

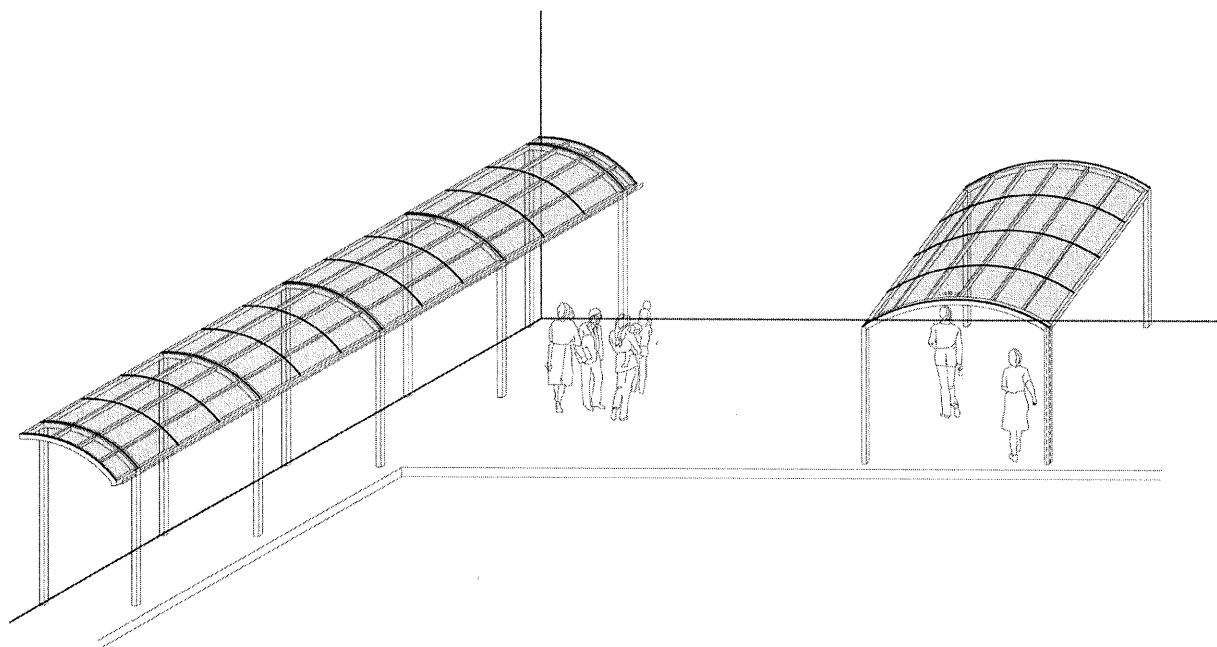
PROJEKTI BIRO

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## PROJEKT I TROŠKOVNIK DVIJU ČELIČNIH NADSTREŠNICA ISPRED ZGRADE OPĆINE PODSTRANA

**Broj projekta:**

T.D. 62/2017-K

**Investitor:**

Općina Podstrana  
Trg F. Tuđmana 3, 21312 Podstrana

**Projektant:**

Luka Runjić, mag.ing.aedif.

**Direktor:**

Luka Runjić, mag. ing. aedif.

**Mjesto i datum izrade:**

Kaštel Stari, studeni 2017.

**PROJEKTNI BIRO RUNJIĆ j.d.o.o.**

Vele Njive 27, Kaštel Stari

INVESTITOR: OPĆINA PODSTRANA  
GRAĐEVINA: ČELIČNE NADSTREŠNICE ISPRED ZGRADE OPĆINE  
Trg F. Tuđmana 3, 21312 Podstrana  
PROJEKT: PROJEKT KONSTRUKCIJE  
BROJ PROJEKTA: TD 62/2017-K, studeni 2017, Kaštel Stari

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**PROJEKTNI BIRO RUNJIĆ j.d.o.o.**

Vele Njive 27, Kaštel Stari

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PROJEKT: PROJEKT KONSTRUKCIJE

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**2. TEHNIČKI DIO**

**PROJEKTNI BIRO RUNJIĆ j.d.o.o.**

Vele Njive 27, Kaštel Stari

INVESTITOR: OPĆINA PODSTRANA  
GRAĐEVINA: ČELIČNE NADSTREŠNICE ISPRED ZGRADE OPĆINE  
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## 2.1. PRORAČUN MEHANIČKE OTPORNOSTI I STABILNOSTI

# Debljina stijenki za ravno ostakljivanje

/pokrenu

5

Tabela 18: Osni razmak (mm) između profila "a"; profili paralelni sa rebrima

Lexan Thermoclear tip ploče									
LTC 4.5/2RS1000	450								
LTC 6/2RS1300	570	530							
LTC 8/2RS1500	655	610	570	535	510				
LTC 8/3RS1700	650	590	560	570	500				
LTC 10/2RS1700	730	670	620	585	545	520			
LTC 10/3RS1900	800	730	675	625	575	540	510		
LTC 10/3TS2000	890	810	750	700	660	630	610	585	
LTC 10/3X2000	980	910	850	810	770	740	720	700	
LTC 16/3TS/ 2700 2800	1100	980	880	810	750	700	665	620	
LTC 16/3X2900	1200	1200	1130	1080	1030	995	960	950	
LTC 20/5RS3300	1200	1160	1070	980	920	860	810	770	
LTC 25/6RS3500	1250	1250	1250	1250	1250	1150	1100	1050	
LTC 32/5X3800	1250	1250	1250	1250	1250	1250	1250	1250	
Opterećenje u N/m <sup>2</sup>	600	800	1000	1200	1400	1600	1800	2000	

## Učvršćene dvije strane - nosači paralelni sa rebrima

Osnovni faktor koji određuje progib ploče je razmak „a“ između centara nosača.

a = osni razmak između profila

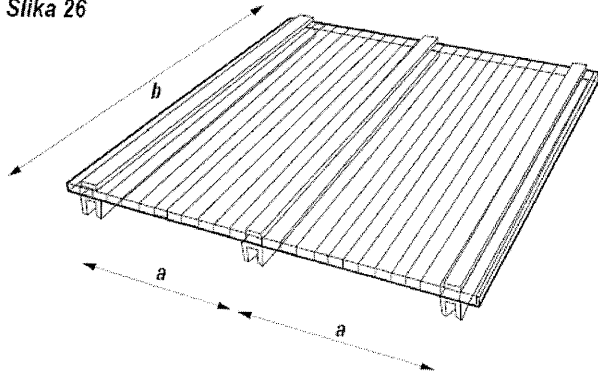
b = duljina ploče

Budući da se može izabrati bilo koja duljina mjera „b“ nema utjecaja na ponašanje pri progibu.

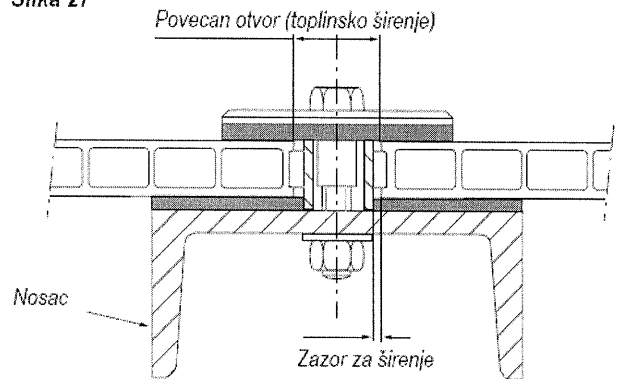
## Učvršćene dvije strane profila – okoito na rebra

U ovom slučaju na progib utječe razmak nosača. Širina ploče nema utjecaja na progib zbog opterećenja. To znači da se može izabrati bilo koja ploča i do njene standardne duljine.

Slika 26

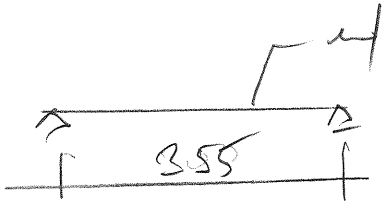


Slika 27



U slučaju potrebe za većim rasponima ploče kod vertikalnog ostakljivanja mogu se koristiti standardni „H“ profili od polikarbonata da se dobije dobar vodonepropusni spoj. Nisu potrebni dodatni vertikalni nosači. Za nakošeno ostakljenje preporuča se potporni nosač za spajanje ploča ne samo zbog nepropusnosti već i zbog izbjegavanja progiba ploče koji može nastati uslijed njene težine. Za pričvršćenje Lexan Thermoclear ploča na nosače mogu se koristiti standardni vijci, matice i podložne pločice. Međutim sav pribor koji služi pritezanju mora biti dovoljno velike površine uz korištenje kompatibilnih gumenih brtvi.

# PROJEKCIJA KRAVNIH LOSTI S 235



PROJEKCIJA  
 $\square 50 \times 100 \times 4 \text{ mm}$

$$W = 27.9 \text{ cm}^3$$

OPREDELJENJE:

potrebna + vr. razmera ...  $0.15 \times 920 + 0.102 = 0.20 \text{ kWh}$   
 snaga ...  $0.85 \times 0.50 \times 920 = 0.30 \text{ kWh}$   
 vreme (izvan) ...  $0.56 \times 1.25 \times 1.10 \times 920 = 0.55 \text{ kWh}$   
 vreme (izvan) ...  $0.56 \times 1.25 \times (-0.70) \times 920 = 0.45 \text{ kWh}$

Merjenje opt:

$$e_{\text{max}} = 1.35 \times 920 + 1.5 \times (0.70 \times 0.30 + 0.55) = 1.41 \text{ kWh}$$

$$M_{\text{red}} = \frac{1.41 \times 3.55^2}{8} = 2.21 \text{ km}$$

$$\sigma_{\text{red}} = \frac{2.21}{27.9} = 7.96 \text{ kN/cm}^2 < \sigma_{\text{red}} = 21.81 \text{ kN/cm}^2$$

KONTROLA PROJEKCIJE:

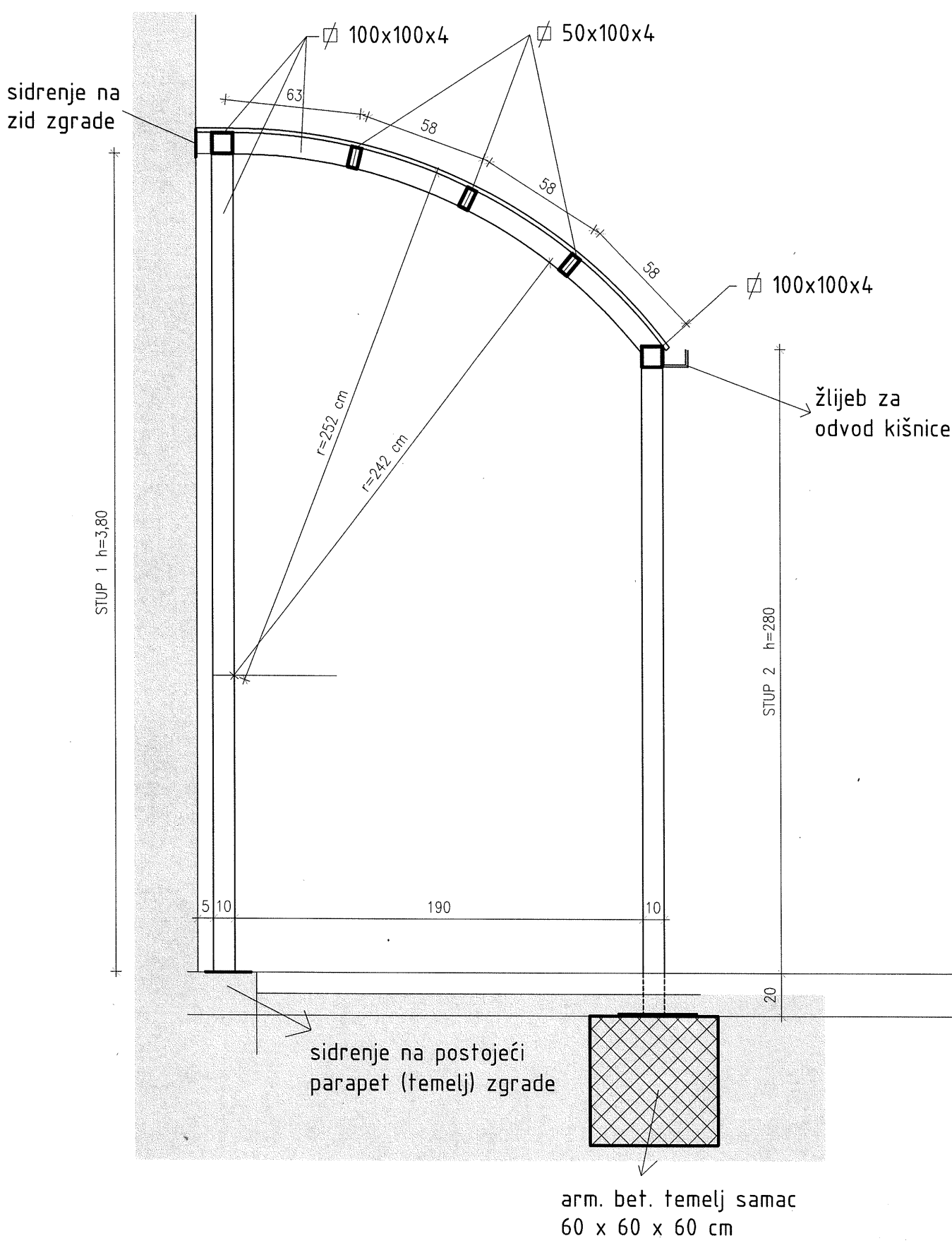
$$M_g = \frac{920 \times 3.55^2}{8} = 932 \text{ km}$$

$$M_{\text{upr}} = \frac{9.55 \times 3.55^2}{8} = 986 \text{ km}$$

$$f = \frac{5}{48} \frac{14.8 \times 30^2}{21000 \times 140} = 0.38 \text{ cm} < \frac{355}{250} = 1.42 \text{ cm}$$



8

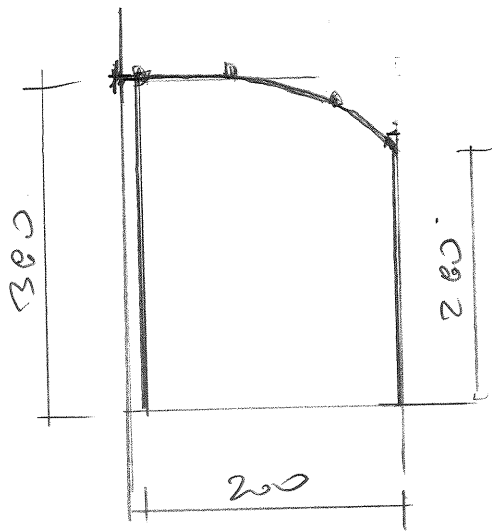
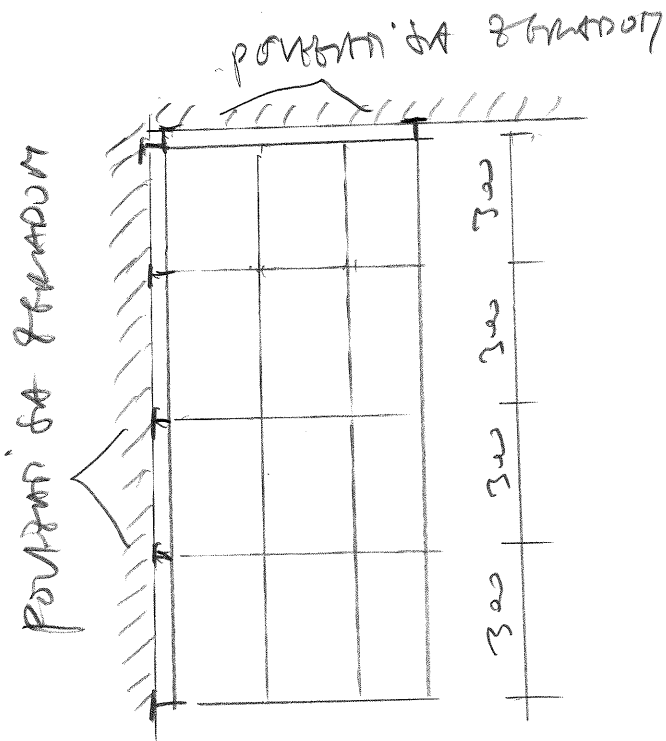


NADSTREŠNICA 1  
presjek MJ. 1:25



МАСТЕРСКАЯ 1

(S 235)



СТАЛОВО ОПТ:

$$g = 0,15 \text{ км}^2 \times 30 = 0,45$$

БРИКЕТ:

$$a = 0,45 \times 50 = 0,475 \text{ км}^2 \quad 1,30$$

УПЛОТН:

$$V_{пл} = 30 \text{ м/с}$$

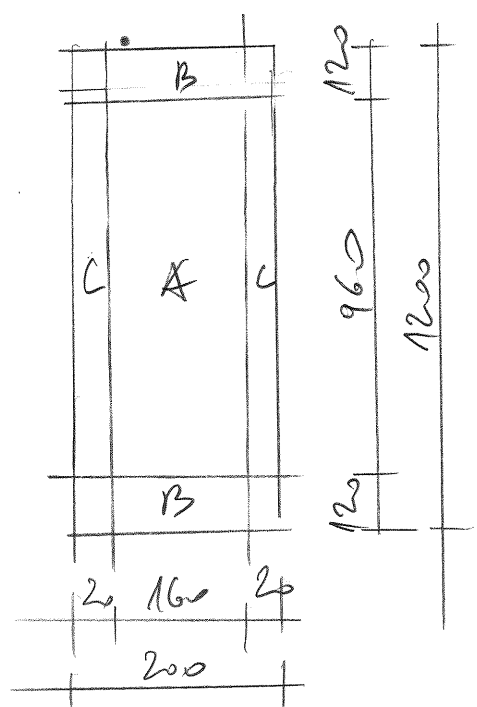
$$W = 0,56 \text{ км}^2$$

$$ce(z) = 1,25$$

$$W = 0,56 \times 1,25 \times C_p, \text{ net}$$

Средний коэффициент  
 $\psi = 0$

Umrumovst Cp, net



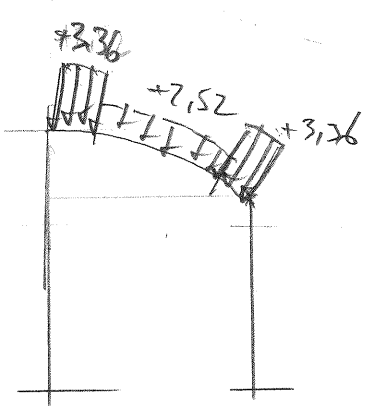
$$\begin{aligned}
 A &= +1.20 \quad | -1.5 \\
 B &= +2.40 \quad | -2.0 \\
 C &= +1.60 \quad | -2.10
 \end{aligned}$$

W. 57

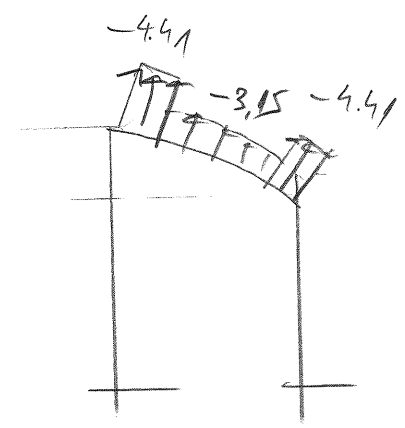
$$W = 256 \times 1.75 \times 3.0 \left\{ \begin{array}{l} +1.20 \\ -1.50 \\ +1.60 \\ -2.10 \end{array} \right\} = \left\{ \begin{array}{l} +2.52 \\ -3.15 \\ +3.36 \\ -4.41 \end{array} \right\}$$

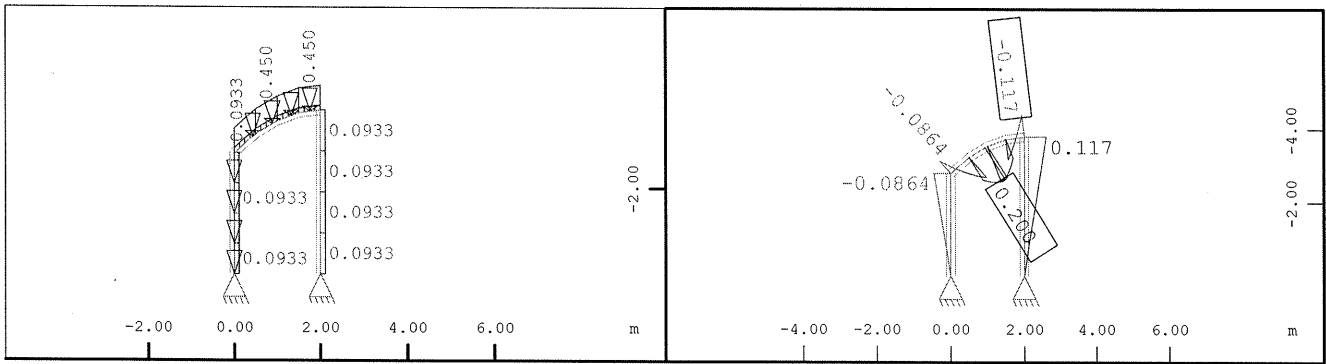
ZA samitni akur.

vrstan priraba:



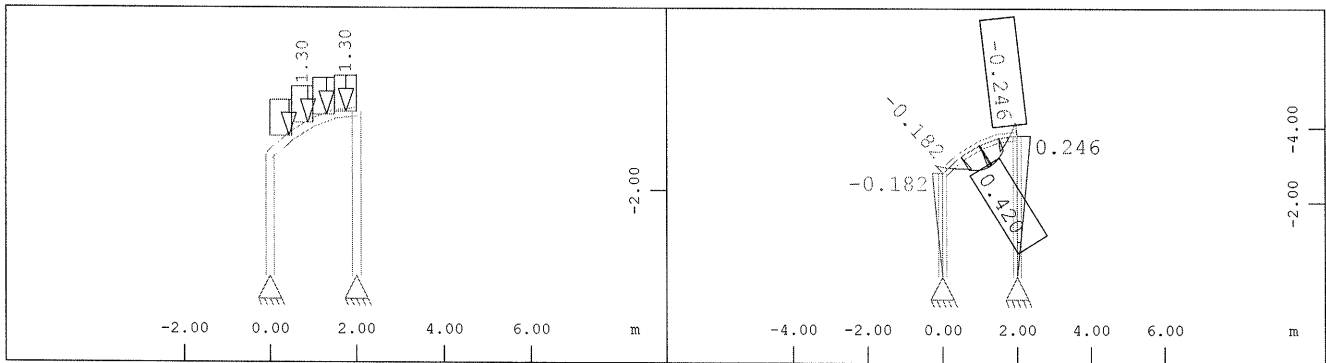
vrstan hitrost:





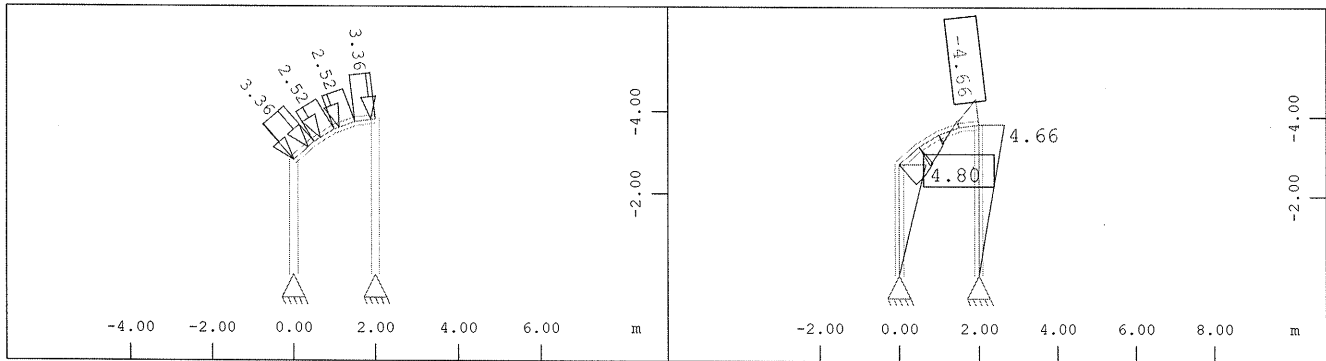
All loads, Loadcase 1 stalno , (1 cm 3D = unit)  
 Beam dead load in global Y (Unit=1.38 kN/m  
 Beam line load (force) in global Y (Unit=1.38  
 kN/m) (Max=0.450) M 1 : 176

Beam Elements , Bending moment My, Loadcase 1 stalno  
 , 1 cm 3D = 0.401 kNm (Min=-0.117) (Max=0.200) M 1 : 207



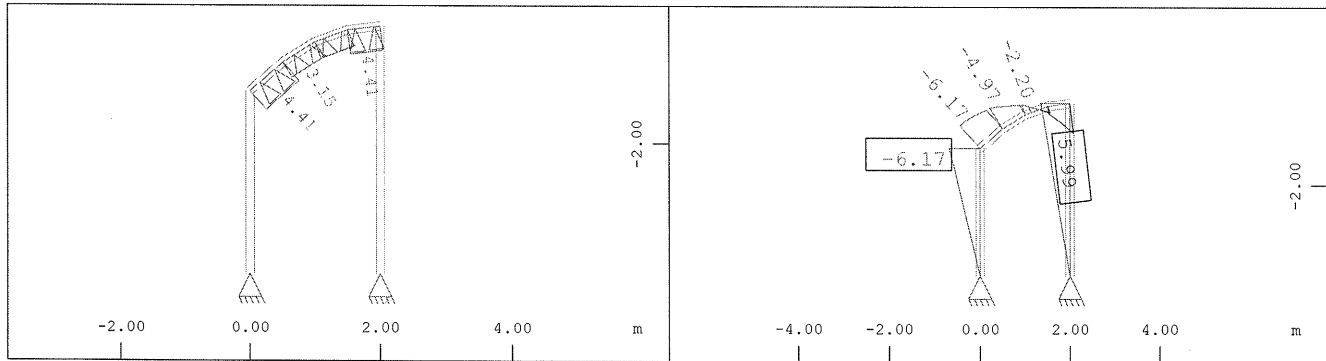
All loads, Loadcase 2 snijeg , (1 cm 3D = unit)  
 Beam line load (force) on projection in global Y  
 (Unit=2.75 kN/m) (Max=1.30) M 1 : 176

Beam Elements , Bending moment My, Loadcase 2 snijeg  
 , 1 cm 3D = 1.38 kNm (Min=-0.246) (Max=0.420) M 1 : 204



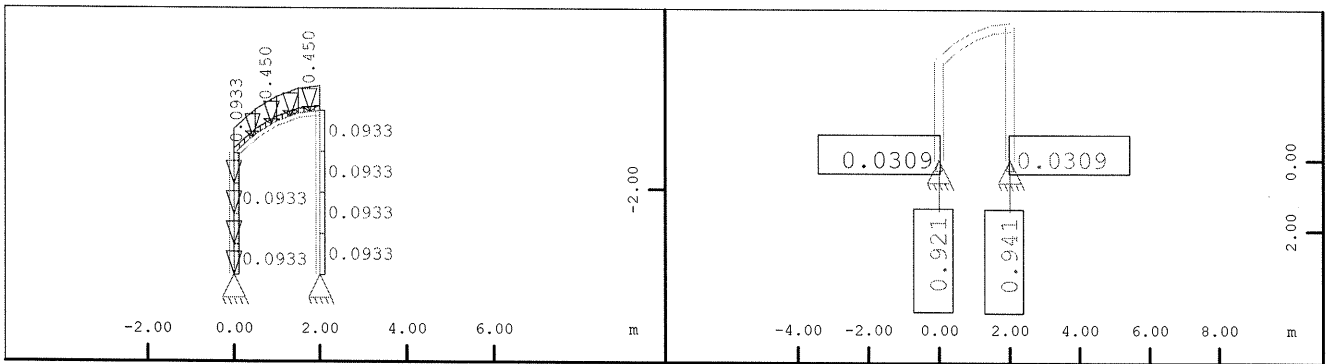
All loads, Loadcase 3 W\_prit , (1 cm 3D = unit)  
 Beam line load (force) in local z (Unit=5.50  
 kN/m) (Max=3.36) M 1 : 186

Beam Elements , Bending moment My, Loadcase 3 W\_prit  
 , 1 cm 3D = 13.8 kNm (Min=-4.66) (Max=4.80) M 1 : 192



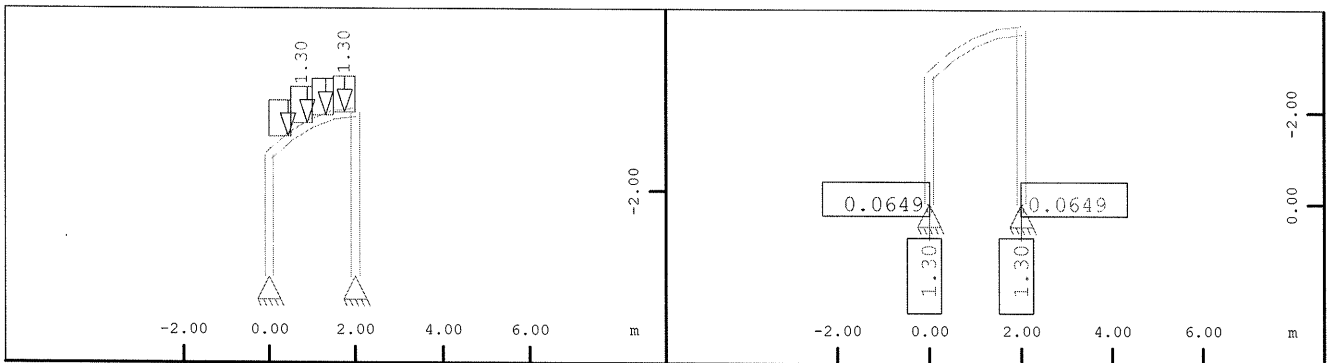
All loads, Loadcase 4 W\_sis , (1 cm 3D = unit) Beam  
 line load (force) in local z (Unit=13.8 kN/m)  
 (Min=-4.41) (Max=0) M 1 : 117

Beam Elements , Bending moment My, Loadcase 4 W\_sis  
 , 1 cm 3D = 15.4 kNm (Min=-6.17) (Max=5.99) M 1 : 168



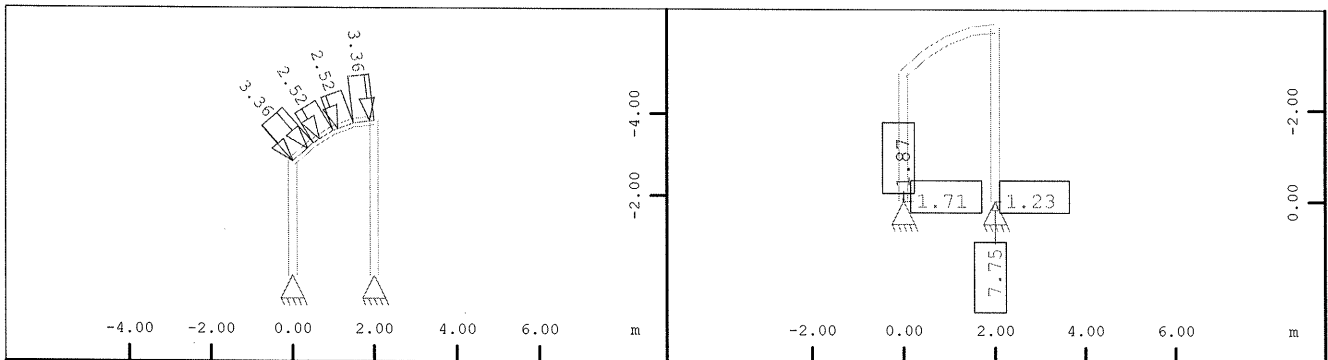
All loads, Loadcase 1 stalno , (1 cm 3D = unit)  
 Beam dead load in global Y (Unit=1.38 kN/m  $\nabla$ ),  
 Beam line load (force) in global Y (Unit=1.38 kN/m  $\nabla$ ) (Max=0.450) M 1 : 176

Nodes , Support force components in global directions, Loadcase 1 stalno , 1 cm 3D = 1.38 kN (Min=-0.941) (Max=0.0309) (total: 1.1548e-07/-1.86/0) M 1 : 216



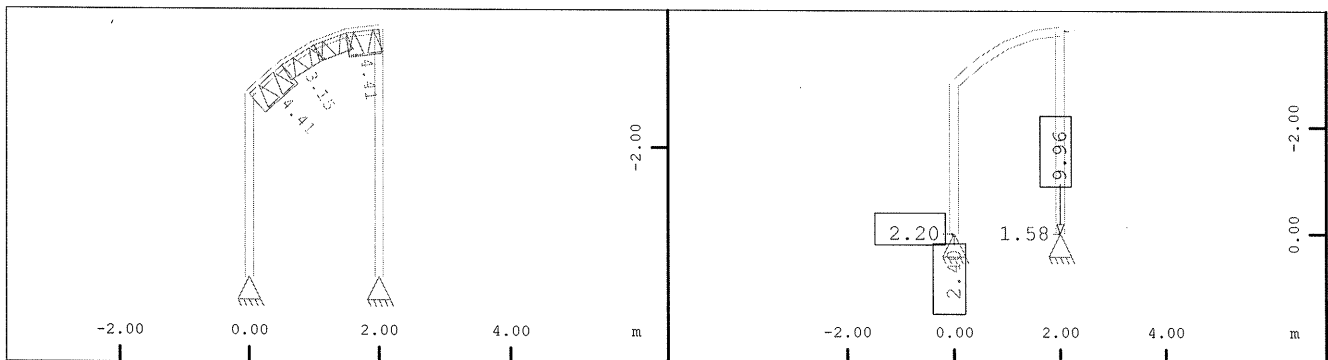
All loads, Loadcase 2 snijeg , (1 cm 3D = unit)  
 Beam line load (force) on projection in global Y (Unit=2.75 kN/m  $\nabla$ ) (Max=1.30) M 1 : 176

Nodes , Support force components in global directions, Loadcase 2 snijeg , 1 cm 3D = 2.75 kN (Min=-1.30) (Max=0.0649) (total: 1.8626e-07/-2.60/0) M 1 : 166



All loads, Loadcase 3 W\_prit , (1 cm 3D = unit)  
 Beam line load (force) in local z (Unit=5.50 kN/m  $\nabla$ ) (Max=3.36) M 1 : 186

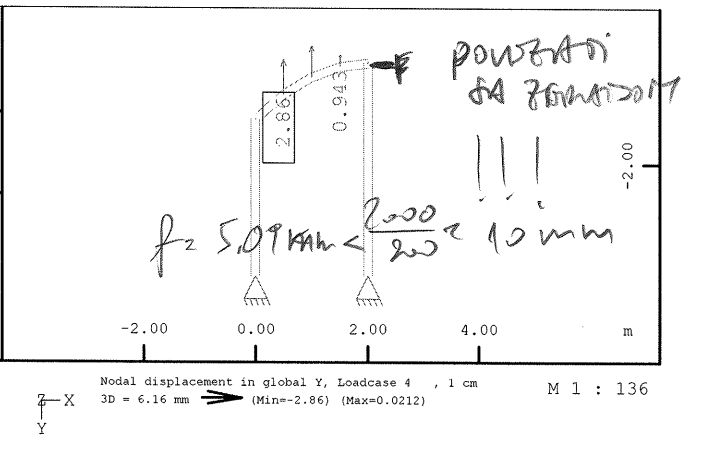
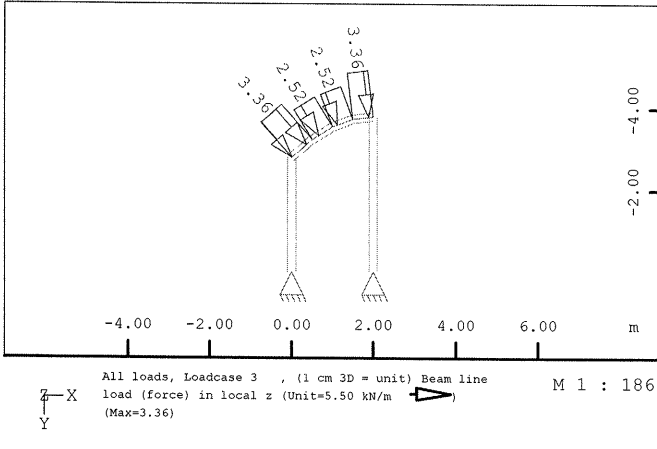
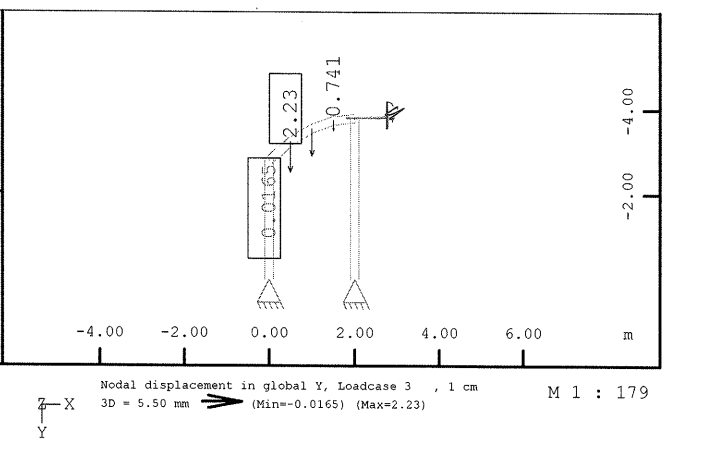
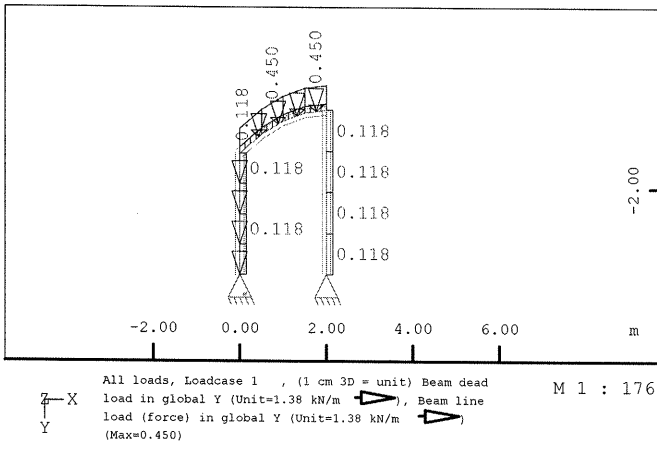
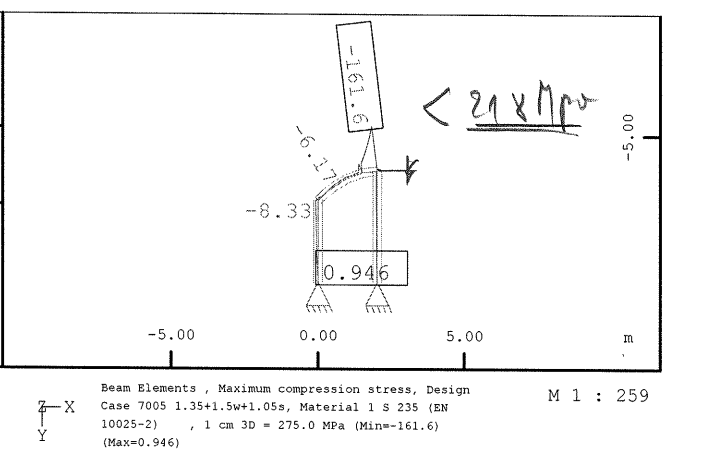
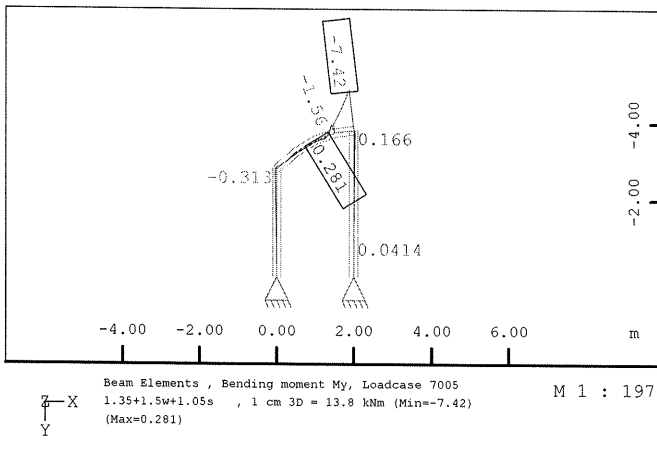
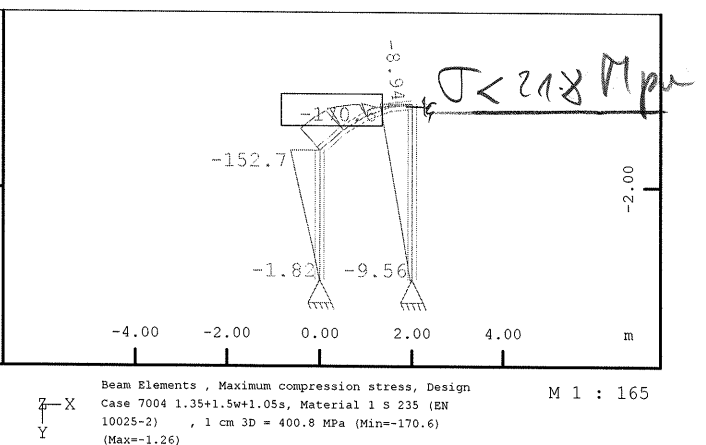
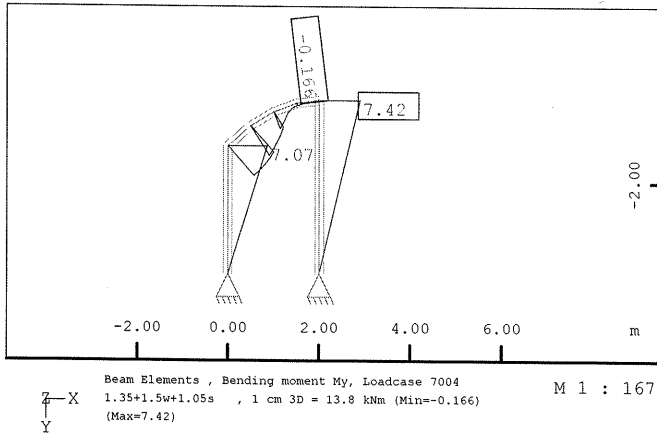
Nodes , Support force components in global directions, Loadcase 3 W\_prit , 1 cm 3D = 13.8 kN (Min=-7.75) (Max=1.87) (total: -2.94/-5.88/0) M 1 : 167



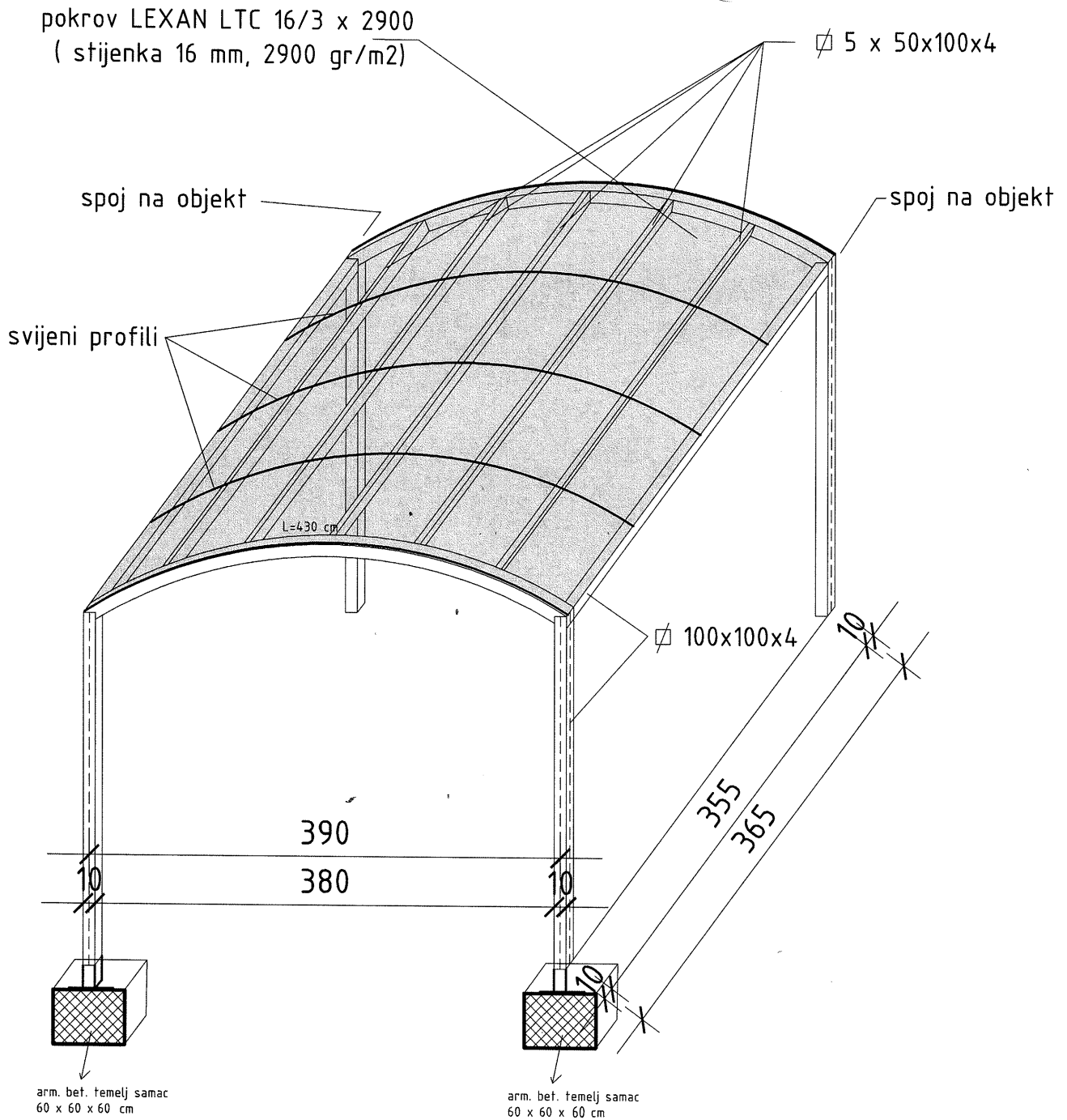
All loads, Loadcase 4 W\_sis , (1 cm 3D = unit)  
 Beam line load (force) in local z (Unit=13.8 kN/m  $\nabla$ ) (Min=-4.41) (Max=0) M 1 : 117

Nodes , Support force components in global directions, Loadcase 4 W\_sis , 1 cm 3D = 15.4 kN (Min=-2.40) (Max=9.96) (total: 3.78/7.56/0) M 1 : 143

not  $V_{ad} = 14,26 \text{ kW}$   
 min  $V_{ad} = -2,69 \text{ kW}$



(8235)



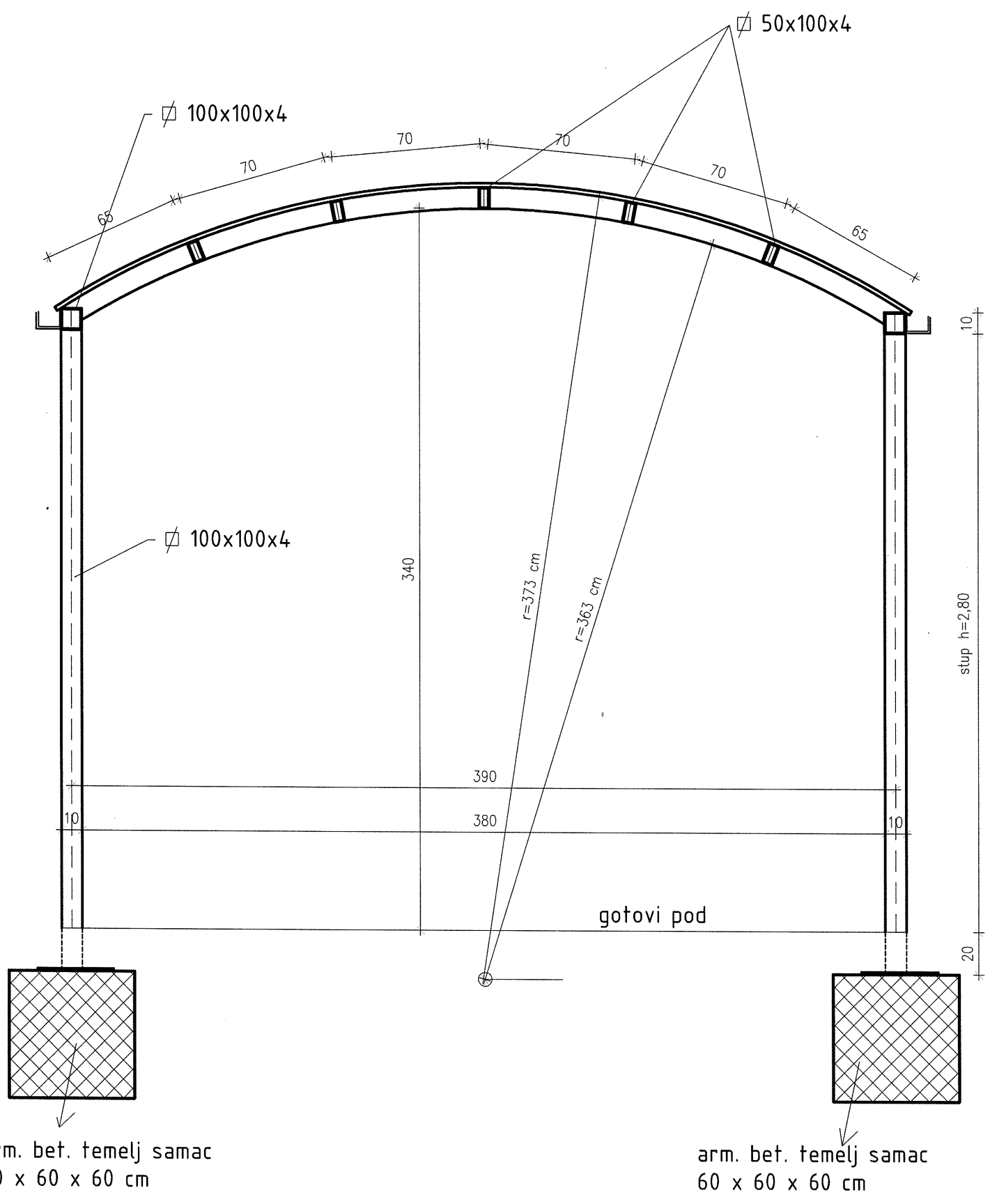
pokrov LEXAN LTC 16/3 x 2900 - 4,30 m x 3,75 m = 16,12 m<sup>2</sup>

okvir 100x100x4 - 31,70 m<sup>1</sup> x 11,90 kg/m<sup>1</sup> = 377,23 kg

letve 50x100x4 - 17,75 m<sup>1</sup> x 8,78 kg/m<sup>1</sup> = 155,85 kg

horizontalni žlijeb za odvod kišnice 3,65 m<sup>1</sup> x 2 kom , vertikalna 2,80 m<sup>1</sup> x 2 kom

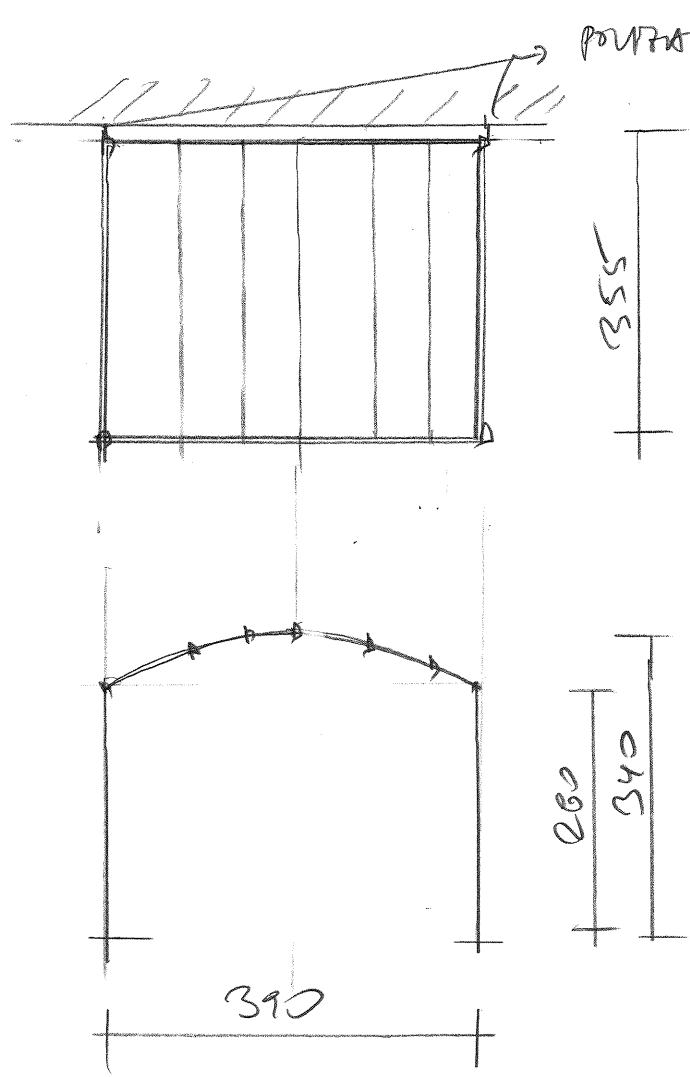
**NADSTREŠNICA 2**  
**aksonometrija**



NADSTREŠNICA 2  
presjek MJ. 1:25

НАПРЯЖЕНИЯ 2

(S 235)



ПОУПРЯМЛЕНА ОУСРЕДНОВАНА

СТАВКА ОПГ:

$$g = 2,15 \text{ кН/м}^2$$

W ОПГ:

$$W = 2 \times 2,25 \times 50 = 225 \text{ кН/м}^2$$

УСРЕДН:

$$v_{\text{ср}} = 30 \text{ м/с}$$

$$q = 0,56 \text{ кН/м}^2$$

$$C_e(\beta) = 1,25$$

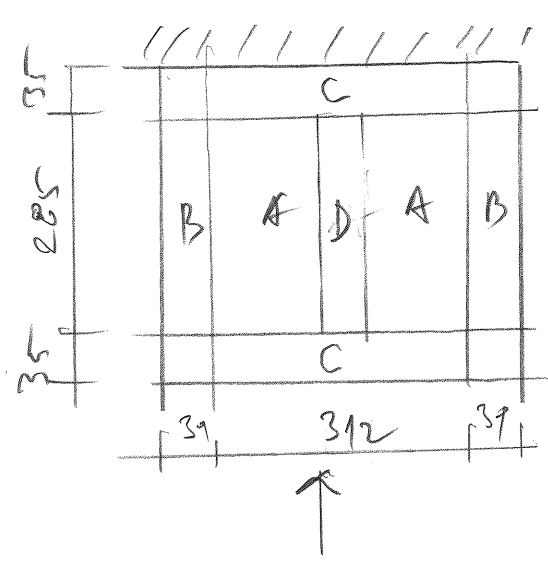
$$W = 0,56 \times 1,25 \times C_{p, \text{вет}}$$

СТУПЕНИ ЗАПМЯТЛИВОСТИ

$\psi = 0 \rightarrow$  ОУСРЕДНОВАНА ДЖА.

$\psi = 1 \rightarrow$  БОДЖА ДЖА.

УСРЕДНОВАНА ОПГ:  $\psi = 1,0$



$$A = +1,1 / -1,30$$

$$B = +1,90 / -2,20$$

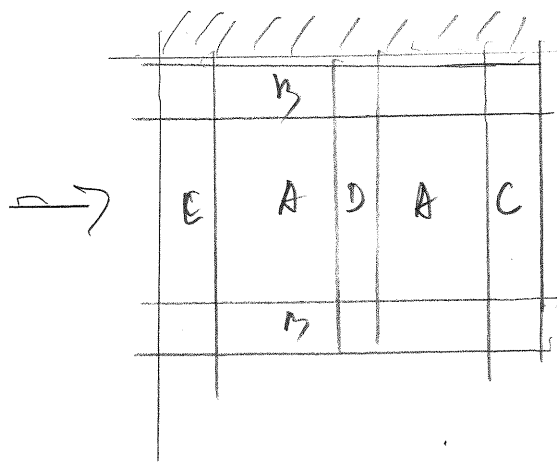
$$C = +1,50 / -1,60$$

$$D = +0,40 / -2,10$$

$$W = 0,56 \times 1,25 \times 1,27 \begin{Bmatrix} +1,1 \\ -1,30 \\ +1,90 \\ -2,20 \end{Bmatrix} = \begin{Bmatrix} +1,36 \\ -1,61 \\ +2,35 \\ -2,15 \end{Bmatrix} \begin{matrix} A+ \\ A- \\ B+ \\ B- \end{matrix}$$



Вкладnost  $q_{p,net}$ :  $1, \varphi = 0$

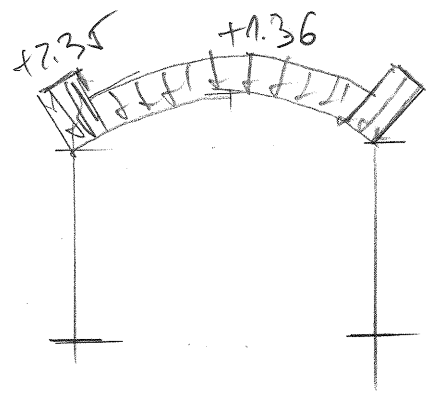


$$\begin{aligned}
 A &= +1.1 / -0.90 \\
 B &= +1.90 / -1.70 \\
 C &= +1.50 / -1.40 \\
 D &= +0.40 / -1.80
 \end{aligned}$$

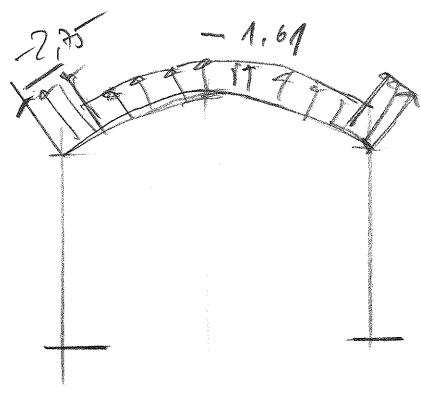
$$W = 456 \times 1.75 \times 1.77 \left\{ \begin{array}{l} +1.10 \\ -0.90 \\ +1.50 \\ -1.40 \end{array} \right\} = \left\{ \begin{array}{l} +1.36 \\ -1.61 \\ +1.86 \\ -1.74 \end{array} \right\} \begin{array}{l} A+ \\ A- \\ C+ \\ C- \end{array}$$

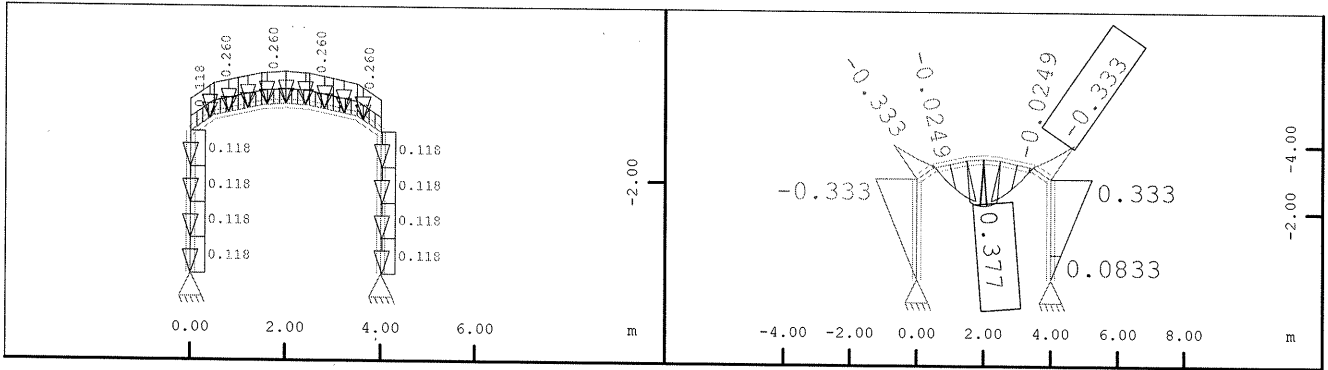
За дван окле:

Угоне притока:



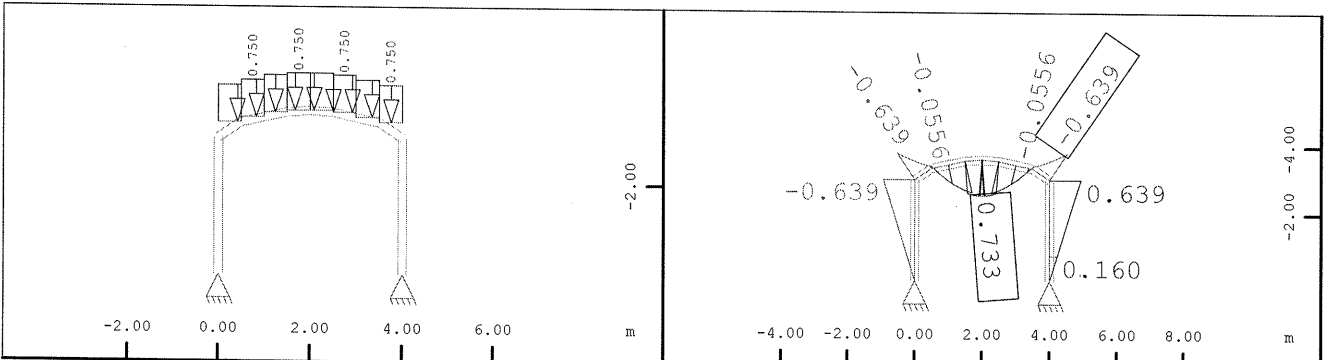
Угоне диванта:





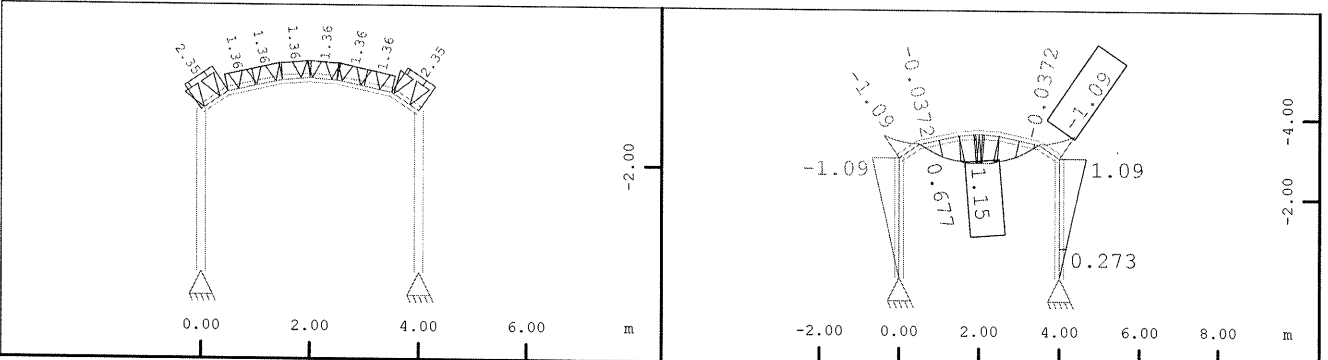
All loads, Loadcase 1 stalno , (1 cm 3D = unit)  
 Beam dead load in global Y (Unit=0.616 kN/m),  
 Beam line load (force) in global Y (Unit=0.616 kN/m) (Max=0.260)  
 M 1 : 161

Beam Elements , Bending moment My, Loadcase 1 stalno  
 , 1 cm 3D = 0.616 kNm (Min=-0.333) (Max=0.377)  
 M 1 : 227



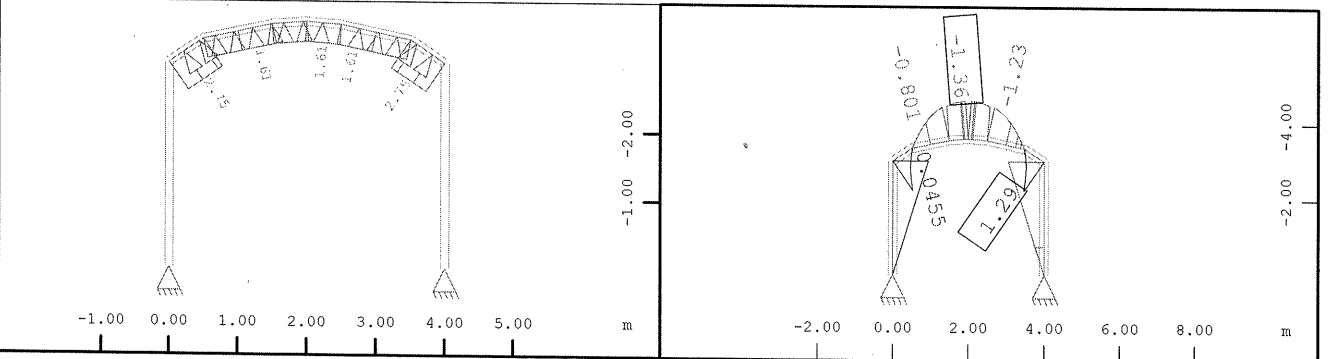
All loads, Loadcase 2 snijeg , (1 cm 3D = unit)  
 Beam line load (force) on projection in global Y  
 (Unit=1.54 kN/m) (Max=0.750)  
 M 1 : 167

Beam Elements , Bending moment My, Loadcase 2 snijeg  
 , 1 cm 3D = 1.54 kNm (Min=-0.639) (Max=0.733)  
 M 1 : 226



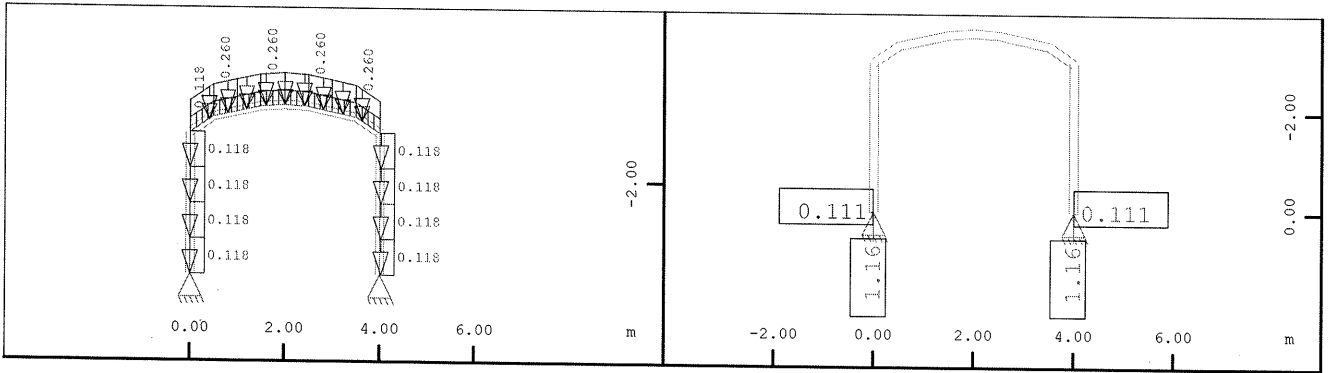
All loads, Loadcase 3 W\_prit , (1 cm 3D = unit)  
 Beam line load (force) in local z (Unit=6.16 kN/m) (Max=2.35)  
 M 1 : 141

Beam Elements , Bending moment My, Loadcase 3 W\_prit  
 , 1 cm 3D = 3.08 kNm (Min=-1.09) (Max=1.15)  
 M 1 : 190



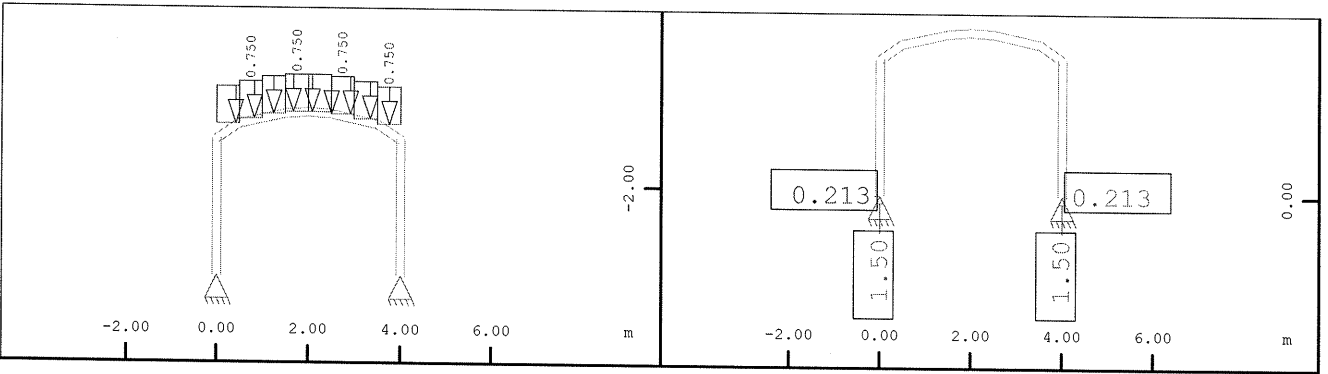
All loads, Loadcase 4 W\_sis , (1 cm 3D = unit)  
 Beam line load (force) in local z (Unit=6.16 kN/m) (Min=-2.75) (Max=0)  
 M 1 : 111

Beam Elements , Bending moment My, Loadcase 4 W\_sis  
 , 1 cm 3D = 2.75 kNm (Min=-1.36) (Max=1.29)  
 M 1 : 201



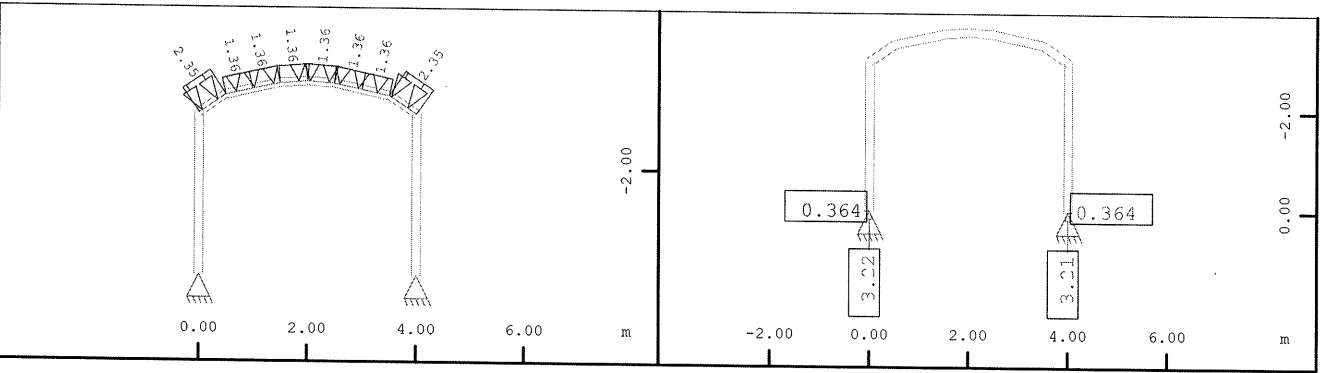
All loads, Loadcase 1 stalno , (1 cm 3D = unit)  
 Beam dead load in global Y (Unit=0.616 kN/m) ,  
 Beam line load (force) in global Y (Unit=0.616 kN/m) (Max=0.260)  
 M 1 : 161

Nodes , Support force components in global directions, Loadcase 1 stalno , 1 cm 3D = 3.08 kN (Min=-1.16) (Max=0.111) (total: -3.7998e-07/-2.32/0)  
 M 1 : 152



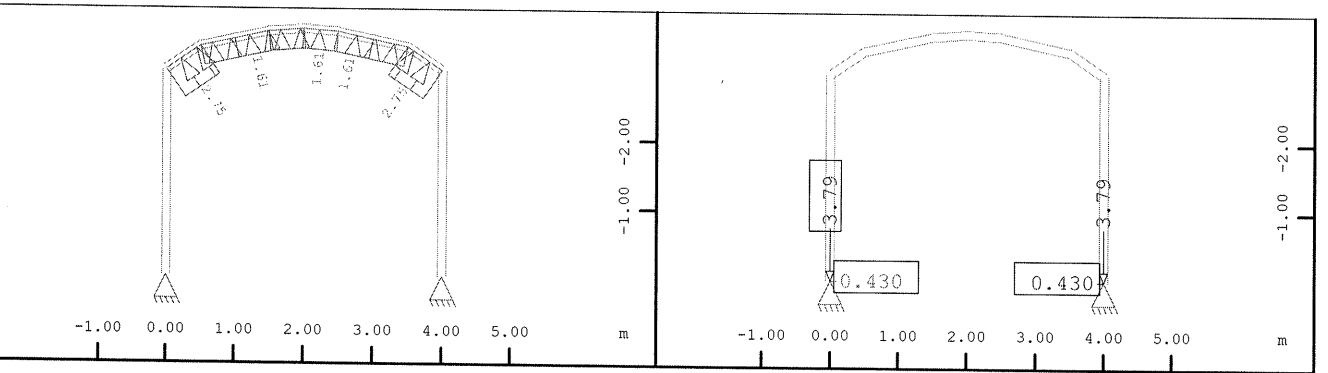
All loads, Loadcase 2 snijeg , (1 cm 3D = unit)  
 Beam line load (force) on projection in global Y (Unit=1.54 kN/m) (Max=0.750)  
 M 1 : 167

Nodes , Support force components in global directions, Loadcase 2 snijeg , 1 cm 3D = 3.08 kN (Min=-1.50) (Max=0.213) (total: -7.4506e-07/-3.00/0)  
 M 1 : 167



All loads, Loadcase 3 W\_prit , (1 cm 3D = unit)  
 Beam line load (force) in local z (Unit=6.16 kN/m) (Max=2.35)  
 M 1 : 141

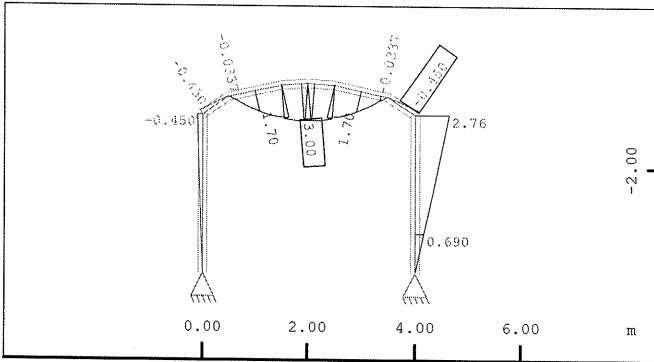
Nodes , Support force components in global directions, Loadcase 3 W\_prit , 1 cm 3D = 6.16 kN (Min=-3.22) (Max=0.364) (total: -1.2219e-06/-6.43/0)  
 M 1 : 153



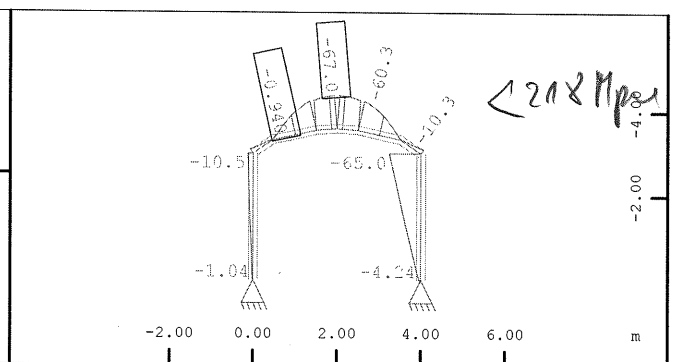
All loads, Loadcase 4 W\_sis , (1 cm 3D = unit)  
 Beam line load (force) in local z (Unit=6.16 kN/m) (Min=-2.75) (Max=0)  
 M 1 : 111

Nodes , Support force components in global directions, Loadcase 4 W\_sis , 1 cm 3D = 5.50 kN (Min=-0.430) (Max=3.79) (total: 1.4603e-06/7.58/0)  
 M 1 : 111

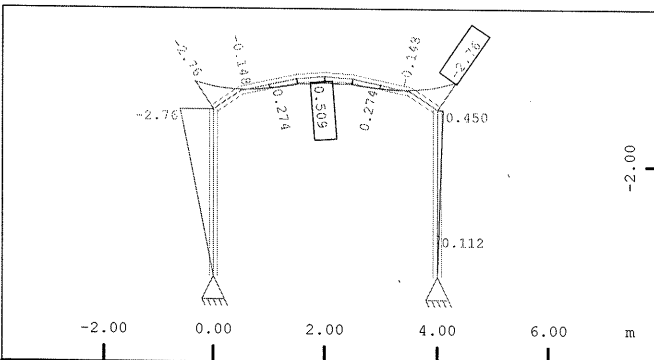
nut Vred z 7.90 kW  
 min Vred z -4.52 kW



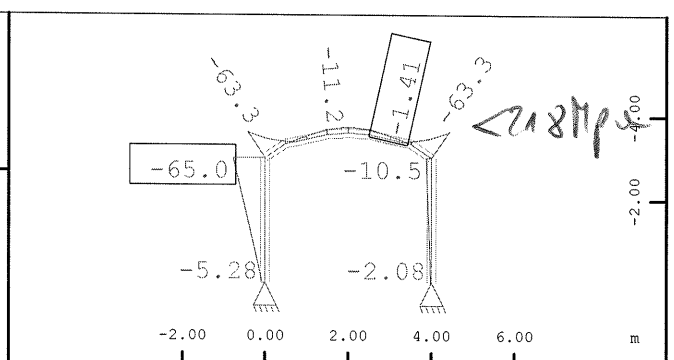
Beam Elements , Bending moment My, Loadcase 7004  
 1.35+1.5w+1.05s , 1 cm 3D = 6.16 kNm (Min=-0.450)  
 (Max=3.00) M 1 : 144



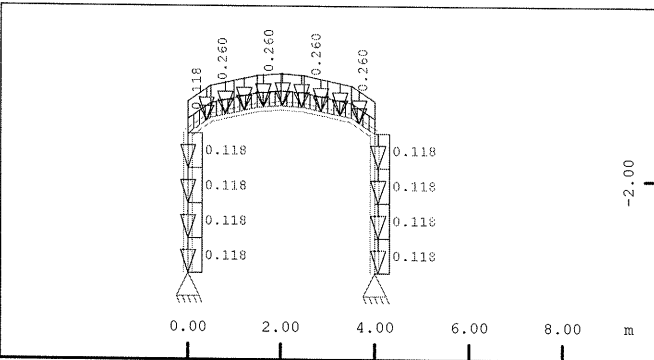
Beam Elements , Maximum compression stress, Design  
 Case 7004 1.35+1.5w+1.05s, Material 1 S 235 (EN  
 10025-2) , 1 cm 3D = 153.9 MPa (Min=-67.0)  
 (Max=-0.940) M 1 : 181



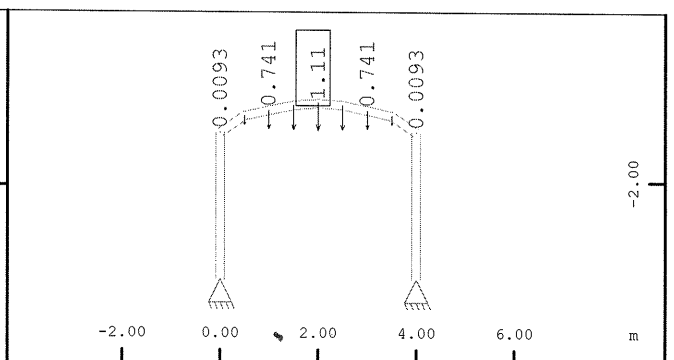
Beam Elements , Bending moment My, Loadcase 7005  
 1.35+1.5w+1.05s , 1 cm 3D = 6.16 kNm (Min=-2.76)  
 (Max=0.509) M 1 : 137



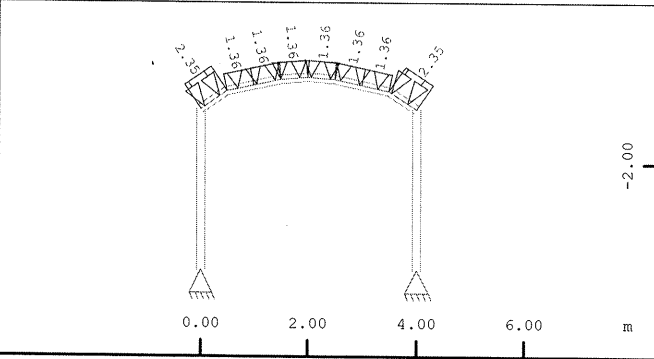
Beam Elements , Maximum compression stress, Design  
 Case 7005 1.35+1.5w+1.05s, Material 1 S 235 (EN  
 10025-2) , 1 cm 3D = 153.9 MPa (Min=-65.0)  
 (Max=-1.41) M 1 : 183



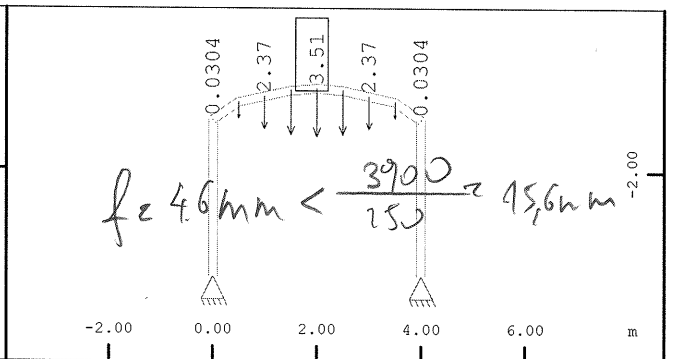
All loads, Loadcase 1 stalno , (1 cm 3D = unit)  
 Beam dead load in global Y (Unit=0.616 kN/m  
 Beam line load (force) in global Y (Unit=0.616  
 kN/m) (Max=0.260) M 1 : 163



Nodal displacement in global Y, Loadcase 1 stalno ,  
 1 cm 3D = 3.08 mm (Max=1.11) M 1 : 155



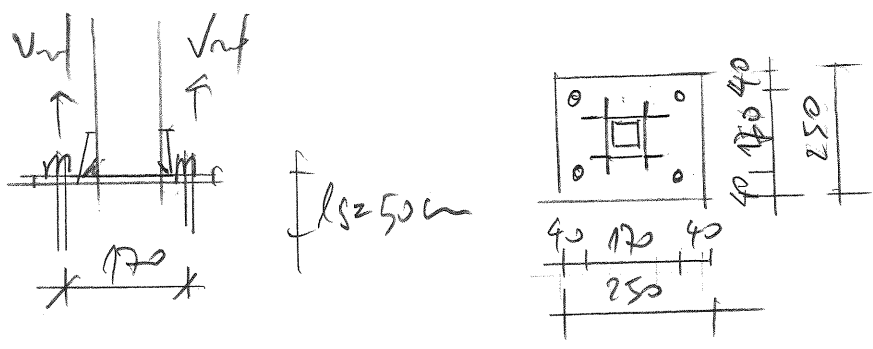
All loads, Loadcase 3 W\_prit , (1 cm 3D = unit)  
 Beam line load (force) in local z (Unit=6.16  
 kN/m) (Max=2.35) M 1 : 142



Nodal displacement in global Y, Loadcase 3 W\_prit ,  
 1 cm 3D = 5.50 mm (Max=3.51) M 1 : 146

PROJEKOVAN. UJAVNA: 4xM12 (S355)

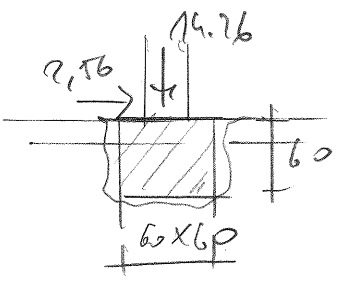
PODLOGA:  $\phi$  250x250x10



min  $V_{adm} = 4.52 \text{ kN}$

$$\sigma_{adm} = \frac{4.52}{2.84} = 1.59 \text{ kN/cm}^2 < \sigma_{adm}$$

KONTROLA KAPONA U OLU:  $\sigma_{adm} = 3.00 \text{ kN/cm}^2$   
 C 25/30, S355

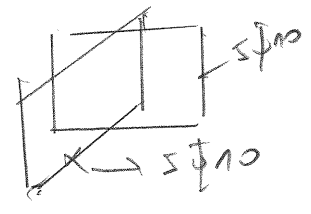


$F_{adm} = 5.40 \text{ kN}$   
 $\Sigma V = 19.66 \text{ kN}$   
 $M = 2.56 \times 0.60 = 1.53 \text{ kNm}$   
 $e = M/N = 9.08 \text{ mm}$

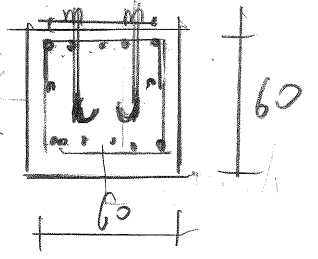
$$\sigma = \frac{19.66}{0.60 \times (0.60 - 2 \times 9.08)} = 275 \text{ kN/cm}^2$$

EXTRUDIRANI U  
 SVETLOJ SPOJ!

→ ARMIRANI



$\sigma = 10$  - U OBA  
 SMERIMA



U K. STANOV, XI ZONA-7.

PROJEKTOVAN:  
 LUKA RUPNIK, m. r. u.

22

**PROJEKTNI BIRO RUNJIĆ j.d.o.o.**

Vele Njive 27, Kaštel Stari

INVESTITOR: OPĆINA PODSTRANA

GRAĐEVINA: ČELIČNE NADSTREŠNICE ISPRED ZGRADE OPĆINE  
Trg F. Tuđmana 3, 21312 Podstrana

PROJEKT: PROJEKT KONSTRUKCIJE

BROJ PROJEKTA: TD 62/2017-K, studeni 2017, Kaštel Stari

## 2.2. TROŠKOVNIK

Br.st.	SADRŽAJ STAVKE	Jed. mjere	Količina	Jedinična cijena	Ukupno
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**Napomena:** Uključene sve dobave materijala, rad, pomoćna sredstva, predradnje, transporti, utovari i istovari te sve drugo potrebno do gotovog proizvoda. U cijenu je potrebno uključiti obradu čelične konstrukcije kvalitete S 235 vrućim pocinčavanjem, te bojanje temeljnom bojom i dva sloja antracit sive završne boje otporne na vanjske utjecaje. Lexan ploče ugrađivati (pričvršćivanje za čeličnu konstrukciju, brtvljenje) prema uputstvima proizvođača, a u cijenu uključen sav potreban pričvršćni materijal, profili, brtve....U pogledu detalja obavezno konzultirati nadzornog inženjera i projektanta. Izvoditelj radova je dužan izvršiti osiguranje građevine za vrijeme građenja od svih očekivanih rizika, kao i zaštitu djelatnika, prolaznika, mehanizacije i slično

### NADSTREŠNICA 1

Izrada čelične konstrukcije prema nacrtu. Na gradilištu se predviđa montaža predgotovljenih elemenata. Nadstrešnica tlocrtne projekcije 12,70 x 2,10 m se sastoji od 10 čeličnih stupova 10x 10 cm, te čelične nosive konstrukcije na koju se postavlja pokrov od lexana. Dio stupova uz objekt ( 6 komada) se sidri u postojeći temelj uz objekt ,dok se za " vanjska 4 stupa rade armirano-betonski temelji samci 60x60x60 cm. Na vanjsku stranu nadstrešnice se postavljaju oluci za skupljanje kišnice, čiji se nosači zavaruju za čelični okvir. U cijenu uključiti i sidrene ploče 250x250x10 mm i 4 vijka M12 po jednom stupu.

okvir □ 100 x 100 x 4 mm x 70,45 m1	kg	838,75
letve □ 50 x 100 x 4 mm x 39,40 m1	kg	345,03
Lexan ploče LEXAN LTC 16/3 x 2900 gr/m2	m <sup>2</sup>	31,48
horizontalni viseći žlijeb	m1	12,85
vertikalni žlijeb	m1	2,80
arm. bet. temelj 60x60x60 cm x 4 kom	m3	0,86

### NADSTREŠNICA 1 UKUPNO:

### NADSTREŠNICA 2

Izrada čelične konstrukcije prema nacrtu. Na gradilištu se predviđa montaža predgotovljenih elemenata. Nadstrešnica tlocrtne projekcije 4,0 x 3,75 m se sastoji od 4 čelična stupa 10x 10 cm, te čelične nosive konstrukcije na koju se postavlja pokrov od lexana. Dio stupova uz objekt (2 komada) se sidri u postojeći temelj uz objekt, dok se za " vanjska 2 stupa rade armirano-betonski temelji samci 60x60x60 cm. Na bočne strane nadstrešnice se postavljaju oluci za skupljanje kišnice, čiji se nosači zavaruju za čelični okvir. U cijenu uključiti i sidrene ploče 250x250x10 mm i 4 vijka M12 po jednom stupu.

okvir □ 100 x 100 x 4 mm x 31,70 m1	kg	377,23
letve □ 50 x 100 x 4 mm x 17,75 m1	kg	155,85
Lexan ploče LEXAN LTC 16/3 x 2900 gr/m2	m <sup>2</sup>	16,12
horizontalni viseći žlijeb	m1	7,30
vertikalni žlijeb	m1	5,60

Br.st.	SADRŽAJ STAVKE	Jed. mjere	Količina	Jedinična cijena	Ukupno
	arm. bet. temelj 60x60x60 cm x 2 kom	m3	0,43		24
<b>NADSTREŠNICA 2 UKUPNO:</b>					