom)								
1		12	1000	12	10.70	8	85.80	
2		12	1152	12	12.00	29	348.00	
3		12	780	12	8.15	34	277.10	
4		14	575	14	6.10	29	176.90	
5		12	1152	12	11.52	98	698.10	
6		12	318	12	3.53	34	120.50	
7		12	425	12	4.60	8	36.80	
8		12	1015	12	10.50	8	84.00	
9		12	180	12	2.50	14	35.00	
10		12	1515	12	10.50	11	115.50	
11		12	425	12	4.60	11	50.60	
12		12	1110	12	11.45	16	183.20	
13		12	567	12	6.62	16	109.12	
14		12	1555	12	10.90	27	294.30	
15		14	465	14	5.00	27	135.00	
16		12	a	12	7.50	1 x 3	17.76	
17		12	a	12	10.55	1 x 3	31.65	
18		12	697	12	5.02	7	35.14	
19		12	830	12	8.65	7	67.55	
20		12	978	12	10.13	10	101.30	
21		12	927	12	9.62	10	96.20	

Sipke - specifikacija		ozn.	ozn. i mere (mm)	Ø	lg (m)	n (kom)	lg (m)	Napomena
POS TT (1 kom)								
1		12	915	12	9.15	12	109.80	
2		12	865	12	8.65	6	51.90	
3		10	75	10	2.42	46	111.32	
4		10	91	10	2.44	44	107.36	
5		12	360	12	3.40	16	54.40	
6		12	315	12	3.15	12	37.80	
7		10	65	10	2.02	28	56.56	
8		10	91	10	2.34	32	74.88	

PROJEKTANT: EUROZOX d.o.o. <small>Spolno DARUVAR</small>		Investitor: OPŠTINA BAR	
Objekat:	DNEVNI CENTAR ZA DJECU SA SMETNJAMA U RAZVOJU	Lokacija: UP 2286, BLOK 1-DUP "Polje Zaljevo" u Baru kp 2286, KO Polje,Bar	
Glavni inženjer	arh.Dragana Čukić, dipl.ing.	Vrsta tehnicke dokumentacije: Glavni projekat	
Odgovorni inženjer	Draško Bašović, Spec.Sci.građ.	Dio tehnicke dokumentacije: KONSTRUKCIJA	
Saradnik	Andrija Krivokapić, Spec.Sci.građ.	Prilog: Plan armiranja temelja POS TP - donja zona - X pravac i POS TT	
Datum izrade i M.P.:		Datum revizije i M.P.:	
novembar 2021		Br. priloga 2.2 Br. strane 300	

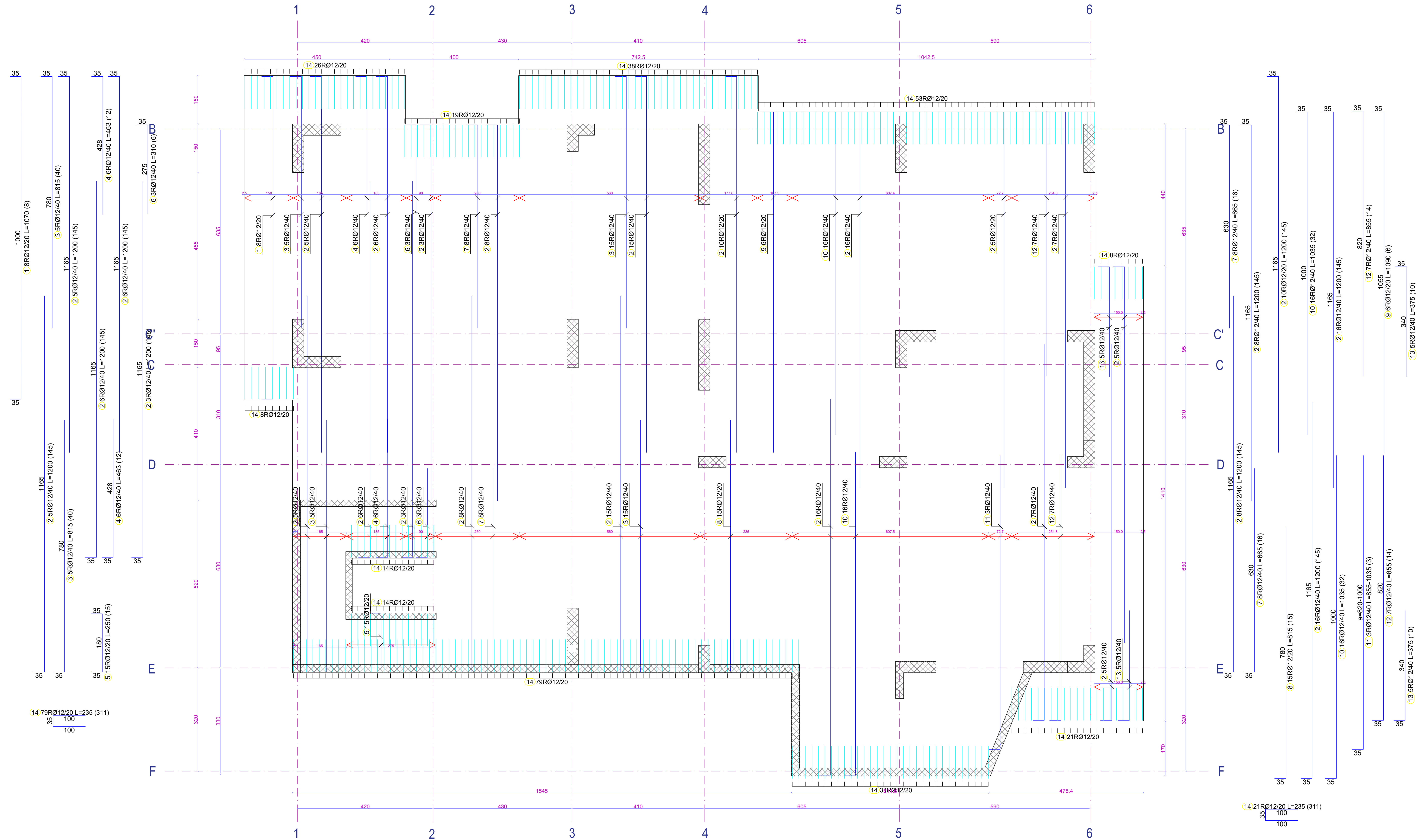
Plan armiranja temelja - POS TP - gornja zona - X pravac
MB 30, B500B, ao=2.5cm

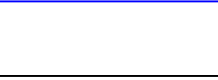
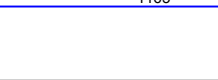
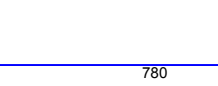
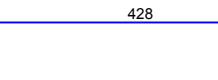

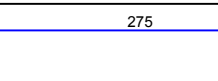
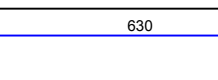
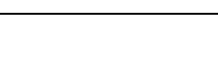
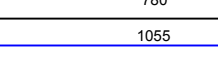
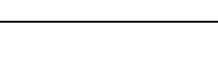
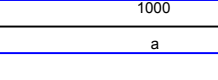
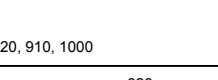
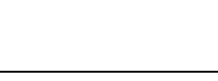
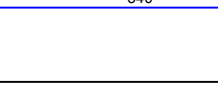


Specie - specifikacija		oznaka i mere (mm)		Ø	l ₀ (mm)	n ₀ (kom)	l ₀ n ₀ (mm)	Napomena	
red.	oznaka	POS TP - gornja zona - X pravac (1 kom)							
1	1	495	12	8	5.85	8	45.20		
2	2	738	12	6	8.08	6	48.48		
3	3	1115	12	90	11.50	90	1035.00		
4	4	715	12	3	7.05	3	21.15		
5	5	1200	12	87	12.00	87	1044.00		
6	6	645	12	65	6.80	65	442.00		
7	7	795	12	22	8.30	22	182.60		
8	8	160	12	10	2.05	10	20.50		
9	9	210	12	5	2.45	5	12.25		
10	10	680	12	5	7.15	5	35.75		
11	11	800	12	10	8.35	10	83.50		
12	12	385	12	10	4.20	10	42.00		
13	13	6	12	1 x 10	7.15	10	71.50		
14	14	100	12	266	2.35	266	625.10		

PROJEKTANT: EUROZOX d.o.o. <small>Špiljska 10 DARUVAR</small>		Investitor: OPŠTINA BAR	
Objekat:	DNEVNI CENTAR ZA DJECU SA SMETNOSTIMA U RAZVOJU	Lokacija: UP 2286, BLOK 1-DUP "Polje Zlatjevo" u Baru op. 2286, KO Polje Bar	
Glavni inženjer	arh. Dragana Čukić, dipl.ing.	Vrsta tehničke dokumentacije: Glavni projekat	
Odgovorni inženjer	Draško Bašović, Spec.Sci.građ.	Dio tehničke dokumentacije: KONSTRUKCIJA	
Saradnik	Andrija Krivokapić, Spec.Sci.građ.	Prilog: Plan armiranja temelja POS TP gornja zona - X pravac	Br. priloga 2.3 Br. strane 301
Datum izrade i M.P.: novembar 2021		Datum revizije i M.P.:	

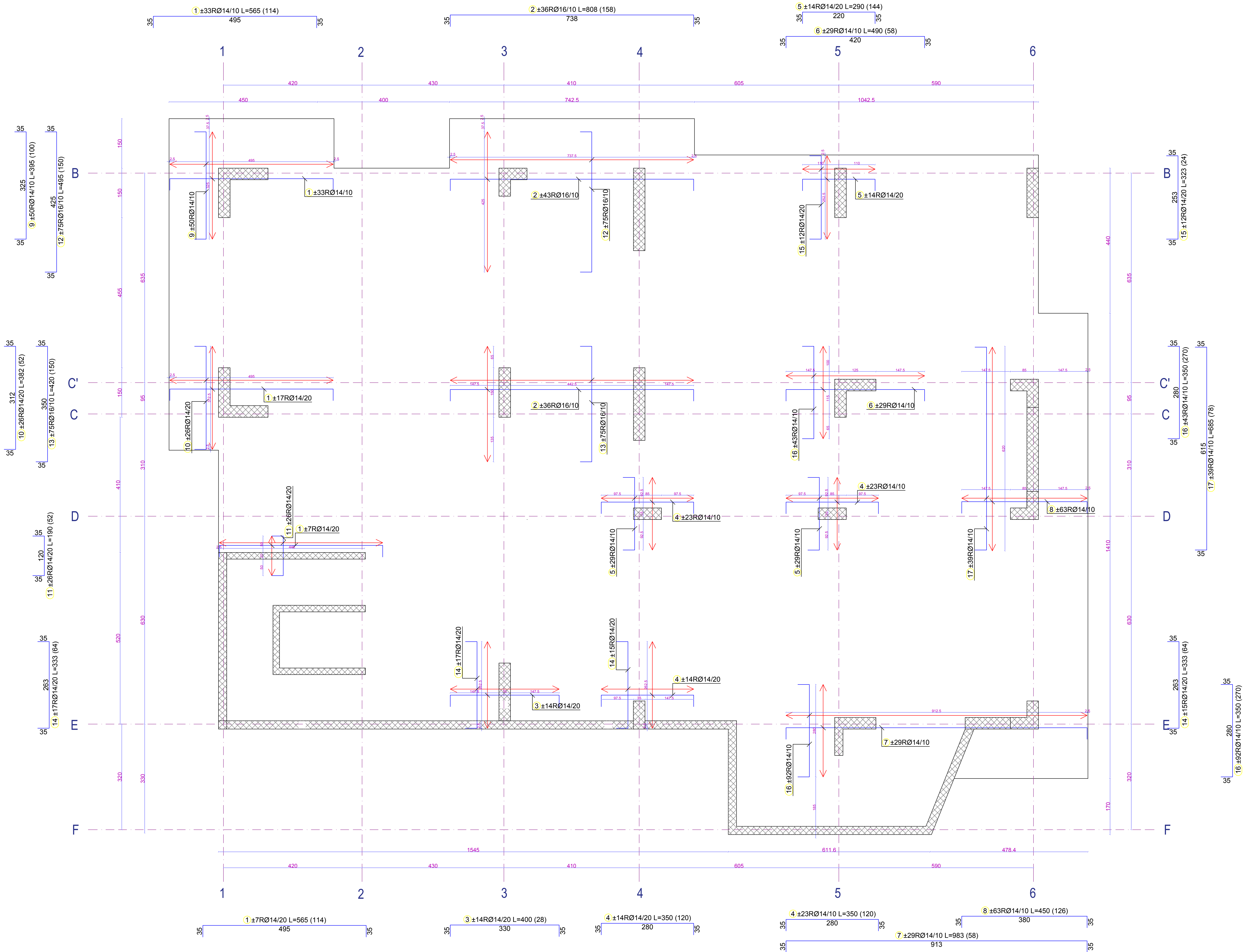
Plan armiranja teme
MB 30, B500B, $a_o=2.5\text{cm}$



Baza - specifikacija		Ø	lg [m]	s [mm]	lg [m]	Napomena
ostaci [mm]						
POG TP - grnja zone - Y pravci (7 kom)						
1		12	10.70	8	85.80	
2		12	12.00	145	1740.00	
3		12	8.15	40	326.00	
4		12	4.63	12	55.56	
5		12	2.60	15	37.50	
6		12	3.10	6	18.60	
7		12	6.65	16	106.40	
8		12	8.15	10	122.25	
9		12	10.80	6	65.40	
10		12	10.35	32	331.20	
11	 s = 820, 910, 1000	12	7.45	1 x 5	28.20	
12		12	8.55	14	119.70	
13		12	3.75	10	37.50	
14		12	2.35	311	730.80	

PROJEKTANT: EUROZOX d.o.o. <small>Sputnik DANILOVGRAD</small>		Investitor: OPŠTINA BAR	
Lokacija: UP 2286, BLOK 1-DUP "Polje Zeljevo" u Baru <small>bp 2286, Ko Polje,Bar</small>			
Objekat: DNEVNI CENTAR ZA DJECU SA SMETNOSTIMA U RAZVOJU	arh.Dragana Čukić, dipl.ing.	Vrsta tehničke dokumentacije:	Glavni projekat
Glavni inženjer	arh.Dragana Čukić, dipl.ing.	Dio tehničke dokumentacije:	KONSTRUKCIJA
Odgovorni inženjer	Draško Bašović, Spec.Sci.građ.	Prilog:	R=1:50 <small>Br. priloga</small>
Saradnik	Andrija Krivokapić, Spec.Sci.građ.	Plan armiranja temelja POS TP gornja zona - V pravac	2.4 <small>Br. strane</small>
Datum izrade i M.P.: novembar 2021		Datum revizije i M.P.:	

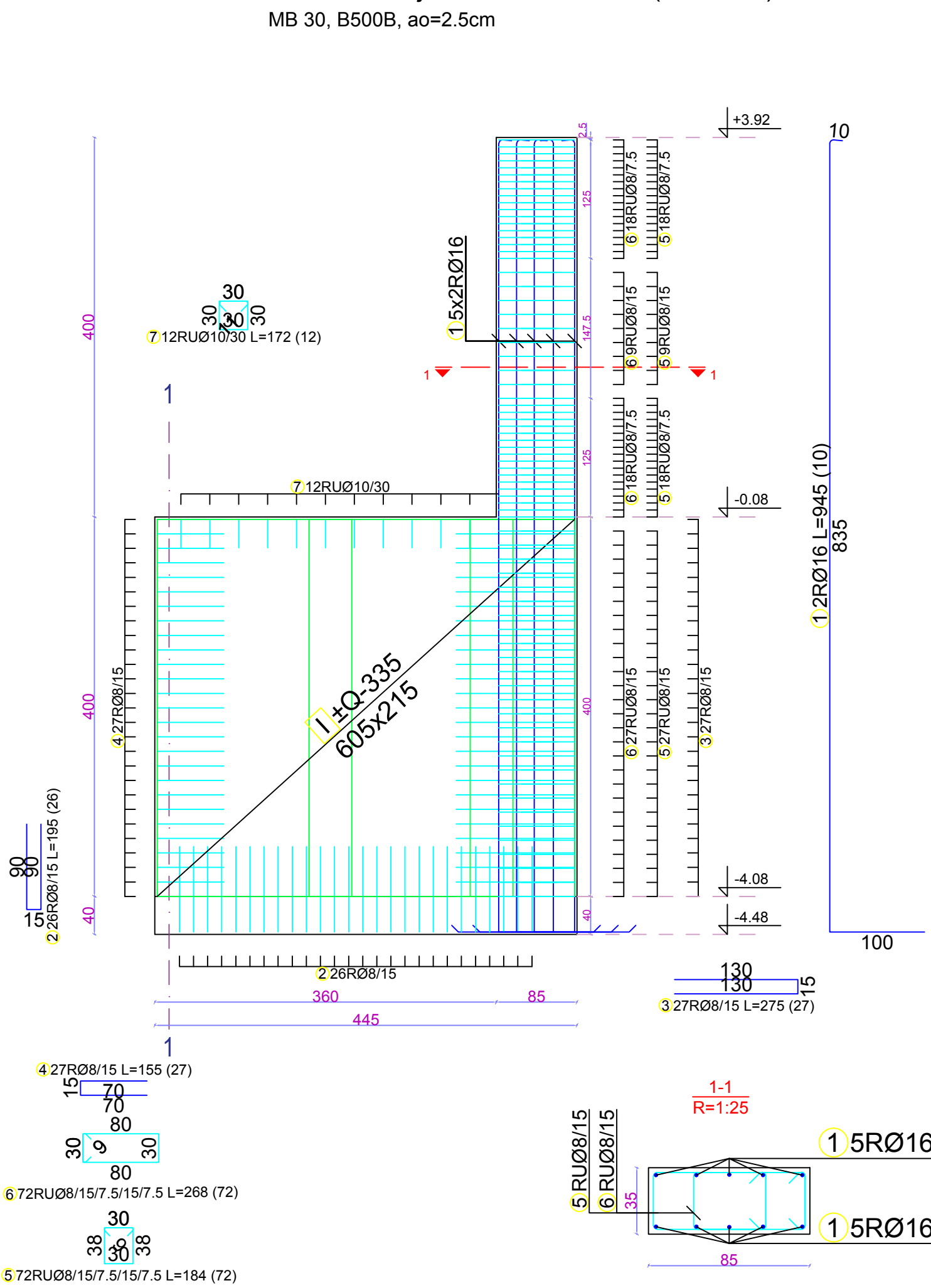
Plan armiranja temelja - POS TP - dodatna armatura
MB 30, B500B, ao=2.5cm



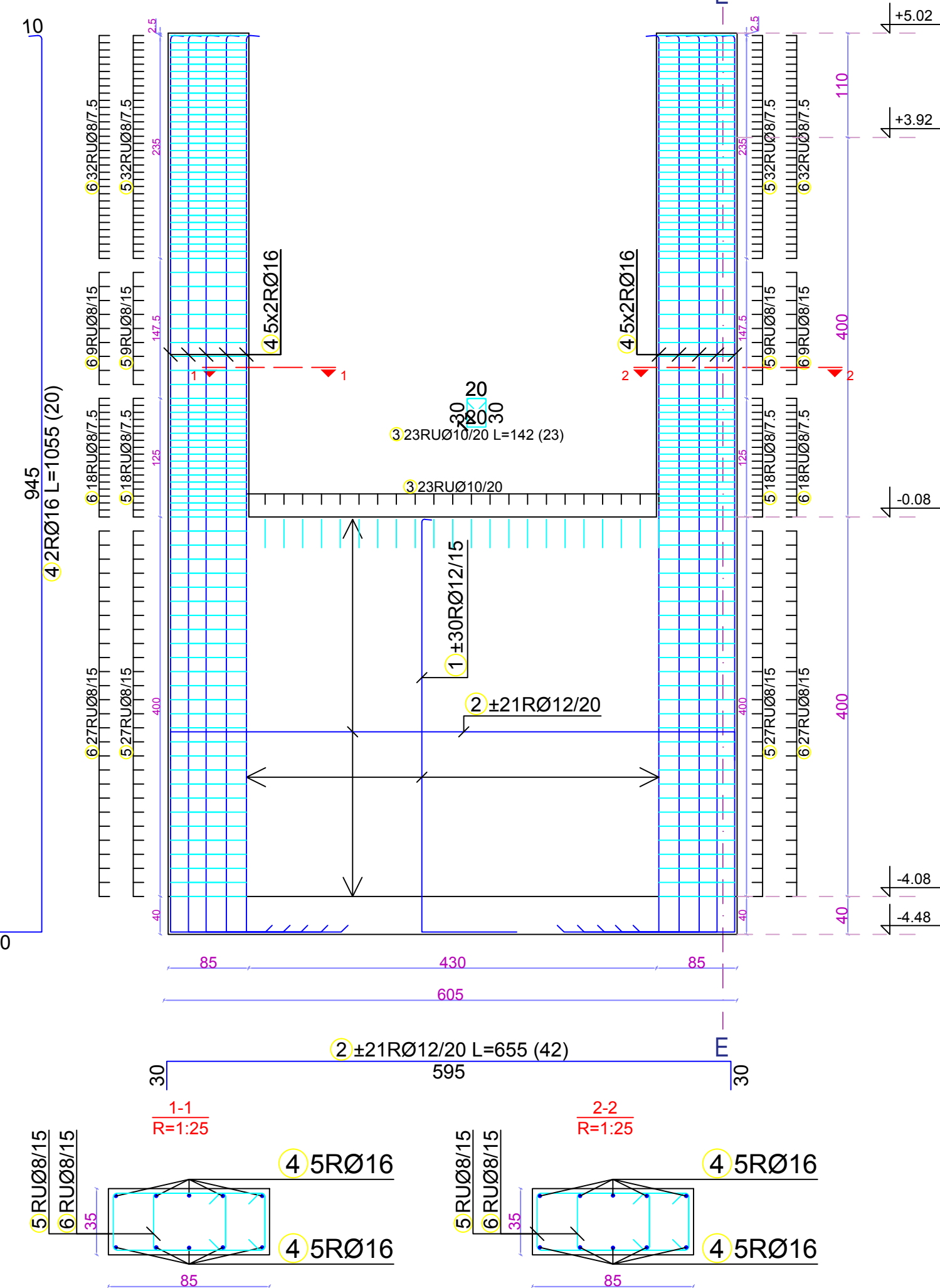
Tip: specifikacija		ozn.	ozn. i mere [cm]	Ø	lg [m]	n [kom]	lgm [m]	Napomena
POS TP - dodatna armatura (1 kom)								
1			495	14	5.65	114	644.10	
2			738	16	8.08	158	1276.64	
3			330	14	4.00	28	112.00	
4			280	14	3.50	120	420.00	
5			220	14	2.90	144	417.60	
6			420	14	4.90	58	284.20	
7			913	14	9.83	58	570.14	
8			380	14	4.50	126	567.00	
9			305	14	3.95	100	395.00	
10			312	14	3.82	52	198.64	
11			120	14	1.90	52	98.80	
12			425	16	4.95	150	742.50	
13			350	16	4.20	150	630.00	
14			255	14	3.33	64	213.12	
15			253	14	3.20	24	77.20	
16			280	14	3.50	270	945.00	
17			615	14	6.85	78	534.30	

PROJEKTANT: EUROZOX d.o.o. <small>Špiljska 1b DARUVAR</small>		Investitor: OPŠTINA BAR	
Objekat:	DNEVNI CENTAR ZA DJECU SA SMETNJAMA U RAZVOJU	Lokacija: UP 2286, BLOK 1-DUP "Polje Zaljevo" u Baru kp 2286, KO Polje,Bar	
Glavni inženjer	arh.Dragana Čukić, dipl.ing.	Vrsta tehnicke dokumentacije:	Glavni projekat
Odgovorni inženjer	Draško Bašović, Spec.Sci.grad.	Dio tehnicke dokumentacije:	KONSTRUKCIJA
Saradnik	Andrija Krivokapić, Spec.Sci.grad.	Prilog: Plan armiranja temelja POS TP dodatna armatura	Bir. priloga 2.5 Bil. strane 303
Datum izrade i M.P.: novembar 2021		Datum revizije i M.P.:	

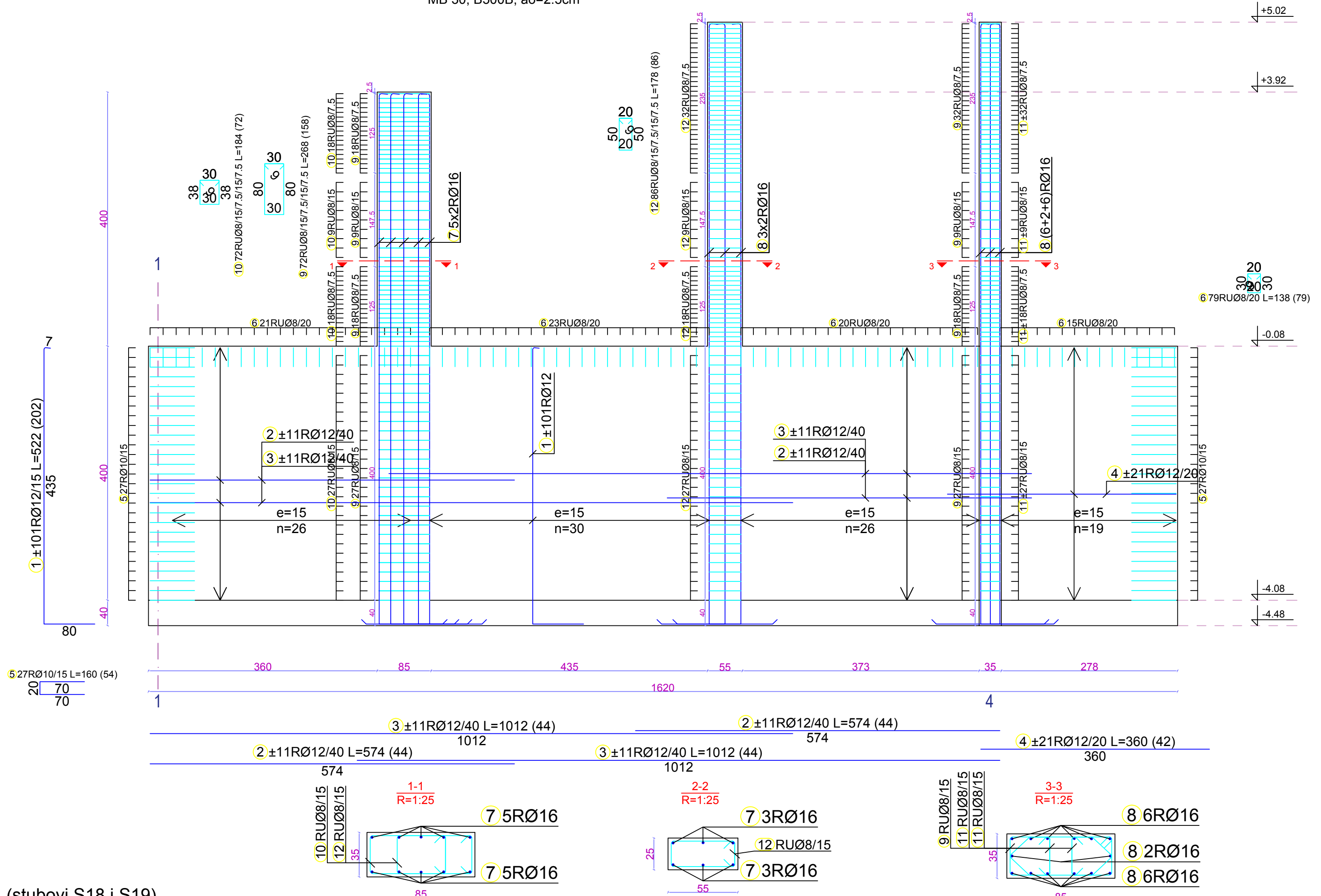
Plan armiranja zida - POS ZP10 (stub S11)
MB 30, B500B, ao=2.5cm



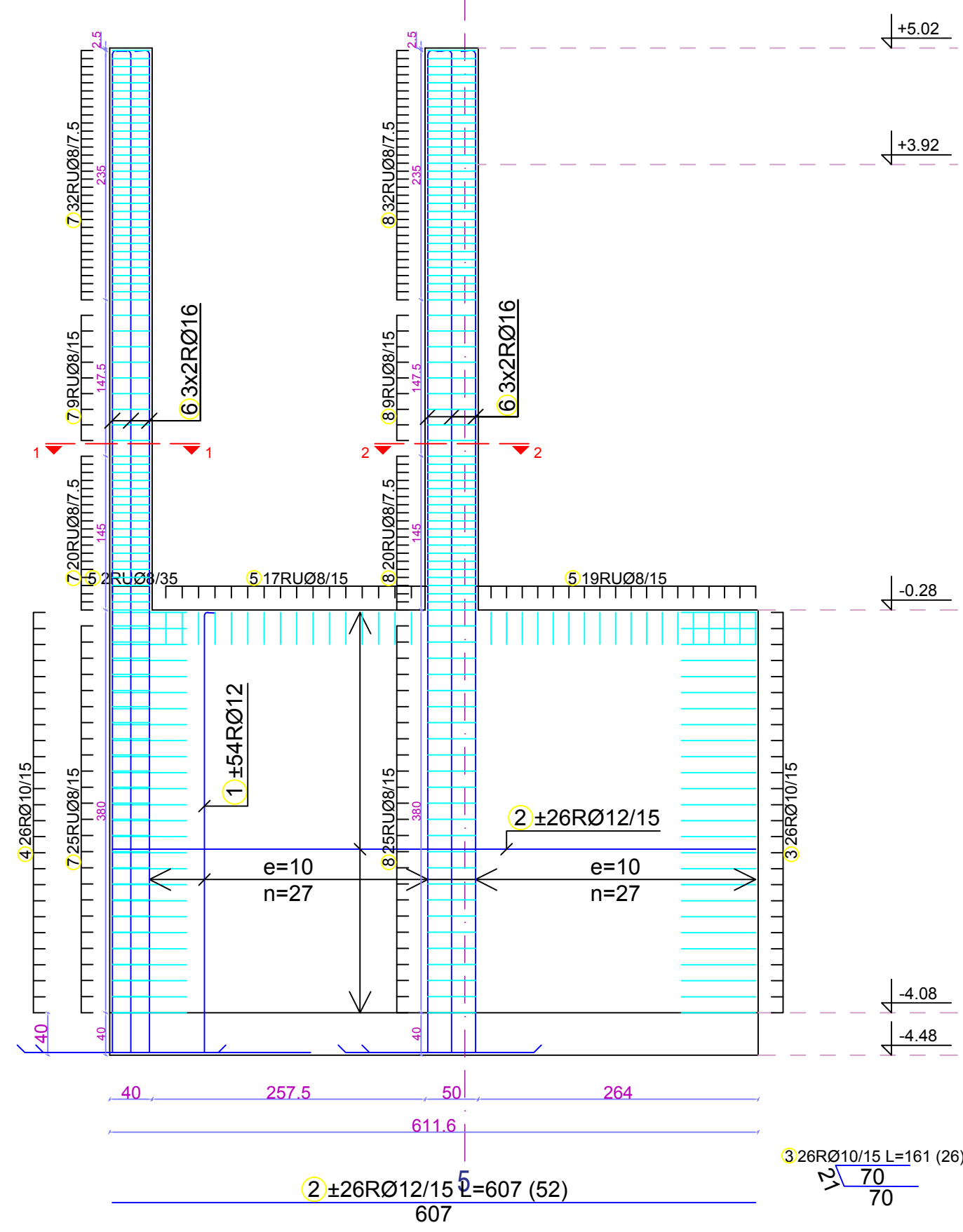
Plan armiranja zida - POS ZP11 (stubovi S10,S12)
MB 30, B500B, ao=2.5cm



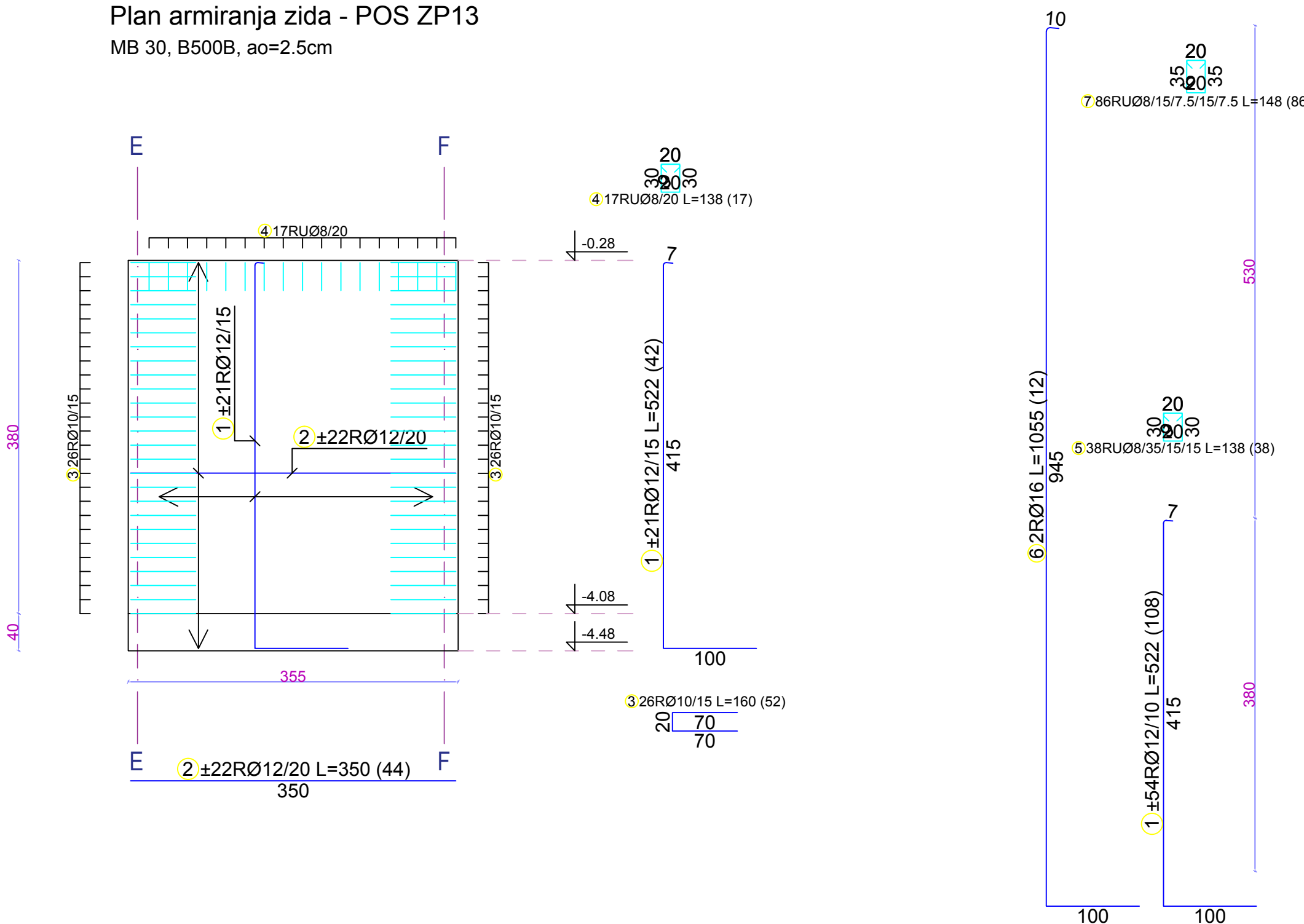
Plan armiranja zida - POS ZP12 (stubovi S13,S14,S7)
MB 30, B500B, ao=2.5cm



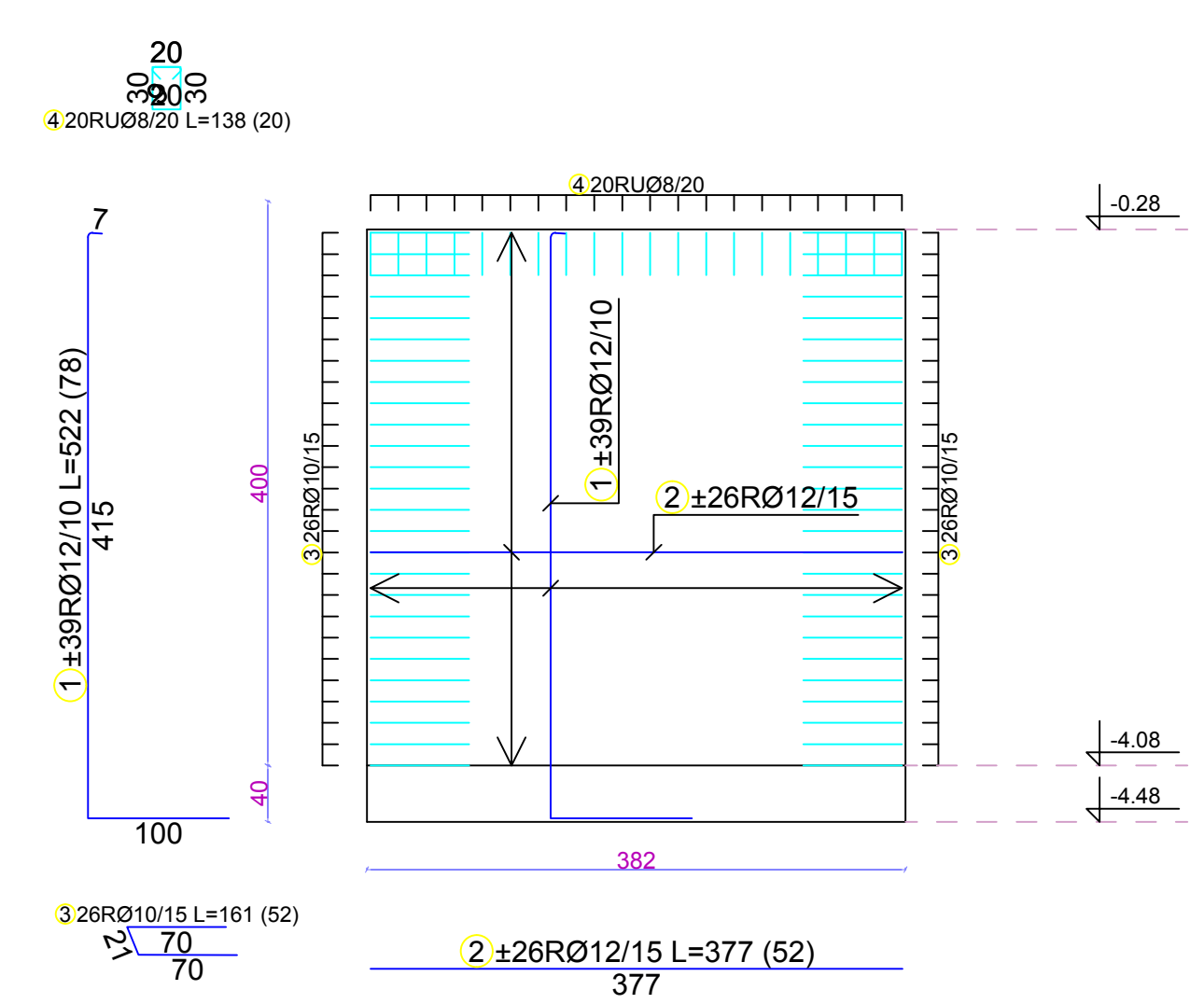
Plan armiranja zida - POS ZP14 (stubovi S18 i S19)
MB 30, B500B, ao=2.5cm



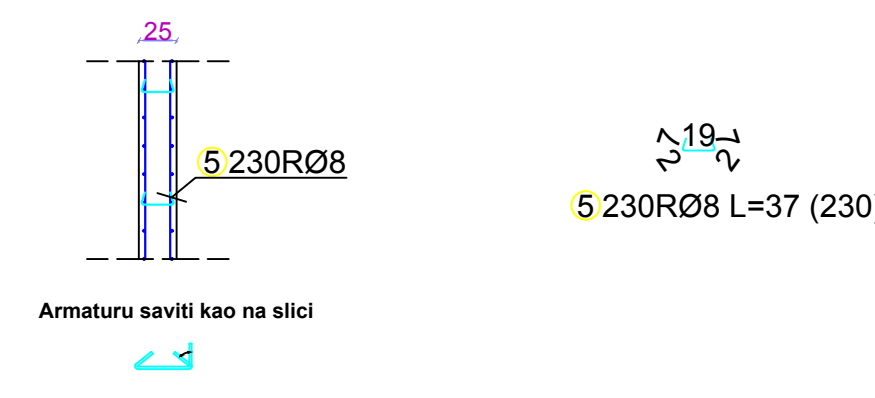
Plan armiranja zida - POS ZP13
MB 30, B500B, ao=2.5cm



Plan armiranja zida - POS ZP15
MB 30, B500B, ao=2.5cm



Detalj postavljanja C-ovki (2kom/m2)
R=1:50

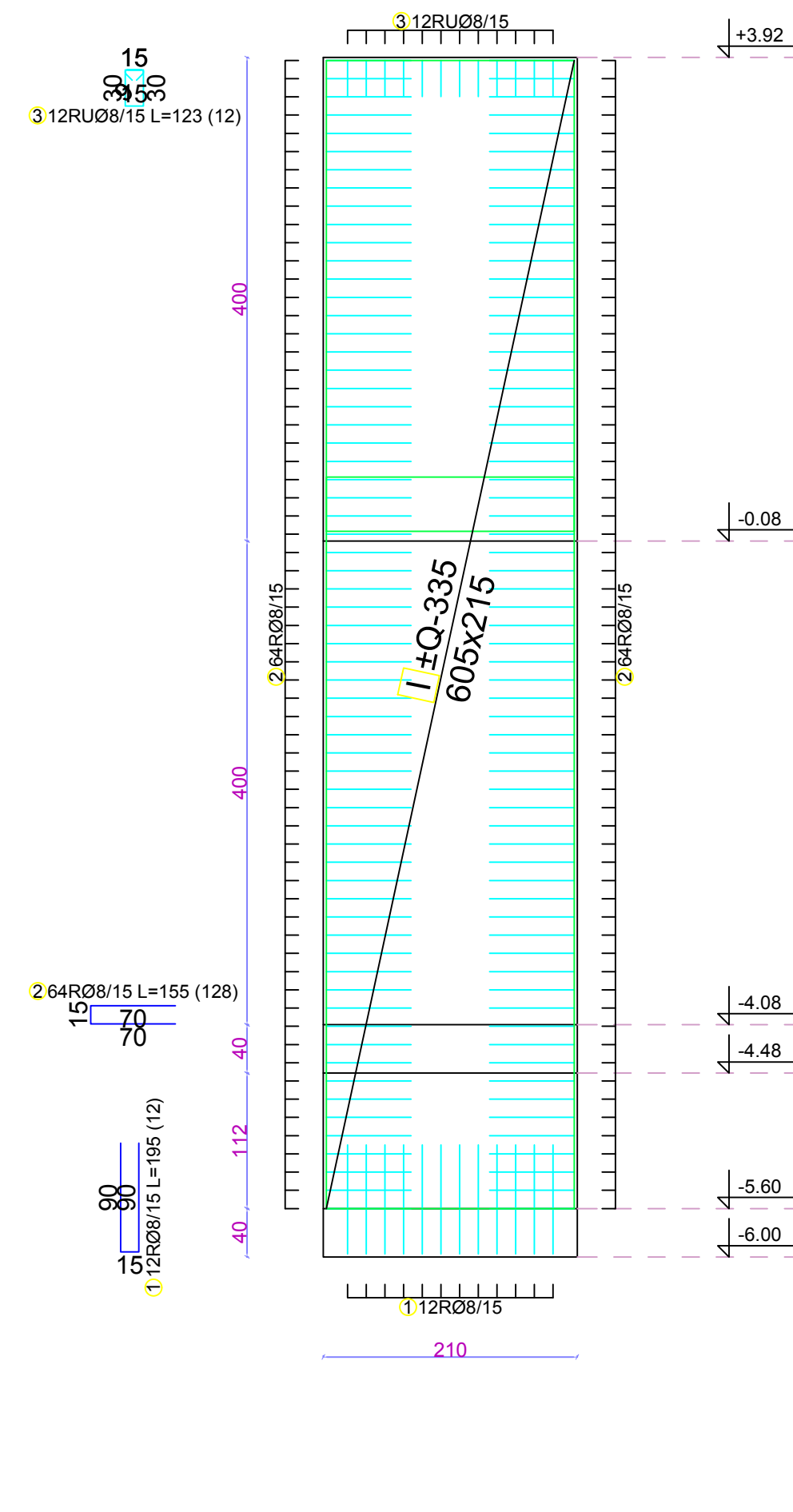


Opis - specifikacija	Q	M	V	W	Napomena
POS ZP10 (pos S11) (1 kom)					
1. 1.2RØ12/15 L=172 (12)	16	9.45	10	94.50	
2. 1.5RØ16	8	1.50	20	50.70	
3. 1.5RØ16	8	2.70	27	74.25	
4. 1.5RØ16	8	1.50	27	41.85	
5. 1.5RØ16	8	1.84	72	132.48	
6. 1.5RØ16	8	2.66	72	192.96	
7. 1.5RØ16	10	1.72	12	20.64	
POS ZP11 (pos S10, S12) (1 kom)					
1. 1.2RØ12/15 L=172 (12)	12	5.42	60	325.20	
2. 1.5RØ16	12	6.60	42	278.10	
3. 1.5RØ16	10	1.42	23	32.66	
4. 1.5RØ16	16	10.50	20	211.00	
5. 1.5RØ16	8	2.66	172	460.96	
6. 1.5RØ16	8	1.84	172	316.48	
POS ZP12 (pos S13, S14, S7) (1 kom)					
1. 1.2RØ12/15 L=172 (12)	12	5.22	202	1054.44	
2. 1.5RØ16	12	5.74	44	292.80	
3. 1.5RØ16	12	10.12	44	448.32	
4. 1.5RØ16	12	3.60	42	151.20	
5. 1.5RØ16	10	1.50	54	86.40	
6. 1.5RØ16	8	1.36	70	100.02	
7. 1.5RØ16	16	9.45	10	94.50	
8. 1.5RØ16	16	10.50	20	211.00	
9. 1.5RØ16	8	2.66	100	423.44	
10. 1.5RØ16	8	1.84	72	132.48	
11. 1.5RØ16	8	1.54	172	264.88	
12. 1.5RØ16	8	1.70	86	153.08	
POS ZP13 (1 kom)					
1. 1.2RØ12/15 L=172 (12)	12	5.22	42	219.24	
2. 1.5RØ16	12	3.50	44	154.00	
3. 1.5RØ16	10	1.60	52	83.20	
4. 1.5RØ16	8	1.36	17	23.46	
POS ZP14 (pos S18, S19) (1 kom)					
1. 1.2RØ12/15 L=172 (12)	12	5.22	108	565.76	
2. 1.5RØ16	12	6.07	52	316.64	
3. 1.5RØ16	10	1.61	20	41.86	
4. 1.5RØ16	10	1.60	26	41.60	
5. 1.5RØ16	8	1.36	30	52.44	
6. 1.5RØ16	16	10.50	12	126.00	
7. 1.5RØ16	8	1.44	60	127.20	
8. 1.5RØ16	8	1.66	60	144.48	
POS ZP15 (1 kom)					
1. 1.2RØ12/15 L=172 (12)	12	5.22	78	407.16	
2. 1.5RØ16	12	3.77	52	190.04	
3. 1.5RØ16	10	1.61	52	83.72	
4. 1.5RØ16	8	1.36	20	27.80	
5. 1.5RØ16	8	0.37	230	85.10	

*U TOKU IZVOĐENJA MOGUĆE UKIDANJE 50%ARMATURE U PRESJEKU
PA NASTAVAK PROPISANIM PREKLAPOM L=500

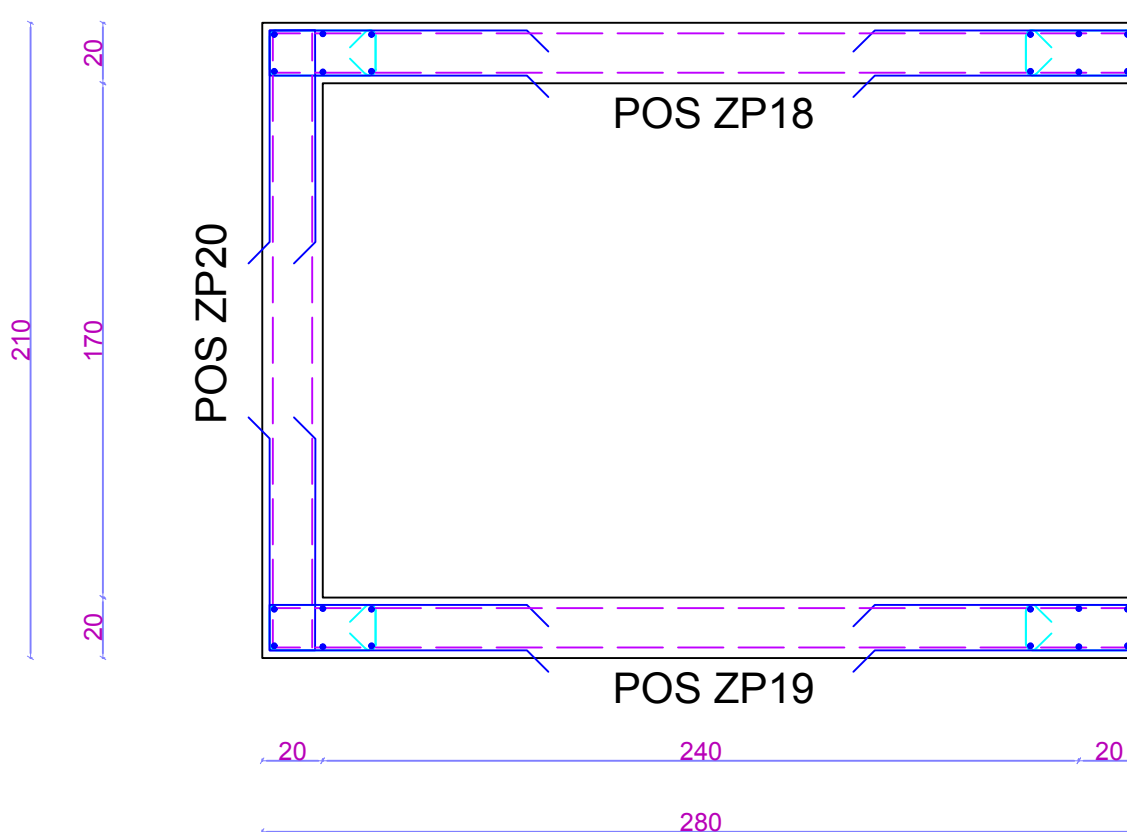
PROJEKTANT: EUROZOX d.o.o. Sput bb DARUVAR	Investitor: OPŠTINA BAR
Objekat: DNEVNI CENTAR ZA DJECU SA SMETNOSTIMA U RAZVOJU	Lokacija: UP 2286, BLOK 1-DUP "Polje Zaljevo" u Baru kp 2286, KO Polje,Bar
Glavni inženjer arh.Dragana Čukić, dipl.ing.	Vrsta tehničke dokumentacije: Glavni projektat
Odgovorni inženjer Draško Bašović, Spec.Sci.građ.	Dio tehničke dokumentacije: KONSTRUKCIJA
Saradnik Andrija Krivokapić, Spec.Sci.građ.	Prilog: Plan armiranja zidnih platana POS ZP 10,11,12,13,14,15 i stubova POS S7,10,11,12,13,14,15,19
Datum izrade i M.P.:	Datum revizije i M.P.:
novembar 2021	

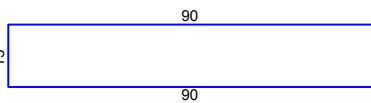
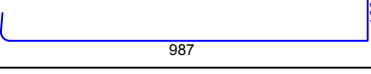
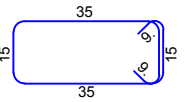
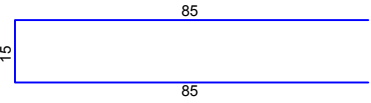
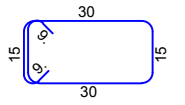
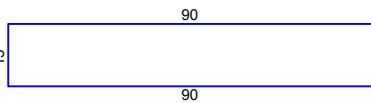
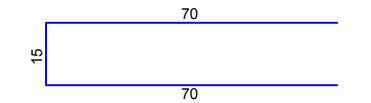
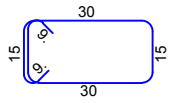
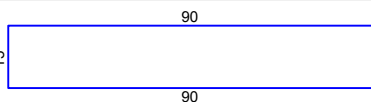
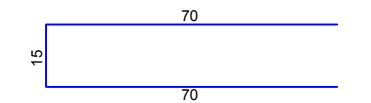
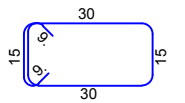
Plan armiranja zidova - POS ZP18
MB 30, B500B, $a_o=2.5\text{cm}$



Technical drawing of a square plate with dimensions and tolerances:

- Top horizontal dimension: 312R08/15 (tolerance: +0.08 / -0.15)
- Right vertical dimension: 211R08/15 (tolerance: +0.08 / -0.15)
- Bottom horizontal dimension: 112R08/15 (tolerance: +0.08 / -0.15)
- Left vertical dimension: 211R08/15 (tolerance: +0.08 / -0.15)
- Overall horizontal dimension: 210
- Overall vertical dimension: 210
- Internal diagonal dimension: 110 ±0.335 (tolerance: +0.335 / -0.335)
- Internal horizontal dimension: 605 ±0.215 (tolerance: +0.215 / -0.215)
- Internal vertical dimension: 605 ±0.215 (tolerance: +0.215 / -0.215)
- Top right corner dimensions: -4.08 and -4.48
- Bottom right corner dimensions: -5.60 and -6.00



Šipke - specifikacija						
ozn.	oblik i mere [mm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
POS ZP16, ZP7 (2 kom)						
1		8	1.95	30	58.50	
2		16	10.97	24	263.28	
3		8	1.33	256	340.48	
4		8	1.85	256	473.60	
5		8	1.23	30	36.90	
POS ZP18 (1 kom)						
1		8	1.95	12	23.40	
2		8	1.55	128	198.40	
3		8	1.23	12	14.76	
POS ZP19 (1 kom)						
1		8	1.95	12	23.40	
2		8	1.55	22	34.10	
3		8	1.23	12	14.76	

*U TOKU IZVOĐENJA MOGUĆE UKIDANJE 50%ARMATURE U PRESJEKU
PA NASTAVAK PROPISANIM PREKLOPOM L=50Ø

PROJEKTANT: EUROZOX d.o.o. Spul bb DANILOVGRAD		Investitor: OPŠTINA BAR	
Objekat:	DNEVNI CENTAR ZA DJECU SA SMETNJAMA U RAZVOJU	Lokacija: UP 2286, BLOK 1-DUP "Polje Zaljevce" u Baru kp 2286, KO Polje,Bar	
Glavni inženjer		Vrsta tehnicke dokumentacije: Glavni projekat	
Odgovorni inženjer	Draško Bašović, Spec.Sci.građ.	Dio tehnicke dokumentacije:	KONSTRUKCIJA R=1:50
Saradnik	Andrija Krivokapić, Spec.Sci.građ.	Prilog: Plan armiranja zidova POS ZP 16,17,18,19	Bir. priloga 2.7 Br. strane 305
Datum izrade i M.P: novembar 2021		Datum revizije i M.P:	

MB 30, B500B, $a_0=2.5\text{cm}$

Structural drawing of a reinforced concrete slab (R20) showing dimensions, reinforcement details, and elevation.

Dimensions:

- Overall length: 945
- Overall width: 120
- Slab thickness: 400
- Reinforcement spacing: 125, 150, 150.0, 107.5, 2.5

Reinforcement Details:

- Top reinforcement (left side): 4.18RUØ8/7.5, 3.18RUØ8/7.5, 2.18RUØ8/7.5
- Top reinforcement (right side): 4.9RUØ8/15, 3.9RUØ8/15, 2.9RUØ8/15
- Bottom reinforcement (left side): 4.32RUØ8/7.5, 3.32RUØ8/7.5, 2.32RUØ8/7.5
- Bottom reinforcement (right side): 5.18RUØ8/7.5, 5.9RUØ8/15, 5.32RUØ8/7.5

Elevation Points:

- 4.48
- 4.08
- 0.08
- +3.92
- +4.42
- +5.02

Technical drawing of a bridge deck cross-section showing reinforcement details. The drawing includes a central concrete deck with a width of 605x118 mm, reinforced with 1-4 bars (top) and 1-3 bars (bottom). The deck is supported by two 400 mm wide abutments. The total width of the bridge is 165 mm. The drawing also shows the reinforcement layout for the abutments, including 11 bars (top) and 10 bars (bottom) for the left abutment, and 7 bars (top) and 8 bars (bottom) for the right abutment. The drawing is labeled with dimensions and reinforcement details.

Technical drawing of a mechanical part, likely a bracket or support, showing dimensions and material specifications.

Dimensions:

- Overall height: 150
- Overall width: 165
- Top flange width: 35

Material Specifications (Top Flange):

- Left side: 1 8RØ20
- Middle: 1 2RØ20
- Right side: 1 8RØ20

Material Specifications (Main Body):

- Top: I Q-335
- Bottom: I Q-335

Material Specifications (Bottom Flange):

- Left side: 9 RØ8/15
- Middle: 8 RUØ8/15
- Right side: 9 RØ8/15

Material Specifications (Top Flange - Alternative):

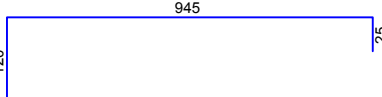
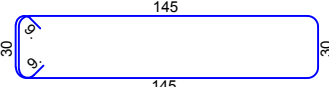
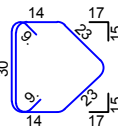

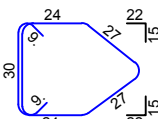
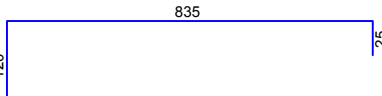


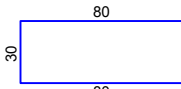
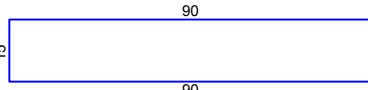
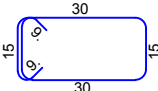
- Left side: 5 RUØ8/15
- Middle: 4 RUØ8/15
- Right side: 3 RUØ8/15

Material Specifications (Bottom Flange - Alternative):

- Left side: 2 RUØ8/15
- Middle: 7 RUØ8/15
- Right side: 2 RUØ8/15

$$\frac{1-1}{R=1:25}$$

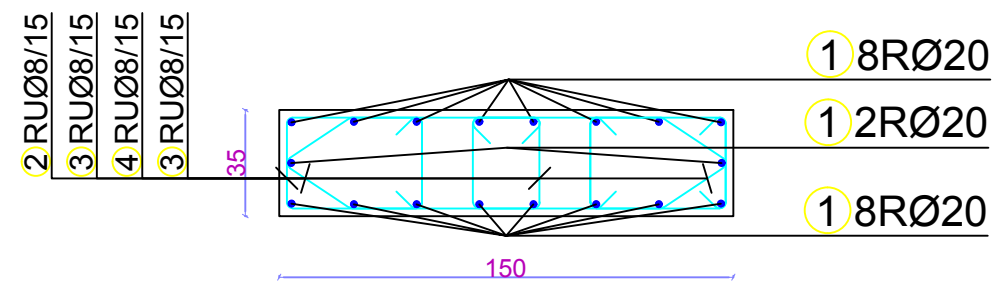
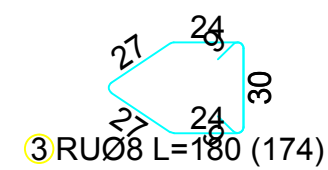
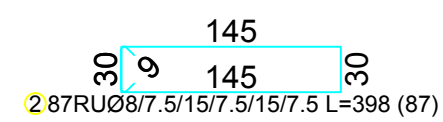
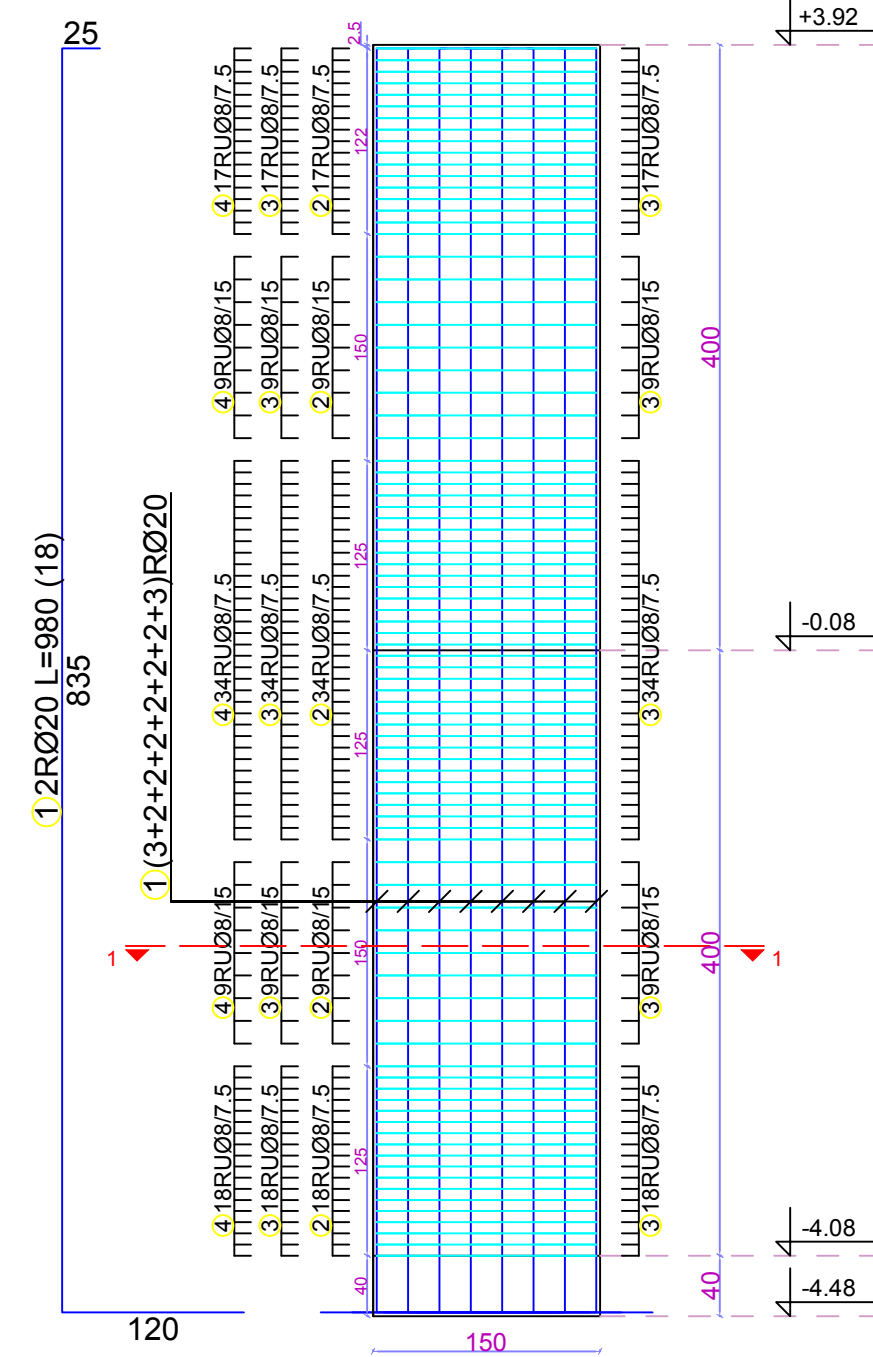
Diagram of a U-bend with dimensions: 80, 80, 30, and 9 RØ8 L=190 (108).

Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
POS S20(ZP1), S21(ZP2) (2 kom)						
1		20	10.90	36	392.40	
2		8	3.98	204	811.92	
3		8	1.52	204	310.08	
4		8	1.44	204	293.76	
5		8	1.80	204	367.20	
6		20	9.80	16	156.80	
7		8	1.68	108	181.44	
8		8	1.28	108	138.24	
9		8	1.90	216	410.40	
10		8	1.95	18	35.10	
11		8	1.23	18	22.14	

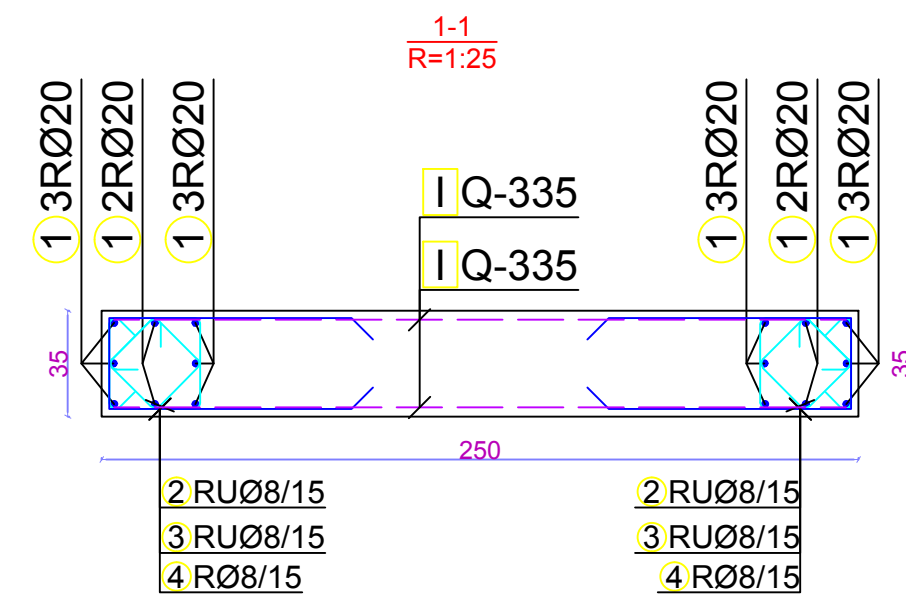
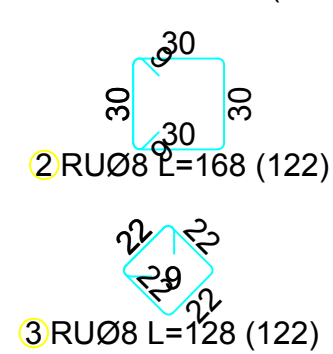
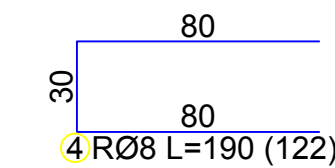
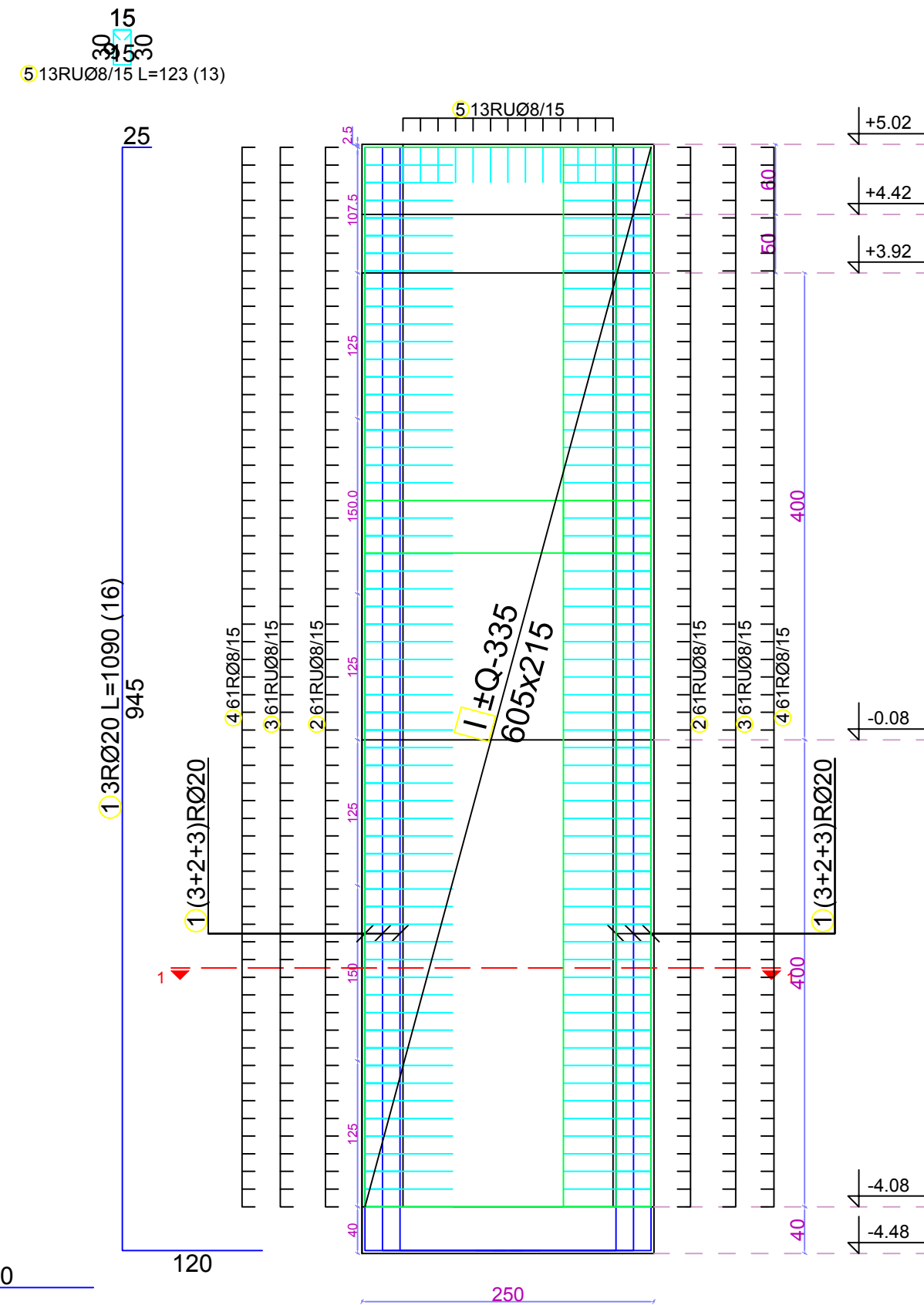
*U TOKU IZVOĐENJA MOGUĆE UKIDANJE 50%ARMATURE U PRESJEKU
PA NASTAVAK PROPISANIM PREKLOPOM L=50Ø

PROJEKTANT: EUROZOX d.o.o. <small>Spuž bb DANILOVGRAD</small>		Investitor: OPŠTINA BAR	
Objekat:	DNEVNI CENTAR ZA DJECU SA SMETNJAMA U RAZVOJU	Lokacija: UP 2286, BLOK 1-DUP "Polje Zaljevo" u Baru kp 2286, KO Polje,Bar	
Glavni inženjer	arh.Dragana Čukić, dipl.ing.	Vrsta tehnicke dokumentacije:	Glavni projekat
Odgovorni inženjer	Draško Bašović, Spec.Sci.građ.	Dio tehnicke dokumentacije:	KONSTRUKCIJA R=1:50
Saradnik	Andrija Krivokapić, Spec.Sci.građ.	Prilog: Plan armiranja stubova POS S20 i S21 i zidova POS ZP1 i ZP2	Br. priloga 2.8 Br. strane 306
Datum izrade i M.P: novembar 2021		Datum revizije i M.P:	

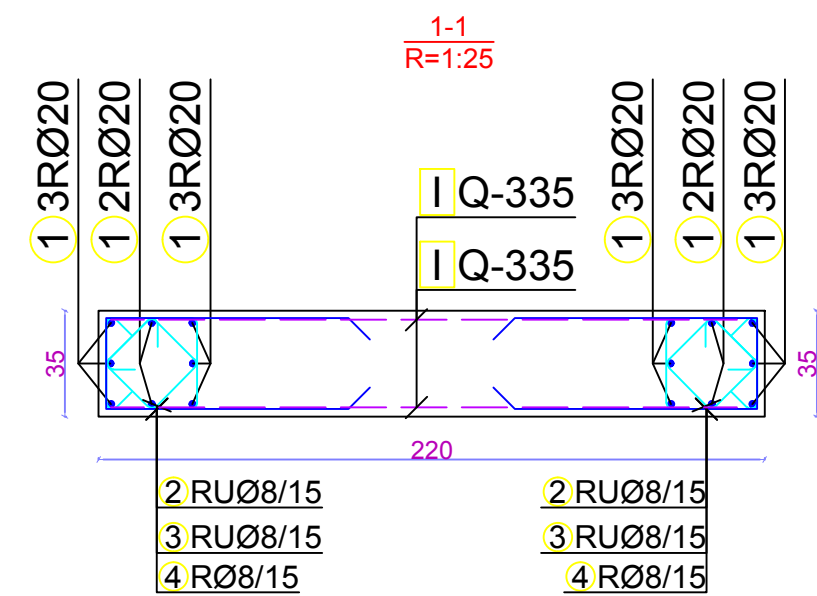
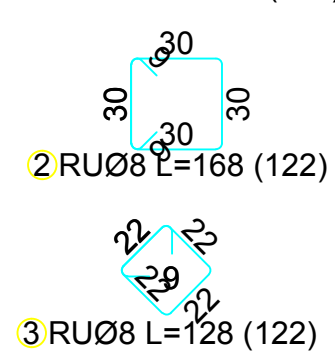
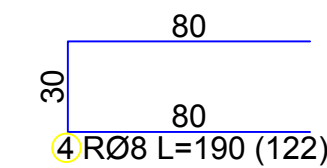
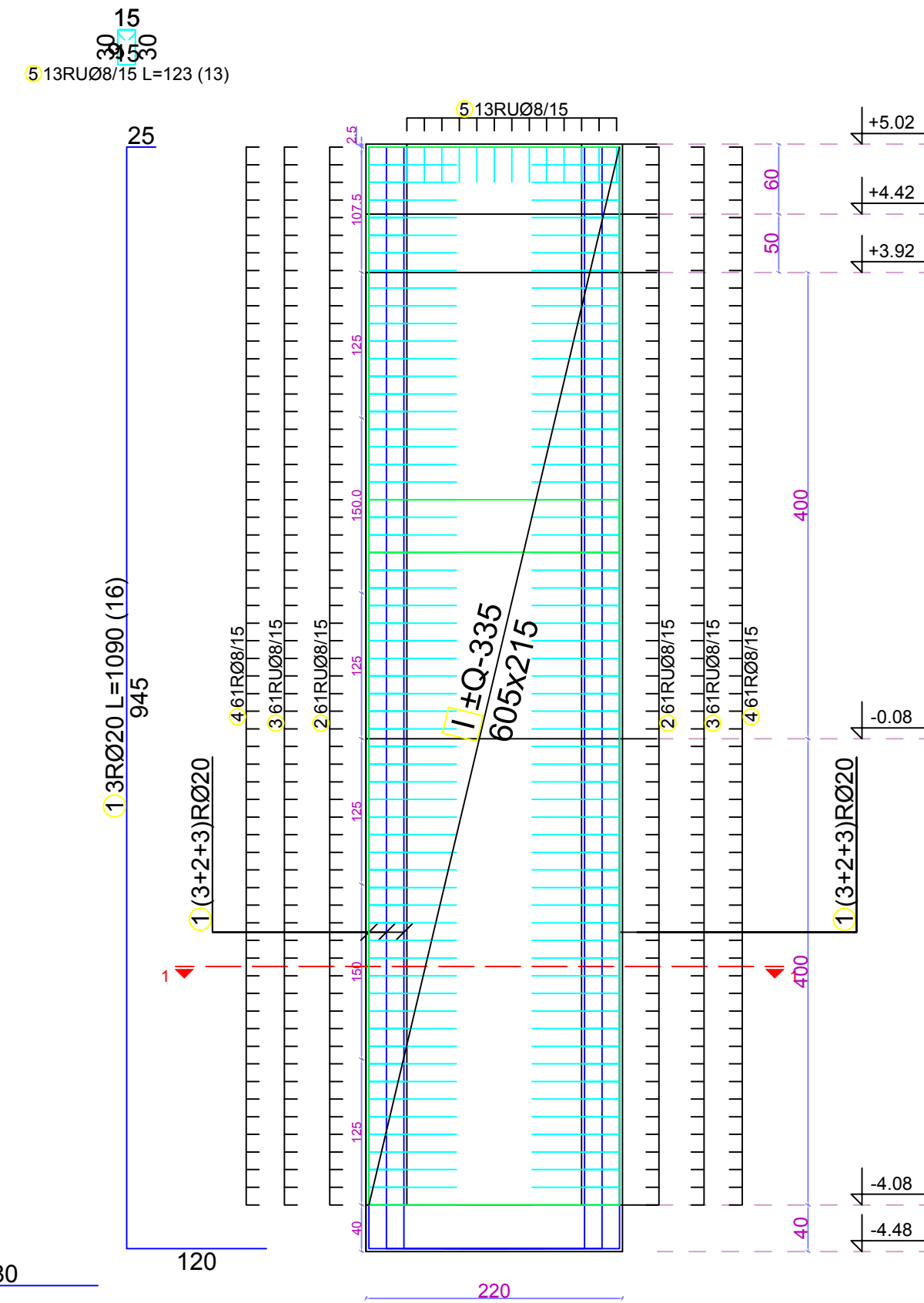
MB 30, B500B, $a_o=2.5\text{cm}$



MB 30, B500B, ao=2.5cm



MB 30, B500B, ao=2.5cm



Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	l _g [m]	n [kom]	l _{gn} [m]	Napomena
POS S22 (1 kom)						
1		20	9.80	18	176.40	
2		8	3.98	87	346.26	
3		8	1.80	174	313.20	
4		8	1.44	87	125.28	
POS ZP3 (1 kom)						
1		20	10.90	16	174.40	
2		8	1.68	122	204.96	
3		8	1.28	122	156.16	
4		8	1.90	122	231.80	
5		8	1.23	13	15.99	
POS ZP4 (1 kom)						
1		20	10.90	16	174.40	
2		8	1.68	122	204.96	
3		8	1.28	122	156.16	
4		8	1.90	122	231.80	
5		8	1.23	13	15.99	

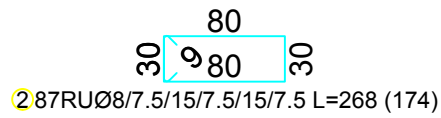
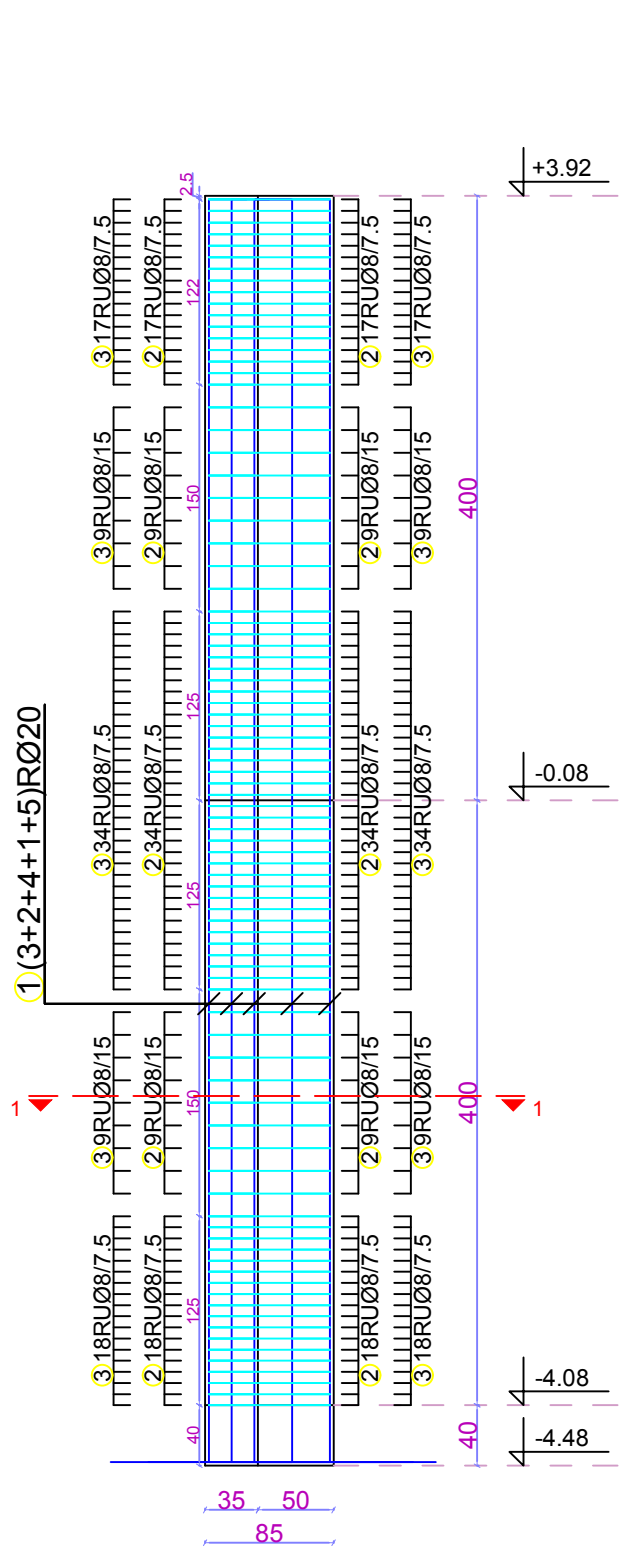
*MREŽE PREKLAPATI NA NIVOU MEĐUSPRATNE TAVANICE

*U TOKU IZVOĐENJA MOGUĆE UKIDANJE 50%ARMATURE U PRESJEKU
PA NASTAVAK PROPISANIM PREKLOPOM L=50Ø

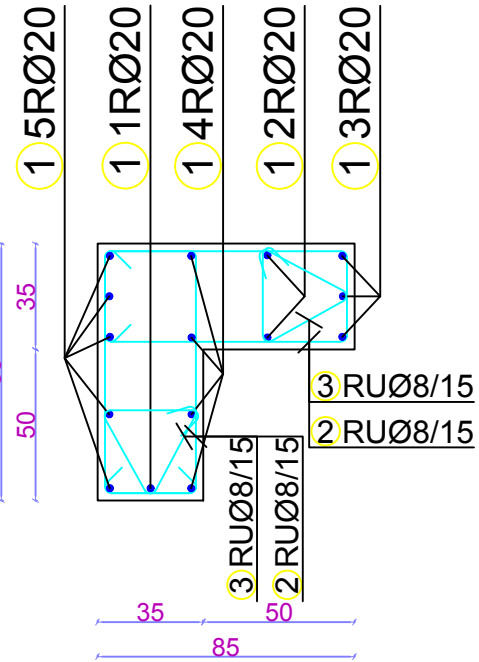
PROJEKTANT: EUROZOX d.o.o. Spuž bb DANILOVGRAD		Investitor: OPŠTINA BAR	
Objekat:	DNEVNI CENTAR ZA DJECU SA SMETNJAMA U RAZVOJU	Lokacija: UP 2286, BLOK 1-DUP "Polje Zaljevo" u Baru kp 2286, KO Polje,Bar	
Glavni inženjer	arh.Dragana Čukić, dipl.ing.	Vrsta tehnicke dokumentacije:	Glavni projekat
Odgovorni inženjer	Draško Bašović, Spec.Sci.građ.	Dio tehnicke dokumentacije:	KONSTRUKCIJA R=1:50
Saradnik	Andrija Krivokapić, Spec.Sci.građ.	Prilog: Plan armiranja stuba POS S22 i zidova POS ZP3,ZP4	Br. priloga 2.9 Br. strane 307
Datum izrade i M.P:		Datum revizije i M.P:	
novembar 2021			

Plan armiranja stuba - POS S1

MB 30, B500B, ao=2.5cm

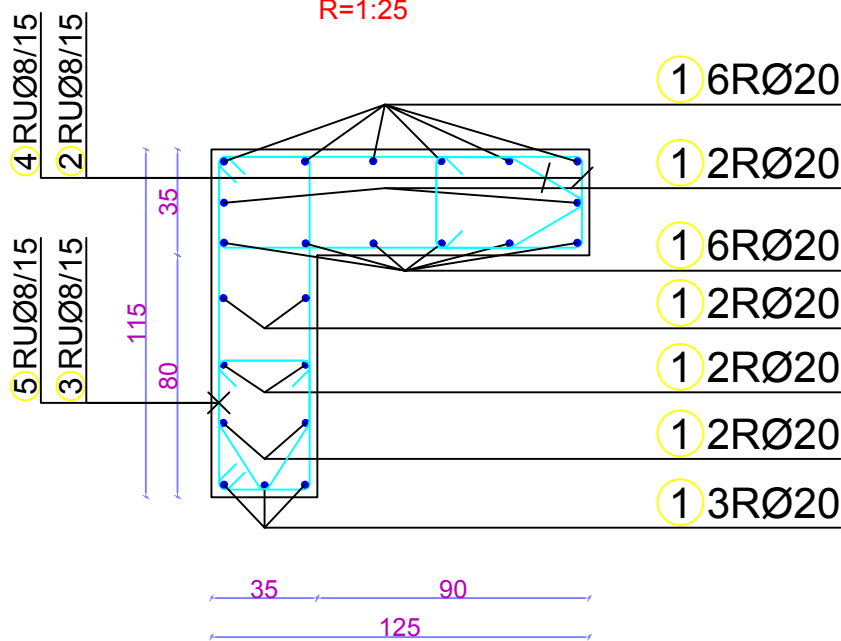
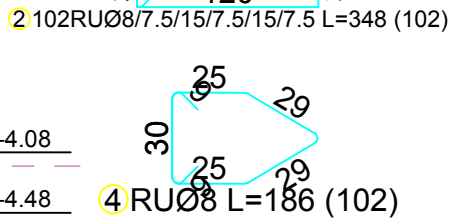
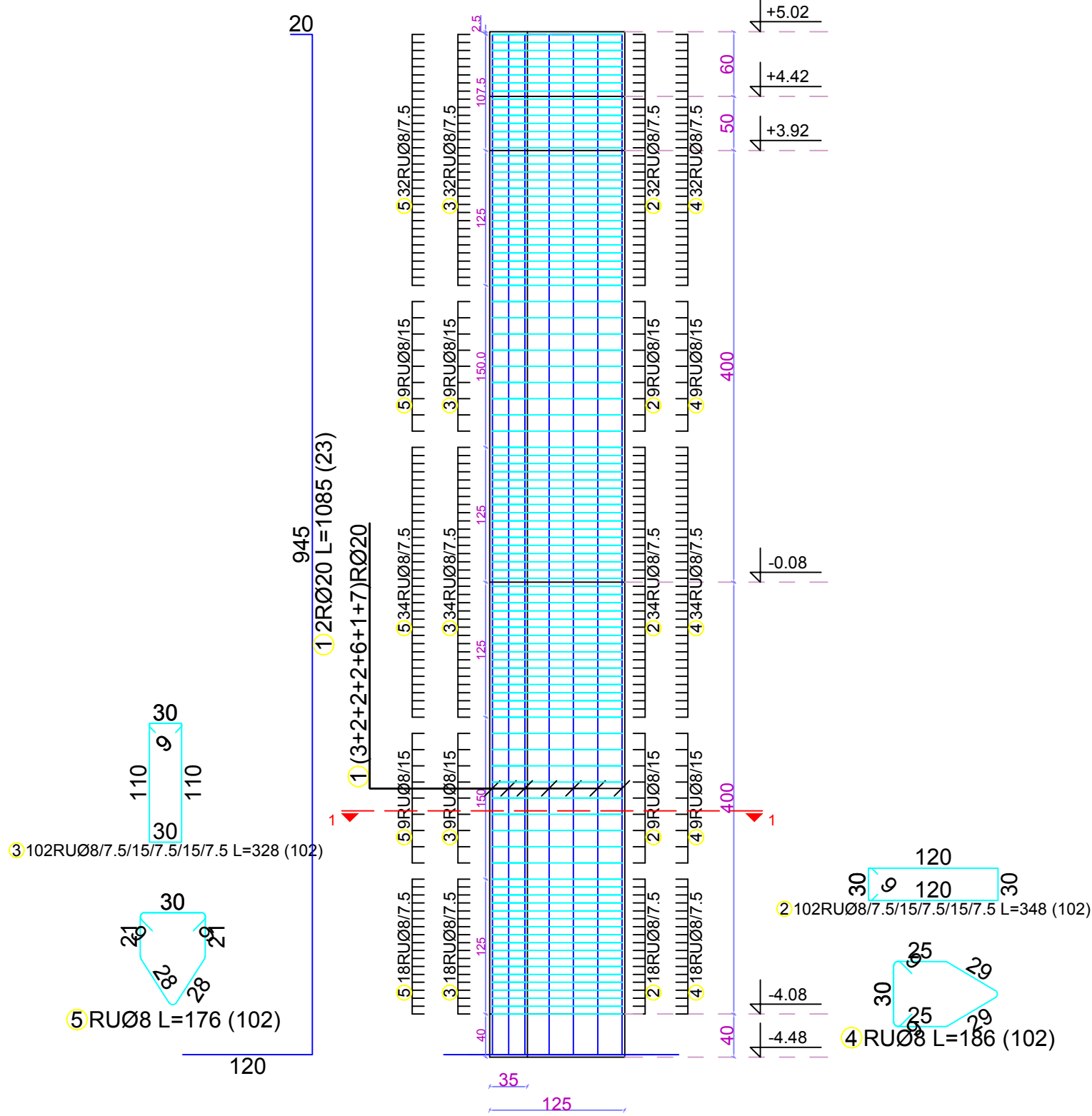


3 RUØ8 L=118 (174)



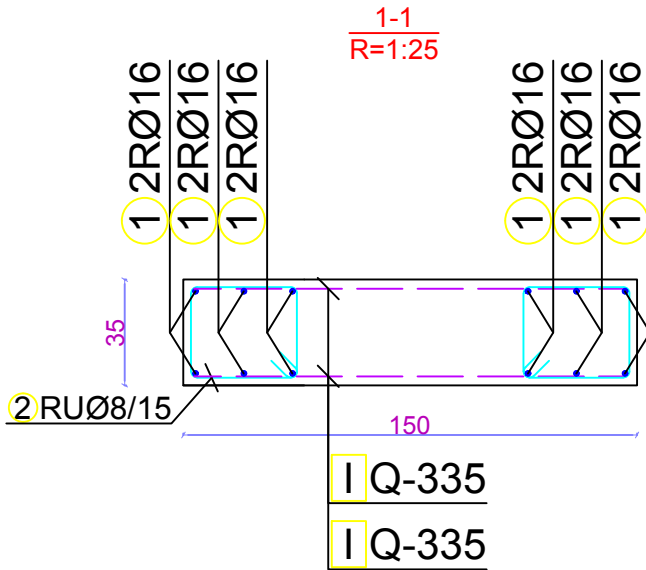
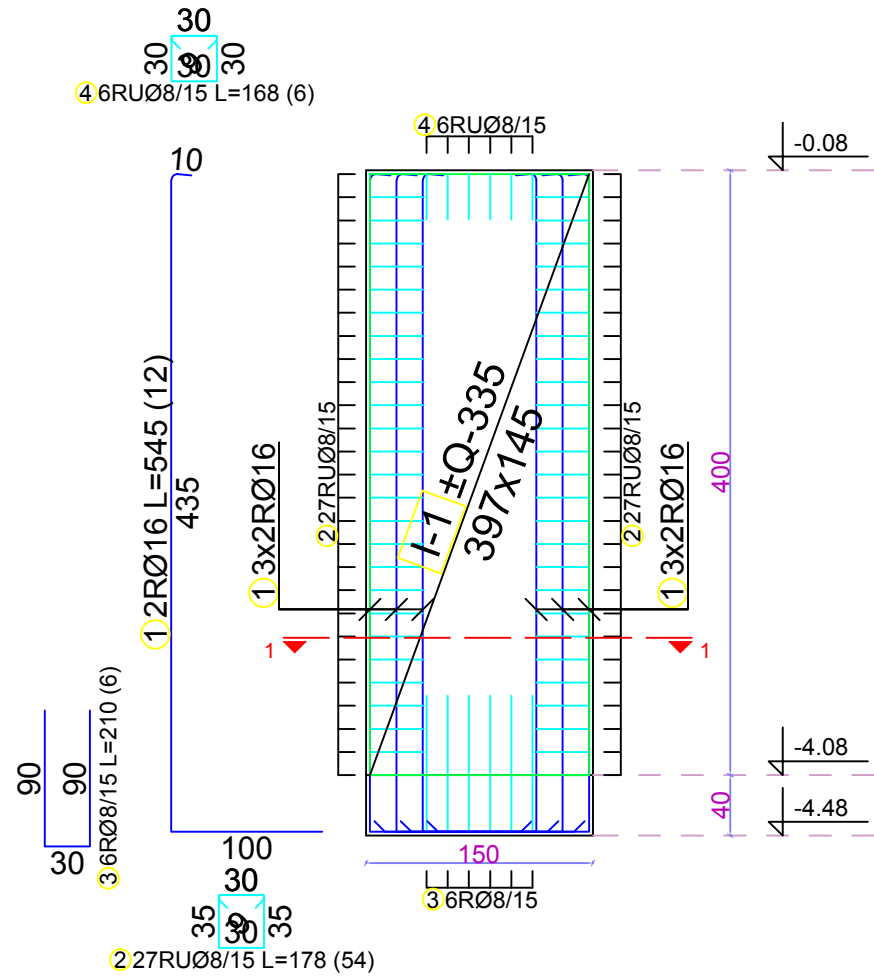
Plan armiranja stuba - POS S2

MB 30, B500B, ao=2.5cm



Plan armiranja zidova - POS ZP5,ZP6 - kom 2

MB 30, B500B, ao=2.5cm

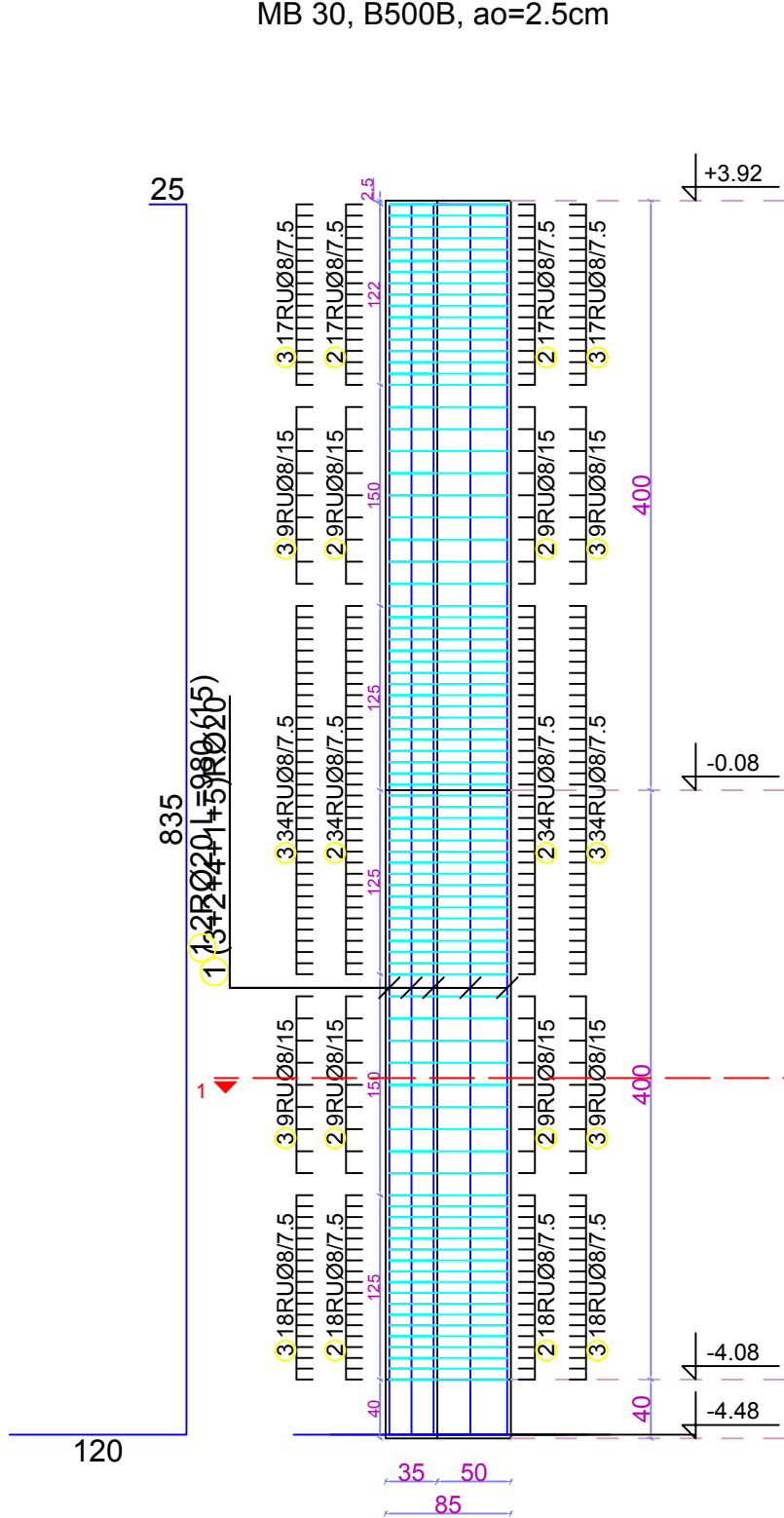


Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgp [m]	Napomena
POS S1 (1 kom)						
1		20	9.80	15	147.00	
2		8	2.68	174	466.32	
3		8	1.18	174	205.32	
POS S2 (1 kom)						
1		20	10.85	23	249.55	
2		8	3.48	102	354.96	
3		8	3.28	102	334.56	
4		8	1.86	102	189.72	
5		8	1.76	102	179.52	
POS ZP5,ZP6 (2 kom)						
1		16	5.45	24	130.80	
2		8	1.78	108	192.24	
3		8	2.10	12	25.20	
4		8	1.68	12	20.16	

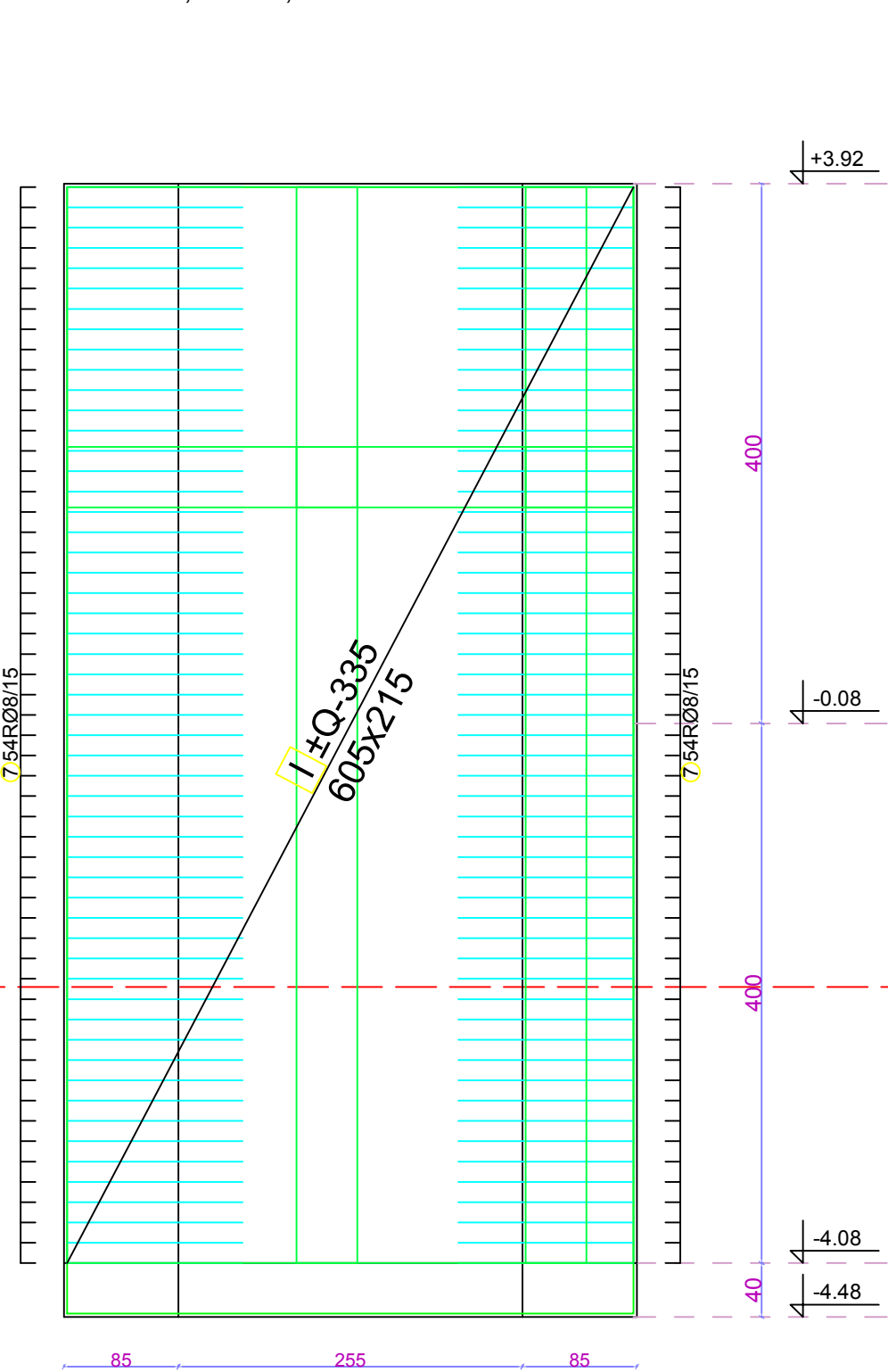
*U TOKU IZVOĐENJA MOGUĆE UKIDANJE 50%ARMATURE U PRESJEKU
PA NASTAVAK PROPISANIM PREKLOPOM L=5Ø

PROJEKTANT: EUROZOX d.o.o. <small>Spuž bb DANILOVGRAD</small>		Investitor: OPŠTINA BAR	
Objekat:	DNEVNI CENTAR ZA DJECU SA SMETNJAMA U RAZVOJU	Lokacija: UP 2286, BLOK 1-DUP "Polje Zaljevo" u Baru kp 2286, KO Polje,Bar	
Glavni inženjer	arh.Dragana Čukić, dipl.ing.	Vrsta tehnicke dokumentacije: Glavni projekat	
Odgovorni inženjer	Draško Bašović, Spec.Sci.građ.	Dio tehnicke dokumentacije: KONSTRUKCIJA R=1:50	
Saradnik	Andrija Krivokapić, Spec.Sci.građ.	Prilog: Plan armiranja stubova POS S1 i S2 i zidova POS ZP5 i ZP6	Br. priloga 2.10 Br. strane 308
Datum izrade i M.P: novembar 2021		Datum revizije i M.P:	

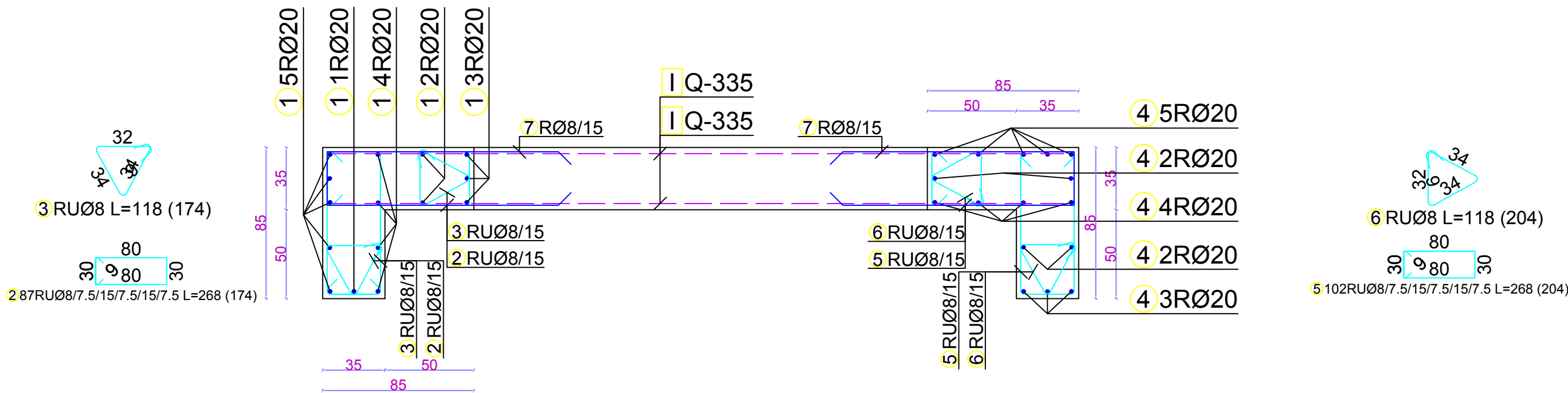
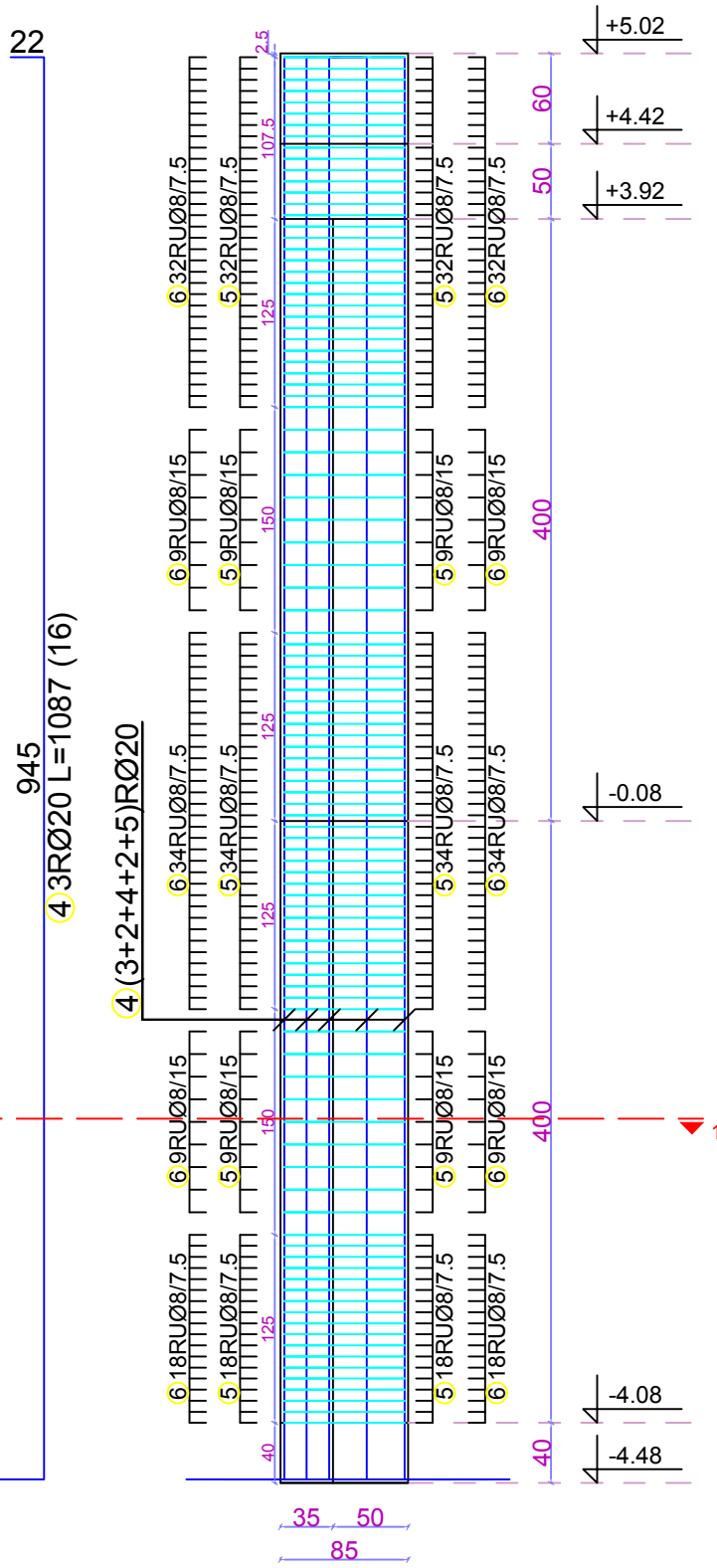
Plan armiranja stuba - POS S6
MB 30, B500B, ao=2.5cm

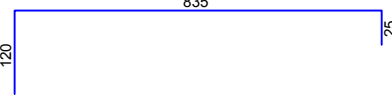
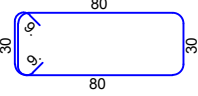
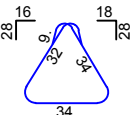
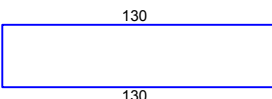

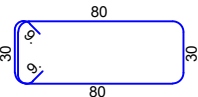
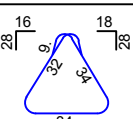


Plan armiranja zida- POS ZP7
MB 30, B500B, ao=2.5cm



Plan armiranja stuba - POS S3
MB 30, B500B, ao=2.5cm



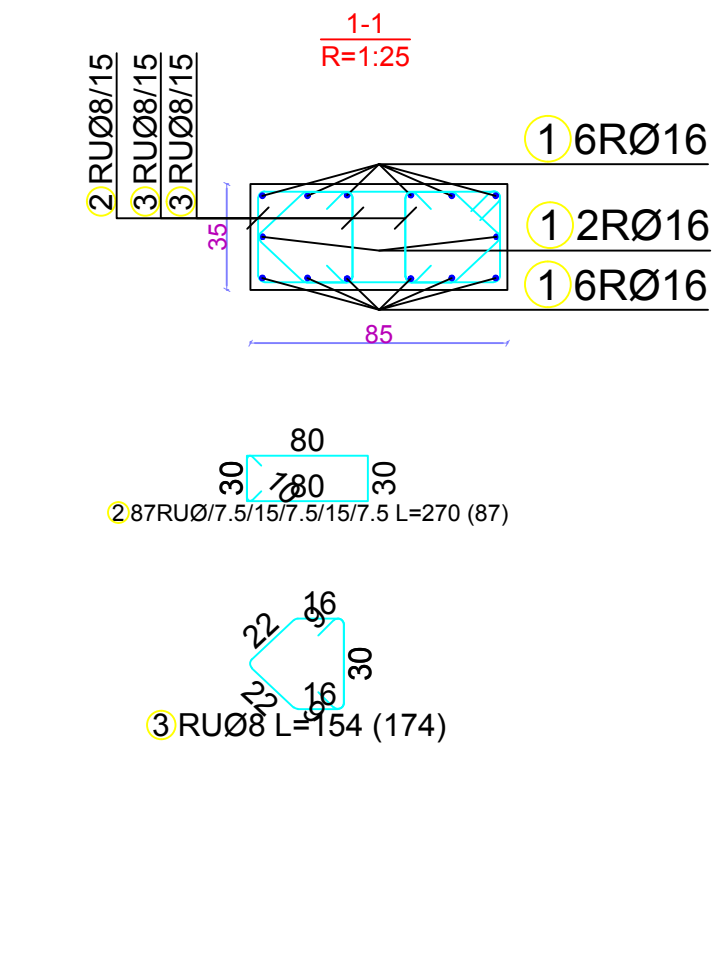
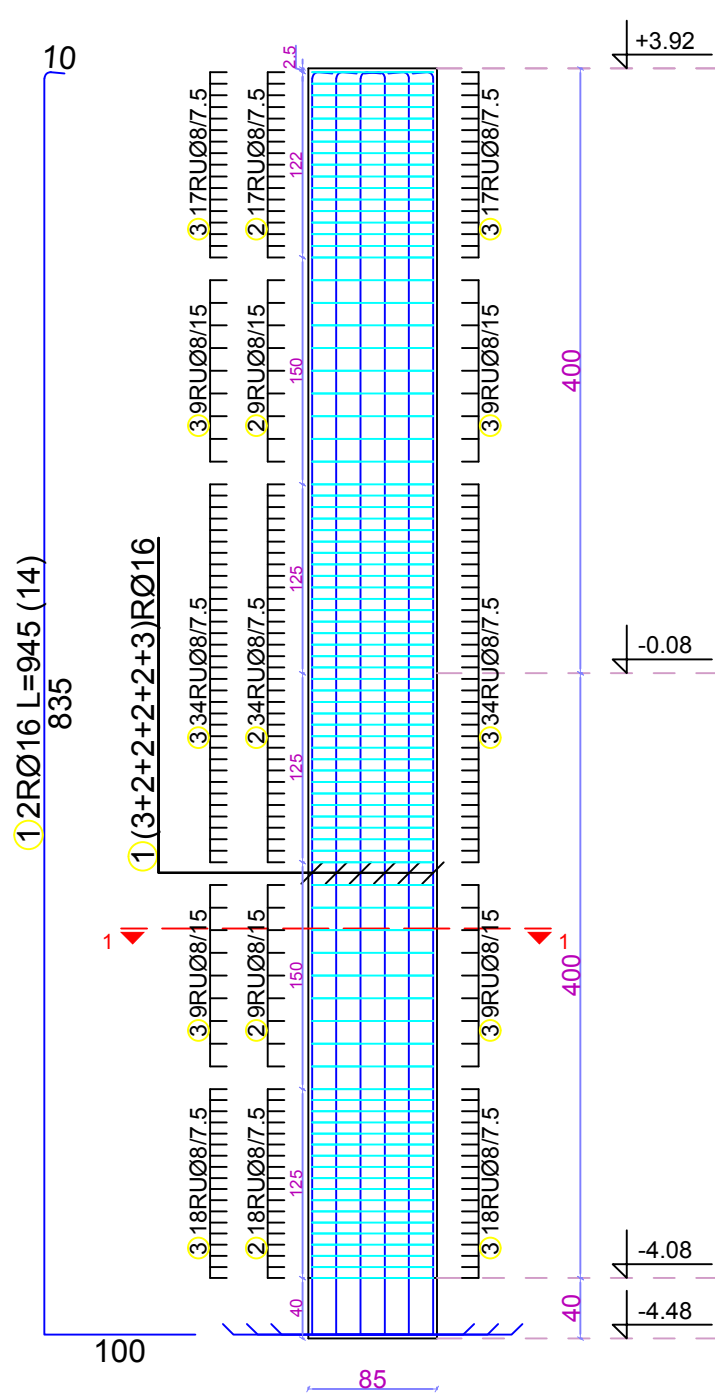
Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgm [m]	Napomena
POS S6 (1 kom)						
1		20	9.80	15	147.00	
2		8	2.68	174	466.32	
3		8	1.18	174	205.32	
POS ZP7 (1 kom)						
7		8	2.90	108	313.20	
POS S3 (1 kom)						
4		20	10.87	16	173.92	
5		8	2.68	204	546.72	
6		8	1.18	204	240.72	

*MREŽE PREKLAPATI NA NIVOU MEĐUSPRATNE TAVANICE

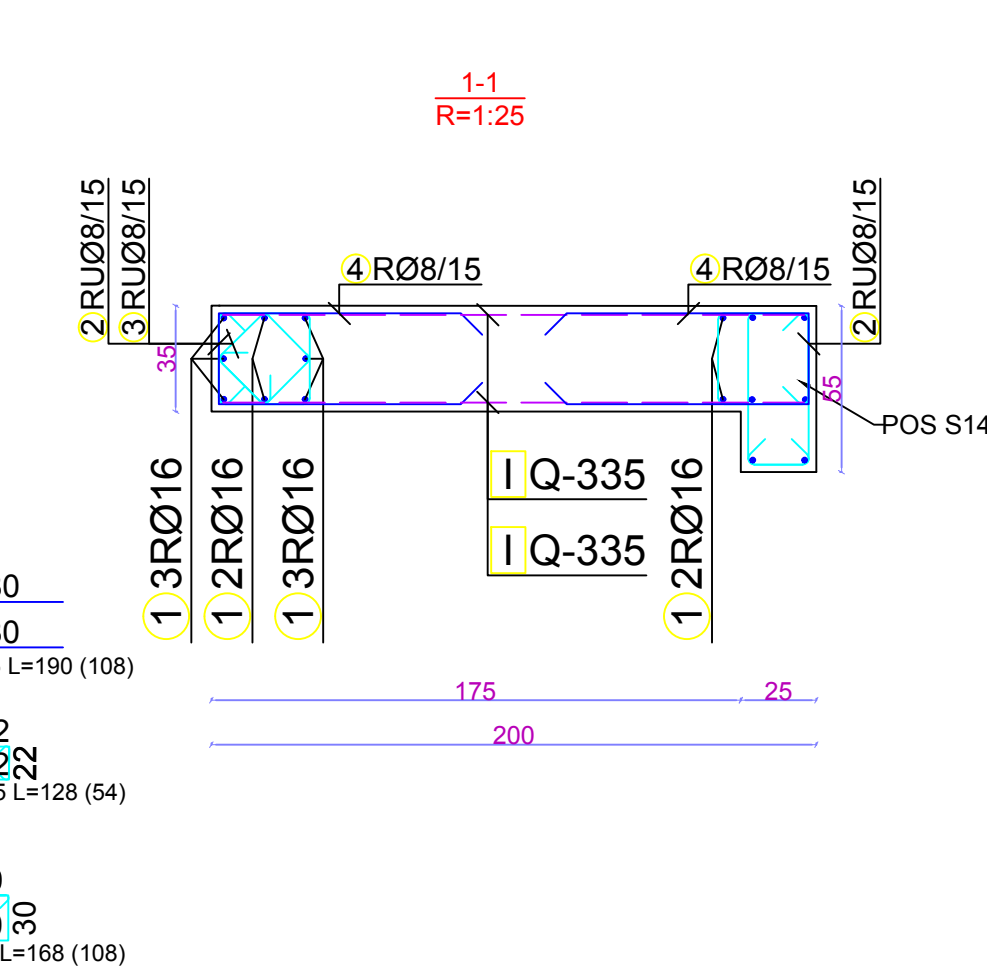
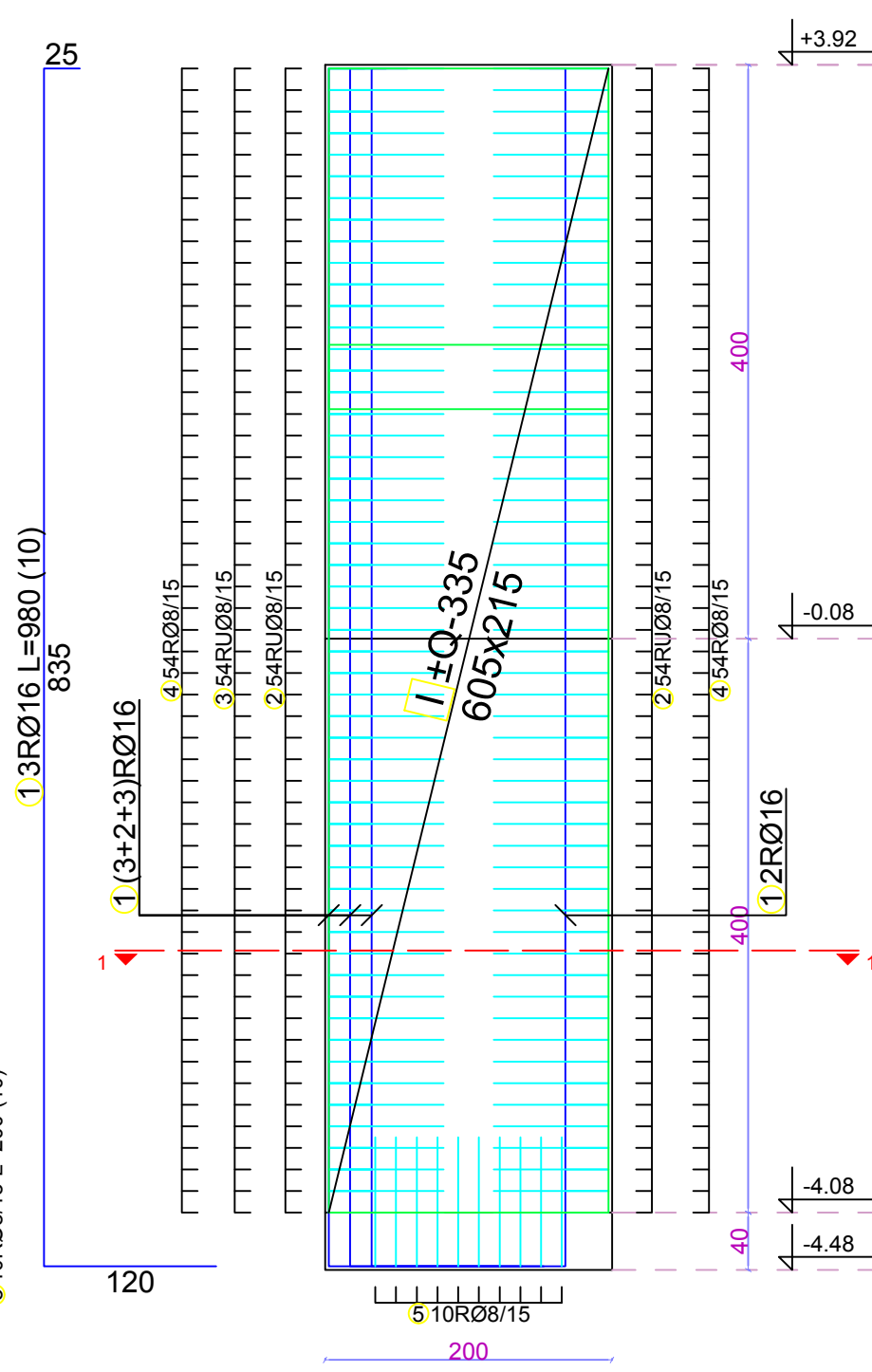
*U TOKU IZVOĐENJA MOGUĆE UKIDANJE 50%ARMATURE U PRESJEKU
PA NASTAVAK PROPISANIM PREKLOPOM L=50Ø

PROJEKTANT: EUROZOX d.o.o. <small>Spuž bb DANILOVGRAD</small>		Investitor: OPŠTINA BAR	
Objekat:	DNEVNI CENTAR ZA DJECU SA SMETNJAMA U RAZVOJU	Lokacija: UP 2286, BLOK 1-DUP "Polje Zaljevo" u Baru kp 2286, KO Polje,Bar	
Glavni inženjer	arh.Dragana Čukić, dipl.ing.	Vrsta tehnicke dokumentacije: Glavni projekat	
Odgovorni inženjer	Draško Bašović, Spec.Sci.građ.	Dio tehnicke dokumentacije: KONSTRUKCIJA	
Saradnik	Andrija Krivokapić, Spec.Sci.građ.	Prilog: Plan armiranja stubova POS S6, S3 i zida POS ZP7	Br. priloga 2.11 Br. strane 309
Datum izrade i M.P: novembar 2021		Datum revizije i M.P:	

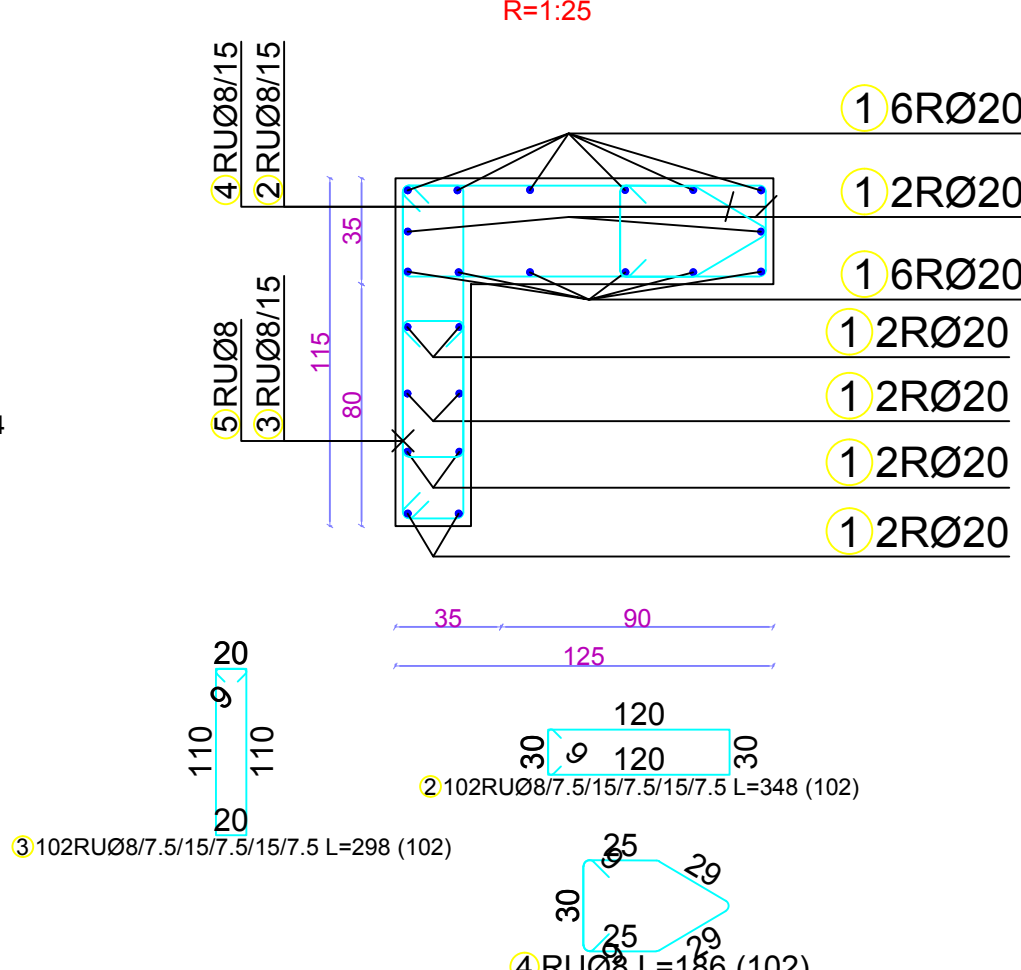
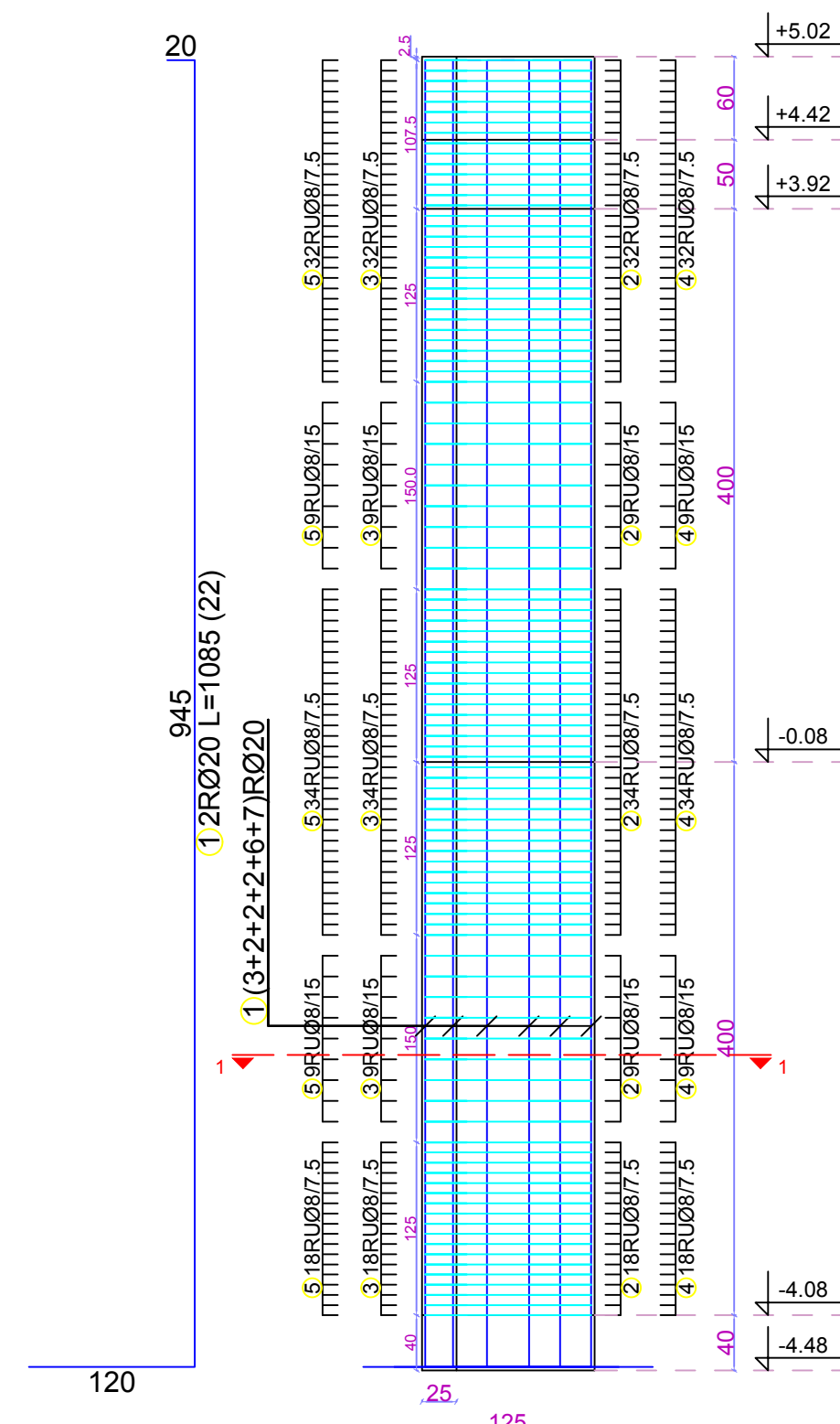
Plan armiranja stubova - POS S4,S5 - kom 2
MB 30, B500B, ao=2.5cm



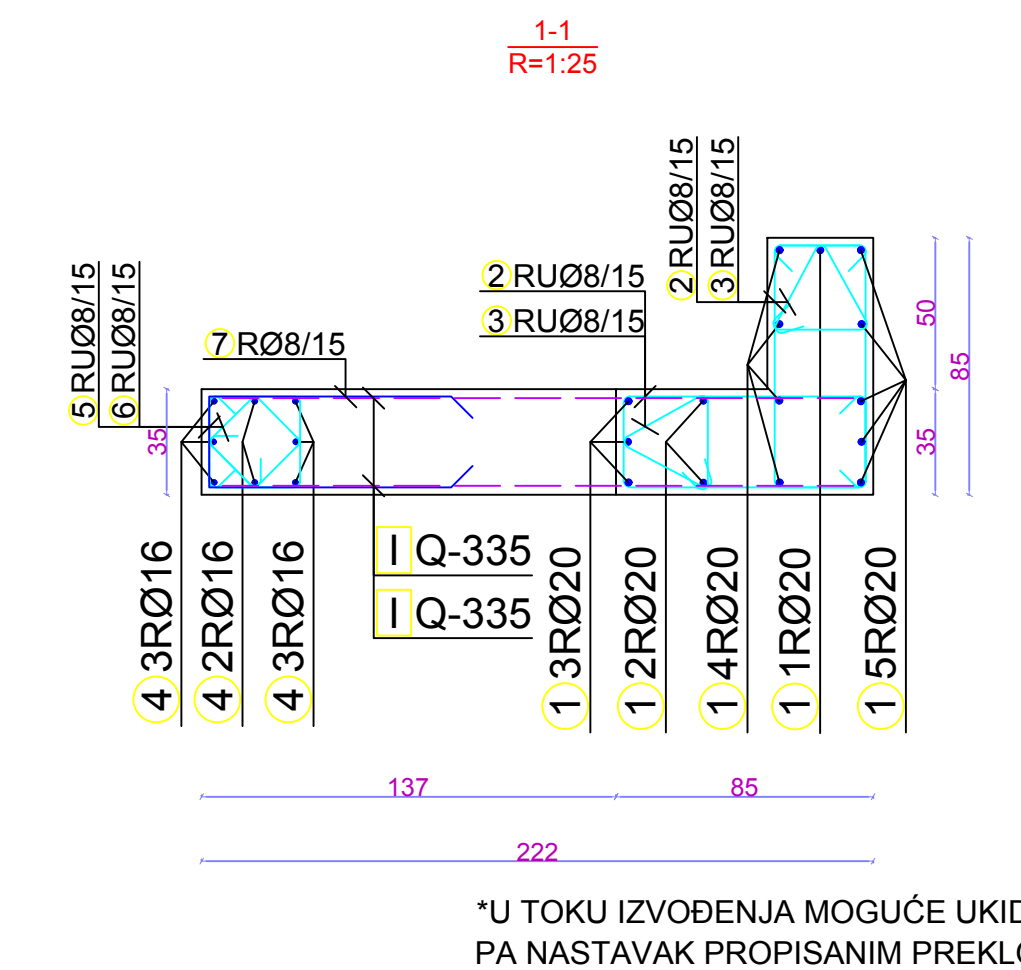
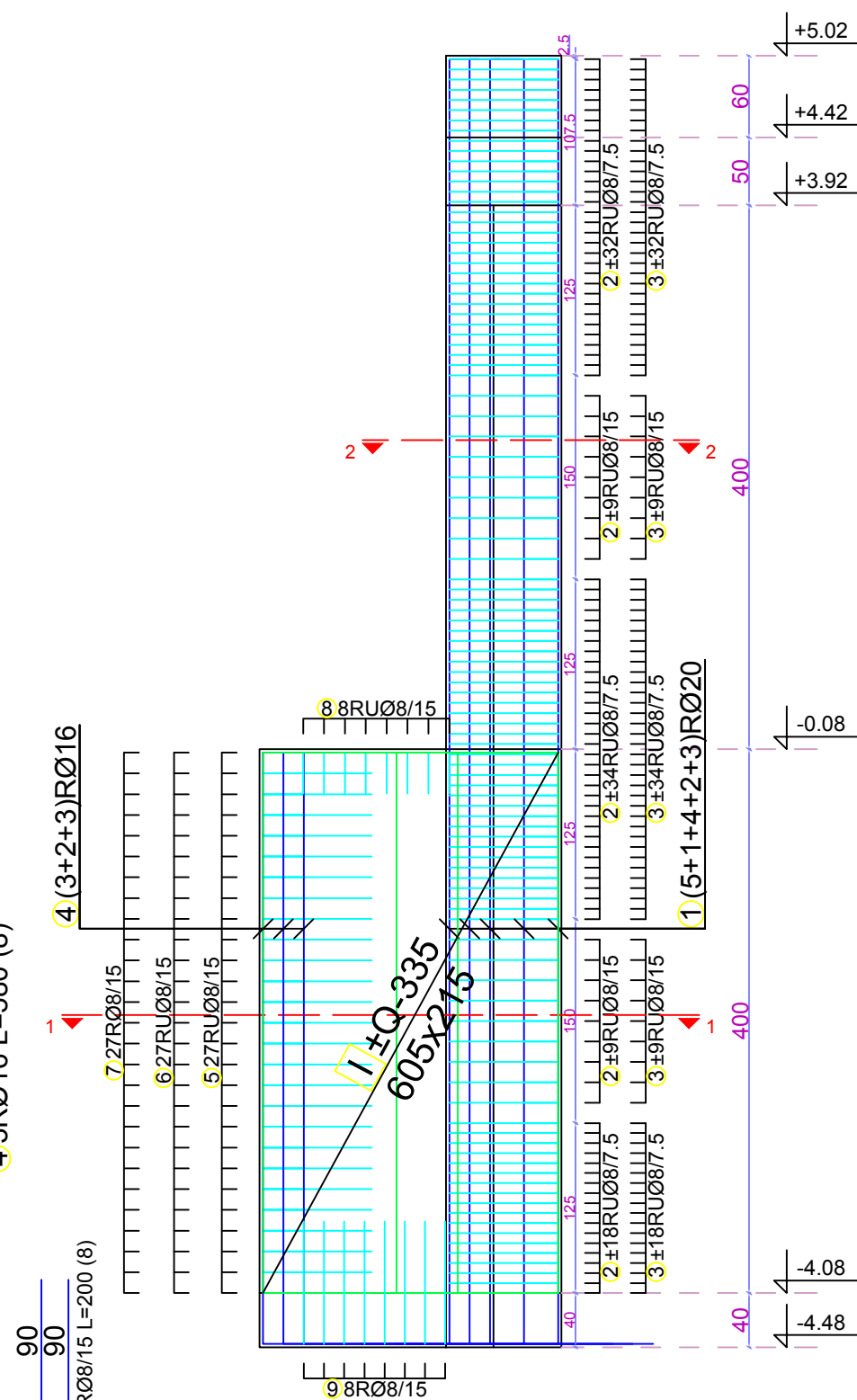
Plan armiranja zida - POS ZP8
MB 30, B500B, ao=2.5cm



Plan armiranja stuba - POS S8
MB 30, B500B, ao=2.5cm



Plan armiranja stuba - POS S9 (ZP9)
MB 30, B500B, ao=2.5cm

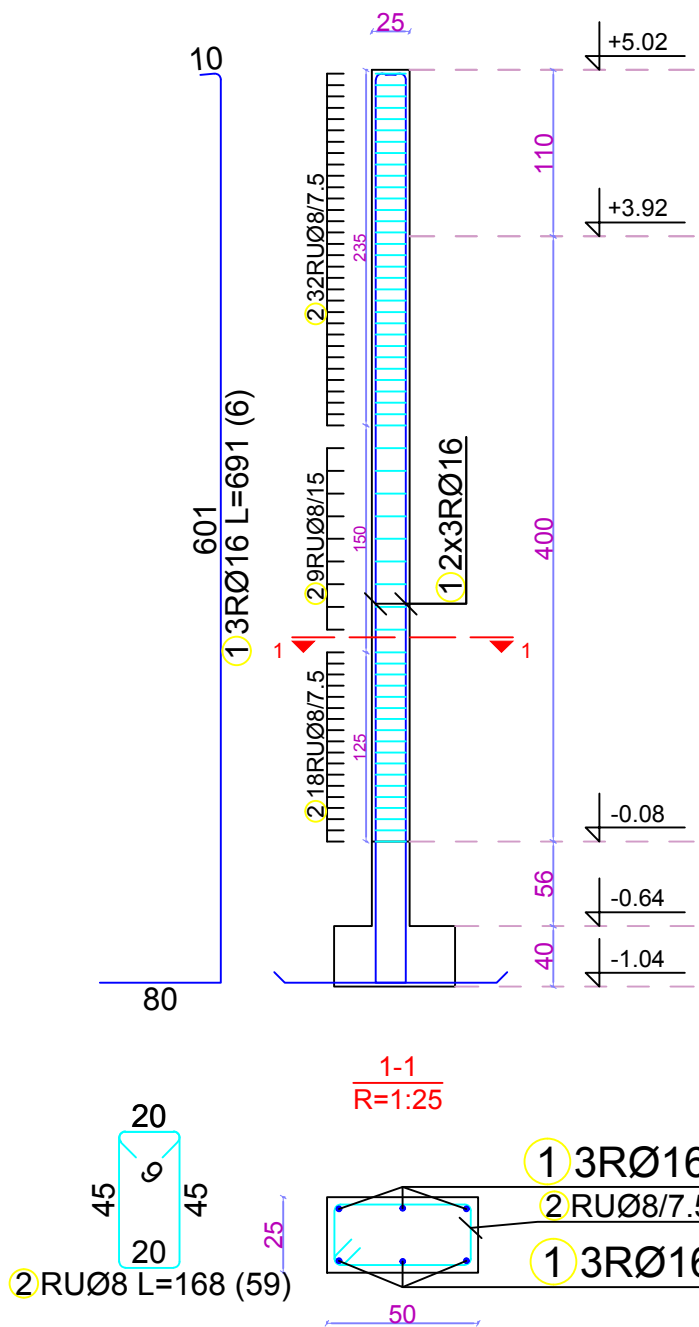


*U TOKU IZVOĐENJA MOGUĆE UKIDANJE 50%ARMATURE U PRESJEKU
PA NASTAVAK PROPISANIM PREKLOPOM L=50Ø

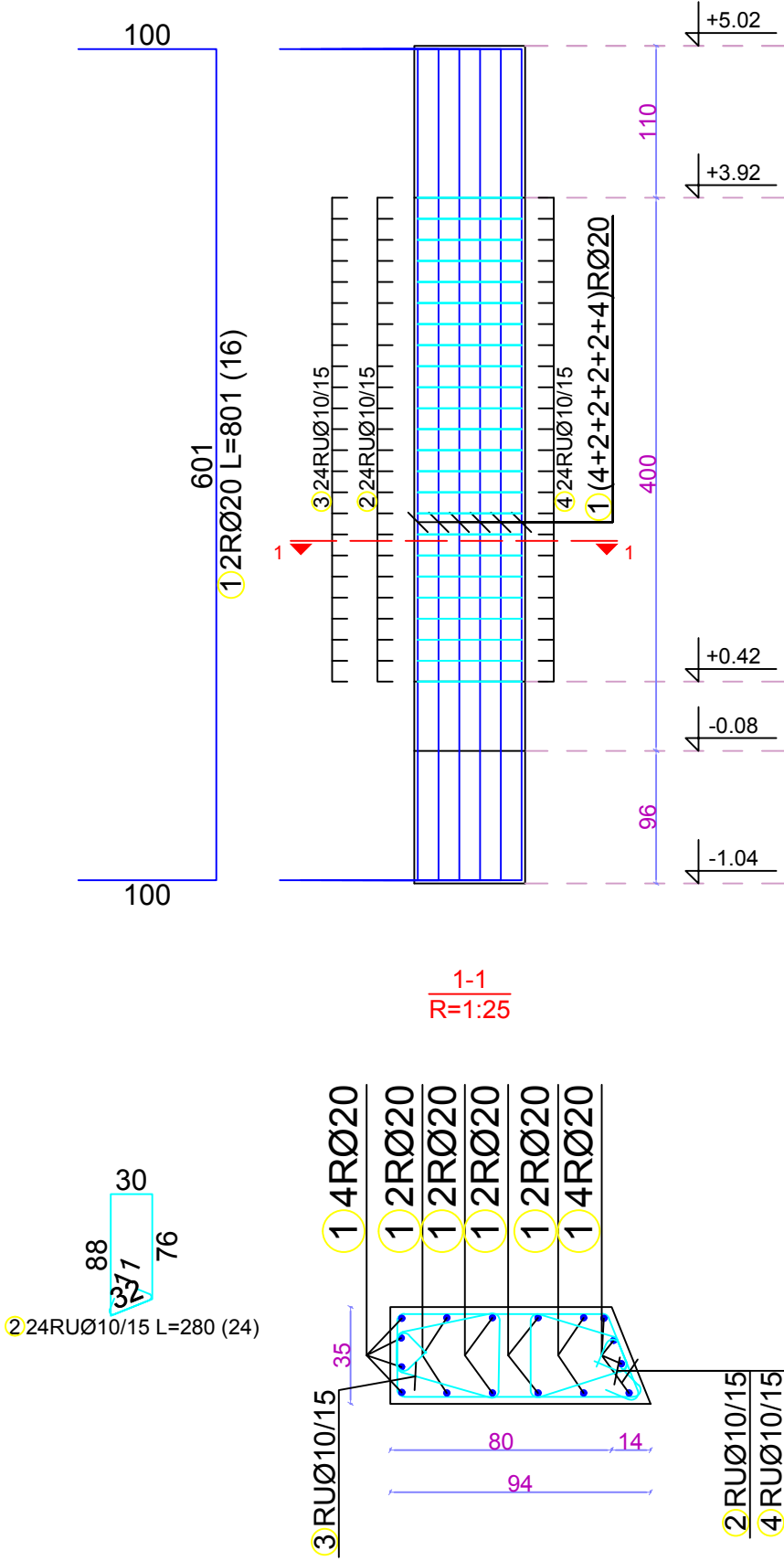
Spec. - specifikacija					
ozn.	oblik i mere [cm]	Ø [mm]	h [mm]	n [kom]	Napomena
POS S4,S5 (2 kom)					
1		16	9.45	28	204.60
2		8	2.70	174	469.80
3		8	1.54	348	535.92
POS ZP8 (1 kom)					
1		16	9.80	10	98.00
2		8	1.68	108	181.44
3		8	1.28	54	69.12
4		8	1.90	108	205.20
5		8	2.00	10	20.00
POS S8 (1 kom)					
1		20	10.85	22	238.70
2		8	3.48	102	354.96
3		8	2.98	102	303.84
4		8	1.86	102	189.72
5		8	1.68	102	171.36
POS S9 (ZP9) (1 kom)					
1		20	10.87	15	163.05
2		8	2.68	204	546.72
3		8	1.18	204	240.72
4		16	5.80	8	46.40
5		8	1.68	27	45.36
6		8	1.28	27	34.56
7		8	1.90	27	51.30
8		8	1.20	8	9.84
9		8	2.00	8	16.00

PROJEKTANT: EUROZOX d.o.o. <small>Spuž bb DANILOVGRAD</small>		Investitor: OPŠTINA BAR	
Objekat:	DNEVNI CENTAR ZA DJECU SA SMETNJAMA U RAZVOJU	Lokacija: UP 2286, BLOK 1-DUP "Polje Zaljevo" u Baru kp 2286, KO Polje,Bar	
Glavni inženjer	arh.Dragana Čukić, dipl.ing.	Vrsta tehnicke dokumentacije: Glavni projekat	
Odgovorni inženjer	Draško Bašović, Spec.Sci.građ.	Dio tehnicke dokumentacije: KONSTRUKCIJA	
Saradnik	Andrija Krivokapić, Spec.Sci.građ.	Prilog: Plan armiranja stubova POS S4,S5,S8 i S9 (ZP11) i zida POS ZP8	Br. priloga 2.12 Br. strane 310
Datum izrade i M.P: novembar 2021		Datum revizije i M.P:	

Plan armiranja stubova - POS S15,S16,S17 - kom 3
MB 30, B500B, ao=2.5cm



Plan armiranja zatega - POS Z1,Z2 - kom 2
MB 30, B500B, ao=2.5cm

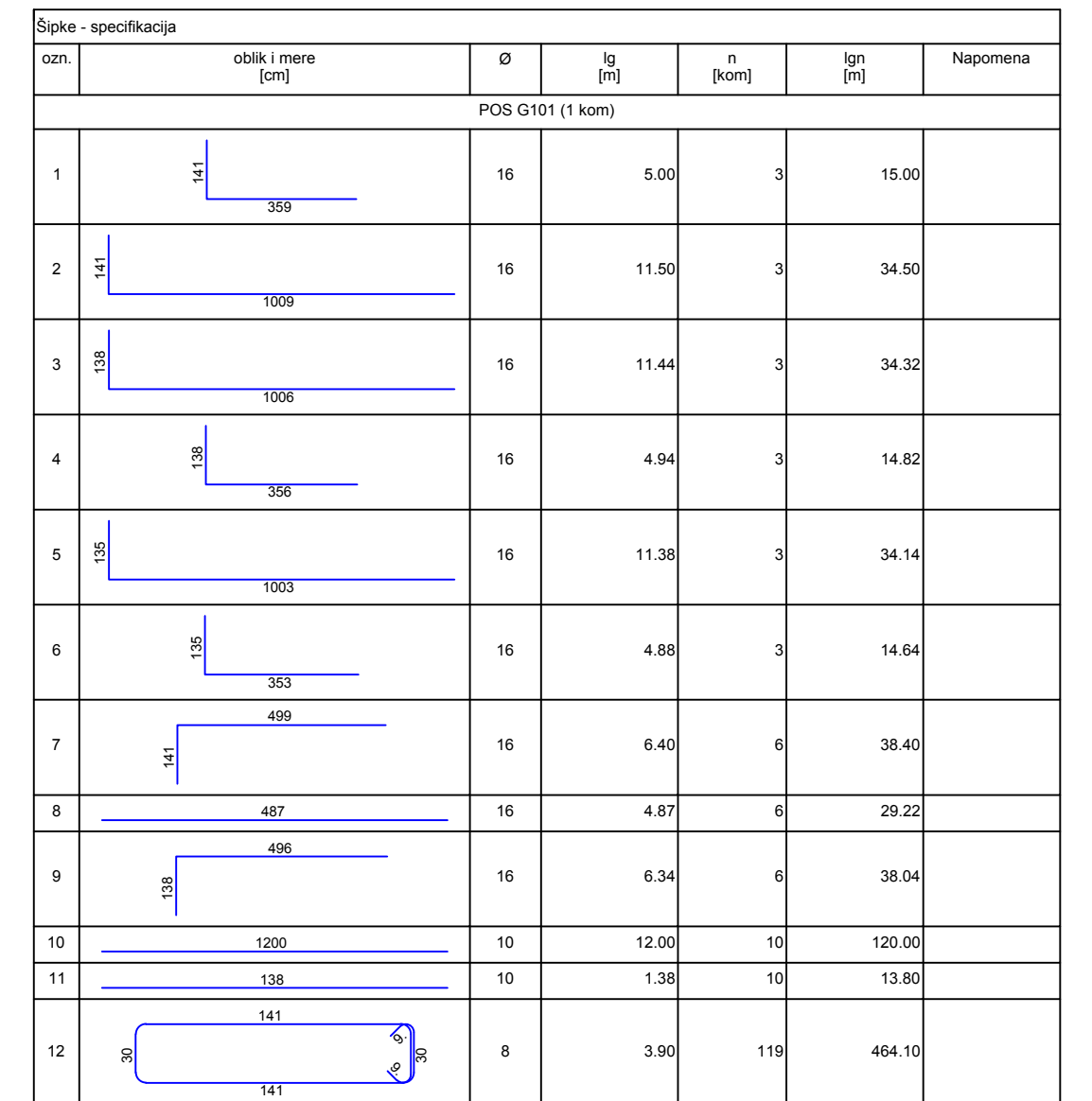


Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
POS S15,S16,S17 (3 kom)						
1		16	6.91	18	124.38	
2		8	1.68	177	297.36	
POS Z1, POS Z2 (2 kom)						
1		20	8.01	32	256.32	
2		10	2.80	48	134.40	
3		10	1.58	48	75.84	
4		10	1.47	48	70.56	

*U TOKU IZVOĐENJA MOGUĆE UKIDANJE 50%ARMATURE U PRESJEKU
PA NASTAVAK PROPISANIM PREKLOPOM L=50Ø

PROJEKTANT: EUROZOX d.o.o. <small>Spuž bb DANILOVGRAD</small>		Investitor: OPŠTINA BAR		
Objekat:	DNEVNI CENTAR ZA DJECU SA SMETNJAMA U RAZVOJU	Lokacija: UP 2286, BLOK 1-DUP "Polje Zaljevo" u Baru <small>kp 2286, KO Polje,Bar</small>		
Glavni inženjer	arh.Dragana Čukić, dipl.ing.	Vrsta tehnicke dokumentacije: Glavni projekat		
Odgovorni inženjer	Draško Bašović, Spec.Sci.građ.	Dio tehnicke dokumentacije: KONSTRUKCIJA	R=1:50	
Saradnik	Andrija Krivokapić, Spec.Sci.građ.	Prilog: Plan armiranja stubova POS S15,S16 i S17 i zatega POS Z1, Z2	Br. priloga 2.13	Br. strane 311
Datum izrade i M.P: novembar 2021		Datum revizije i M.P:		

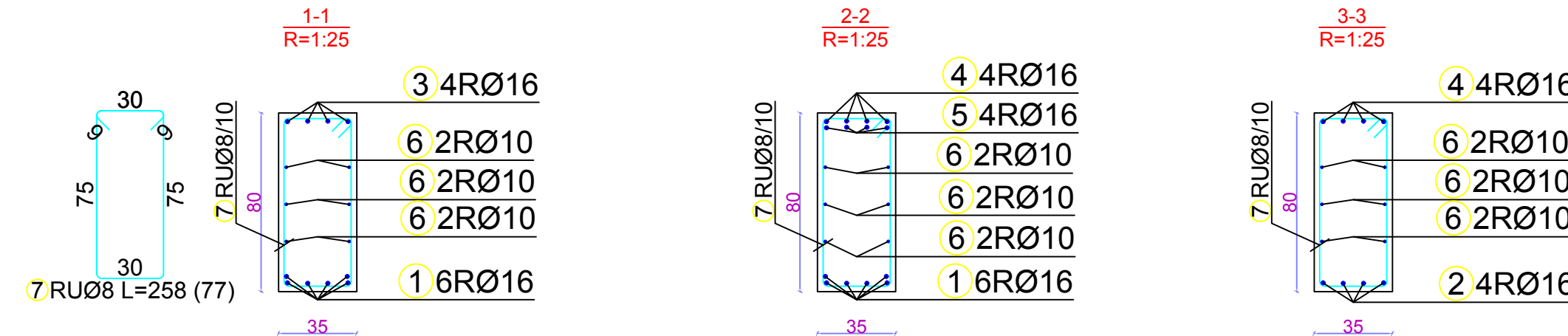
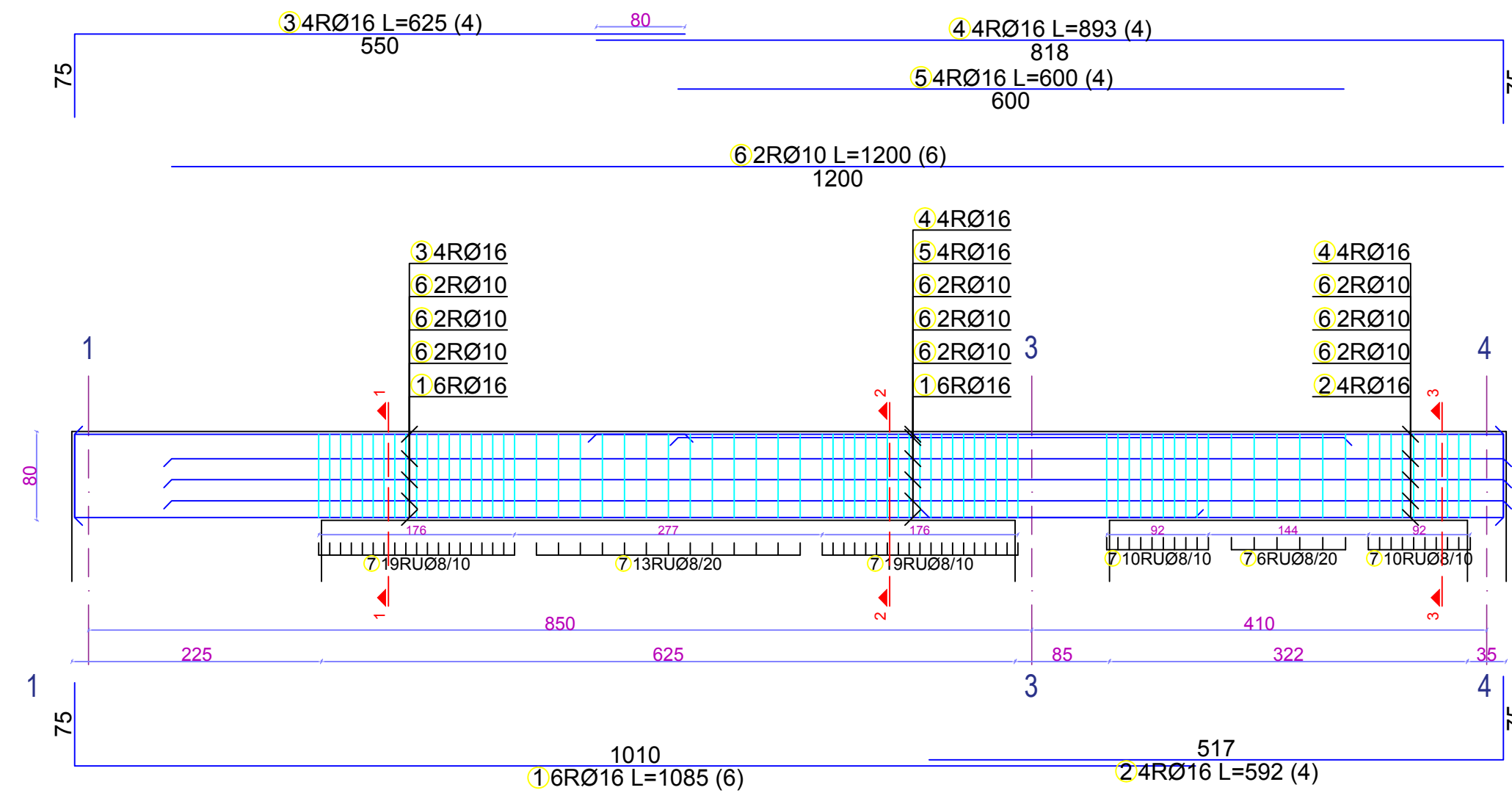
MB 30, B500B, $a_o=2.5\text{cm}$



PROJEKTANT: EUROZOX d.o.o. <small>Spuž bb DANILOVGRAD</small>		Investitor: OPŠTINA BAR	
Objekat:	DNEVNI CENTAR ZA DJECU SA SMETNJAMA U RAZVOJU	Lokacija: UP 2286, BLOK 1-DUP "Polje Zaljevo" u Baru kp 2286, KO Polje,Bar	
Glavni inženjer	arh.Dragana Čukić, dipl.ing.	Vrsta tehnicke dokumentacije:	Glavni projekat
Odgovorni inženjer	Draško Bašović, Spec.Sci.građ.	Dio tehnicke dokumentacije:	KONSTRUKCIJA R=1:50
Saradnik	Andrija Krivokapić, Spec.Sci.građ.	Prilog: Plan armiranja grede POS G101	Br. priloga 2.14 Br. strane 312
Datum izrade i M.P: novembar 2021		Datum revizije i M.P:	

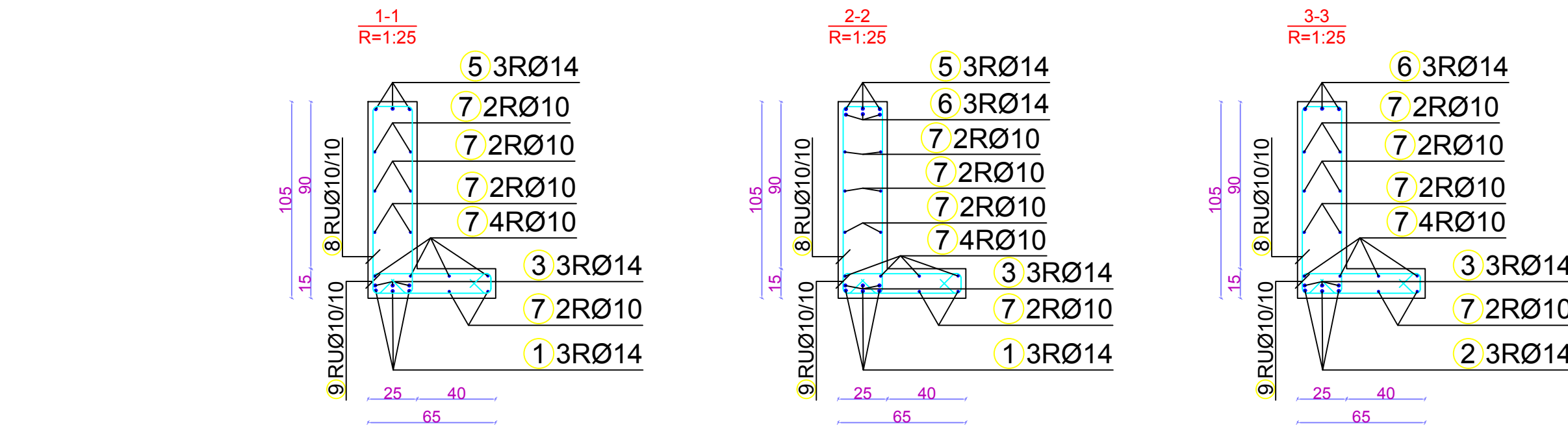
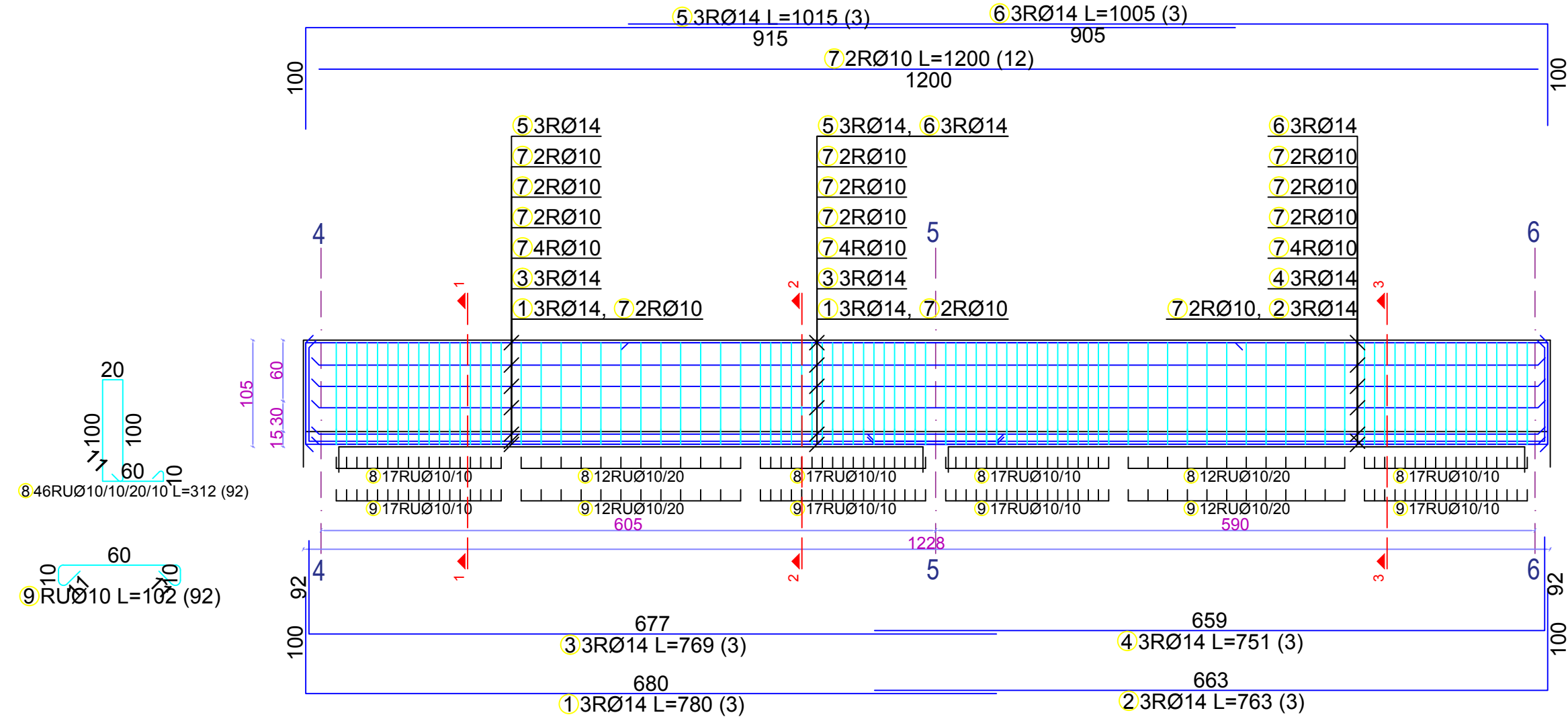
Plan armiranja grede - POS G102

MB 30, B500B, ao=2.5cm



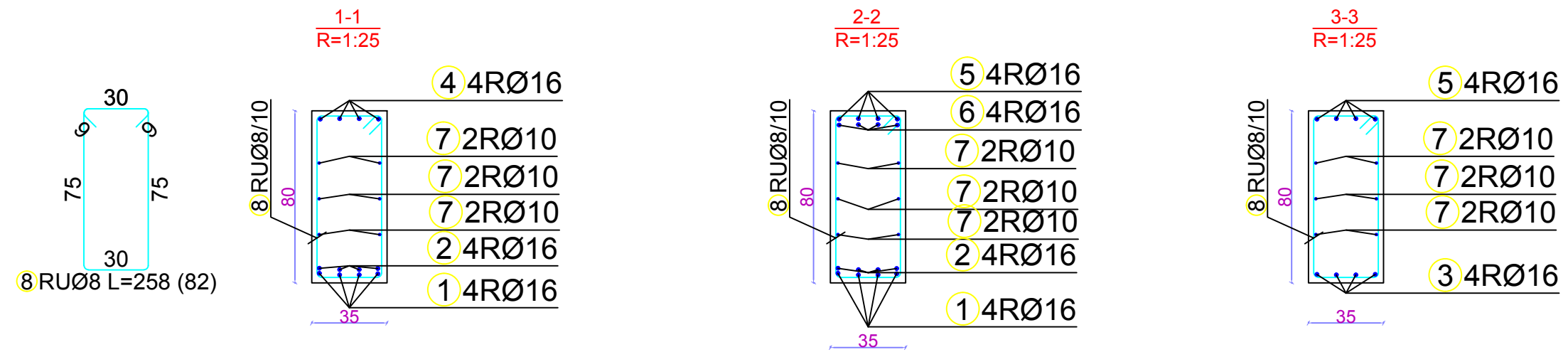
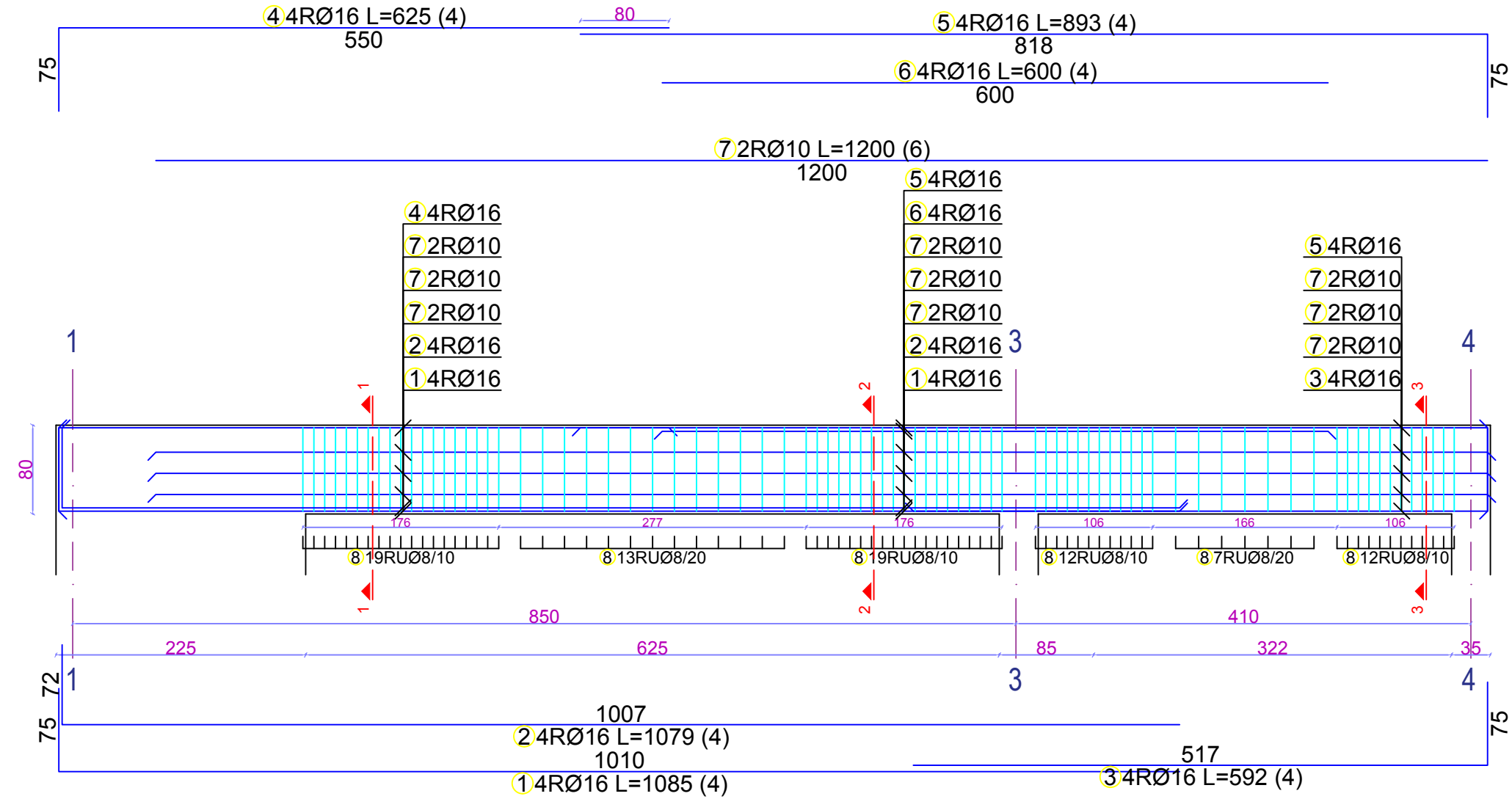
Plan armiranja grede - POS G103

MB 30, B500B, ao=2.5cm

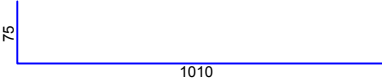
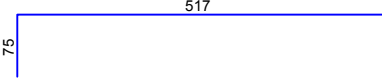
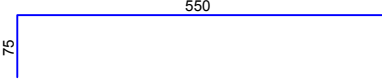
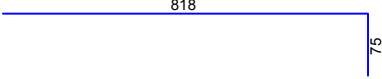
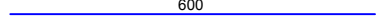
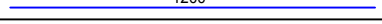
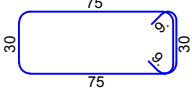
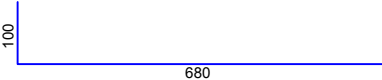
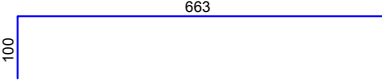
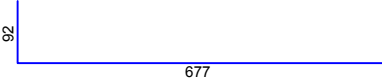
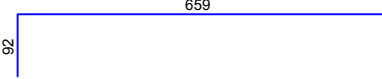
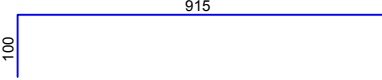
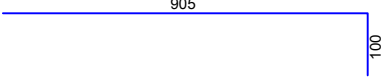
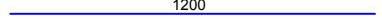
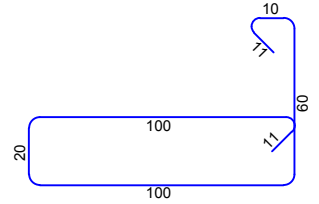
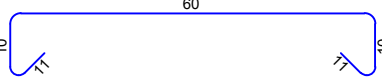


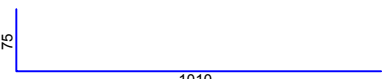
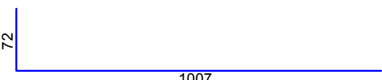
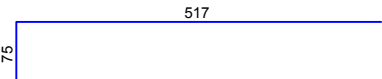
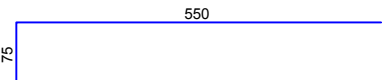
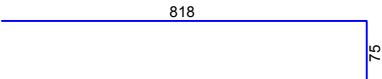
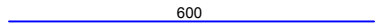
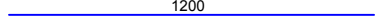
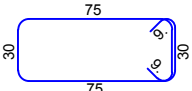
Plan armiranja grede - POS G104

MB 30, B500B, ao=2.5cm



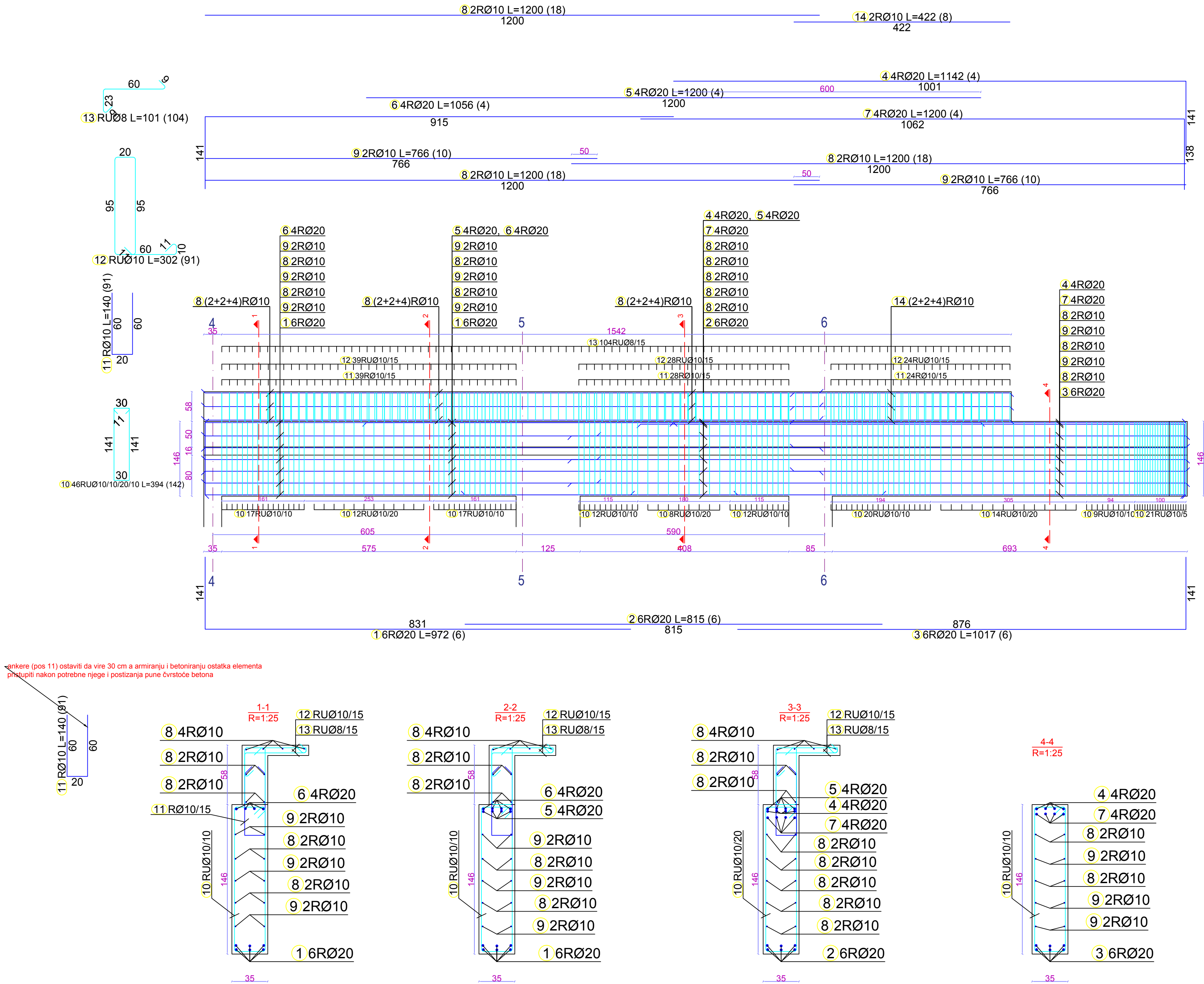
PROJEKTANT: EUROZOX d.o.o. <div>Spuž bb DANILOVGRAD</div>		Investitor: OPŠTINA BAR	
Objekat:	DNEVNI CENTAR ZA DJECU SA SMETNJAMA U RAZVOJU	Lokacija: UP 2286, BLOK 1-DUP "Polje Zaljevo" u Baru kp 2286, KO Polje,Bar	
Glavni inženjer	arh.Dragana Čukić, dipl.ing.	Vrsta tehnicke dokumentacije:	Glavni projekat
Odgovorni inženjer	Draško Bašović, Spec.Sci.građ.	Dio tehnicke dokumentacije:	KONSTRUKCIJA
Saradnik	Andrija Krivokapić, Spec.Sci.građ.	Prilog:	R=1:50
		Plan armiranja greda POS G102,G103 i G104	Br. priloga 2.15-1
Datum izrade i M.P:		Br. strane 313	
Datum revizije i M.P:			
novembar 2021			

Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
POS G102 (1 kom)						
1		16	10.85	6	65.10	
2		16	5.92	4	23.68	
3		16	6.25	4	25.00	
4		16	8.93	4	35.72	
5		16	6.00	4	24.00	
6		10	12.00	6	72.00	
7		8	2.58	77	198.66	
POS G103 (1 kom)						
1		14	7.80	3	23.40	
2		14	7.63	3	22.89	
3		14	7.69	3	23.07	
4		14	7.51	3	22.53	
5		14	10.15	3	30.45	
6		14	10.05	3	30.15	
7		10	12.00	12	144.00	
8		10	3.12	92	287.04	
9		10	1.02	92	93.84	

Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
POS G104 (1 kom)						
1		16	10.85	4	43.40	
2		16	10.79	4	43.16	
3		16	5.92	4	23.68	
4		16	6.25	4	25.00	
5		16	8.93	4	35.72	
6		16	6.00	4	24.00	
7		10	12.00	6	72.00	
8		8	2.58	82	211.56	

PROJEKTANT: EUROZOX d.o.o. <small>Spuž bb DANILOVGRAD</small>		Investitor: OPŠTINA BAR	
Objekat:	DNEVNI CENTAR ZA DJECU SA SMETNJAMA U RAZVOJU	Lokacija: UP 2286, BLOK 1-DUP "Polje Zaljevo" u Baru kp 2286, KO Polje,Bar	
Glavni inženjer	arh.Dragana Čukić, dipl.ing.	Vrsta tehnicke dokumentacije: Glavni projekat	
Odgovorni inženjer	Draško Bašović, Spec.Sci.građ.	Dio tehnicke dokumentacije: KONSTRUKCIJA	R=1:50
Saradnik	Andrija Krivokapić, Spec.Sci.građ.	Prilog: Plan armiranja greda POS G102,G103 i G104	Br. priloga 2.15-2 Br. strane 314
Datum izrade i M.P: novembar 2021		Datum revizije i M.P:	

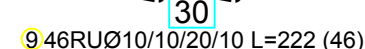
Plan armiranja grede - POS G106 (G105)
MB 30, B500B, ao=2.5cm



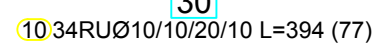
Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lg _n [m]	Napomena
POS G106(G105) (1 kom)						
1		20	9.72	6	58.32	
2		20	8.15	6	48.90	
3		20	10.17	6	61.02	
4		20	11.42	4	45.68	
5		20	12.00	4	48.00	
6		20	10.56	4	42.24	
7		20	12.00	4	48.00	
8		10	12.00	18	216.00	
9		10	7.66	10	76.60	
10		10	3.94	142	559.48	
11		10	1.40	91	127.40	
12		10	3.02	91	274.82	
13		8	1.01	104	105.04	
14		10	4.22	8	33.76	

PROJEKTANT: EUROZOX d.o.o. <small>Spuž bb DANILOVGRAD</small>		Investitor: OPŠTINA BAR		
Objekat:	DNEVNI CENTAR ZA DJECU SA SMETNJAMA U RAZVOJU	Lokacija: UP 2286, BLOK 1-DUP "Polje Zaljevo" u Baru kp 2286, KO Polje,Bar		
Glavni inženjer	arh.Dragana Čukić, dipl.ing.	Vrsta tehnicke dokumentacije: Glavni projekat		
Odgovorni inženjer	Draško Bašović, Spec.Sci.građ.	Dio tehnicke dokumentacije: KONSTRUKCIJA		R=1:50
Saradnik	Andrija Krivokapić, Spec.Sci.građ.	Prilog: Plan armiranja grede POS G106 (G105)	Br. priloga 2.16	Br. strane 315
Datum izrade i M.P: novembar 2021		Datum revizije i M.P:		

MB 30, B500B, $a_0=2.5\text{cm}$



MB 30, B500B, $a_0=2.5\text{cm}$



PROJEKTANT: EUROZOX d.o.o. Špuz bb DANILOVGRAD		Investitor: OPŠTINA BAR	
t: DNEVNI CENTAR ZA DJECU SA SMETNJAMA U RAZVOJU		Lokacija: UP 2286, BLOK 1-DUP "Polje Zaljevo" u Bar kp 2286, KO Polje,Bar	
arh.Dragana Čukić, dipl.ing.		Vrsta tehničke dokumentacije: Glavni projekat	
Draško Bažović, Spec.Sci.građ.		Dio tehničke dokumentacije: KONSTRUKCIJA	
Andrija Krivokapić, Spec.Sci.građ.		Prilog: Plan armiranja greda POS G108(107) i G110(G109)	
		Br. priloga	2.17

EUROZOX d.o.o.
Spuž bb
DANILOVGRAD

OPŠTINA BAR

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DNEVNI CEN

SMETNJAN

--	--

arh.Dragan

Draško Bašo

Andrija Krivok

de i M.P:

2021

OPŠTINA BAR

BLOK 1 DUB "Reli:

BLUK 1-DUP Polje
kp 2286, KO Polje

Glavni projekti

KONSTRUK

	8
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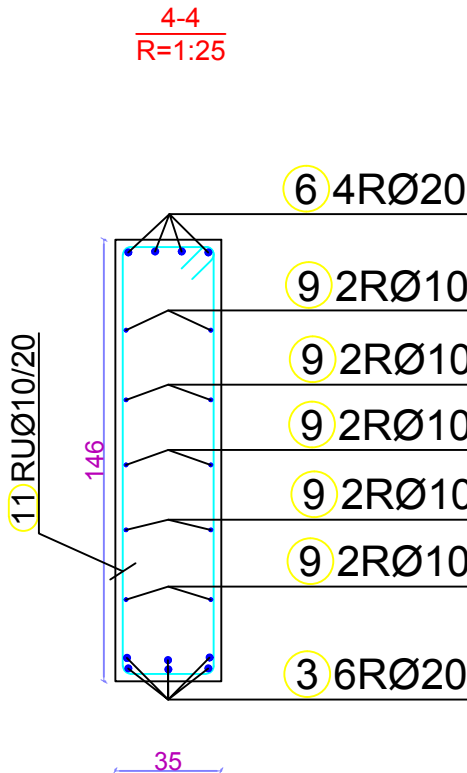
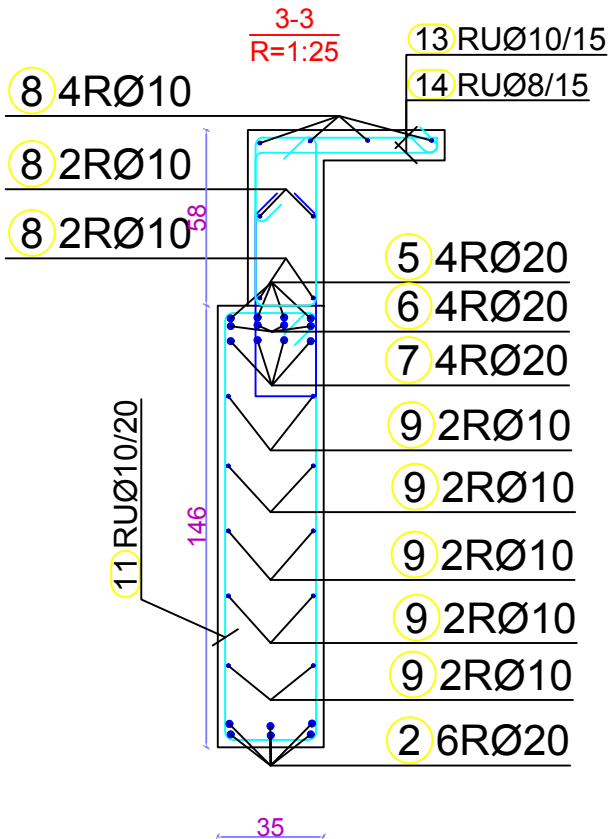
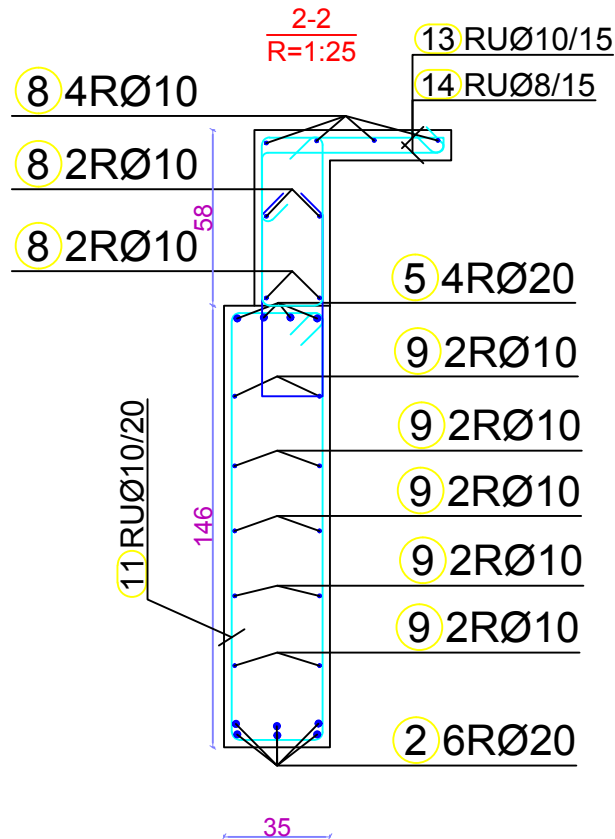
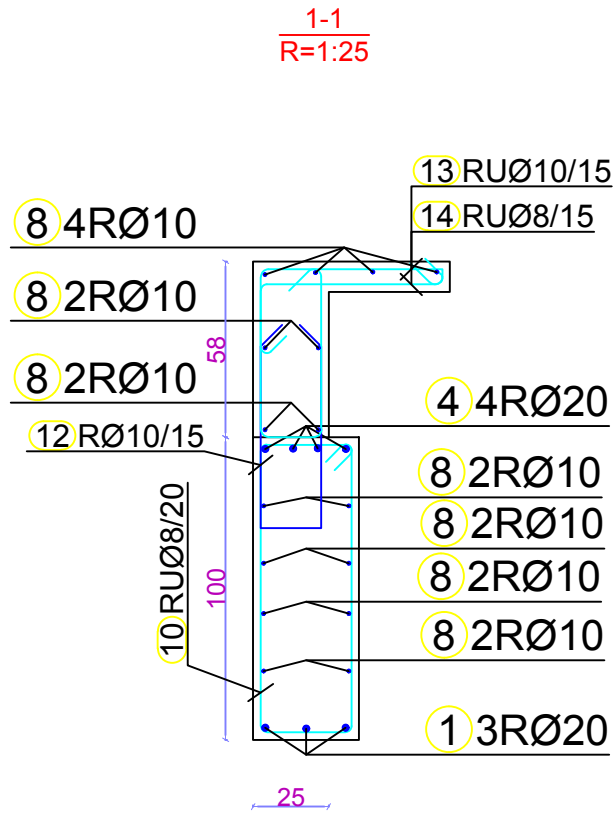
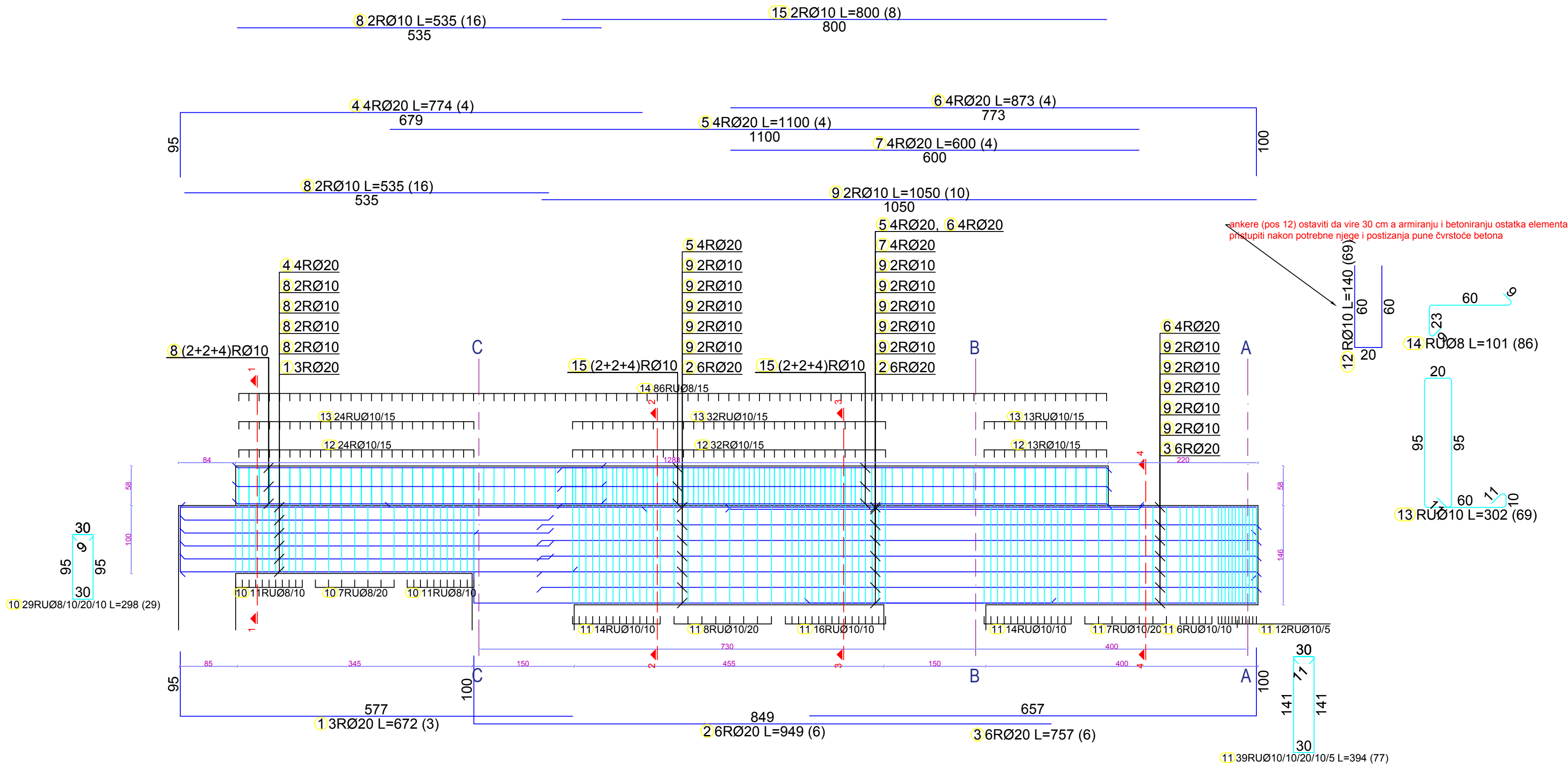
greda

G110(G109)

M.P:

Plan armiranja grede - POS G112 (G111)

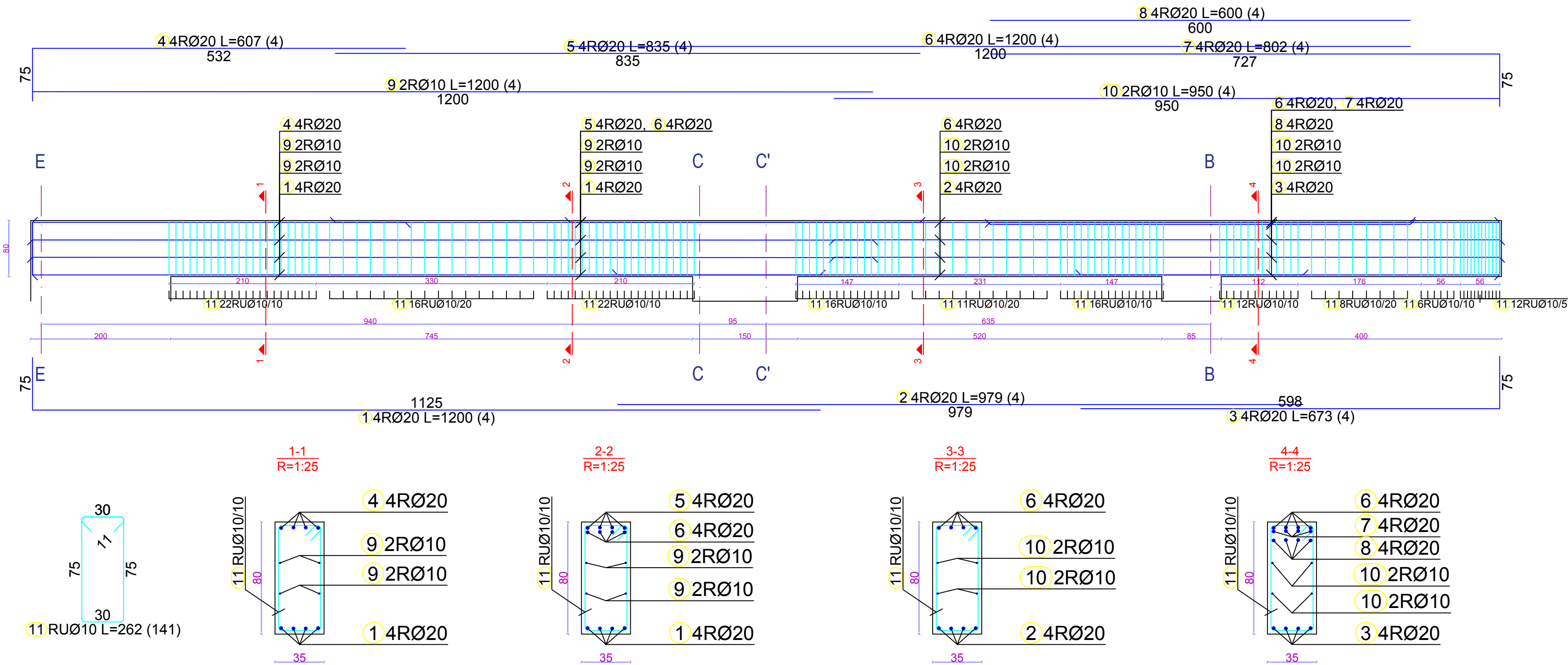
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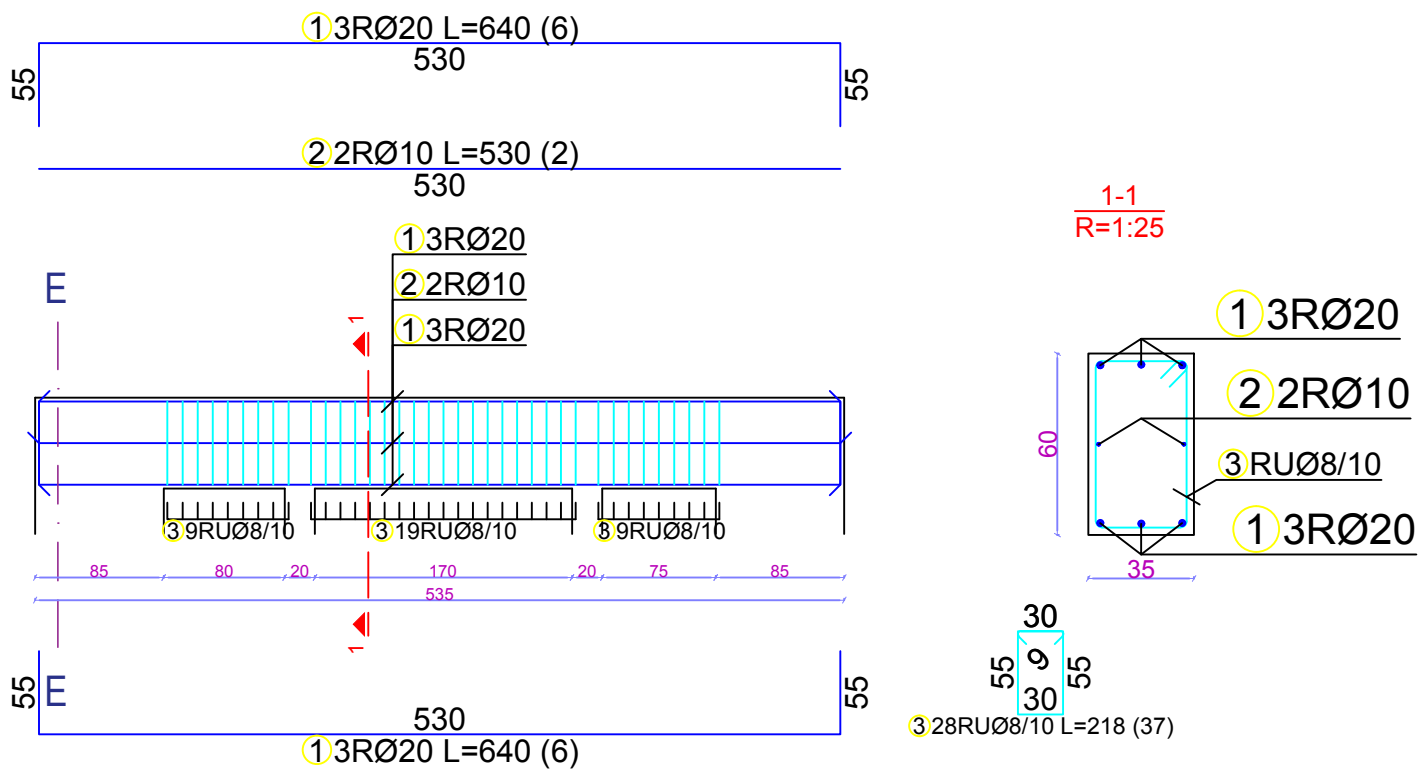
Šipke - specifikacija					
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lg _n [m]
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2		20	9.49	6	56.94
3		20	7.57	6	45.42
4		20	7.74	4	30.96
5		20	11.00	4	44.00
6		20	8.73	4	34.92
7		20	6.00	4	24.00
8		10	5.35	16	85.60
9		10	10.50	10	105.00
10		8	2.98	29	86.42
11		10	3.94	77	303.38
12		10	1.40	69	96.60
13		10	3.02	69	208.38
14		8	1.01	86	86.86
15		10	8.00	8	64.00

PROJEKTANT: EUROZOX d.o.o. <small>Spuž bb DANILOVGRAD</small>		Investitor: OPŠTINA BAR		
Objekat:	DNEVNI CENTAR ZA DJECU SA SMETNJAMA U RAZVOJU	Lokacija: UP 2286, BLOK 1-DUP "Polje Zaljevo" u Baru kp 2286, KO Polje,Bar		
Glavni inženjer	arh.Dragana Čukić, dipl.ing.	Vrsta tehnicke dokumentacije: Glavni projekat		
Odgovorni inženjer	Draško Bašović, Spec.Sci.građ.	Dio tehnicke dokumentacije: KONSTRUKCIJA		R=1:50
Saradnik	Andrija Krivokapić, Spec.Sci.građ.	Prilog: Plan armiranja grede POS G112 (G111)	Br. priloga 2.18	Br. strane 317
Datum izrade i M.P: novembar 2021		Datum revizije i M.P:		

Plan armiranja grede - POS G114 (G115)
MB 30, B500B, ao=2.5cm



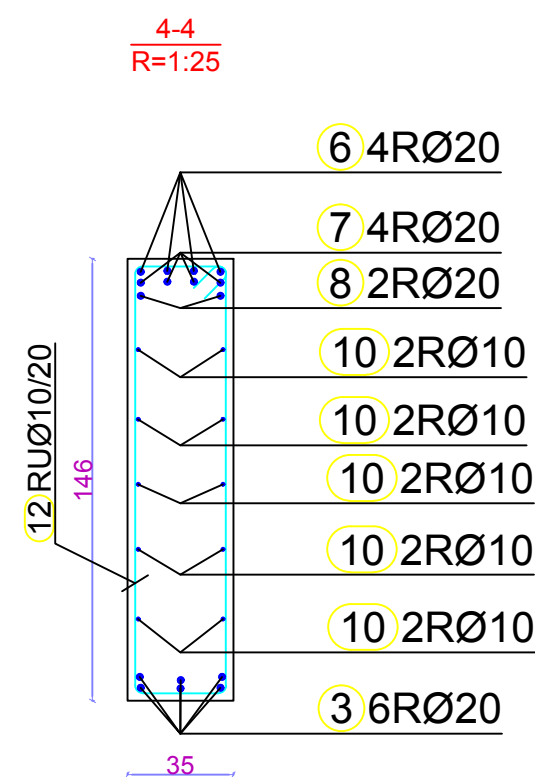
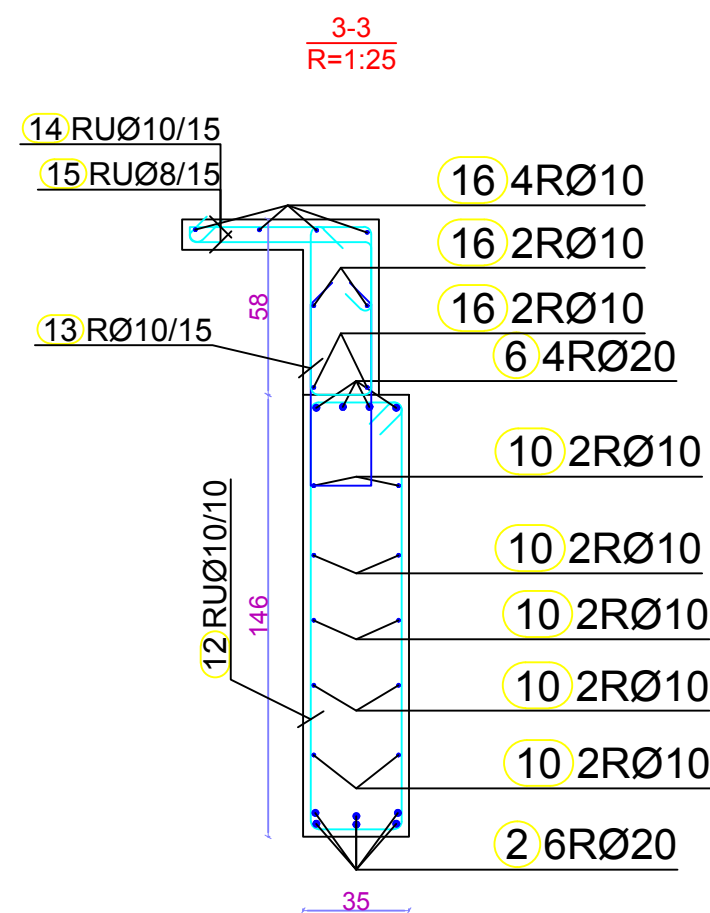
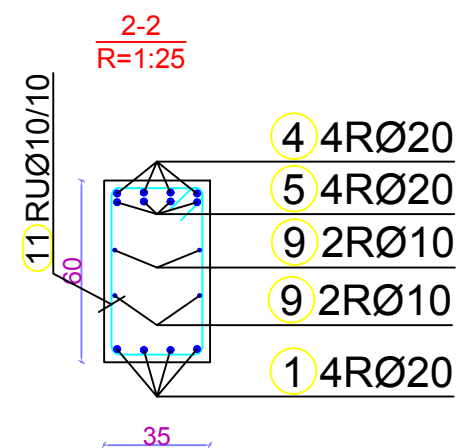
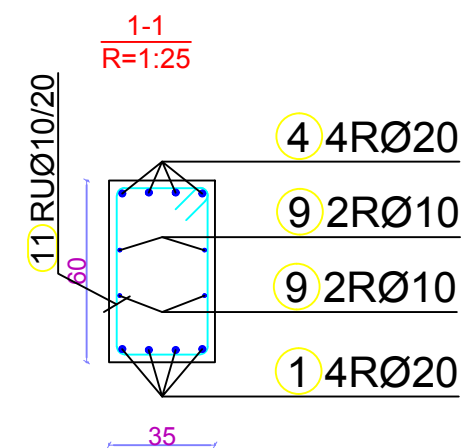
Plan armiranja grede - POS G113
MB 30, B500B, ao=2.5cm

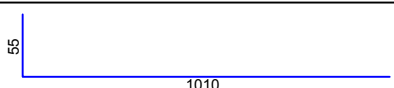
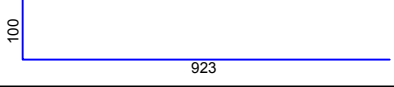
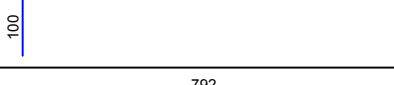
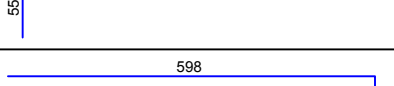
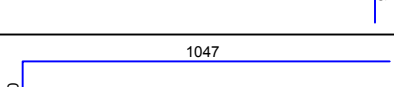
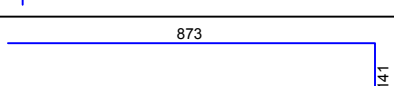
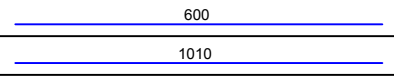
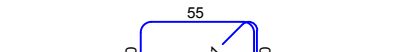
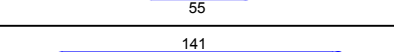
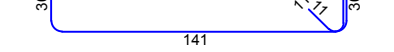
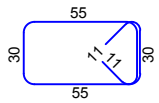
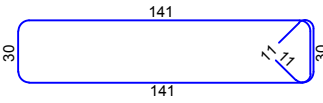
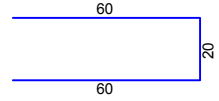
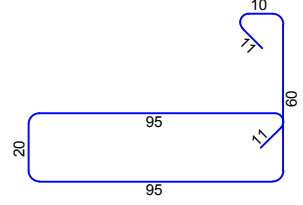
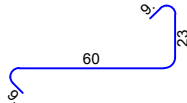
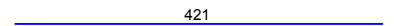


Šipke - specifikacija					
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lg _n [m]
POS G113 (1 kom)					
1		20	6.40	6	38.40
2		10	5.30	2	10.60
3		8	2.18	37	80.66
POS G114(G115) (1 kom)					
1		20	12.00	4	48.00
2		20	9.79	4	39.16
3		20	6.73	4	26.92
4		20	6.07	4	24.28
5		20	8.35	4	33.40
6		20	12.00	4	48.00
7		20	8.02	4	32.08
8		20	6.00	4	24.00
9		10	12.00	4	48.00
10		10	9.50	4	38.00
11		10	2.62	141	369.42

PROJEKTANT: EUROZOX d.o.o. <small>Spuž bb DANILOVGRAD</small>		Investitor: OPŠTINA BAR	
Objekat:	DNEVNI CENTAR ZA DJECU SA SMETNJAMA U RAZVOJU	Lokacija: UP 2286, BLOK 1-DUP "Polje Zaljevo" u Baru kp 2286, KO Polje,Bar	
Glavni inženjer	arh.Dragana Čukić, dipl.ing.	Vrsta tehnicke dokumentacije: Glavni projekat	
Odgovorni inženjer	Draško Bašović, Spec.Sci.građ.	Dio tehnicke dokumentacije: KONSTRUKCIJA R=1:50	
Saradnik	Andrija Krivokapić, Spec.Sci.građ.	Prilog: Plan armiranja greda POS G114 (G115) i G113	Br. priloga 2.19 Br. strane 318
Datum izrade i M.P: novembar 2021		Datum revizije i M.P:	

MB 30, B500B, ao=2.5cm

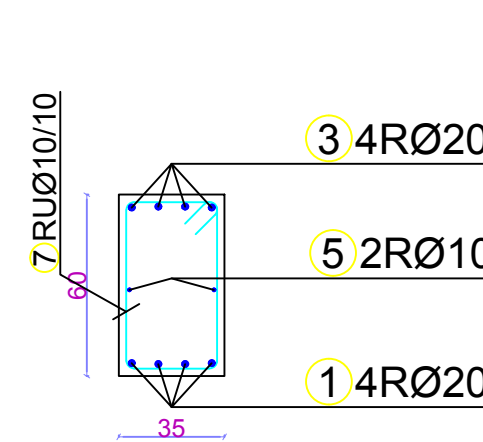
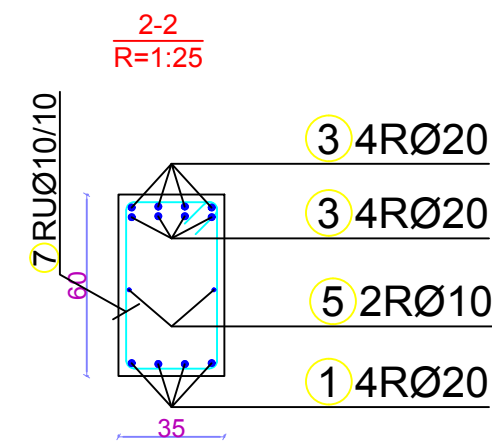
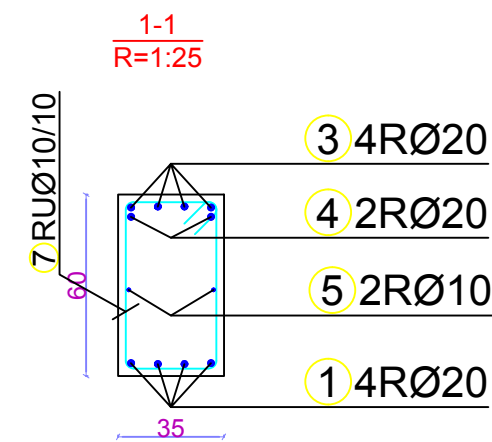
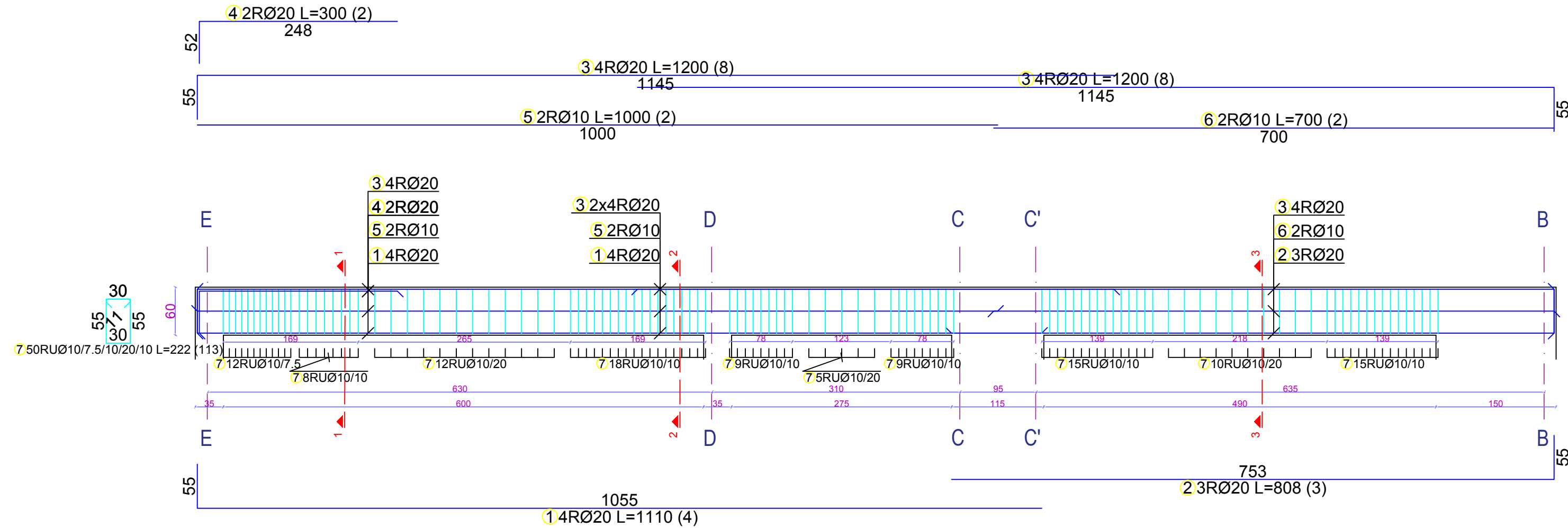


Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
POS G116(G117) (1 kom)						
1		20	10.65	4	42.60	
2		20	10.23	6	61.38	
3		20	8.63	6	51.78	
4		20	8.47	4	33.88	
5		20	6.89	4	27.56	
6		20	11.47	4	45.88	
7		20	10.14	4	40.56	
8		20	6.00	2	12.00	
9		10	10.10	4	40.40	
10		10	12.20	10	122.00	
11		10	2.22	61	135.42	
12		10	3.94	69	271.86	
13		10	1.40	29	40.60	
14		10	3.02	29	87.58	
15		8	1.01	29	29.29	
16		10	4.21	8	33.68	

PROJEKTANT: EUROZOX d.o.o. Spuž bb DANILOVGRAD		Investitor: OPŠTINA BAR	
Objekat:	DNEVNI CENTAR ZA DJECU SA SMETNJAMA U RAZVOJU	Lokacija: UP 2286, BLOK 1-DUP "Polje Zaljevo" u Baru kp 2286, KO Polje,Bar	
Glavni inženjer	arh.Dragana Čukić, dipl.ing.	Vrsta tehnicke dokumentacije: Glavni projekat	
Odgovorni inženjer	Draško Bašović, Spec.Sci.građ.	Dio tehnicke dokumentacije: KONSTRUKCIJA	R=1:50
Saradnik	Andrija Krivokapić, Spec.Sci.građ.	Prilog: Plan armiranja greda POS G116 (G117)	Br. priloga 2.20 Br. strane 319
Datum izrade i M.P: novembar 2021		Datum revizije i M.P:	

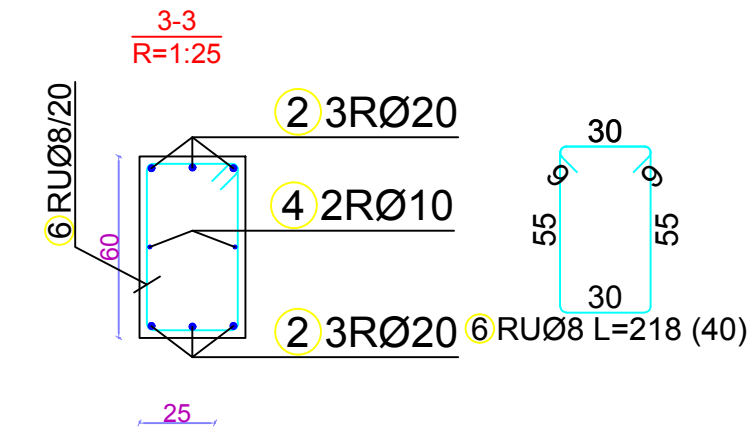
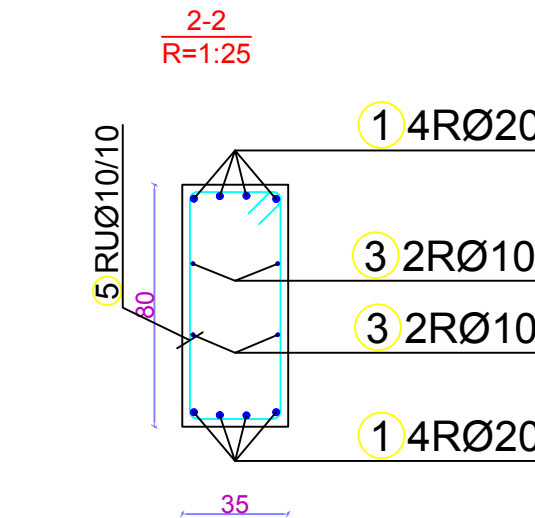
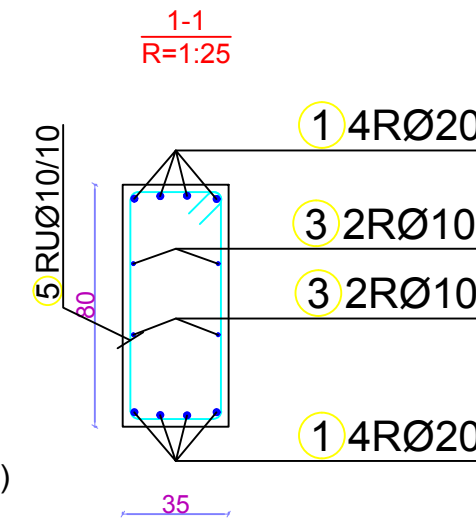
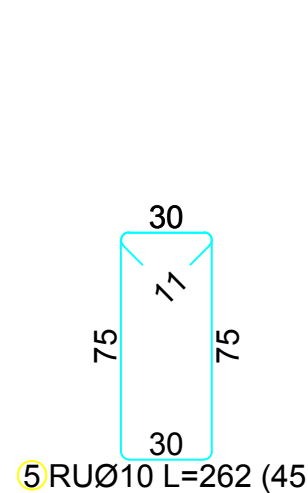
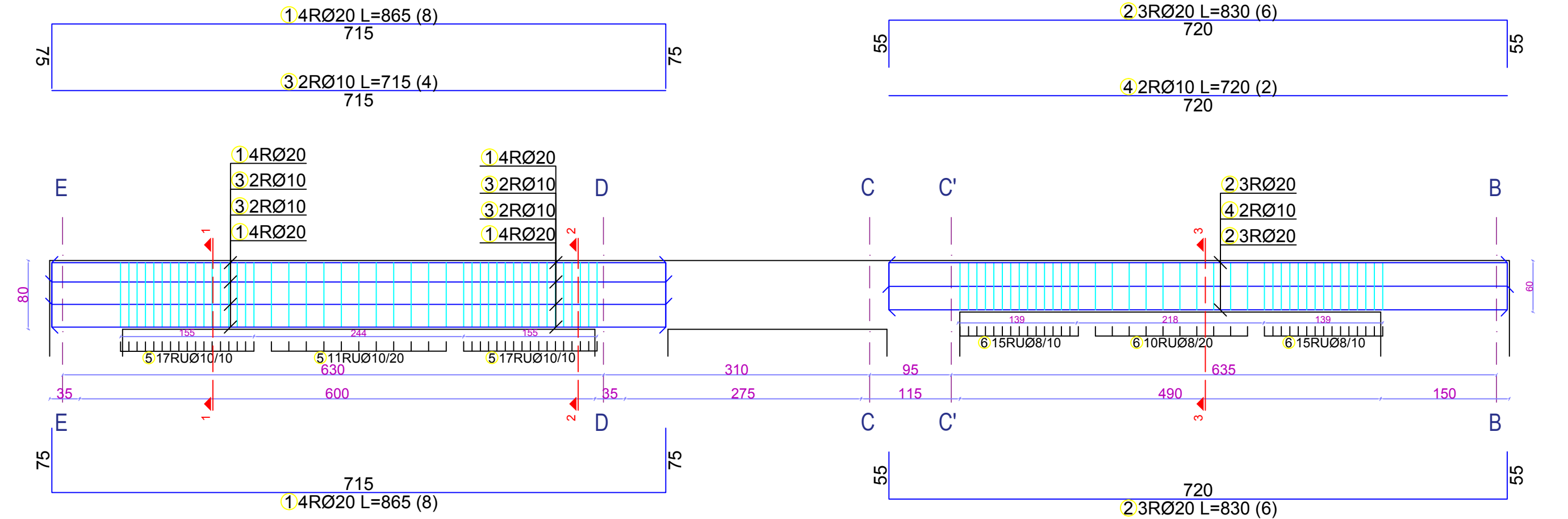
Plan armiranja grede - POS G118

MB 30, B500B, ao=2.5cm



Plan armiranja grede - POS G119

MB 30, B500B, ao=2.5cm



Sipke - specifikacija					
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]
POS G118 (1 kom)					
1		20	11.10	4	44.40
2		20	8.08	3	24.24
3		20	12.00	8	96.00
4		20	3.00	2	6.00
5		10	10.00	2	20.00
6		10	7.00	2	14.00
7		10	2.22	113	250.86
POS G119 (1 kom)					
1		20	8.65	8	69.20
2		20	8.30	6	49.80
3		10	7.15	4	28.60
4		10	7.20	2	14.40
5		10	2.62	45	117.90
6		8	2.18	40	87.20

PROJEKTANT:
EUROZOX d.o.o.

Spuž bb
DANILOVGRAD

Investitor:

OPŠTINA BAR

Objekat:

**DNEVNI CENTAR ZA DJECU SA
SMETNJAMA U RAZVOJU**

Lokacija:

**UP 2286, BLOK 1-DUP "Polje Zaljevo" u Baru
kp 2286, KO Polje,Bar**

Glavni inženjer

arh.Dragana Čukić, dipl.ing.

Vrsta tehnicke dokumentacije:

Glavni projekat

Odgovorni inženjer

Draško Bašović, Spec.Sci.građ.

Dio tehnicke dokumentacije:

KONSTRUKCIJA

R=1:50

Saradnik

Andrija Krivokapić, Spec.Sci.građ.

Prilog:

Br. priloga

Br. strane

2.21

320

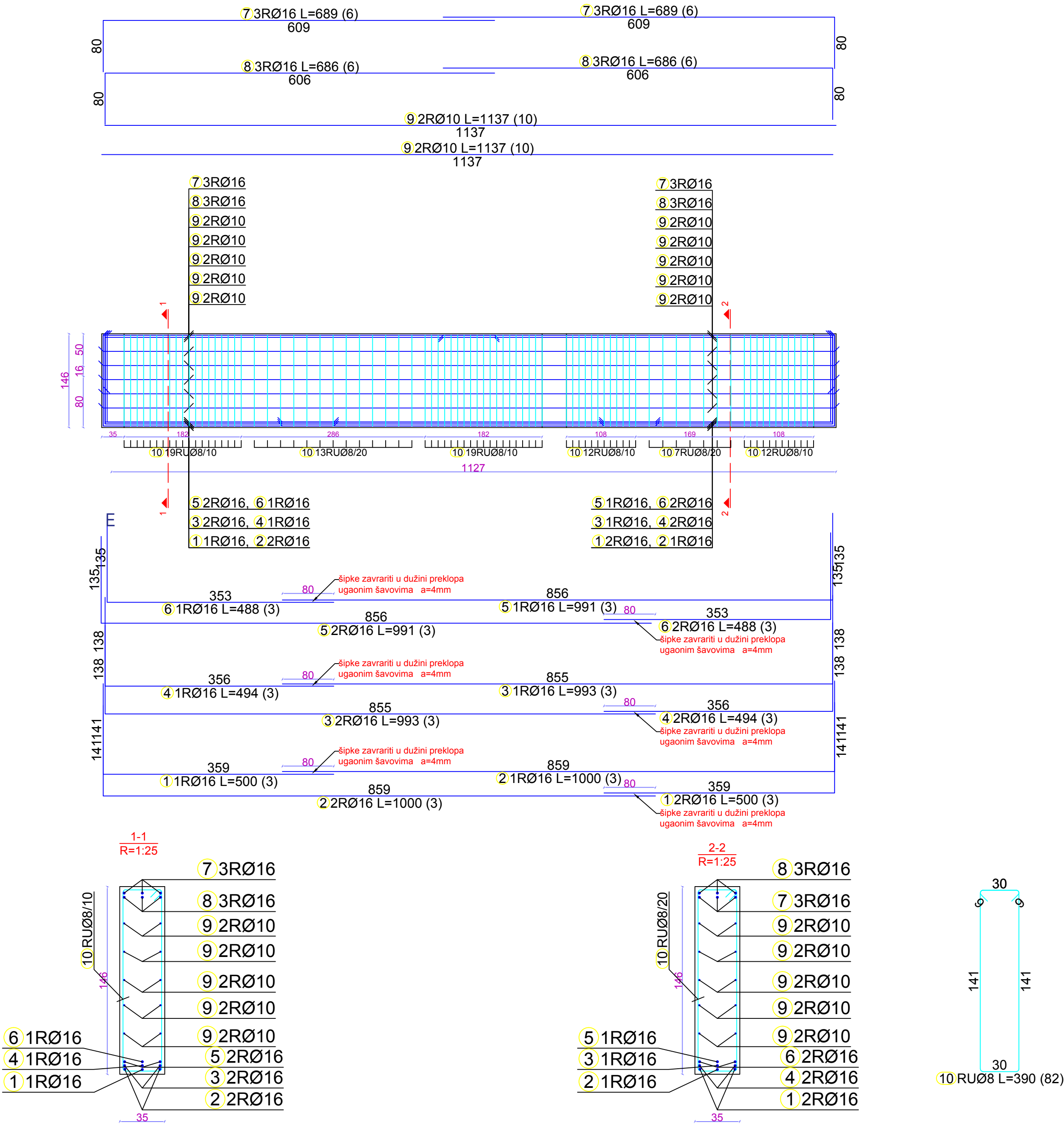
Datum izrade i M.P:

novembar 2021

Datum revizije i M.P:

Plan armiranja grede - POS G120

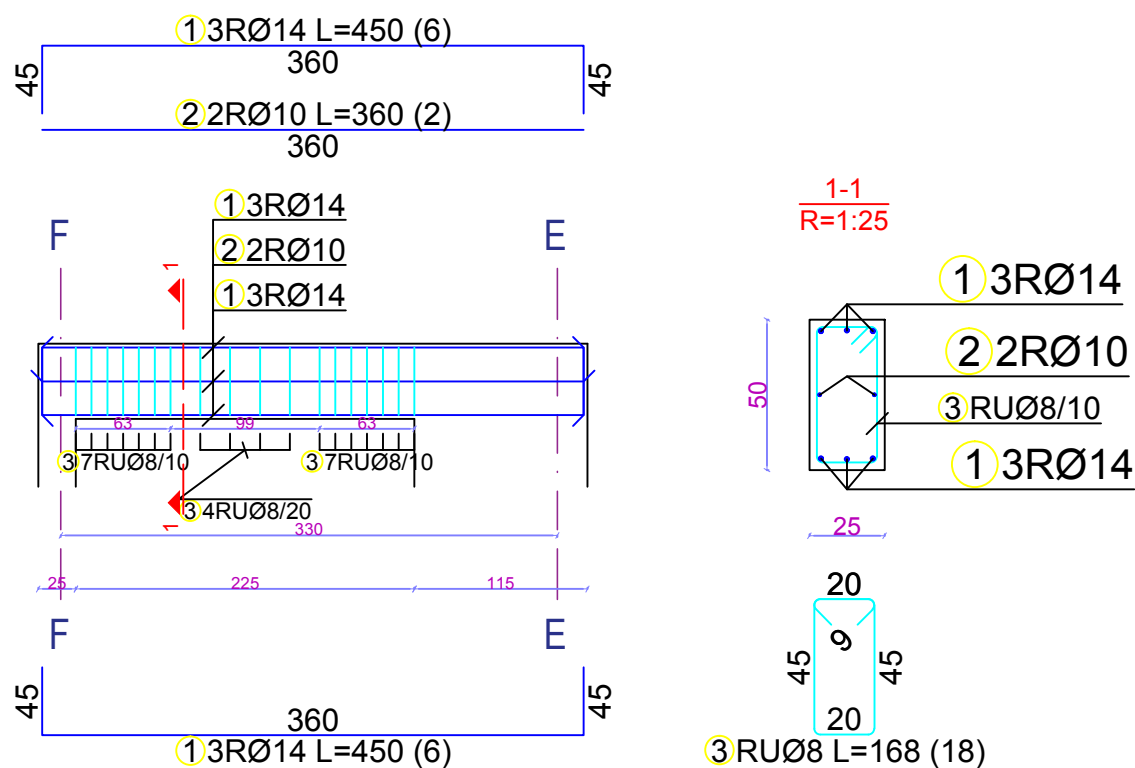
MB 30, B500B, ao=2.5cm



Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lg _n [m]	Napomena
POS G120 (1 kom)						
1		16	5.00	3	15.00	
2		16	10.00	3	30.00	
3		16	9.93	3	29.79	
4		16	4.94	3	14.82	
5		16	9.91	3	29.73	
6		16	4.88	3	14.64	
7		16	6.89	6	41.34	
8		16	6.86	6	41.16	
9		10	11.37	10	113.70	
10		8	3.90	82	319.80	

PROJEKTANT: EUROZOX d.o.o. Spuž bb DANILOVGRAD		Investitor: OPŠTINA BAR	
Objekat:	DNEVNI CENTAR ZA DJECU SA SMETNJAMA U RAZVOJU	Lokacija: UP 2286, BLOK 1-DUP "Polje Zaljevo" u Baru kp 2286, KO Polje,Bar	
Glavni inženjer	arh.Dragana Čukić, dipl.ing.	Vrsta tehnicke dokumentacije: Glavni projekat	
Odgovorni inženjer	Draško Bašović, Spec.Sci.građ.	Dio tehnicke dokumentacije: KONSTRUKCIJA	R=1:50
Saradnik	Andrija Krivokapić, Spec.Sci.građ.	Prilog: Plan armiranja grede POS G120	Br. priloga: 2.22 Br. strane: 321
Datum izrade i M.P: novembar 2021		Datum revizije i M.P:	

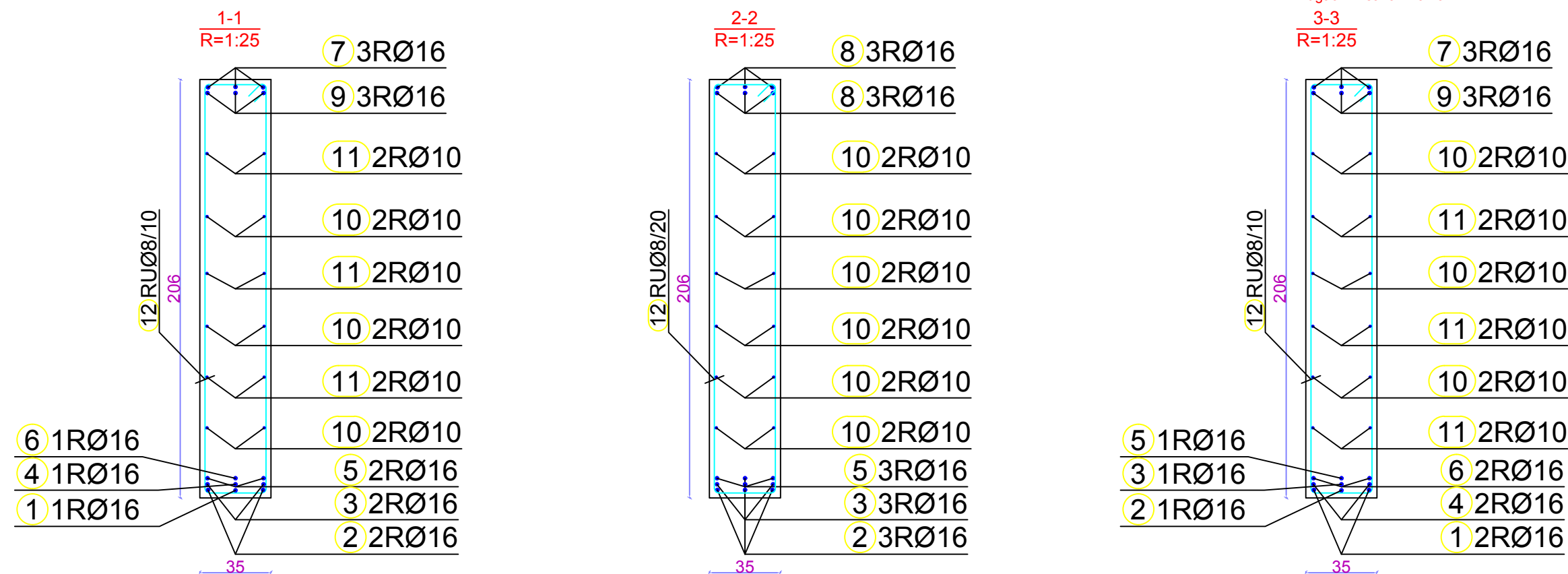
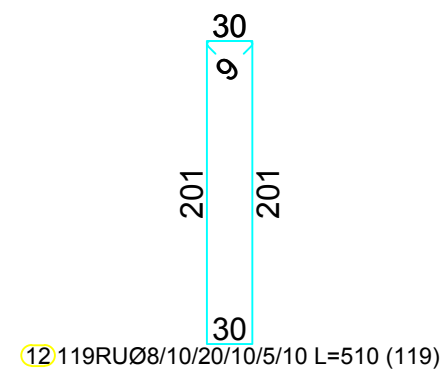
Plan armiranja grede - POS G121
MB 30, B500B, ao=2.5cm

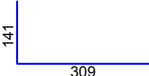
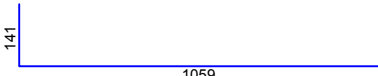
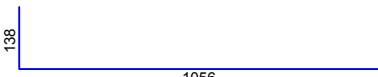

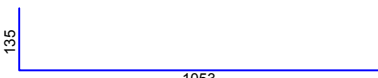

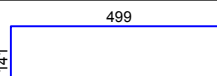
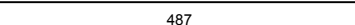
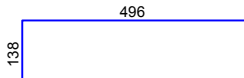

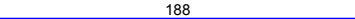
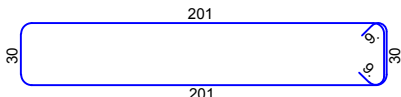


Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lg _n [m]	Napomena
POS G121 (1 kom)						
1		14	4.50	6	27.00	
2		10	3.60	2	7.20	
3		8	1.68	18	30.24	

PROJEKTANT: EUROZOX d.o.o. Spuž bb DANILOVGRAD		Investitor: OPŠTINA BAR		
Objekat:	DNEVNI CENTAR ZA DJECU SA SMETNJAMA U RAZVOJU	Lokacija: UP 2286, BLOK 1-DUP "Polje Zaljevo" u Baru kp 2286, KO Polje,Bar		
Glavni inženjer	arh.Dragana Čukić, dipl.ing.	Vrsta tehnicke dokumentacije: Glavni projekat		
Odgovorni inženjer	Draško Bašović, Spec.Sci.građ.	Dio tehnicke dokumentacije: KONSTRUKCIJA		R=1:50
Saradnik	Andrija Krivokapić, Spec.Sci.građ.	Prilog: Plan armiranja grede POS G121	Br. priloga 2.23	Br. strane 322
Datum izrade i M.P: novembar 2021		Datum revizije i M.P:		

MB 30, B500B, $a_o=2.5\text{cm}$

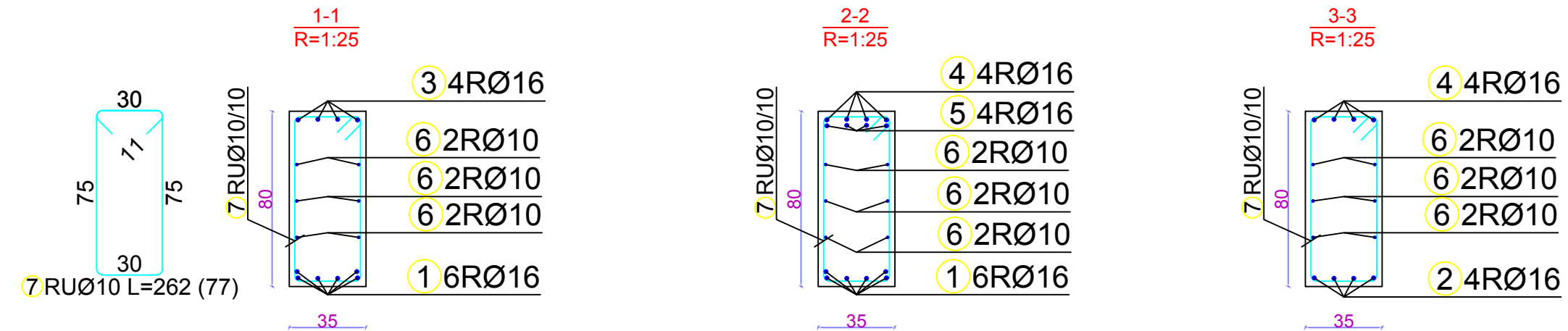
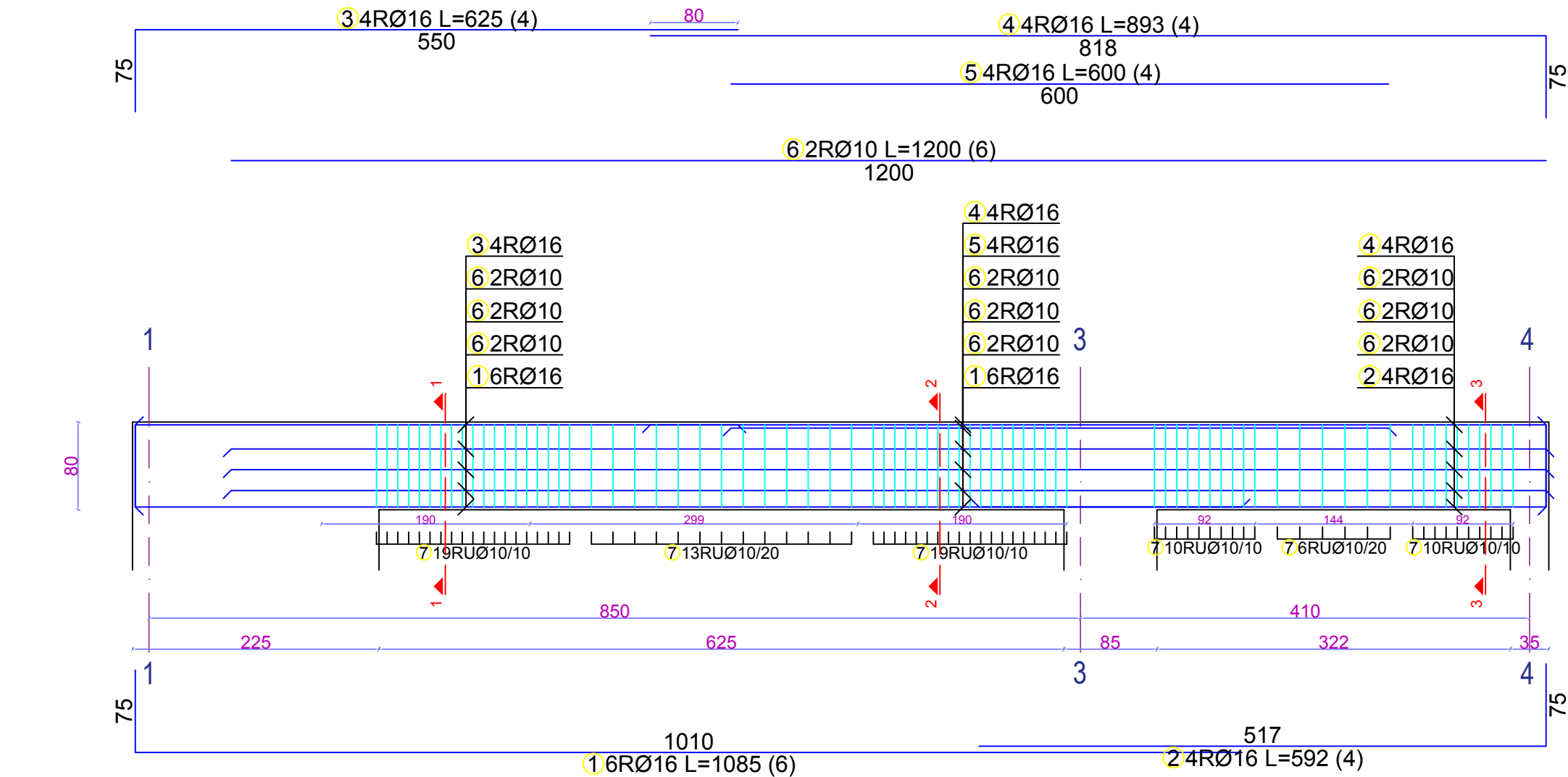


Šipke - specifikacija							
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena	
POS G201 (1 kom)							
1		16	4.50	3	13.50		
2		16	12.00	3	36.00		
3		16	11.94	3	35.82		
4		16	4.44	3	13.32		
5		16	11.88	3	35.64		
6		16	4.38	3	13.14		
7		16	6.40	6	38.40		
8		16	4.87	6	29.22		
9		16	6.34	6	38.04		
10		10	11.50	12	138.00		
11		10	1.88	12	22.56		
12		8	5.10	119	606.90		

PROJEKTANT: EUROZOX d.o.o. <small>Spuž bb DANILOVGRAD</small>		Investitor: OPŠTINA BAR	
Objekat:	DNEVNI CENTAR ZA DJECU SA SMETNJAMA U RAZVOJU	Lokacija: UP 2286, BLOK 1-DUP "Polje Zaljevo" u Baru kp 2286, KO Polje,Bar	
Glavni inženjer	arh.Dragana Čukić, dipl.ing.	Vrsta tehnicke dokumentacije:	Glavni projekat
Odgovorni inženjer	Draško Bašović, Spec.Sci.građ.	Dio tehnicke dokumentacije:	KONSTRUKCIJA R=1:50
Saradnik	Andrija Krivokapić, Spec.Sci.građ.	Prilog: Plan armiranja grede POS G201	Br. priloga 2.24 Br. strane 323
Datum izrade i M.P: novembar 2021		Datum revizije i M.P:	

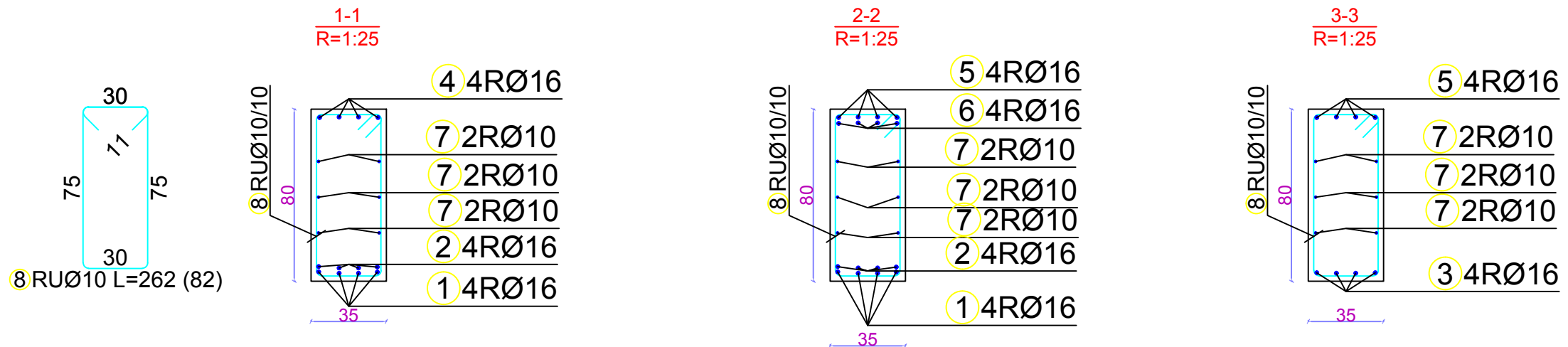
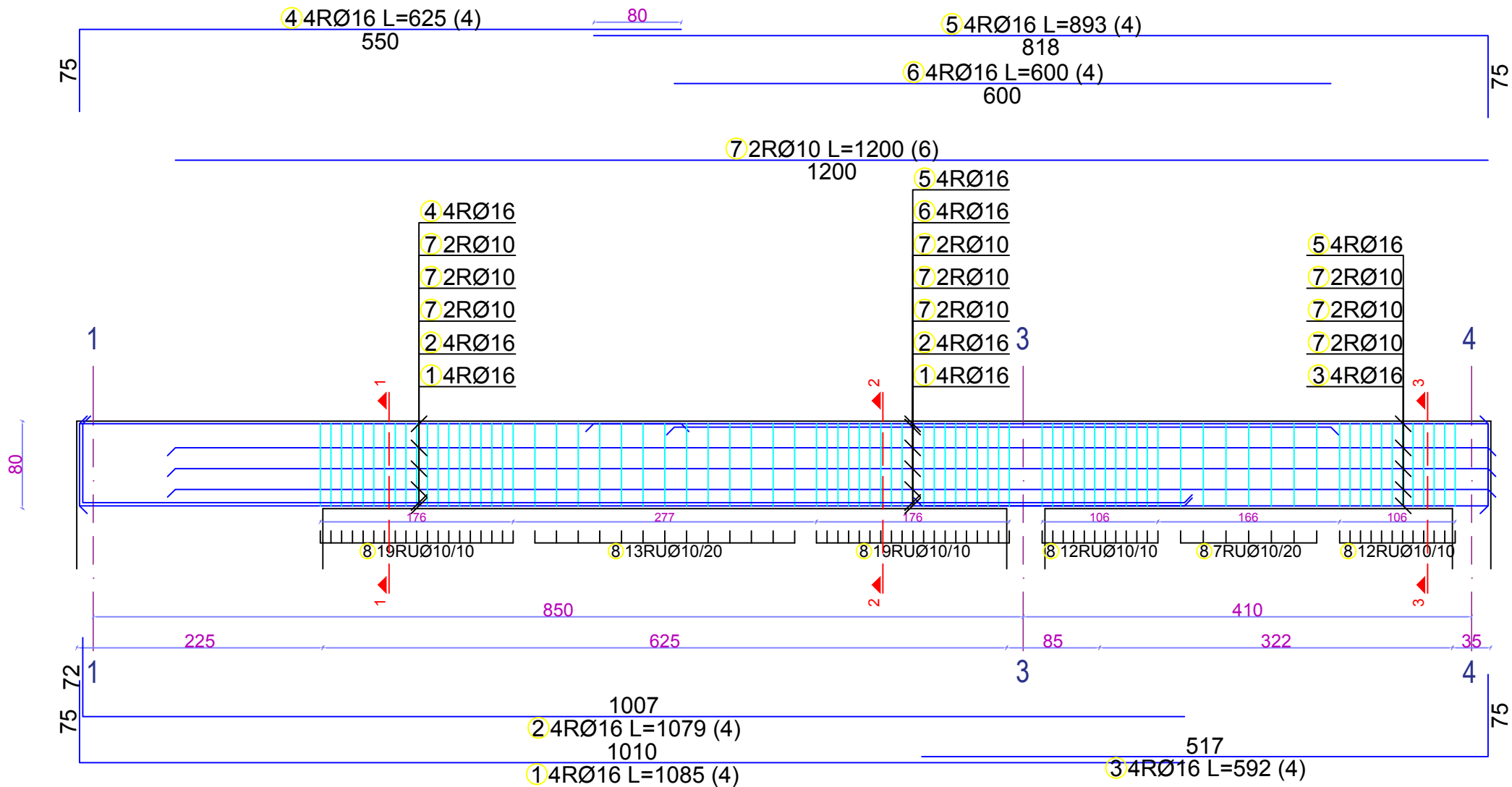
Plan armiranja grede - POS G202

MB 30, B500B, ao=2.5cm



Plan armiranja grede - POS G203

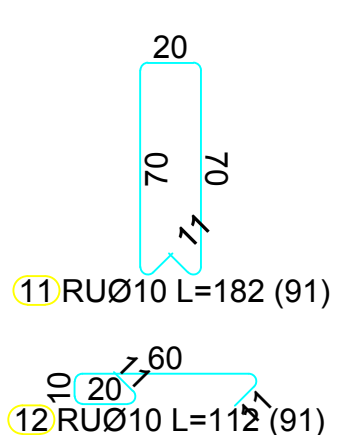
MB 30, B500B, ao=2.5cm



Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgm [m]	Napomena
POS G203 (1 kom)						
1		16	10.85	4	43.40	
2		16	10.79	4	43.16	
3		16	5.92	4	23.68	
4		16	6.25	4	25.00	
5		16	8.93	4	35.72	
6		16	6.00	4	24.00	
7		10	12.00	6	72.00	
8		10	2.52	82	214.84	
POS G202 (1 kom)						
1		16	10.85	6	65.10	
2		16	5.92	4	23.68	
3		16	6.25	4	25.00	
4		16	8.93	4	35.72	
5		16	6.00	4	24.00	
6		10	12.00	6	72.00	
7		10	2.62	77	201.74	

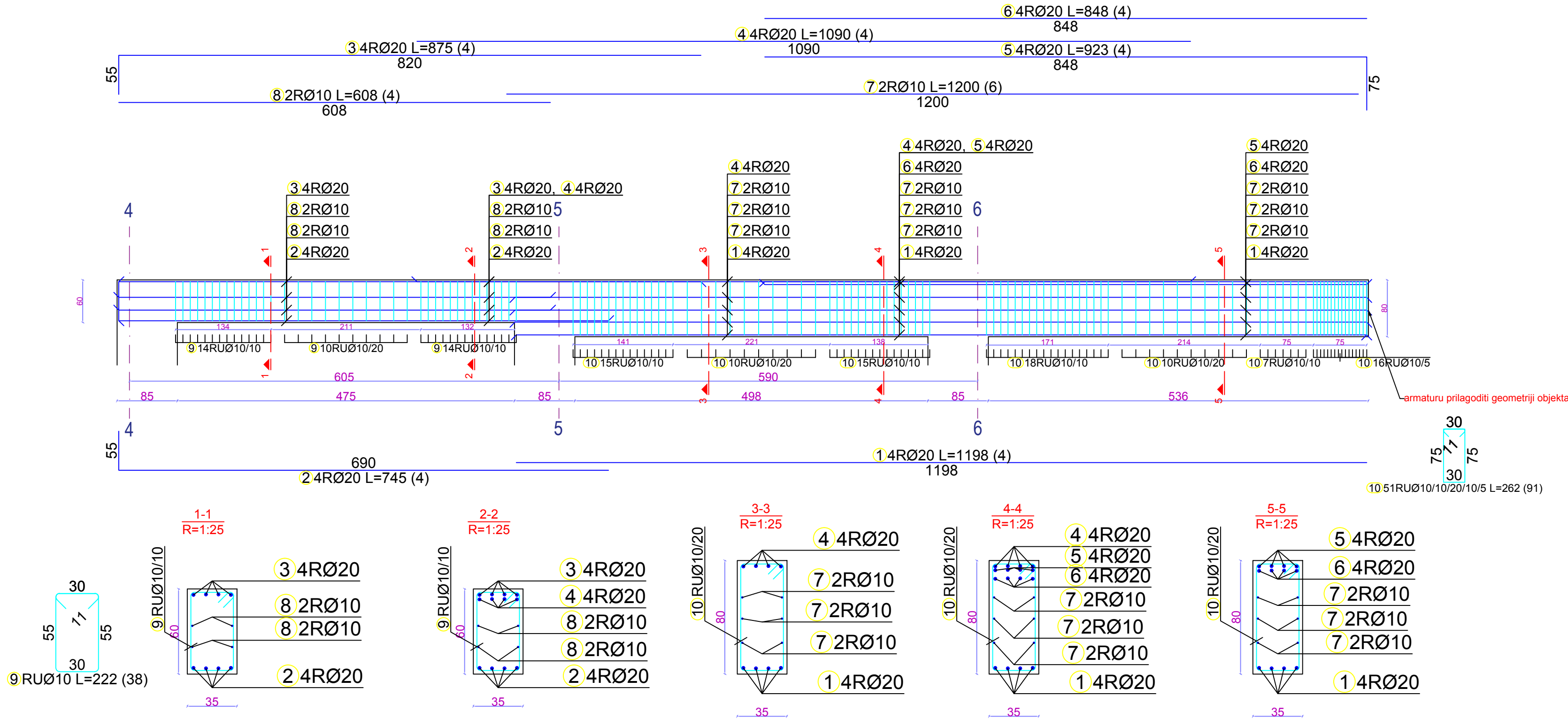
PROJEKTANT: EUROZOX d.o.o. Spuž bb DANILOVGRAD		Investitor: OPŠTINA BAR	
Objekat:	DNEVNI CENTAR ZA DJECU SA SMETNJAMA U RAZVOJU	Lokacija: UP 2286, BLOK 1-DUP "Polje Zaljevo" u Baru kp 2286, KO Polje,Bar	
Glavni inženjer	arh.Dragana Čukić, dipl.ing.	Vrsta tehnicke dokumentacije: Glavni projekat	
Odgovorni inženjer	Draško Bašović, Spec.Sci.građ.	Dio tehnicke dokumentacije: KONSTRUKCIJA	R=1:50
Saradnik	Andrija Krivokapić, Spec.Sci.građ.	Prilog: Plan armiranja greda POS G202 i G203	Br. priloga 2.25 Br. strane 324
Datum izrade i M.P: novembar 2021		Datum revizije i M.P:	

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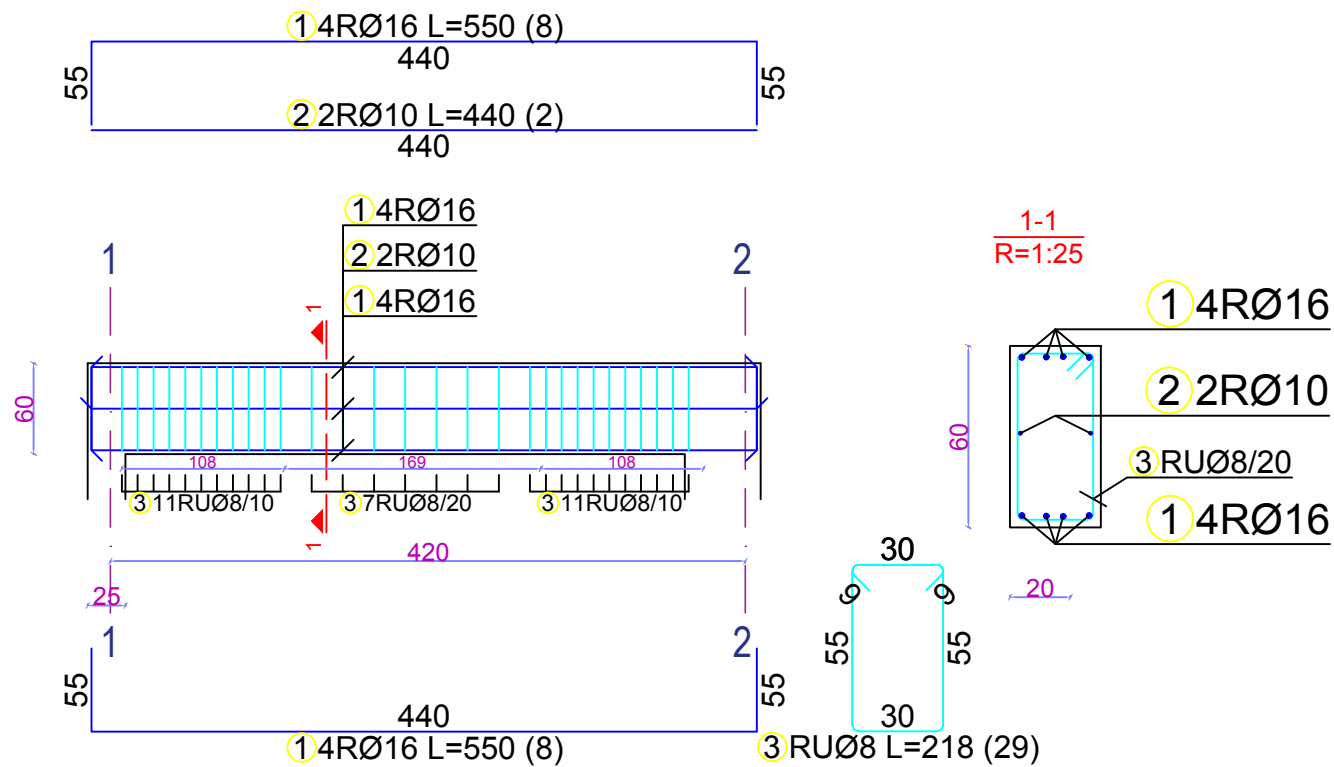


PROJEKTANT: EUROZOX d.o.o. <small>Spuž bb DANILOVGRAD</small>		Investitor: OPŠTINA BAR	
Objekat:	DNEVNI CENTAR ZA DJECU SA SMETNJAMA U RAZVOJU	Lokacija: UP 2286, BLOK 1-DUP "Polje Zaljevo" u Baru kp 2286, KO Polje,Bar	
Glavni inženjer	arh.Dragana Čukić, dipl.ing.	Vrsta tehnicke dokumentacije:	Glavni projekat
Odgovorni inženjer	Draško Bašović, Spec.Sci.građ.	Dio tehnicke dokumentacije:	KONSTRUKCIJA R=1:50
Saradnik	Andrija Krivokapić, Spec.Sci.građ.	Prilog: Plan armiranja grede POS G205 (G204)	Br. priloga 2.26 Br. strane 325
Datum izrade i M.P: novembar 2021		Datum revizije i M.P:	

Plan armiranja grede - POS G207 (G206)
MB 30, B500B, ao=2.5cm



Plan armiranja grede - POS G208
MB 30, B500B, ao=2.5cm



Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
POS G207(G206) (1 kom)						
1	1198	20	11.98	4	47.92	
2	690	20	7.45	4	29.80	
3	820	20	8.75	4	35.00	
4	1090	20	10.90	4	43.60	
5	848	20	9.23	4	36.92	
6	848	20	8.48	4	33.92	
7	1200	10	12.00	6	72.00	
8	608	10	6.08	4	24.32	
9	55	10	2.22	38	84.36	
10	75	10	2.62	91	238.42	
POS G208 (1 kom)						
1	440	16	5.50	8	44.00	
2	440	10	4.40	2	8.80	
3	55	8	2.18	29	63.22	

PROJEKTANT:
EUROZOX d.o.o.
Spuž bb
DANILOVGRAD

Investitor:
OPŠTINA BAR

Objekat: **DNEVNI CENTAR ZA DJECU SA SMETNJAMA U RAZVOJU**
Lokacija: **UP 2286, BLOK 1-DUP "Polje Zaljevo" u Baru kp 2286, KO Polje,Bar**

Glavni inženjer: **arh.Dragana Čukić, dipl.ing.**
Vrsta tehnicke dokumentacije: **Glavni projekat**

Odgovorni inženjer: **Draško Bašović, Spec.Sci.građ.**
Dio tehnicke dokumentacije: **KONSTRUKCIJA**
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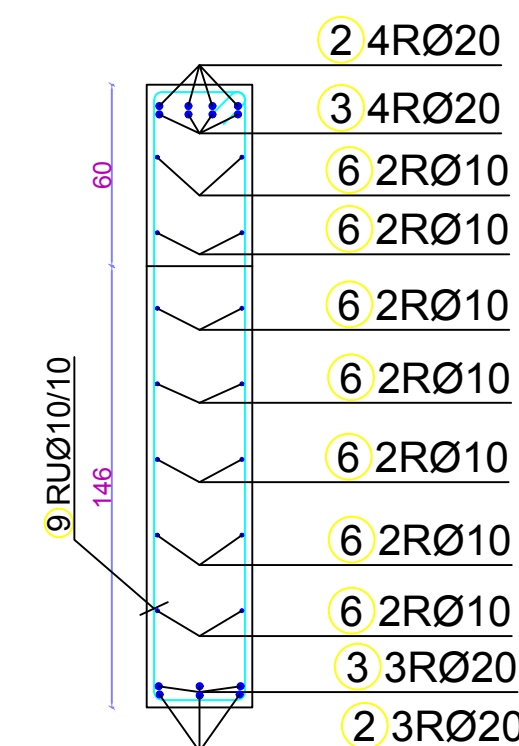
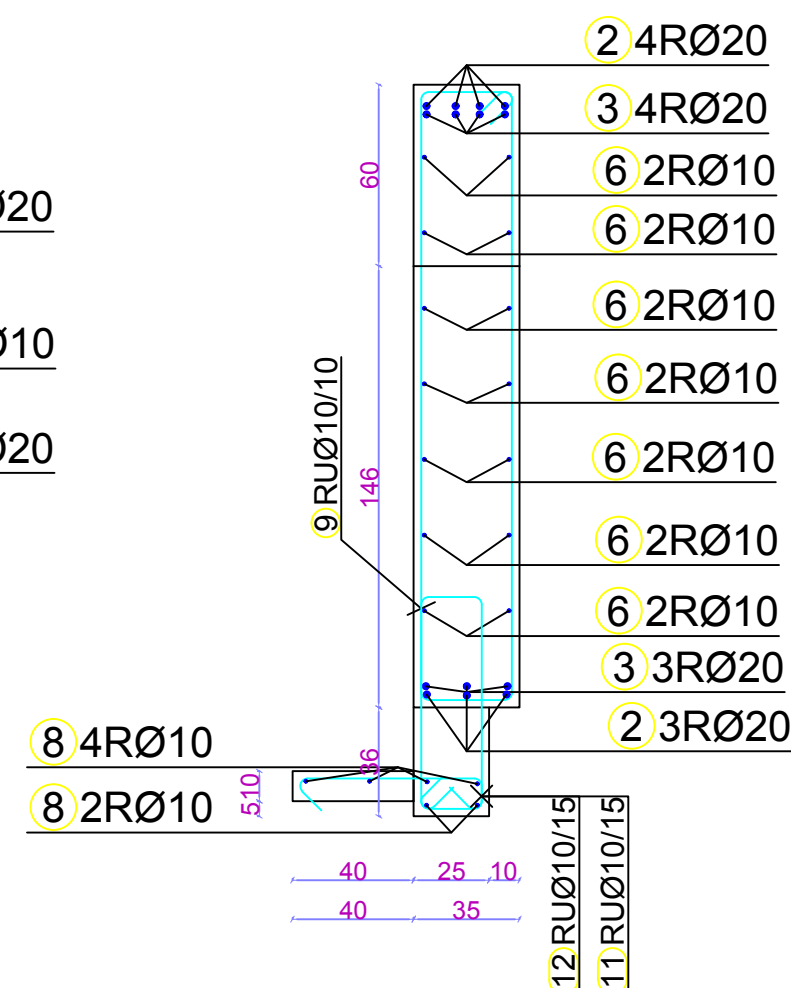
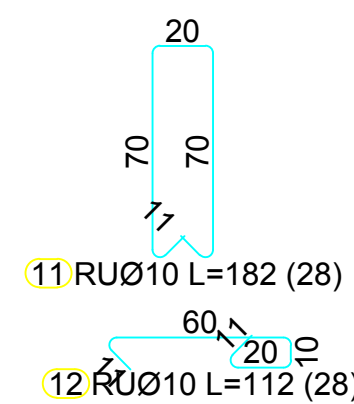
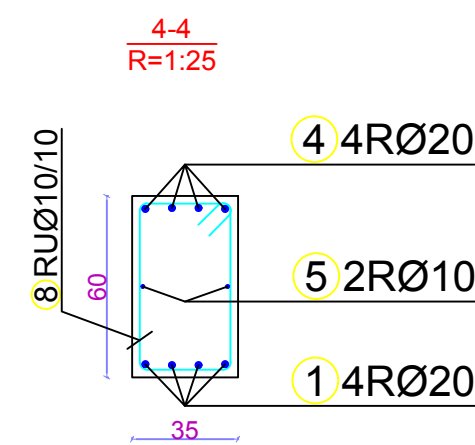
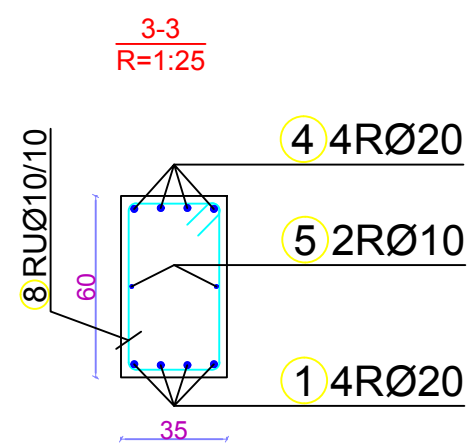
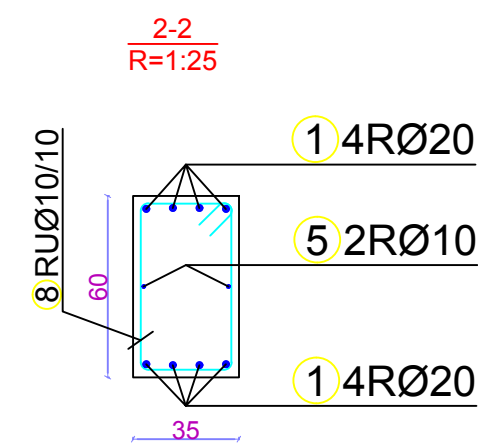
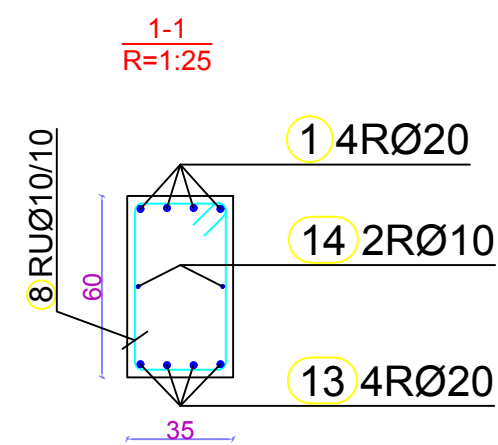
Saradnik: **Andrija Krivokapić, Spec.Sci.građ.**
Prilog: **Plan armiranja grede POS G207(G206) i G208**
Br. priloga: **2.27**
Br. strane: **326**

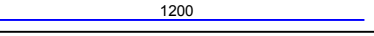
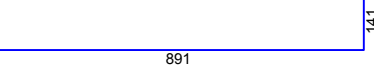

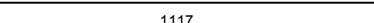

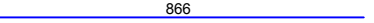
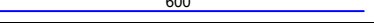
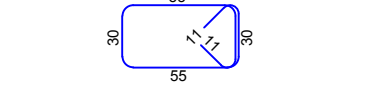
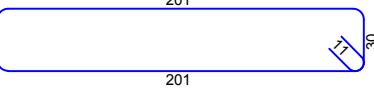
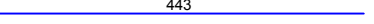
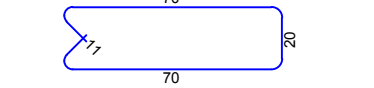
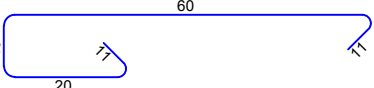
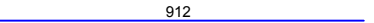
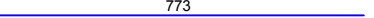
Datum izrade i M.P:

novembar 2021

Datum revizije i M.P:

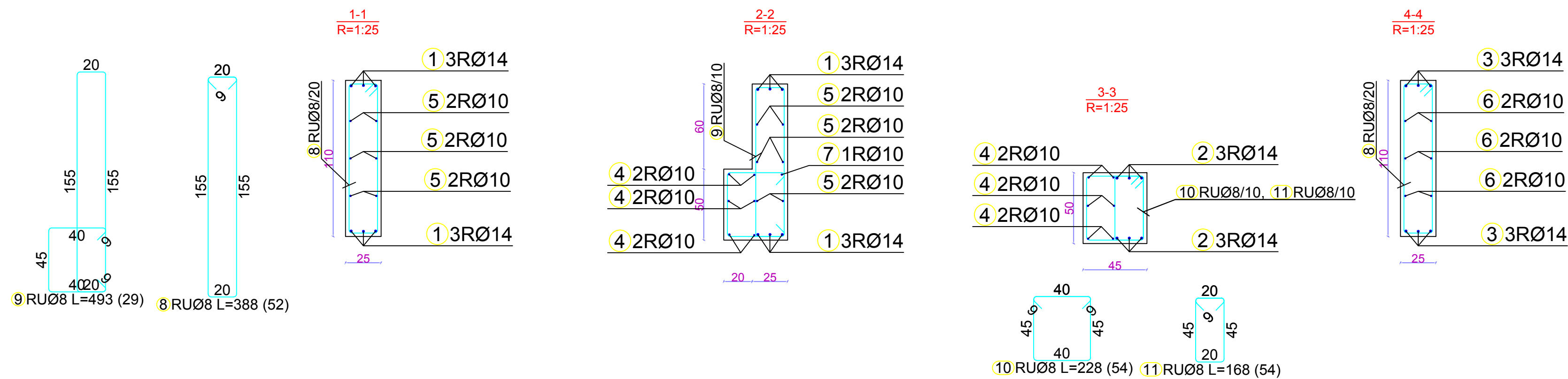
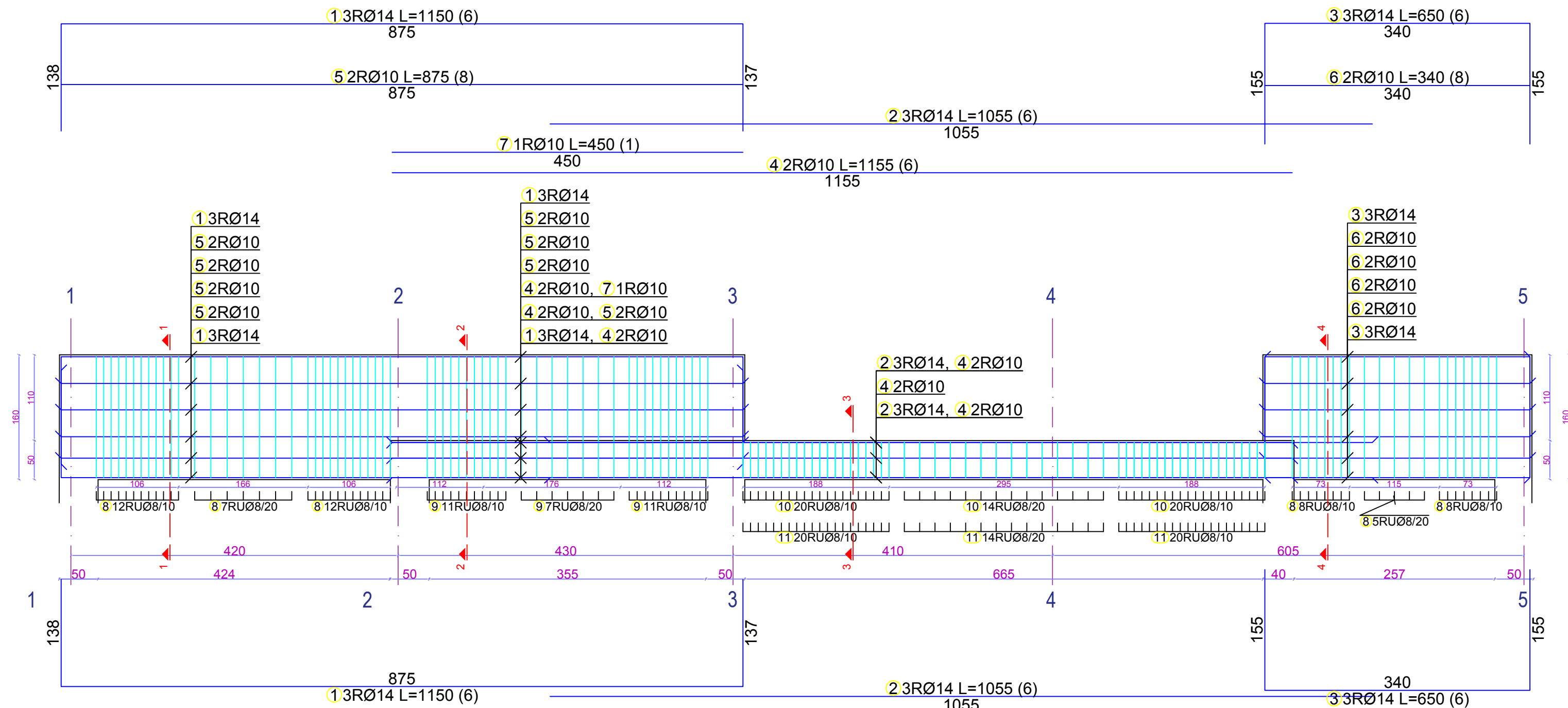
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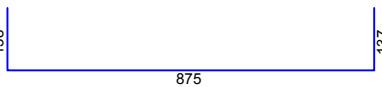
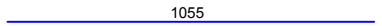
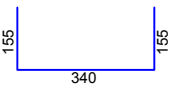
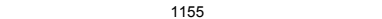
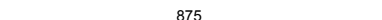
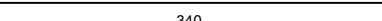

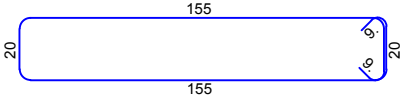
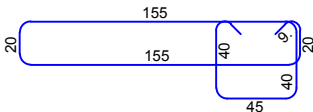
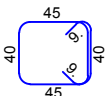
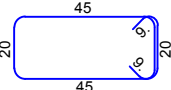


Šipke - specifikacija						
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G210 (G209) (1 kom)						
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2		20	11.73	7	82.11	
3		20	11.61	7	81.27	
4		20	11.17	4	44.68	
5		10	12.00	2	24.00	
6		10	8.66	14	121.24	
7		20	6.00	4	24.00	
8		10	2.22	138	306.36	
9		10	4.84	77	372.68	
10		10	4.43	6	26.58	
11		10	1.82	28	50.96	
12		10	1.12	28	31.36	
13		20	9.12	4	36.48	
14		10	7.73	2	15.46	

PROJEKTANT: EUROZOX d.o.o. <small>Spuz bb DANILOVGRAD</small>		Investitor: OPŠTINA BAR	
Objekat:	DNEVNI CENTAR ZA DJECU SA SMETNJAMA U RAZVOJU	Lokacija: UP 2286, BLOK 1-DUP "Polje Zaljevo" u Baru kp 2286, KO Polje,Bar	
Glavni inženjer	arh.Dragana Čukić, dipl.ing.	Vrsta tehnicke dokumentacije: Glavni projekat	
Odgovorni inženjer	Draško Bašović, Spec.Sci.građ.	Dio tehnicke dokumentacije:	KONSTRUKCIJA
Saradnik	Andrija Krivokapić, Spec.Sci.građ.	Prilog: Plan armiranja grede POS G210 i G209	Br. priloga 2.28
Datum izrade i M.P:		Br. strane 327	
datum izrade novembar 2021		Datum revizije i M.P:	

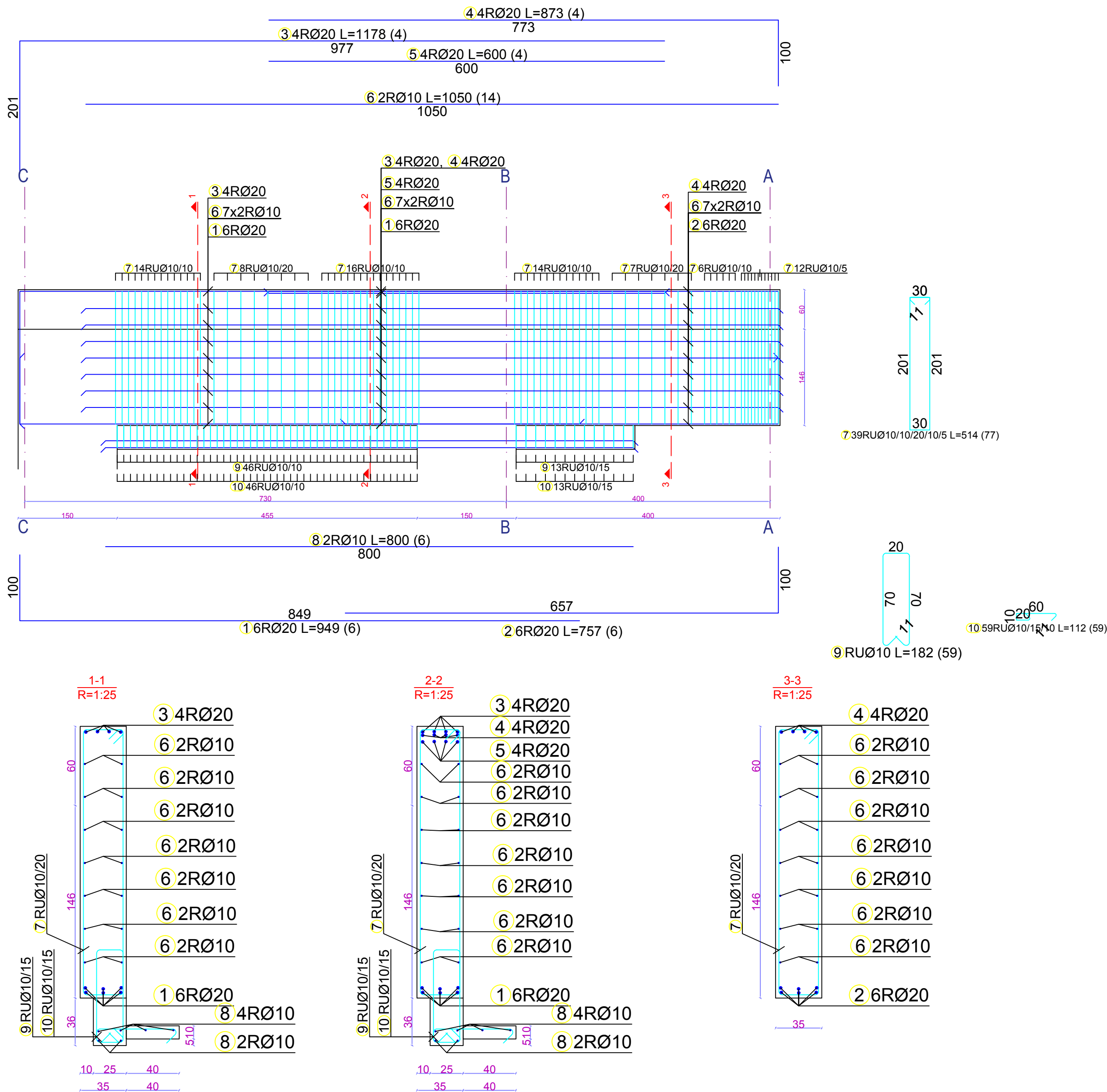
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Sipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
POS G211(212,211) (1 kom)						
1		14	11.50	6	69.00	
2		14	10.55	6	63.30	
3		14	6.50	6	39.00	
4		10	11.55	6	69.30	
5		10	8.75	8	70.00	
6		10	3.40	8	27.20	
7		10	4.50	1	4.50	
8		8	3.88	52	201.76	
9		8	4.93	29	142.97	
10		8	2.28	54	123.12	
11		8	1.68	54	90.72	

PROJEKTANT: EUROZOX d.o.o. <small>Spuž bb DANILOVGRAD</small>		Investitor: OPŠTINA BAR	
Objekat:	DNEVNI CENTAR ZA DJECU SA SMETNJAMA U RAZVOJU	Lokacija: UP 2286, BLOK 1-DUP "Polje Zaljevo" u Baru kp 2286, KO Polje,Bar	
Glavni inženjer	arh.Dragana Čukić, dipl.ing.	Vrsta tehnicke dokumentacije: Glavni projekat	
Odgovorni inženjer	Draško Bašović, Spec.Sci.građ.	Dio tehnicke dokumentacije: KONSTRUKCIJA	R=1:50
Saradnik	Andrija Krivokapić, Spec.Sci.građ.	Prilog: Plan armiranja grede POS G211(G212 G211')	Br. priloga 2.29 Br. strane 328
Datum izrade i M.P: novembar 2021		Datum revizije i M.P:	

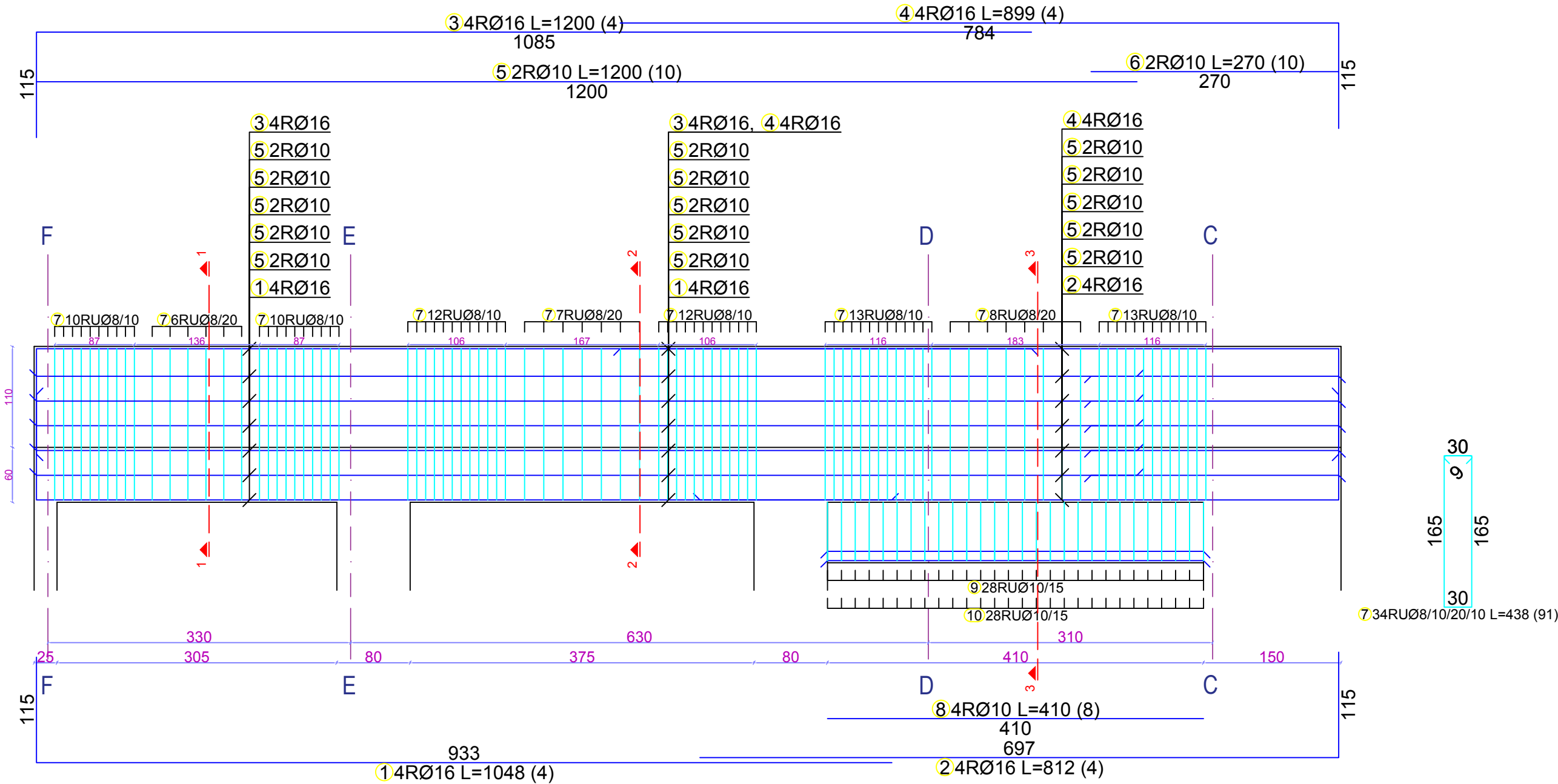
Plan armiranja grede - POS G213
MB 30, B500B, ao=2.5cm



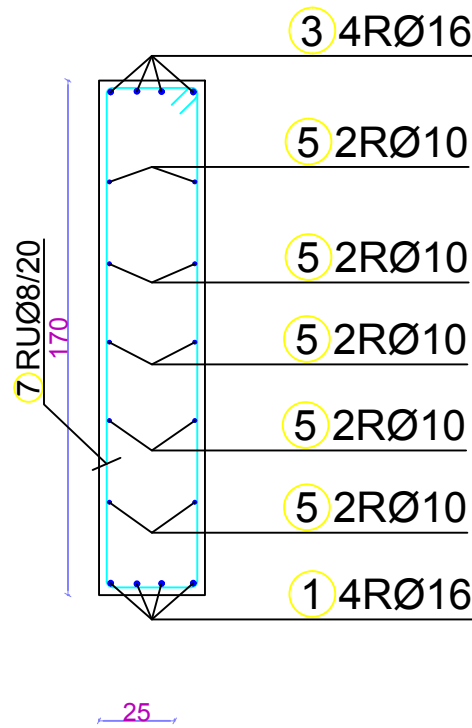
Šipke - specifikacija						
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POS G213 (1 kom)						
1		20	9.49	6	56.94	
2		20	7.57	6	45.42	
3		20	11.78	4	47.12	
4		20	8.73	4	34.92	
5		20	6.00	4	24.00	
6		10	10.50	14	147.00	
7		10	5.14	77	395.78	
8		10	8.00	6	48.00	
9		10	1.82	59	107.38	
10		10	1.12	59	66.08	

PROJEKTANT: EUROZOX d.o.o. Spuž bb DANILOVGRAD		Investitor: OPŠTINA BAR		
Objekat:	DNEVNI CENTAR ZA DJECU SA SMETNJAMA U RAZVOJU	Lokacija: UP 2286, BLOK 1-DUP "Polje Zaljevo" u Baru kp 2286, KO Polje,Bar		
Glavni inženjer	arh.Dragana Čukić, dipl.ing.	Vrsta tehnicke dokumentacije:	Glavni projekat	
Odgovorni inženjer	Draško Bašović, Spec.Sci.građ.	Dio tehnicke dokumentacije:	KONSTRUKCIJA	R=1:50
Saradnik	Andrija Krivokapić, Spec.Sci.građ.	Prilog:	Plan armiranja grede POS G213	Br. priloga 2.30 Br. strane 329
Datum izrade i M.P: novembar 2021		Datum revizije i M.P:		

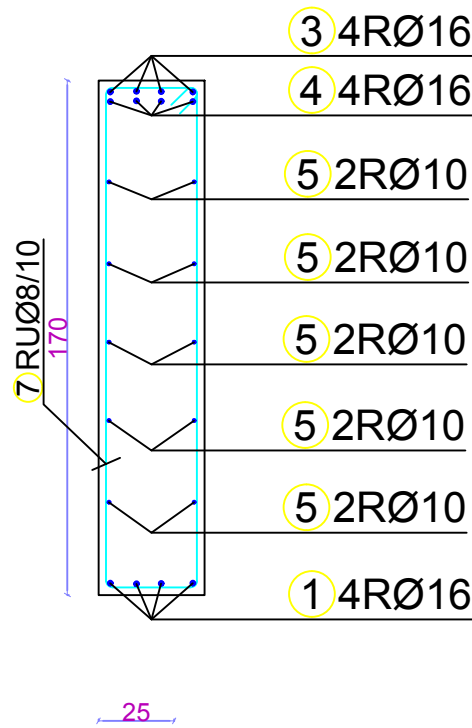
Plan armiranja grede - POS G214
MB 30, B500B, ao=2.5cm



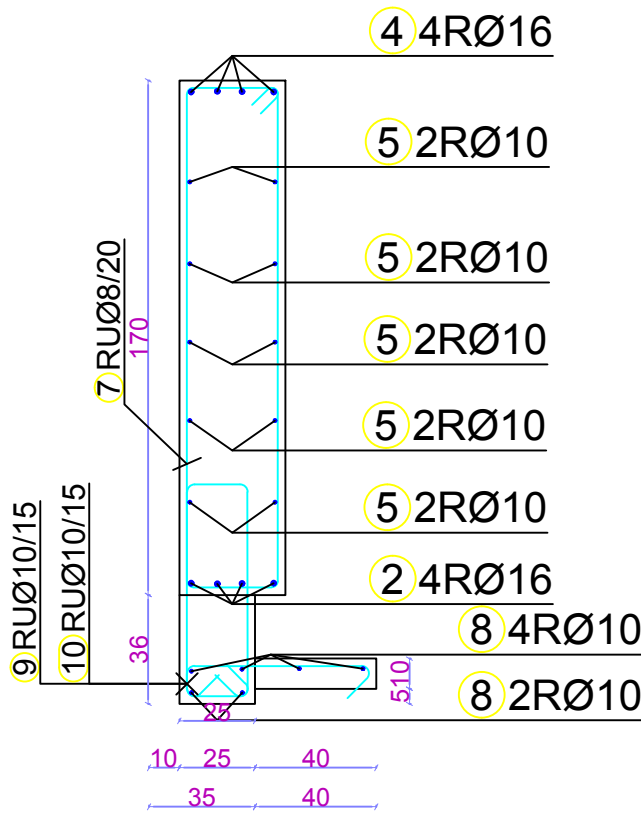
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R=1:25



2-2
R=1:25



3-3
R=1:25

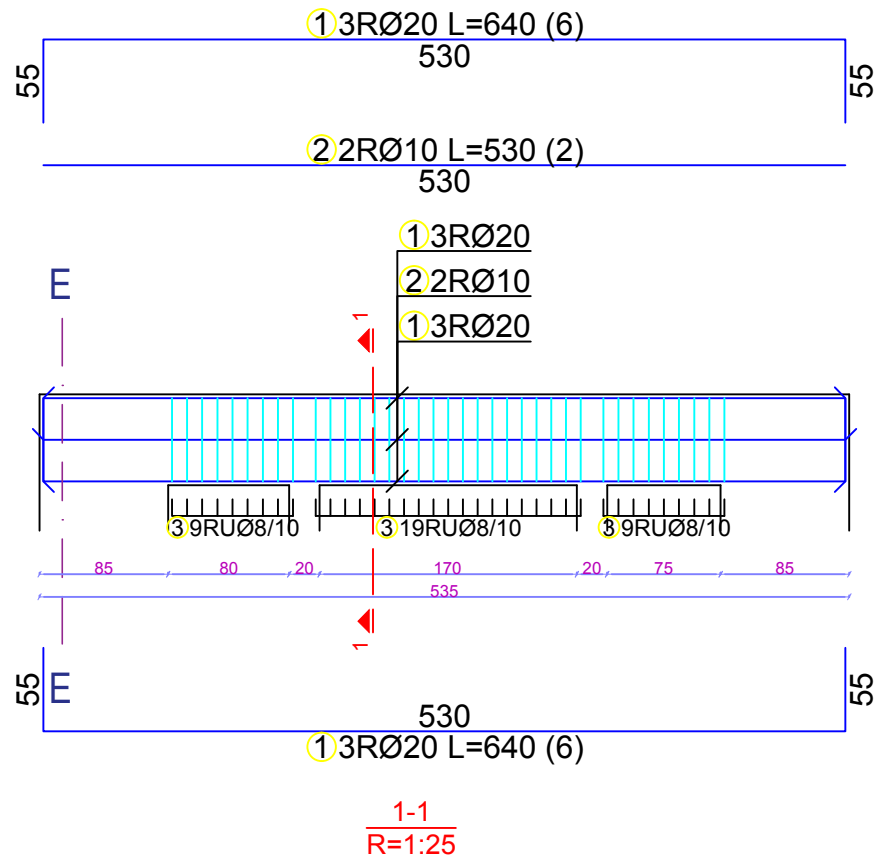


30
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165
30
165

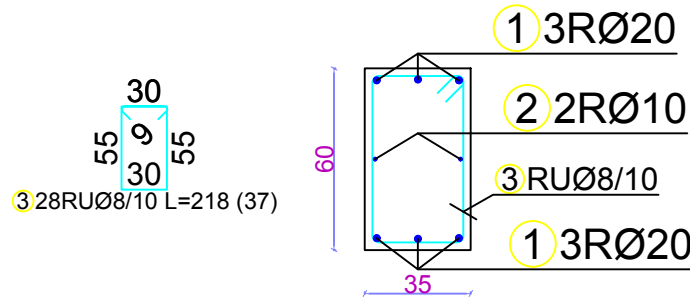
20
70
10
9 RUØ10 L=182 (28)

10 20 60
10 RUØ10 L=112 (28)

Plan armiranja grede - POS G215
MB 30, B500B, ao=2.5cm



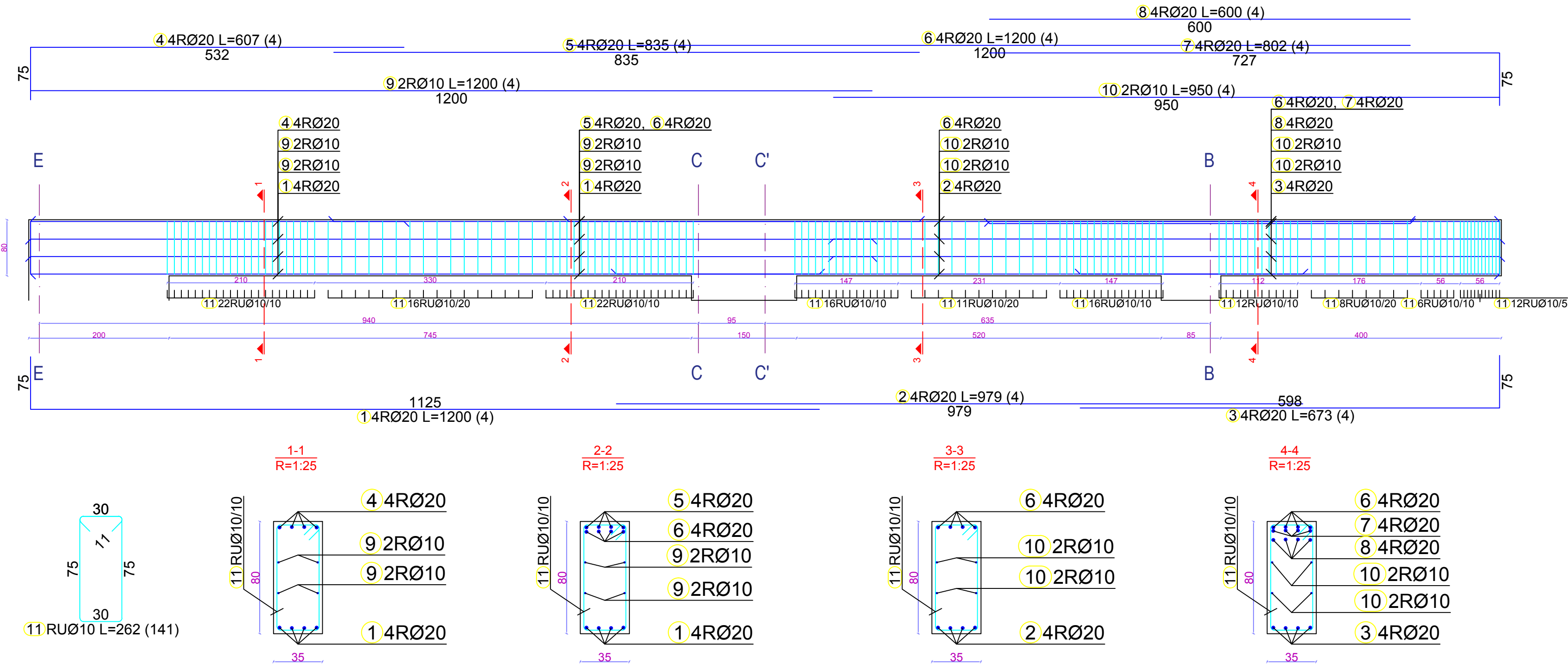
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R=1:25



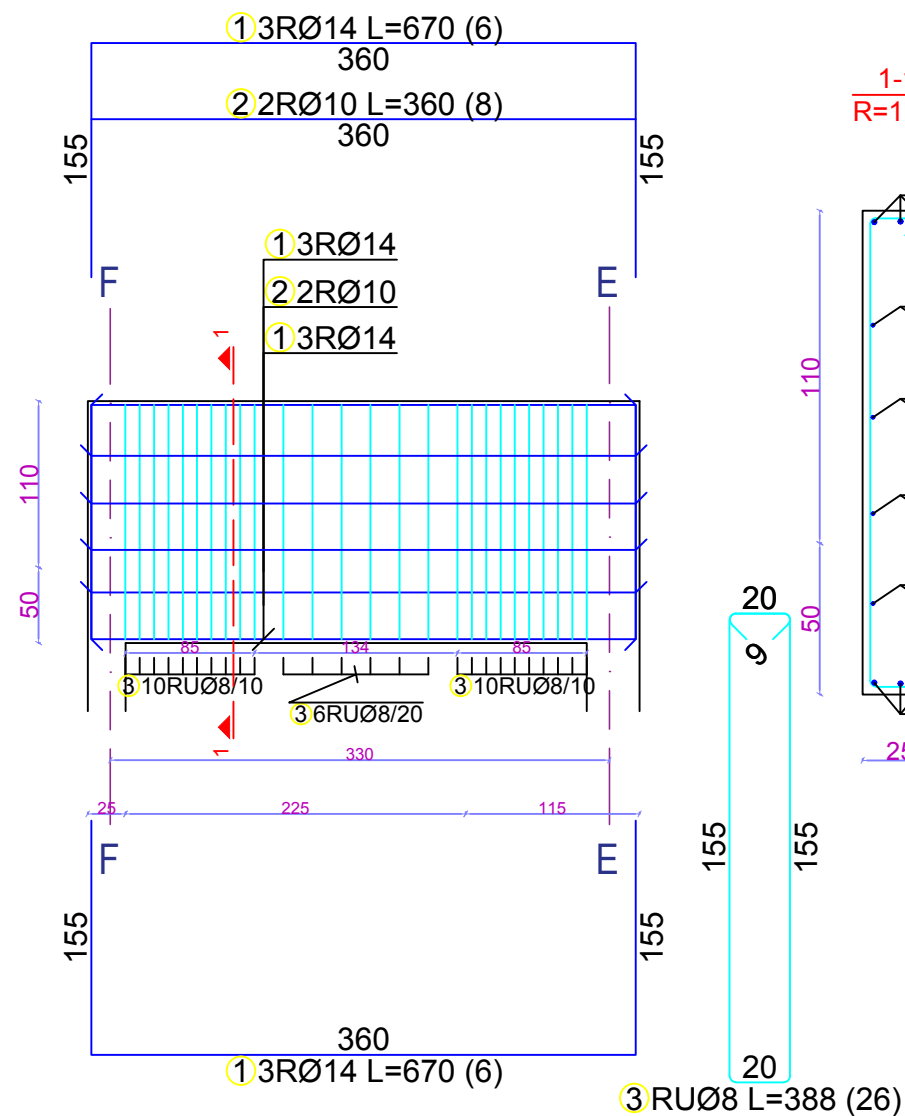
Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
POS G214 (1 kom)						
1		16	10.48	4	41.92	
2		16	8.12	4	32.48	
3		16	12.00	4	48.00	
4		16	8.99	4	35.96	
5		10	12.00	10	120.00	
6		10	2.70	10	27.00	
7		8	4.38	91	398.58	
8		10	4.10	8	32.80	
9		10	1.82	28	50.96	
10		10	1.12	28	31.36	
POS G215 (1 kom)						
1		20	6.40	6	38.40	
2		10	5.30	2	10.60	
3		8	2.18	37	80.66	

PROJEKTANT: EUROZOX d.o.o. <small>Spuž bb DANILOVGRAD</small>		Investitor: OPŠTINA BAR		
Objekat:	DNEVNI CENTAR ZA DJECU SA SMETNJAMA U RAZVOJU	Lokacija: UP 2286, BLOK 1-DUP "Polje Zaljevo" u Baru kp 2286, KO Polje,Bar		
Glavni inženjer	arh.Dragana Čukić, dipl.ing.	Vrsta tehnicke dokumentacije: Glavni projekat		
Odgovorni inženjer	Draško Bašović, Spec.Sci.građ.	Dio tehnicke dokumentacije: KONSTRUKCIJA		R=1:50
Saradnik	Andrija Krivokapić, Spec.Sci.građ.	Prilog: Plan armiranja grede POS G214 i G215	Br. priloga 2.31	Br. strane 330
Datum izrade i M.P: novembar 2021		Datum revizije i M.P:		

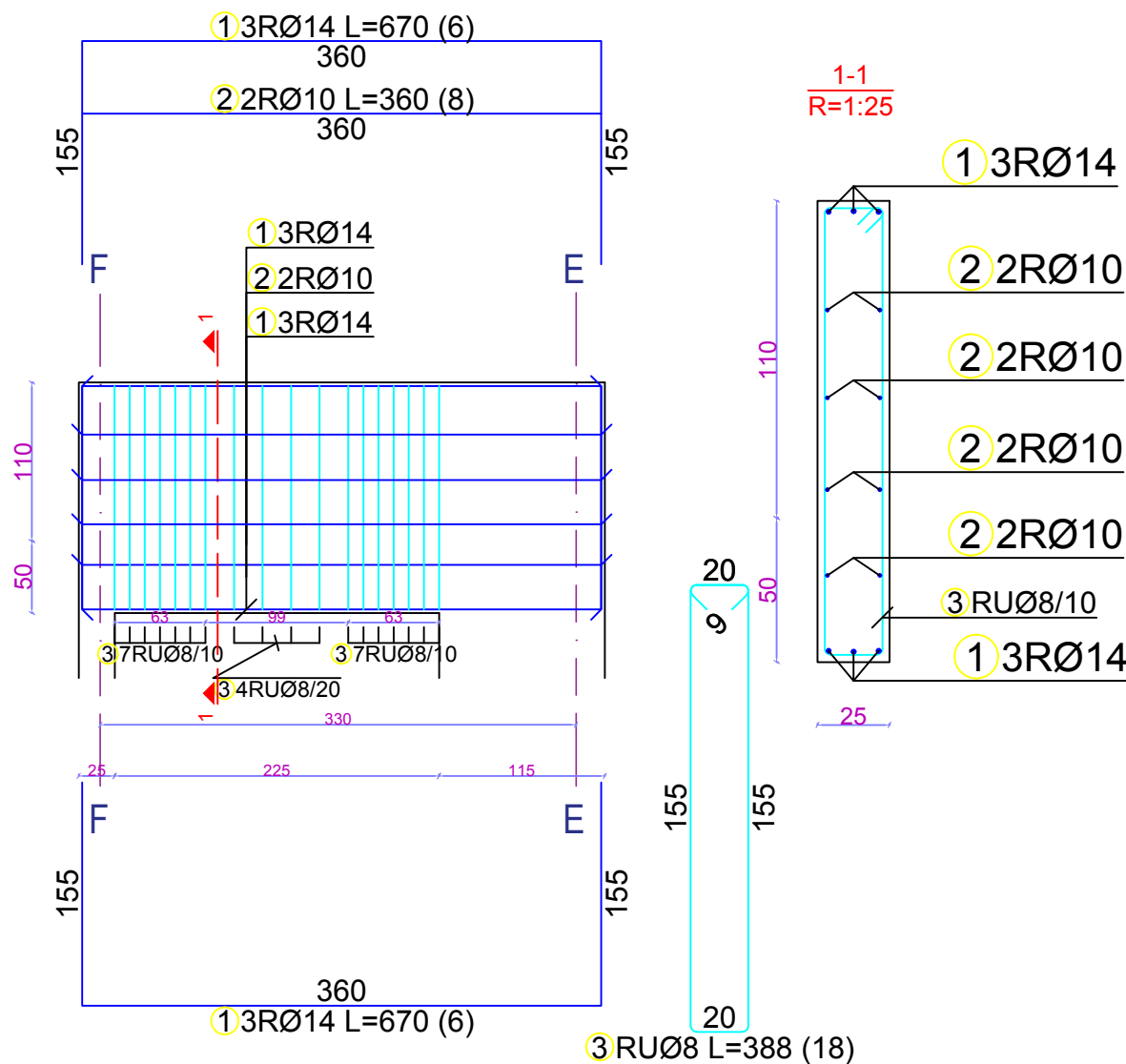
Plan armiranja grede - POS G116(G217)
MB 30, B500B, ao=2.5cm



Plan armiranja grede - POS G218, POS G225 - kom 2
MB 30, B500B, ao=2.5cm



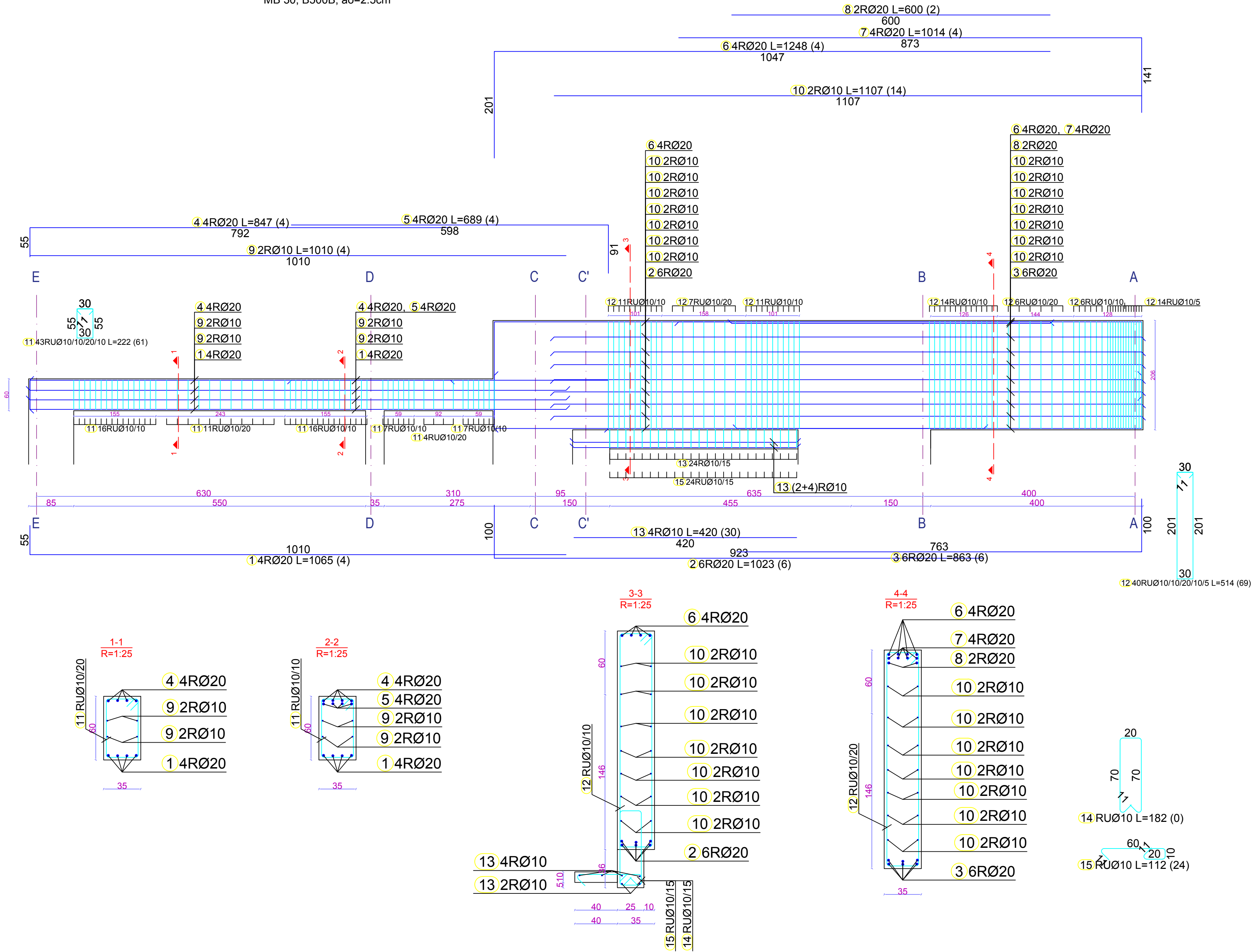
Plan armiranja grede - POS G226
MB 30, B500B, ao=2.5cm



Sipke - specifikacija					
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]
POS G216(217) (1 kom)					
1		20	12.00	4	48.00
2		20	9.79	4	39.16
3		20	6.73	4	26.92
4		20	6.07	4	24.28
5		20	8.35	4	33.40
6		20	12.00	4	48.00
7		20	8.02	4	32.08
8		20	6.00	4	24.00
9		10	12.00	4	48.00
10		10	9.50	4	38.00
11		10	2.62	141	369.42
POS G218 i G225 (1 kom)					
1		14	6.70	6	40.20
2		10	3.60	8	28.80
3		8	3.88	26	100.88
POS G226 (1 kom)					
1		14	6.70	6	40.20
2		10	3.60	8	28.80
3		8	3.88	18	69.84

PROJEKTANT: EUROZOX d.o.o. Spuž bb DANILOVGRAD		Investitor: OPŠTINA BAR	
Objekat:	DNEVNI CENTAR ZA DJECU SA SMETNJAMA U RAZVOJU	Lokacija: UP 2286, BLOK 1-DUP "Polje Zaljevo" u Baru kp 2286, KO Polje,Bar	
Glavni inženjer	arh.Dragana Čukić, dipl.ing.	Vrsta tehnicke dokumentacije: Glavni projekat	
Odgovorni inženjer	Draško Bašović, Spec.Sci.građ.	Dio tehnicke dokumentacije: KONSTRUKCIJA R=1:50	
Saradnik	Andrija Krivokapić, Spec.Sci.građ.	Prilog: Plan armiranja greda POS G216 (G217), POS G218, G225 i G226	Br. priloga 2.32 Br. strane 331
Datum izrade i M.P: novembar 2021		Datum revizije i M.P:	

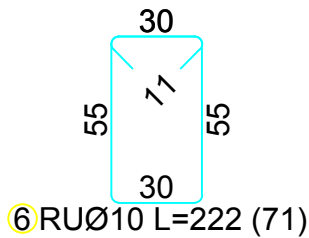
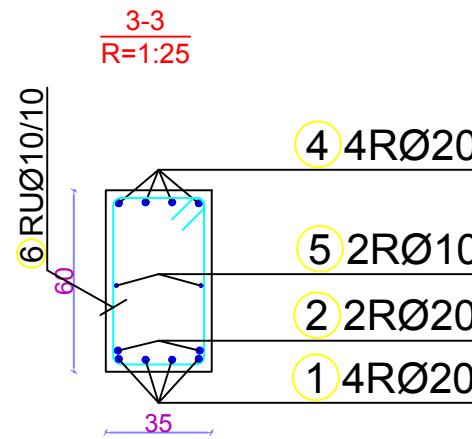
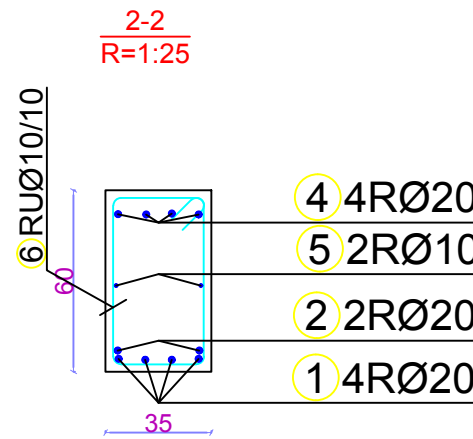
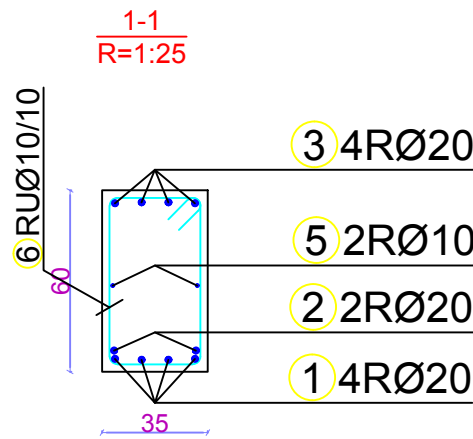
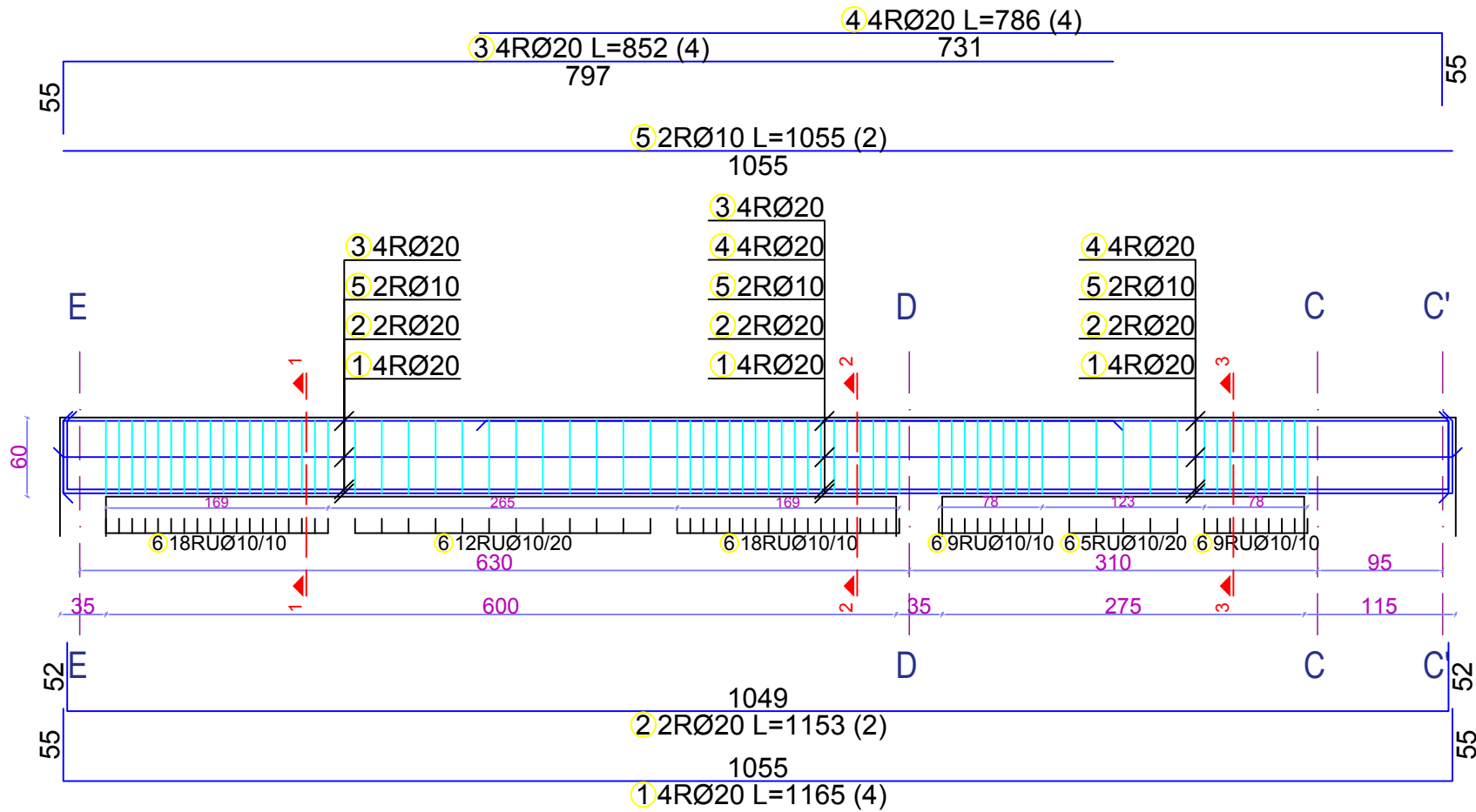
Plan armiranja grede - POS G219 (G220,G221)
MB 30, B500B, ao=2.5cm



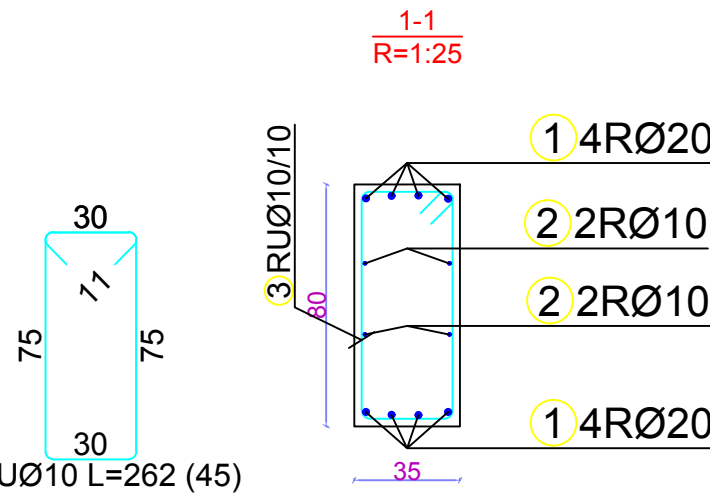
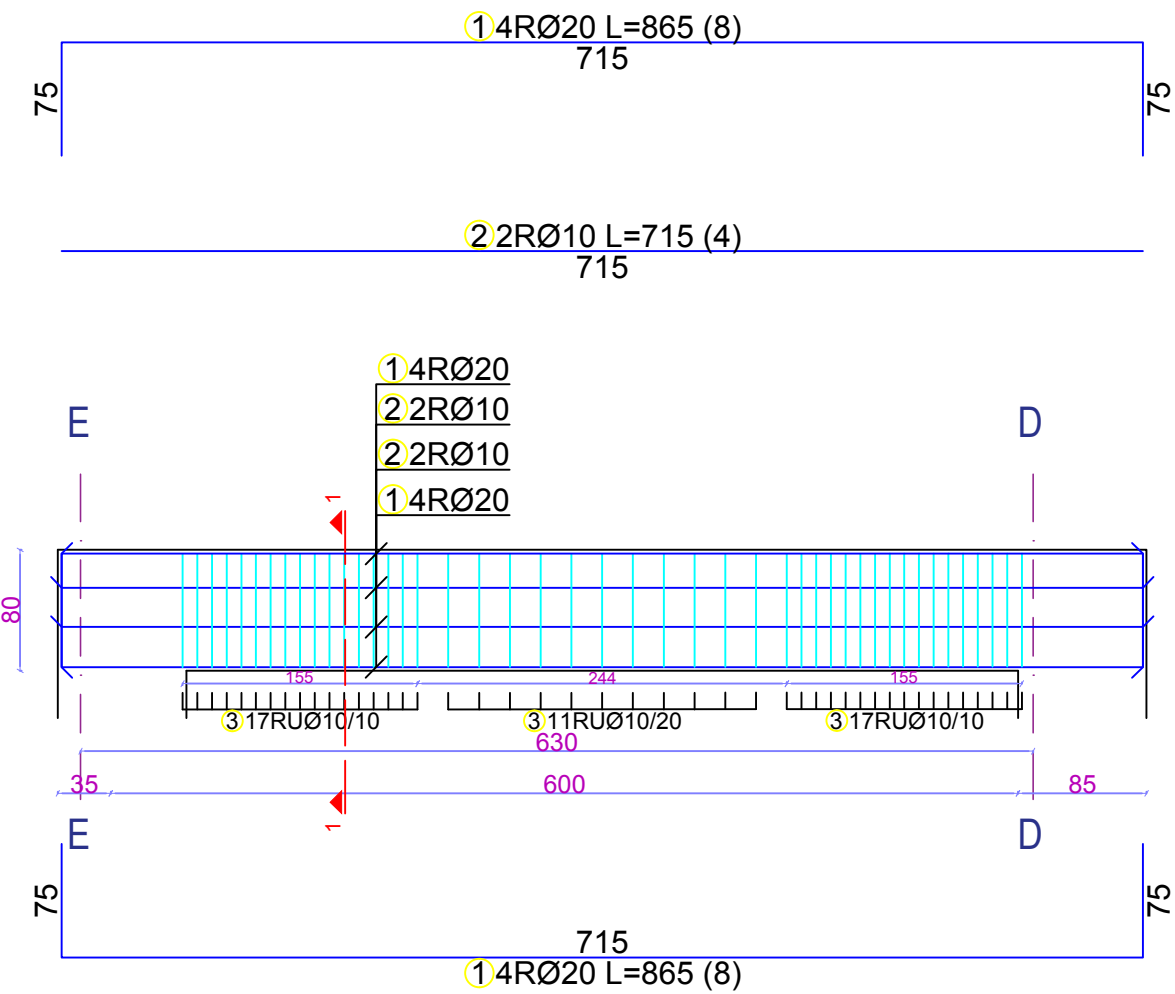
Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lg _n [m]	Napomena
POS G219 (220, 221) (1 kom)						
1		20	10.65	4	42.60	
2		20	10.23	6	61.38	
3		20	8.63	6	51.78	
4		20	8.47	4	33.88	
5		20	6.89	4	27.56	
6		20	12.48	4	49.92	
7		20	10.14	4	40.56	
8		20	6.00	2	12.00	
9		10	10.10	4	40.40	
10		10	11.07	14	154.98	
11		10	2.22	61	135.42	
12		10	5.14	69	354.66	
13		10	4.20	30	126.00	
15		10	1.12	24	26.88	

PROJEKTANT: EUROZOX d.o.o. <small>Spuž bb DANILOVGRAD</small>		Investitor: OPŠTINA BAR		
Objekat:	DNEVNI CENTAR ZA DJECU SA SMETNJAMA U RAZVOJU	Lokacija: UP 2286, BLOK 1-DUP "Polje Zaljevo" u Baru kp 2286, KO Polje,Bar		
Glavni inženjer	arh.Dragana Čukić, dipl.ing.	Vrsta tehnicke dokumentacije: Glavni projekat		
Odgovorni inženjer	Draško Bašović, Spec.Sci.građ.	Dio tehnicke dokumentacije: KONSTRUKCIJA		R=1:50
Saradnik	Andrija Krivokapić, Spec.Sci.građ.	Prilog: Plan armiranja grede POS G219 (G220,G221)	Br. priloga 2.33	Br. strane 332
Datum izrade i M.P: novembar 2021		Datum revizije i M.P:		

Plan armiranja grede - POS G222
MB 30, B500B, ao=2.5cm



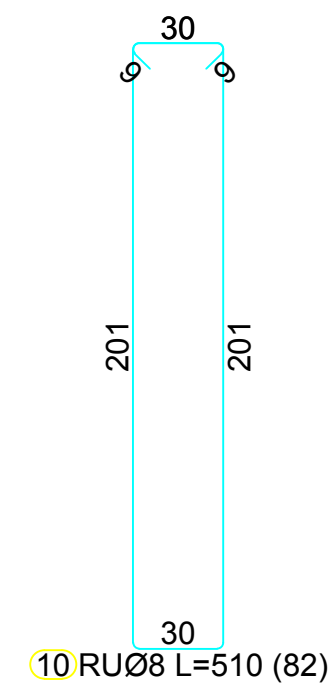
Plan armiranja grede - POS G223
MB 30, B500B, ao=2.5cm


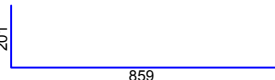
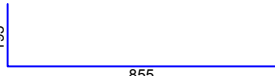
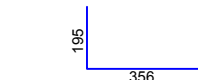
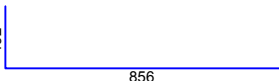
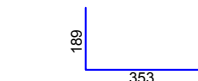
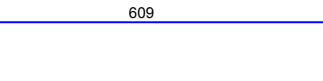
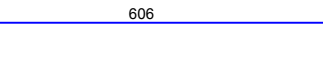




Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lg _n [m]	Napomena
POS G222 (1 kom)						
1		20	11.65	4	46.60	
2		20	11.53	2	23.06	
3		20	8.52	4	34.08	
4		20	7.86	4	31.44	
5		10	10.55	2	21.10	
6		10	2.22	71	157.62	
POS G223 (1 kom)						
1		20	8.65	8	69.20	
2		10	7.15	4	28.60	
3		10	2.62	45	117.90	

PROJEKTANT: EUROZOX d.o.o. <small>Spuž bb DANILOVGRAD</small>		Investitor: OPŠTINA BAR	
Objekat:	DNEVNI CENTAR ZA DJECU SA SMETNJAMA U RAZVOJU	Lokacija: UP 2286, BLOK 1-DUP "Polje Zaljevo" u Baru kp 2286, KO Polje,Bar	
Glavni inženjer	arh.Dragana Čukić, dipl.ing.	Vrsta tehnicke dokumentacije: Glavni projekat	
Odgovorni inženjer	Draško Bašović, Spec.Sci.građ.	Dio tehnicke dokumentacije: KONSTRUKCIJA	R=1:50
Saradnik	Andrija Krivokapić, Spec.Sci.građ.	Prilog: Plan armiranja grede POS G222 i G223	Br. priloga 2.34 Br. strane 333
Datum izrade i M.P: novembar 2021		Datum revizije i M.P:	

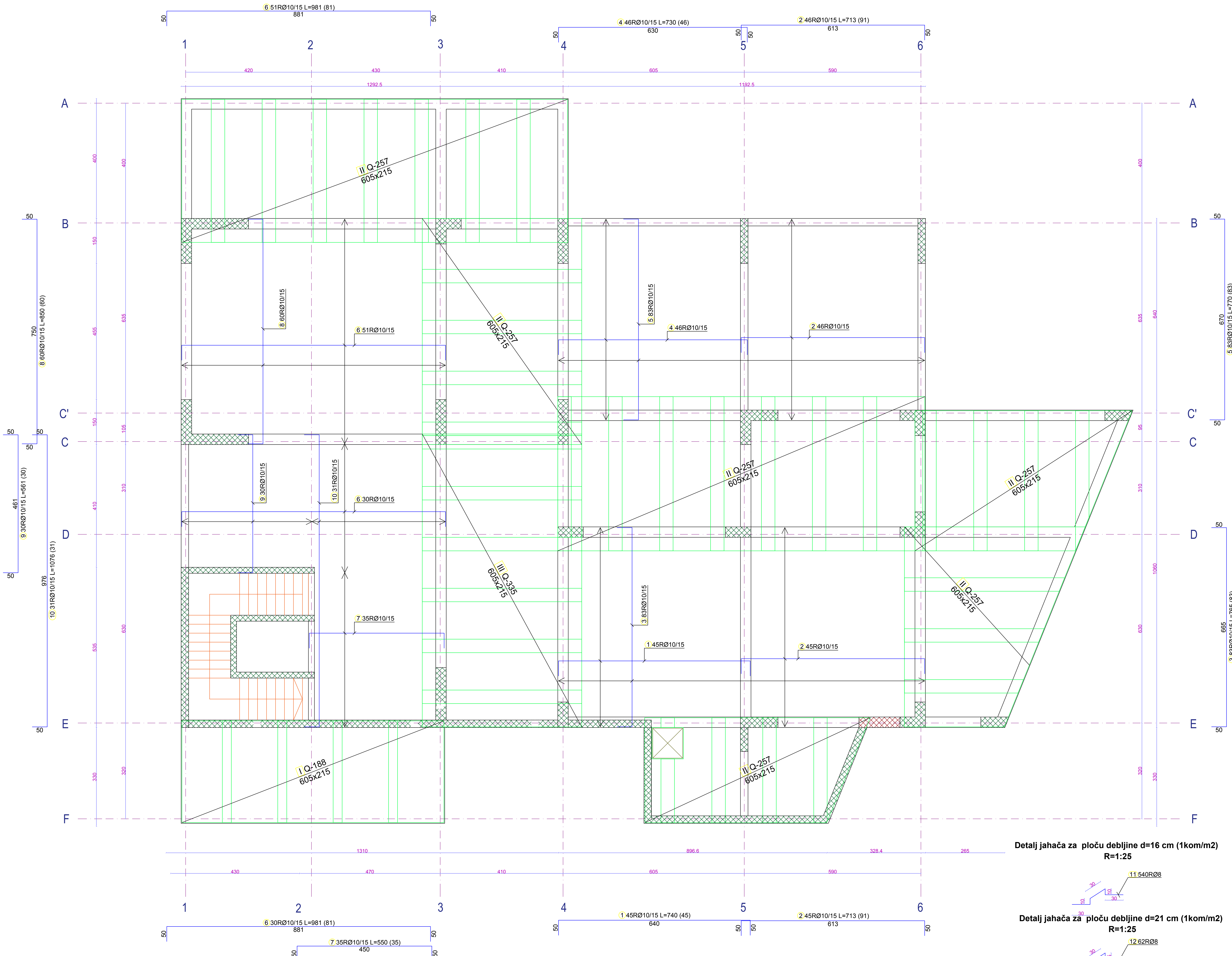
MB 30, B500B, $a_o=2.5\text{cm}$


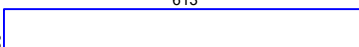
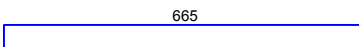
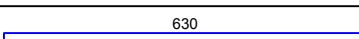
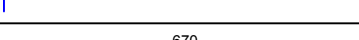
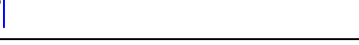


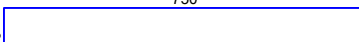
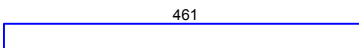
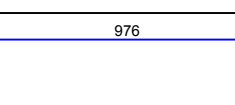
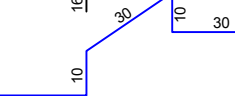


Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
POS G224 (1 kom)						
1		16	5.60	3	16.80	
2		16	10.60	3	31.80	
3		16	10.50	3	31.50	
4		16	5.51	3	16.53	
5		16	10.48	3	31.44	
6		16	5.42	3	16.26	
7		16	6.89	6	41.34	
8		16	6.86	6	41.16	
9		10	11.37	12	136.44	
10		8	5.10	82	418.20	

PROJEKTANT: EUROZOX d.o.o. Spuž bb DANILOVGRAD		Investitor: OPŠTINA BAR	
Objekat:	DNEVNI CENTAR ZA DJECU SA SMETNJAMA U RAZVOJU	Lokacija: UP 2286, BLOK 1-DUP "Polje Zaljevo" u Baru kp 2286, KO Polje,Bar	
Glavni inženjer	arh.Dragana Čukić, dipl.ing.	Vrsta tehnicke dokumentacije:	Glavni projekat
Odgovorni inženjer	Draško Bašović, Spec.Sci.građ.	Dio tehnicke dokumentacije:	KONSTRUKCIJA R=1:50
Saradnik	Andrija Krivokapić, Spec.Sci.građ.	Prilog: Plan armiranja grede POS G224	Br. priloga 2.35 Br. strane 334
Datum izrade i M.P: novembar 2021		Datum revizije i M.P:	

Plan armiranja ploče - POS P100 - donja zona
MB 30, B500B, MA 560/500, $a_0=2.5\text{cm}$

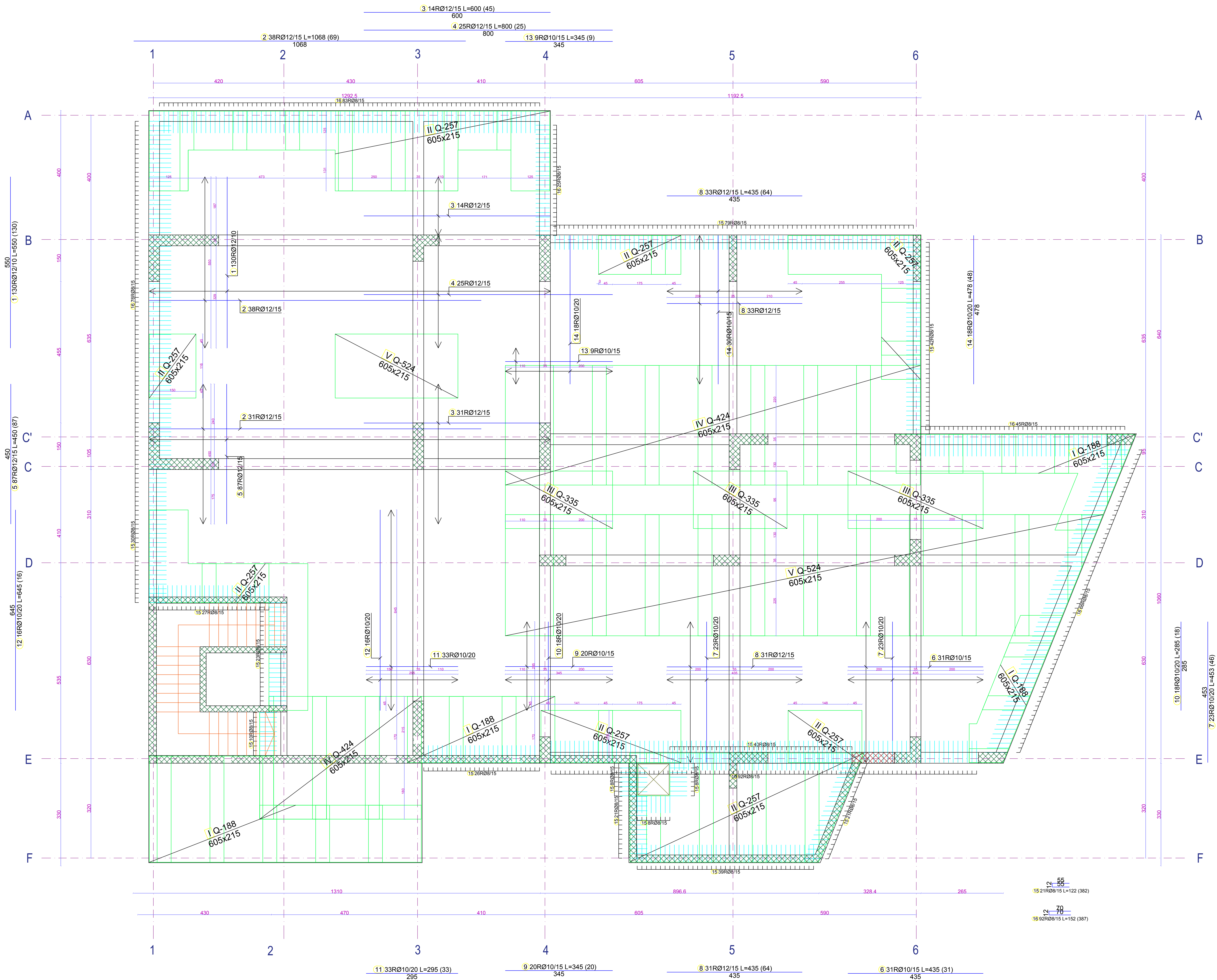


Slike - specifikacija							Napomena
com	otok i mera [mm]	Ø	lj [mm]	n [zubi]	gr [mm]		
POB P100 - dorja zona (1 kom)							
1		10	7.40	45	333.00		
2		10	7.13	91	648.83		
3		10	7.65	83	624.95		
4		10	7.30	46	335.80		
5		10	7.70	83	639.10		
6		10	9.81	81	794.61		
7		10	5.90	35	192.50		
8		10	8.90	60	510.00		
9		10	5.41	30	166.30		
10		10	10.75	31	333.56		
11		8	1.10	540	594.00		
12		8	1.20	62	74.40		

*ZA PLOČU POS P103 IZVESTI NADVIŠENJE $h=1\text{vm}$

PROJEKTANT: EUROZOX d.o.o. <small>Spol: 10</small> <small>DANILOVGRAD</small>		Investitor: OPŠTINA BAR	
Objekat: DNEVNI CENTAR ZA DJECU SA SMETNJAMA U RAZVOJU	Lokacija: UP 2286, BLOK 1-DUP "Polje Zaljevo" u Baru Kp 2286, KO Polje,Bar		
Glavni inženjer arh.Dragana Čukić, dipl.ing.	Vrsta tehničke dokumentacije: Glavni projekat		
Odgovorni inženjer Draško Bašović, Spec.Sci.grad.	Dio tehničke dokumentacije: KONSTRUKCIJA	R=1:50	
Saradnik Andrija Krivokapić, Spec.Sci.grad.	Priloga: Plan armiranja POS 100 - donja zona	br. priloga 2.36	br. strane 335
Datum izrade i M.P.: novembar 2021		Datum revizije i M.P.: 	

Plan armiranja ploče - POS P100 - gornja zona
MB 30, B500B, MA 560/500, $\alpha_o=2.5\text{cm}$

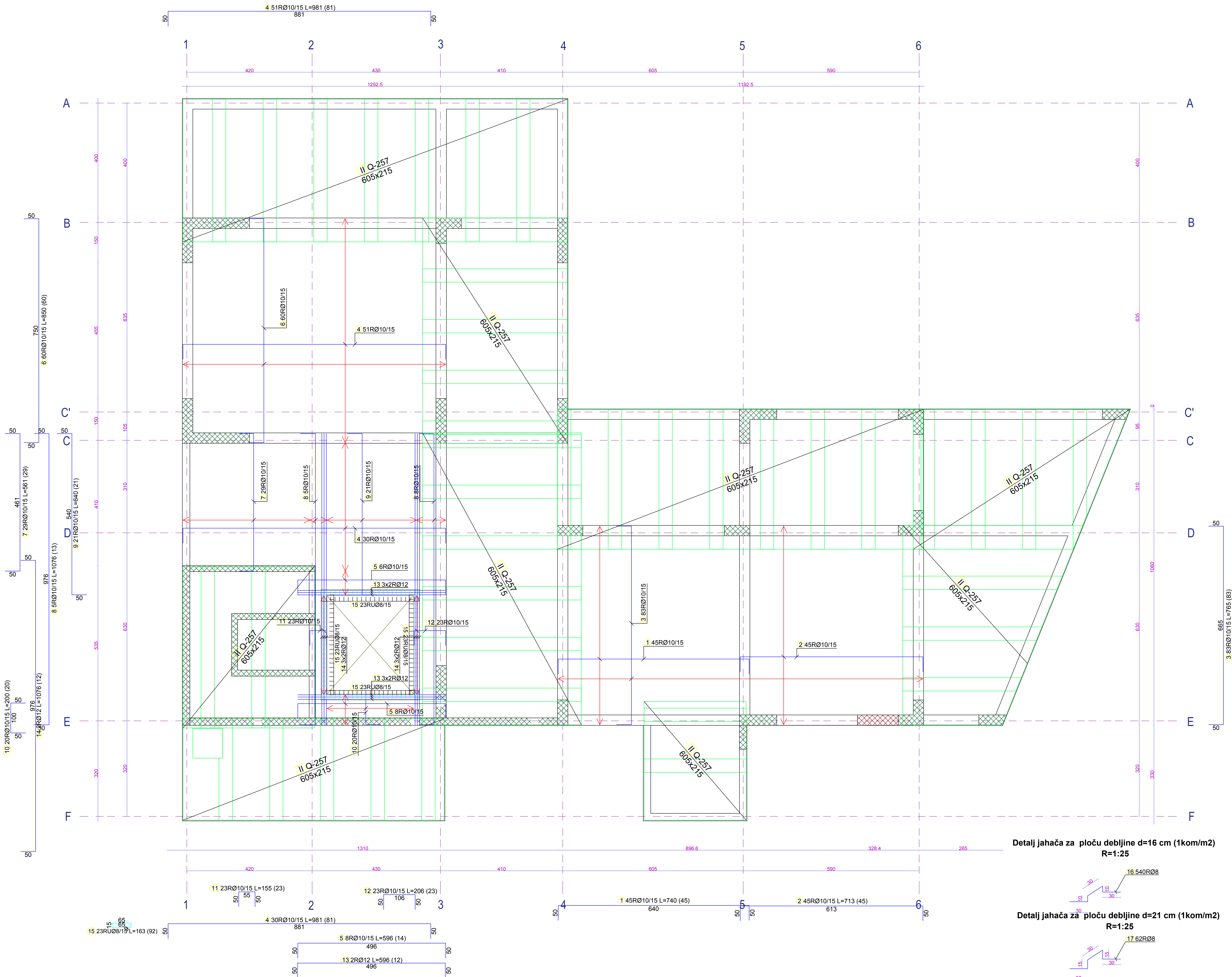



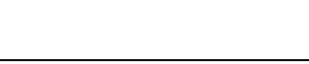
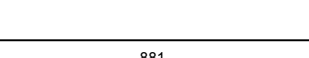
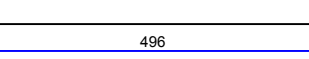
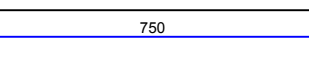
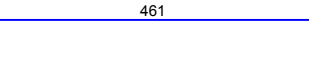

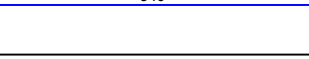
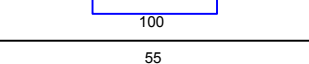
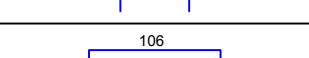
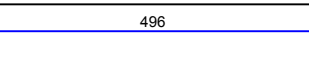
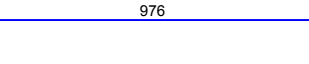

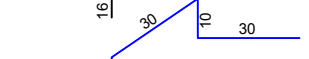
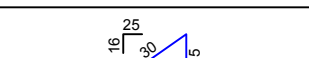

Spise - sportovna		Ø	l0 [m]	l1 [m]	l21 [m]	Napomena
POB P100 - gornja zona (1 kom)						
1		12	5.50	130		715.00
2		12	1.00	69		736.92
3		12	8.00	45		270.00
4		12	8.00	25		205.00
5		10	4.50	30		301.50
6		10	4.50	3		136.85
7		10	4.50	46		206.38
8		12	4.50	64		278.40
9		10	3.40	20		68.00
10		10	2.80	16		51.30
11		10	2.80	33		27.20
12		10	6.00	55		103.20
13		10	3.40	9		31.05
14		10	4.70	48		229.44
15		8	1.22	382		466.04
16		8	1.52	397		588.24

*ZA PLOČU POS P103 IZVESTI NADVIŠENJE $h=1\text{vm}$

PROJEKTANT: EUROZOX d.o.o. <small>Ispol bo DANEOVGRAD</small>		investitor: OPŠTINA BAR	
Objekat:	DNEVNI CENTAR ZA DJECU SA SMETNJAMA U RAZVOJU	Lokacija: UP 2286, BLOK 1-D"Polje Zajezvo" u Baru kp 2286, KO Polje,Bar	
Glavni inženjer	arh.Dragana Čukić, dipl.ing.	Vrsta tehničke dokumentacije:	Glavni projektat
Odgovorni inženjer	Draško Bašović, Spec.Sci.građ.	Dio tehničke dokumentacije:	KONSTRUKCIJA
Saradnik	Andrija Krivokapić, Spec.Sci.građ.	Prilog: Plan armiranja POS 100 - gornja zona	R=1:50 2.37
Datum izrade i M.P.: novembar 2021		Datum revizije i M.P.: 	
		Br. priloga	Br. stranice
			336

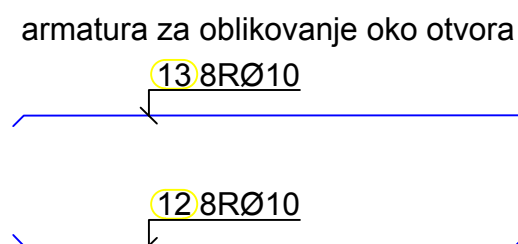
Plan armiranja ploče - POS P200 - donja zona
MB 30, B500B, MA 560/500, ao=2.5cm



Sveća - specifikacija		ozn.	ozn. i mere (mm)	Ø	lg (m)	n (kom)	lgm (m)	Napomena							
POS P200 - donja zona (1 kum)															
1		10	7.40	45	333.00										
2		10	7.13	45	320.85										
3		10	7.05	60	634.95										
4		10	9.81	81	794.61										
5		10	5.96	14	83.44										
6		10	8.90	60	510.00										
7		10	5.81	20	162.60										
8		10	10.76	13	139.88										
9		10	6.40	21	134.40										
10		10	2.00	20	40.00										
11		10	1.55	23	35.65										
12		10	2.06	23	47.38										
13		12	5.96	12	71.52										
14		12	10.76	12	129.12										
15		8	1.63	62	149.96										
16		8	1.10	540	594.00										
17		8	1.20	62	74.40										

PROJEKTANT: EUROZOX d.o.o. <small>Špiljska 1b DARUVAR</small>		Investitor: OPŠTINA BAR	
Objekat:	DNEVNI CENTAR ZA DJECU SA SMETNOSTIMA U RAZVOJU	Lokacija: UP 2286, BLOK 1-DUP "Polje Zaljevo" u Baru bp 2286, KO Polje,Bar	
Glavni inženjer	arh.Dragana Čukić, dipl.ing.	Vrsta tehničke dokumentacije: Glavni projekat	
Odgovorni inženjer	Draško Bašović, Spec.Sci.građ.	Dio tehničke dokumentacije: KONSTRUKCIJA	
Saradnik	Andrija Krivokapić, Spec.Sci.građ.	Prilog: Plan armiranja POS 200 - donja zona	
Datum izrade i M.P.: novembar 2021		Datum revizije i M.P.:	
		Br. priloga 2.38	
		Br. strane 337	

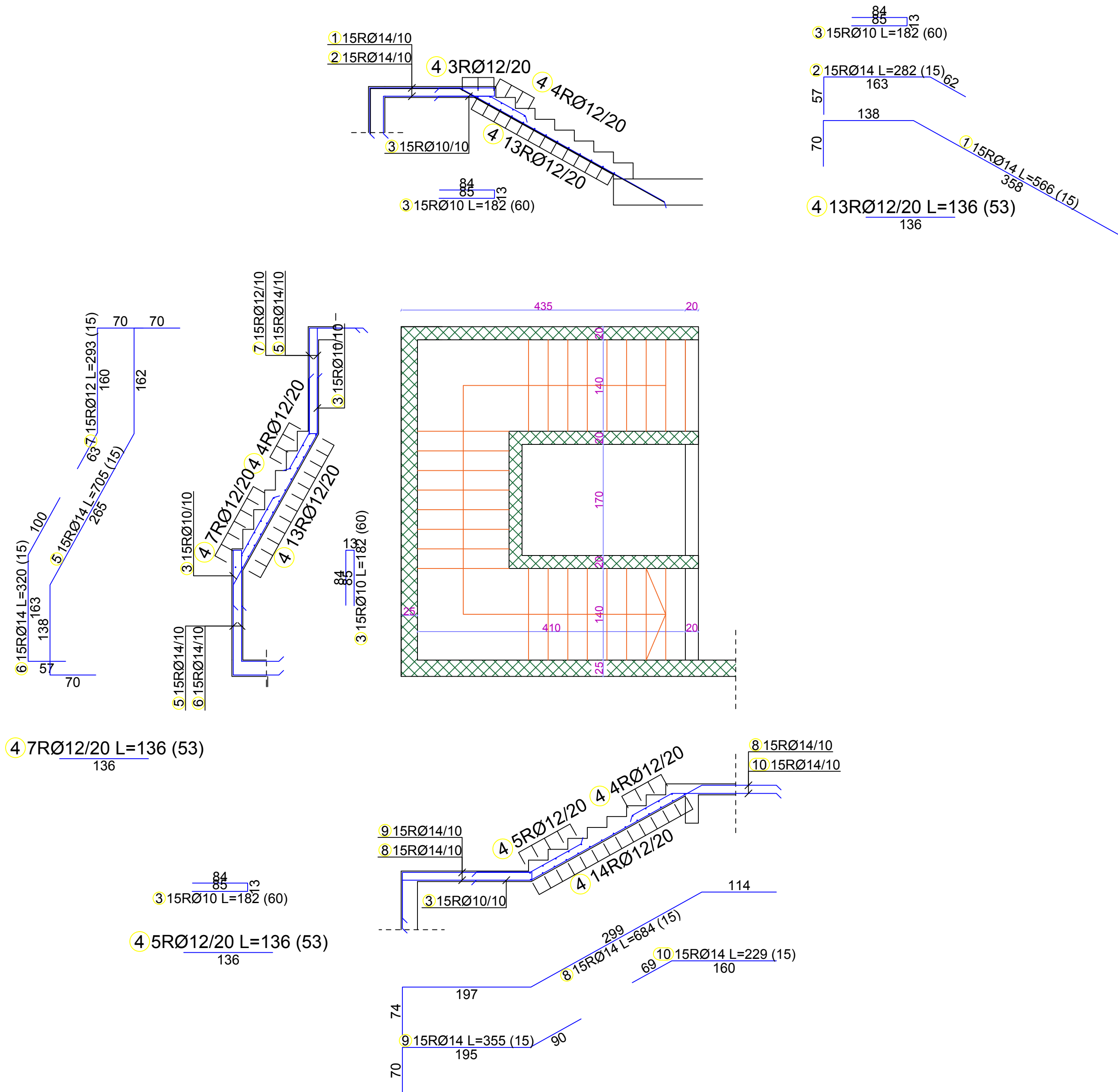
Plan armiranja ploče - POS P200 - gornja zona
MB 30, B500B, MA 560/500, $a_o=2.5\text{cm}$



Specijalizacija						Napomena
Opis	otok (mese)	Q	I ₂ (m ³)	n (Dost)	I ₂ (m ³)	
POS P200 - gorje zona (1 toni)						
1	550	12	5.50	1300	715.00	
2	1068	12	10.68	69	736.62	
3	600	12	6.00	69	414.00	
4	450	12	4.50	87	391.50	
5	450	10	4.50	20	134.00	
6	450	12	4.50	48	208.50	
7	450	12	4.50	31	134.85	
8	345	10	3.45	20	69.00	
9	285	10	2.85	18	61.30	
10	55	8	1.22	397	435.54	
	54					
11	70	8	1.52	469	708.32	
	74					
12	305	10	3.25	8	26.00	
13	365	10	3.65	8	29.20	

PROJEKTANT: EUROZOX d.o.o. <small>Sputi 1b DANILVOGRAD</small>		Investitor: OPŠTINA BAR	
Objekat: DNEVNI CENTAR ZA DJECU SA SMETNJAMA U RAZVOJU	Lokacija: UP 2286, BLOK 1-DUP "Polje Zaljevno" u Baru kz 126, 80 Polje,Bar		
Glavni inženjer arh.Dragana Ćukić, dipl.inž.	Vrsta tehničke dokumentacije: Glavni projekat	Dio tehničke dokumentacije: KONSTRUKCIJA	R=1:50
Odgovorni inženjer Draško Bašović, Spec.Sci.građ.	Prilog: Plan armiranja POS 100 - gornja zona	Br. priloga 2.39	Br. strane 338
Saradnik Andrija Krivokapić, Spec.Sci.građ.			
Datum izrade i M.P.: novembar 2021		Datum revizije i M.P.:	

Plan armiranja stepenica - POS St
MB 30, B500B, ao=2.0cm



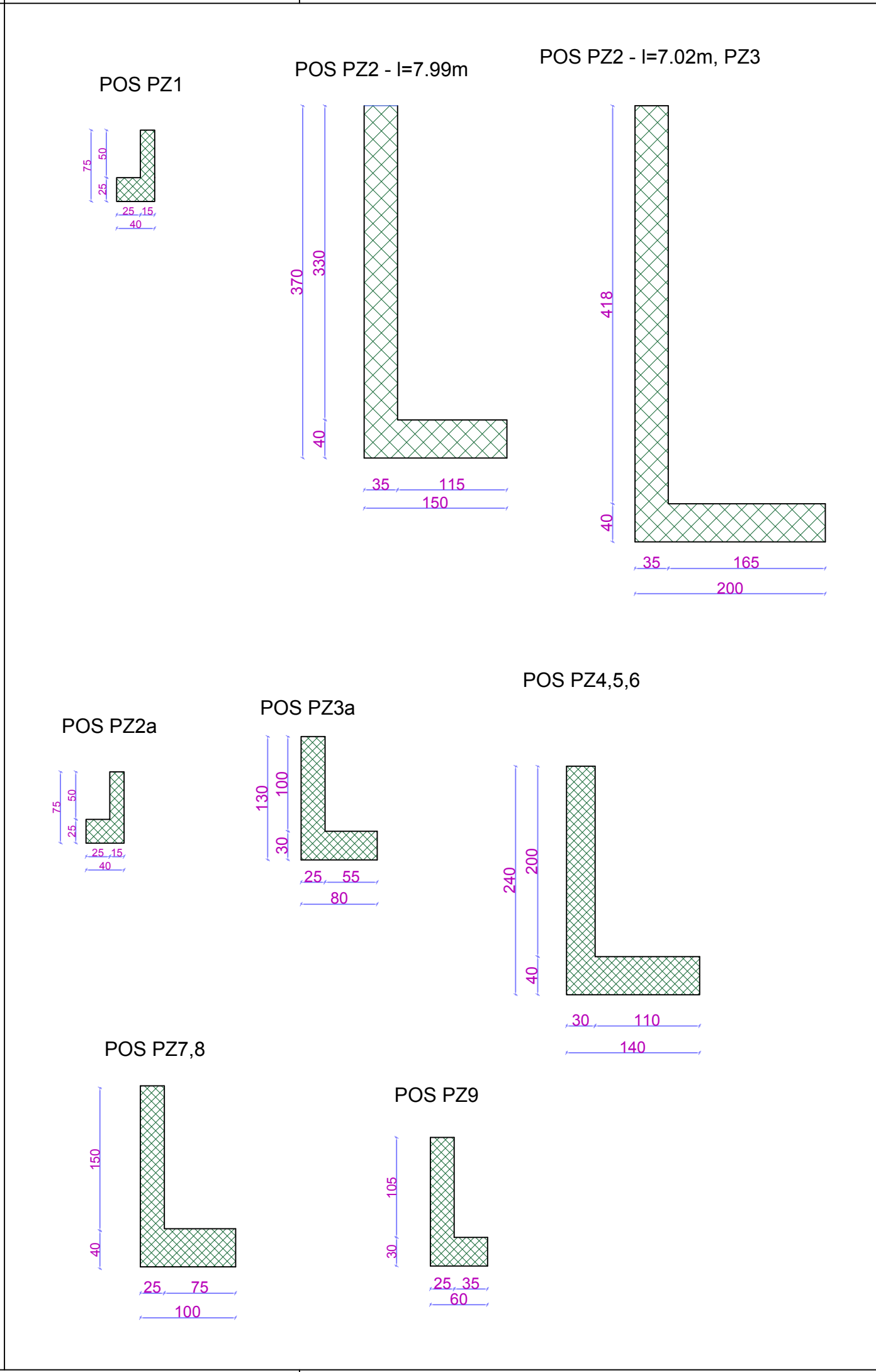
Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lg _n [m]	Napomena
POS St (1 kom)						
1		14	5.66	15	84.90	
2		14	2.82	15	42.30	
3		10	1.82	60	109.20	
4		12	1.36	53	72.08	
5		14	7.05	15	105.75	
6		14	3.20	15	48.00	
7		12	2.93	15	43.95	
8		14	6.84	15	102.60	
9		14	3.55	15	53.25	
10		14	2.29	15	34.35	

PROJEKTANT: EUROZOX d.o.o. <small>Spuž bb DANILOVGRAD</small>		Investitor: OPŠTINA BAR	
Objekat:	DNEVNI CENTAR ZA DJECU SA SMETNJAMA U RAZVOJU	Lokacija: UP 2286, BLOK 1-DUP "Polje Zaljevo" u Baru kp 2286, KO Polje,Bar	
Glavni inženjer	arh.Dragana Čukić, dipl.ing.	Vrsta tehnicke dokumentacije:	Glavni projekat
Odgovorni inženjer	Draško Bašović, Spec.Sci.građ.	Dio tehnicke dokumentacije:	KONSTRUKCIJA
Saradnik	Andrija Krivokapić, Spec.Sci.građ.	Prilog:	Br. priloga
Datum izrade i M.P: novembar 2021		Datum revizije i M.P:	
		Plan armiranja stepenica POS St	2.40
			Br. strane 339

Plan pozicija potpornih zidova

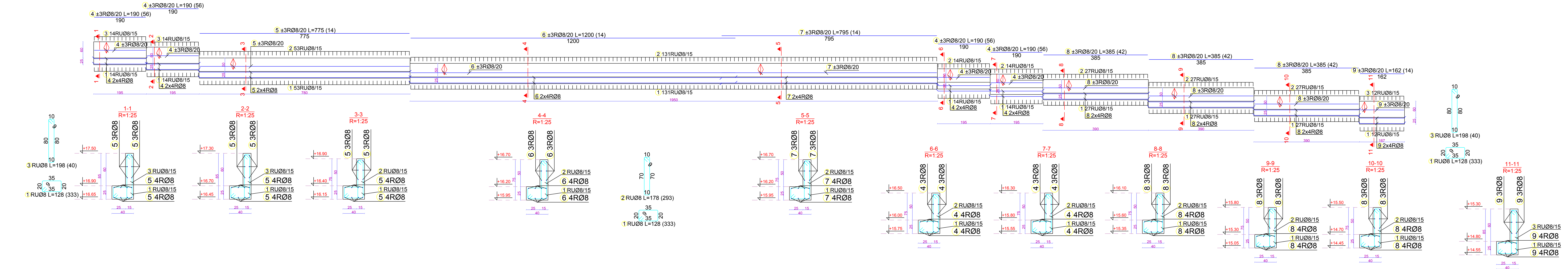
The plan illustrates the layout of retaining walls (POS PZ 1 through POS PZ 8) surrounding a building. Key features include:

- Building Footprint:** A central area with a grid of rooms and corridors.
- Retaining Walls:** Labeled POS PZ 1 through POS PZ 8, showing their positions and elevations.
- Elevation Points:** Numerous numerical values (e.g., 15.30, 16.16, 17.60, 18.80) indicating specific elevations at various points along the walls and building edges.
- Grid Lines:** Labeled with letters (a, b, c, d, e, f) and numbers (1, 2, 3, 4, 5, 6, 7, 8) to define the spatial coordinates.
- Structural Details:** Cross-sections and detailed views of the retaining walls and building foundations.



<div>PROJEKTANT: EUROZOX d.o.o. <div>Spuž bb DANILOVGRAD</div></div>					<div>Investitor: OPŠTINA BAR</div>	
Objekat:	DNEVNI CENTAR ZA DJECU SA SMETNJAMA U RAZVOJU		Lokacija: UP 2286, BLOK 1-DUP "Polje Zaljevo" u Baru kp 2286, KO Polje,Bar			
Glavni inženjer	arh.Dragana Čukić, dipl.ing.		Vrsta tehnicke dokumentacije: Glavni projekat			
Odgovorni inženjer	Draško Bašović, Spec.Sci.građ.		Dio tehnicke dokumentacije: KONSTRUKCIJA		R=1:50	
Saradnik	Andrija Krivokapić, Spec.Sci.građ.		Prilog: Plan pozicija potpornih zidova	Br. priloga 3.1	Br. strane 340	
Datum izrade i M.P: novembar 2021			Datum revizije i M.P:			

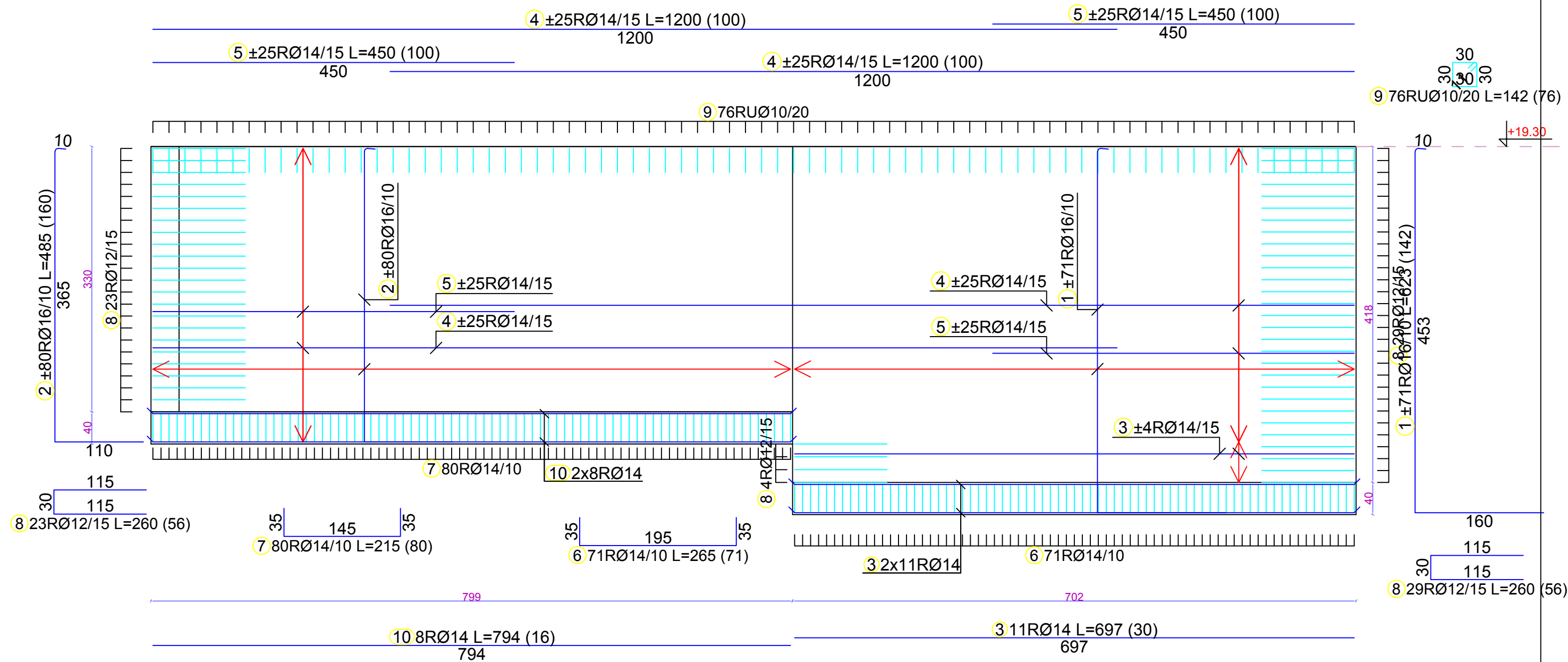
Plan armiranja potpornog zida- POS PZ1
MB 30, B500B, ao=2.5cm



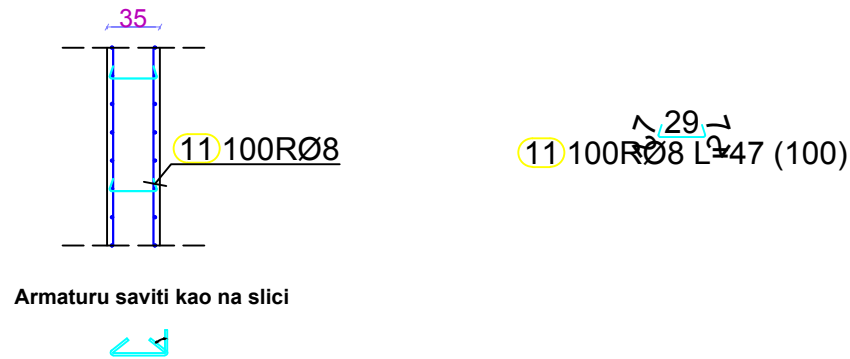
Šipke - specifikacija					
ozn.	oblik i mere (cm)	Ø	lg (m)	n (kom)	lgm (m)
PZ1 (1 kom)					
1		8	1.28	333	426.24
2		8	1.78	265	471.70
3		8	1.98	68	134.64
4		8	1.90	56	106.40
5		8	7.75	14	108.50
6		8	12.00	14	168.00
7		8	7.95	14	111.30
8		8	3.85	42	161.70
9		8	1.62	14	22.68

PROJEKTANT: EUROZOX d.o.o. <small>Sputić bb DANILOVGRAD</small>		Investitor: OPŠTINA BAR	
Objekat:	DNEVNI CENTAR ZA DJECU SA SMETNJAMA U RAZVOJU	Lokacija: UP 2286, BLOK 1-DUP "Polje Zaljevo" u Baru kp 2286, KO Polje,Bar	
Glavni inženjer	arh.Dragana Čukić, dipl.ing.	Vrsta tehnicke dokumentacije:	Glavni projekat
Odgovorni inženjer	Draško Bašović, Spec.Sci.građ.	Dio tehnicke dokumentacije:	KONSTRUKCIJA
Saradnik	Andrija Krivokapić, Spec.Sci.građ.	Prilog:	Plan armiranja potpornog zida POS PZ1
Datum izrade i M.P.:		Datum revizije i M.P.:	
novembar 2021			
		Br. priloga	3.2
		Br. strane	341

Plan armiranja potpornog zida- POS PZ2
MB 30, B500B, ao=2.5cm



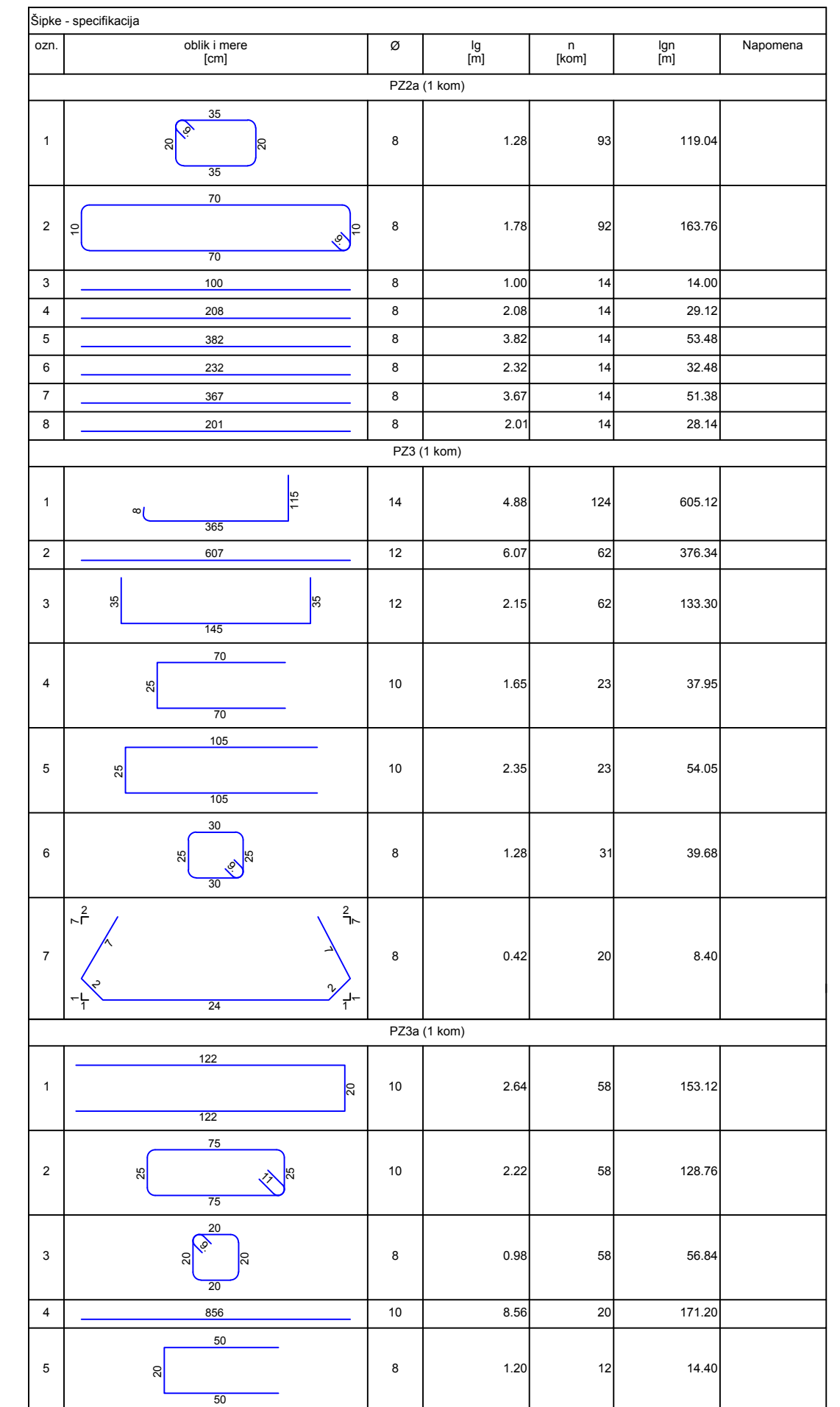
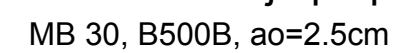
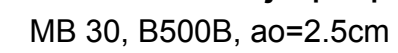
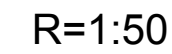
Detalj postavljanja C-ovki (2kom/m2)
R=1:50



Šipke - specifikacija						
ozn.	oblik i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	Napomena
PZ2 (1 kom)						
1		16	6.23	142	884.66	
2		16	4.85	160	776.00	
3		14	6.97	30	209.10	
4		14	12.00	100	1200.00	
5		14	4.50	100	450.00	
6		14	2.65	71	188.15	
7		14	2.15	80	172.00	
8		12	2.60	56	145.60	
9		10	1.42	76	107.92	
10		14	7.94	16	127.04	
11		8	0.47	100	47.00	

PROJEKTANT: EUROZOX d.o.o. <small>Spuž bb DANILOVGRAD</small>		Investitor: OPŠTINA BAR	
Objekat:	DNEVNI CENTAR ZA DJECU SA SMETNJAMA U RAZVOJU	Lokacija: UP 2286, BLOK 1-DUP "Polje Zaljevo" u Baru kp 2286, KO Polje,Bar	
Glavni inženjer	arh.Dragana Čukić, dipl.ing.	Vrsta tehnicke dokumentacije: Glavni projekat	
Odgovorni inženjer	Draško Bašović, Spec.Sci.građ.	Dio tehnicke dokumentacije:	KONSTRUKCIJA R=1:50
Saradnik	Andrija Krivokapić, Spec.Sci.građ.	Prilog:	Br. strane
		Plan armiranja potpornog zida POS PZ2	3.3 342
Datum izrade i M.P: novembar 2021		Datum revizije i M.P:	

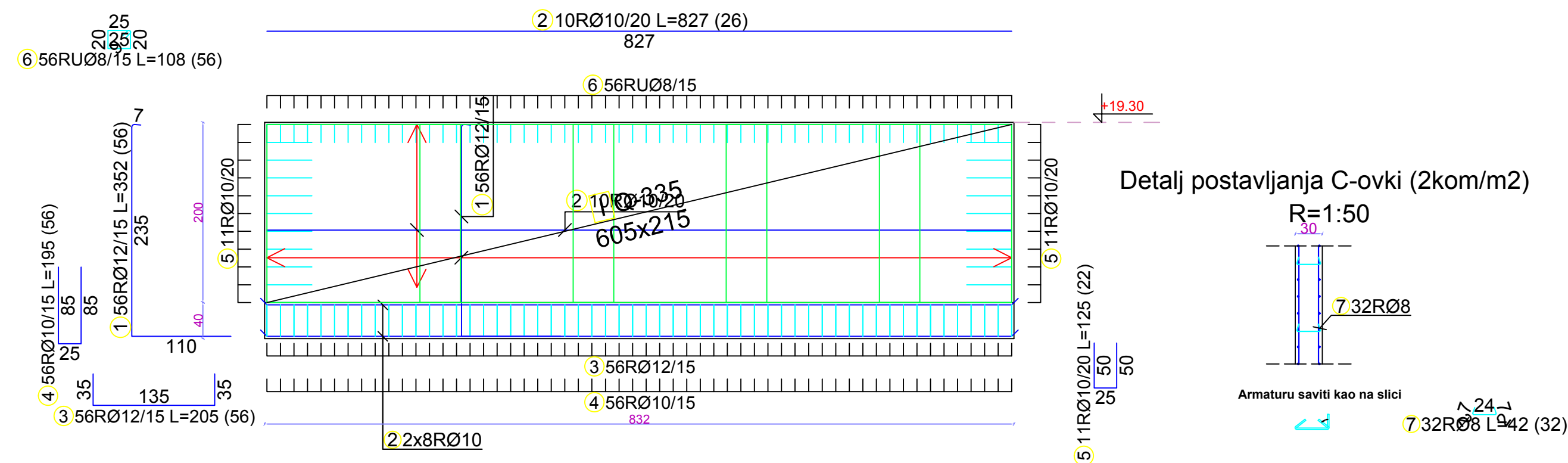
MB 30, B500B, $a_0=2.5\text{cm}$



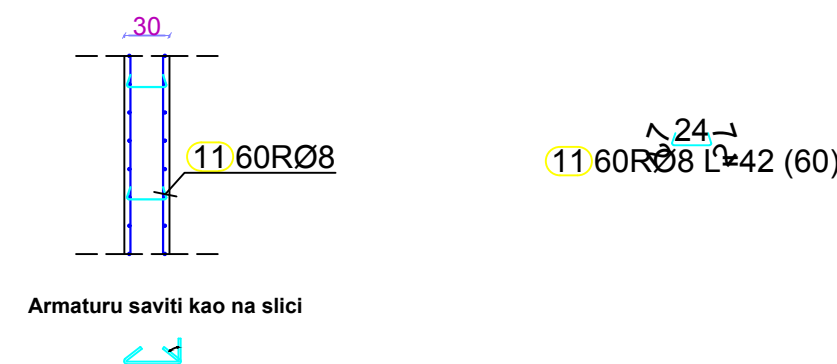
PROJEKTANT: EUROZOX d.o.o. Spuž bb DANILOVGRAD		Investitor: OPŠTINA BAR	
Objekat:	DNEVNI CENTAR ZA DJECU SA SMETNJAMA U RAZVOJU	Lokacija: UP 2286, BLOK 1-DUP "Polje Zaljevo" u Baru kp 2286, KO Polje,Bar	
Glavni inženjer	arh.Dragana Čukić, dipl.ing.	Vrsta tehnicke dokumentacije:	Glavni projekat
Odgovorni inženjer	Draško Bašović, Spec.Sci.građ.	Dio tehnicke dokumentacije:	KONSTRUKCIJA R=1:50
Saradnik	Andrija Krivokapić, Spec.Sci.građ.	Prilog: Plan armiranja potpornog zida POS PZ2a, PZ3 I PZ3a	Br. priloga 3.4 Br. strane 343
Datum izrade i M.P: novembar 2021		Datum revizije i M.P:	

MB 30, B500B, $a_0=2.5\text{cm}$ [illegible]

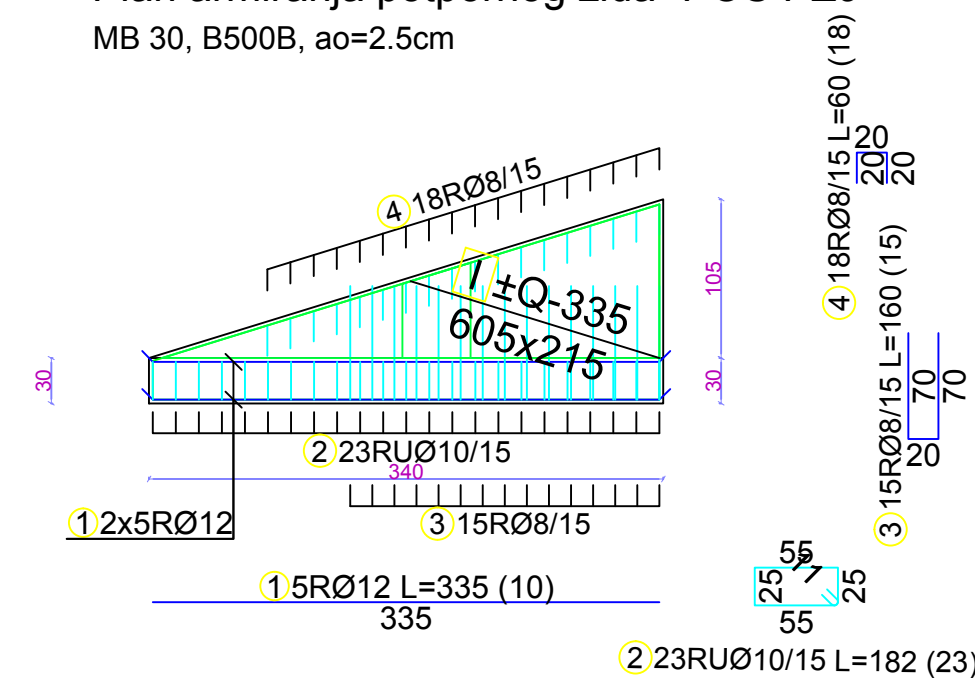
MB 30, B500B, $a_o=2.5\text{cm}$

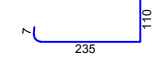

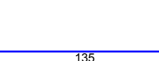
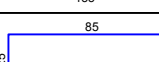
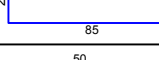
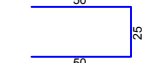
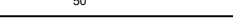

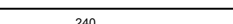


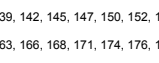

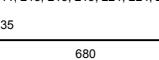
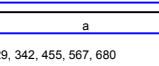
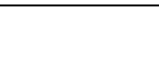
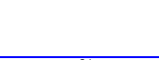


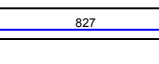
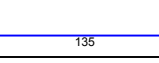
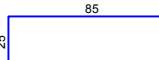


R=1:50



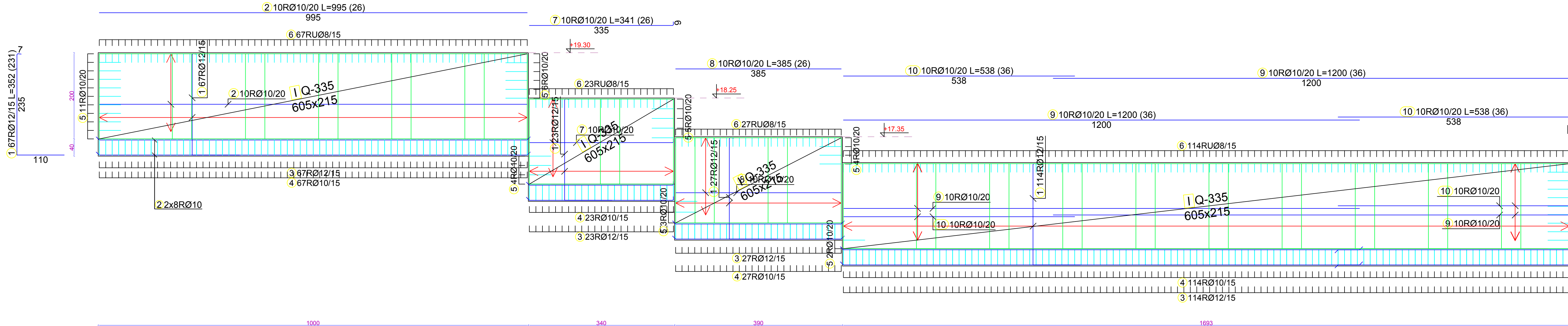
MB 30, B500B, $a_o=2.5\text{cm}$



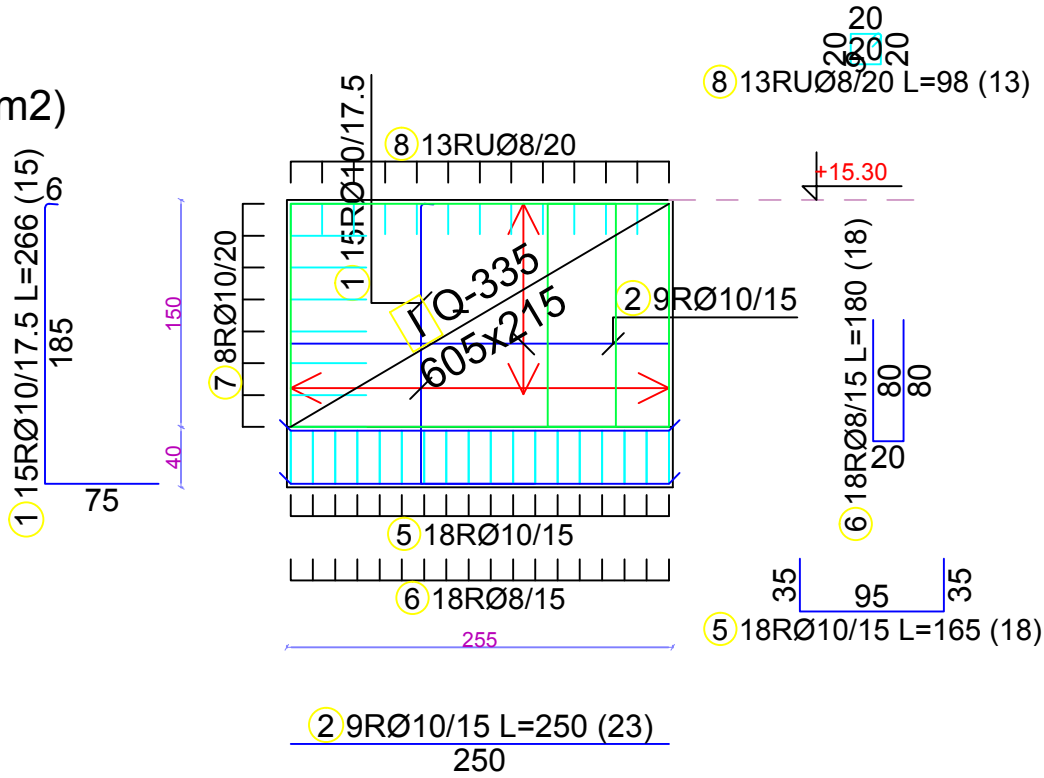
Spíše - specifikacija		Ø	lg	n	lgn	Napomena
ozn.	obli i mere [cm]	Ø	lg [m]	n [kom]	lgn [m]	
P24 (1 kom)						
1		12	3.52	67	235.94	
2		10	7.38	26	191.88	
3		12	2.05	113	231.65	
4		10	1.95	113	220.35	
5		10	1.25	60	75.00	
6		8	1.08	113	122.04	
7		10	2.40	26	62.40	
8	 a = 115, 118, 121, 123, 126, 129, 131, 134, 137, 139, 142, 145, 147, 150, 152, 155, 158, 160, 163, 166, 168, 171, 174, 176, 179, 182, 184, 187, 190, 192, 195, 197, 200, 203, 205, 208, 211, 213, 216, 219, 221, 224, 227, 229, 232, 235	12	*2.92	1 x 46	134.31	
9		10	6.80	21	142.80	
10	 a = 116, 229, 342, 455, 567, 680	10	*3.98	1 x 6	23.89	
11		8	0.42	60	25.20	
P25 (1 kom)						
1		12	3.52	56	197.12	
2		10	6.27	26	215.02	
3		12	2.05	56	114.80	
4		10	1.95	56	109.20	
5		10	1.25	22	27.50	
6		8	1.08	56	60.48	
7		8	0.42	32	13.44	
P29 (1 kom)						
1		12	3.35	10	33.50	
2		10	1.82	23	41.86	
3		8	1.60	15	24.00	
4		8	0.60	16	10.80	

PROJEKTANT: EUROZOX d.o.o. <small>Spuž bb DANILOVGRAD</small>		Investitor: OPŠTINA BAR	
Objekat:	DNEVNI CENTAR ZA DJECU SA SMETNJAMA U RAZVOJU	Lokacija: UP 2286, BLOK 1-DUP "Polje Zaljevo" u Baru kp 2286, KO Polje,Bar	
Glavni inženjer	arh.Dragana Čukić, dipl.ing.	Vrsta tehnicke dokumentacije:	Glavni projekat
Odgovorni inženjer	Draško Bašović, Spec.Sci.građ.	Dio tehnicke dokumentacije:	KONSTRUKCIJA R=1:50
Saradnik	Andrija Krivokapić, Spec.Sci.građ.	Prilog: Plan armiranja potpornih zidova POS PZ4 i POS PZ5 i POS PZ9	Br. priloga 3.5 Br. strane 344
Datum izrade i M.P:		Datum revizije i M.P:	
novembar 2021			

Plan armiranja potpornog zida- POS PZ6
MB 30, B500B, ao=2.5cm

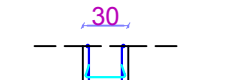


Plan armiranja potpornog zida- POS PZ8
MB 30, B500B, ao=2.5cm



Detalji postavljanja C-ovki (2kom/m2)

R=1:50

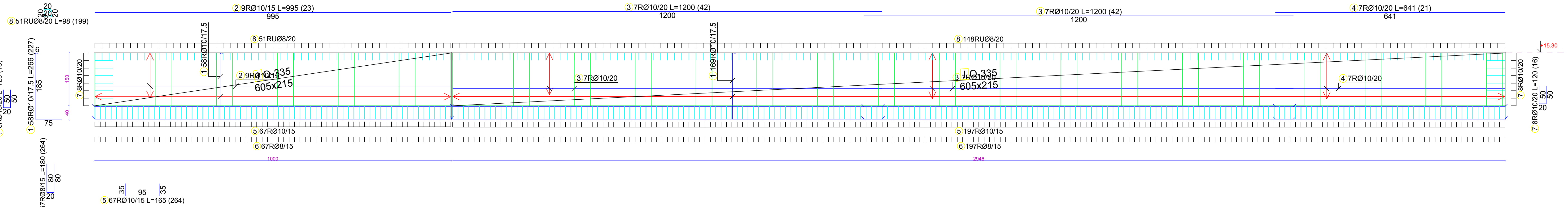


Armaturu saviti kao na slici



11 140RØ8 L=42 (140)

Plan armiranja potpornog zida- POS PZ7
MB 30, B500B, ao=2.5cm



Spisak - specifikacija						
ozn.	opis i mere [mm]	Ø	lg [mm]	n [kom]	lg [m]	Napomena
PZ6 (1 kom)						
1		12	3.52	231	813.12	
2		10	9.95	26	256.70	
3		12	2.05	231	473.55	
4		10	1.95	231	450.45	
5		10	1.25	46	57.50	
6		8	1.08	231	249.48	
7		10	3.41	26	88.66	
8		10	3.85	26	100.10	
9		10	12.00	36	432.00	
10		10	5.38	36	193.68	
PZ7 (1 kom)						
1		10	2.66	227	603.82	
2		10	9.95	23	228.85	
3		10	12.00	42	504.00	
4		10	6.41	21	134.61	
5		10	1.65	264	435.60	
6		8	1.80	264	475.20	
7		10	1.20	16	19.20	
8		8	0.98	199	195.02	
PZ8 (1 kom)						
1		10	2.66	15	39.90	
2		10	2.50	23	57.50	
5		10	1.65	18	29.70	
6		8	1.80	18	32.40	
7		10	1.20	8	9.60	
8		8	0.98	13	12.74	

PROJEKTANT:
EUROZOX d.o.o.
Sput bb
DANILOVGRAD

Investitor:
OPŠTINA BAR

Objekat:
DNEVNI CENTAR ZA DJECU SA SMETNJAMA U RAZVOJU

Lokacija:
**UP 2286, BLOK 1-DUP "Polje Zaljevo" u Baru
kp 2286, KO Polje,Bar**

Glavni inženjer
arh.Dragana Čukić, dipl.ing.

Vrsta tehnicke dokumentacije:
Glavni projekat

Odgovorni inženjer
Draško Bašović, Spec.Sci.građ.

Dio tehnicke dokumentacije:
KONSTRUKCIJA

Saradnik
Andrija Krivokapić, Spec.Sci.građ.

Priloga:
**Plan armiranja potpornih zidova
POS PZ6, POS PZ7 i POS PZ8**

Br. priloga
3.6

Br. strane
345

Datum izrade i M.P.:

Datum revizije i M.P.:

novembar 2021