Technical description for the Construction of EU Partnership Signboards

I. Technical Specification of panels

Assembly frame (A)

Profiles (100/60/3) should be 45 degrees angle cut and joined, and the joints shall be welded, sanded (polished) and puttied as needed.

Frontally, the visible crossbar width of the frame B should be 60 mm (see sketches attached).

Both legs should be closed in from the lower side with an iron plates, dimensions 200 x 160 mm (50 mm on each side of the 100/60 profile).

The construction shall be sanded, and then protected from corrosion in two coats using primer.

After this, the final layer shall be made using matte white paint (nitro enamel). The foundation footing should subsequently be welded with pieces of ribbed reinforcing iron R10 to R12, in order to integrate the construction as well as possible within the concrete footing.

Frame holding tin sheet with graphics (B)

Profiles (40/30/20) should not be 45 degrees angle cut, and the joints shall be welded, sanded (polished) and puttied as needed.

Frontally, the visible crossbar width of the frame B shall be 40 mm (see drawings attached).

The construction shall be sanded and then protected from corrosion in two coats using primer.

After that, the final painting of the construction shall be done using matte white paint (nitro enamel).

Frame (C)

The profiles (60/60/3) should be45 degrees angle cut, and the joints shall be welded, sanded (polished) and puttied as needed.

The construction shall be sanded and then protected from corrosion in two layers using primer.

After that, the final painting of the construction shall be done using matte white paint (nitro enamel).

Anti-vandal frame (D)

Profiles (L25/25) should be 45 degrees angle cut, previously cutting holes and milling them so that flat-headed screws are in line with the frame surface (see drawings attached).

The construction shall be sanded and then protected from corrosion in two layers using primer.

After that the final painting of the construction shall be done using matte white paint (nitro enamel).

The frame should be screwed together after putting the tin sheet with graphics in frame B and frame C, through previously cut and milled holes, as mentioned above.

Galvanized tin

On both frames marked with B, each of the three tin panels, dimensions 1000 x 2000 mm, 1 mm thick shall be assembled, so that they form a surface of 3000 x 2000 mm (as presented in the drawing). The tin shall be joined to frame B by riveting, taking care that rivets are evenly distributed (because they will be discretely visible underneath the foil). After riveting, rivet caps should be gently sanded (taking care that the caps are not sanded enough to lose their bearing capacity), so that they are visible as little as possible after sticking the foil.

The manufacturing of the panels shall be controlled in the workshop by UNOPS representative.

Technical criteria for graphic printing, application and assembly to the frame

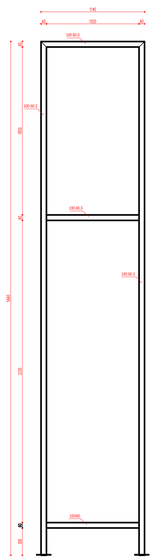
The graphics shall be printed on self-adhesive PVC foil, 100 microns thick, using solvent print technique, with subsequent machine application of protective matte PVC foil, 100 microns thick.

Graphic dimensions on one side (the panels shall have identical graphics on both sides): 3000 x 2000 mm. The printing shall be done in three segments (because of tin dimensions), format 1000 x 2000 mm.

When printing and plastifying, attention should be paid to the necessary foil folds (2-3 cm) along the lines joining the tin sheets, in order to prevent foil deformation in time, which would make water leaks possible and create (visual) creases on the junctures.

After this, the mentioned foil system shall be applied on the cleaned galvanized tin using machines, and then the graphics (in three segments, as in drawings) assembled on frame B.

GLAVNI NOSEĆI RAM – A



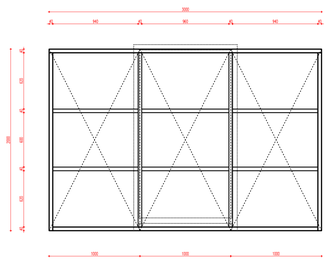
SPECIFIKACIJA ČELIČNIH PROFILA

POZ	PROFIL	L (M)	KG/M'	KG/KOM	KOM	KG.
A	▯100.60.3	14.380	7.07	101.66	1	203.32
C	▯60.60.3	10.480	5.20	54.50	2	108.99
B	▯40.30.2	15.440	1.97	30.42	2	60.84
D	L 25.25.3	10.000	0.12	1.20	2	2.40
						G=375.55kg

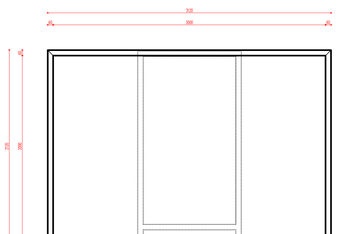
SPECIFIKACIJA LIMA (POCINKOVANI ČELIČNI LIM)

POZ	dim. (m)	d (mm)	KG/M2	KG/KOM	KOM	KG.
	1 x 2	1.00	7.80	15.64	6	93.84
						G=93.84kg

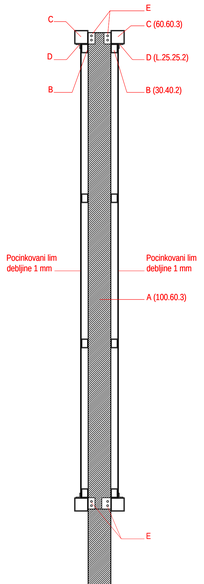
RAM KOJI NOSI LIM SA GRAFIKOM – B



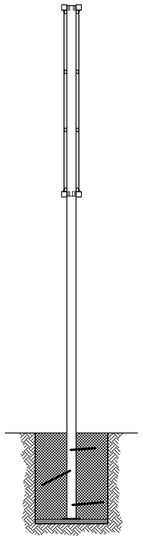
ZAVRŠNI OKVIRNI RAM – C



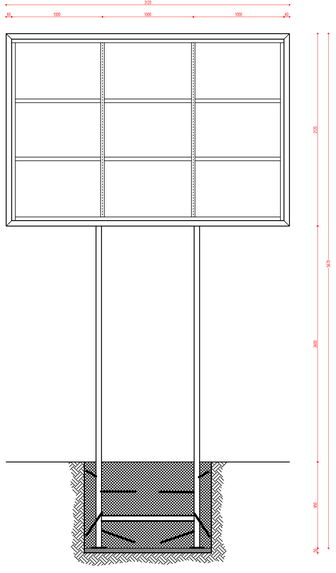
DETALJ-PRESEK I MONTAŽA TABLI NA RAM (R=1:10)



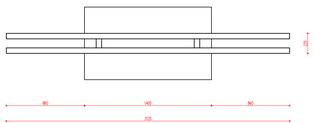
PRESEK KROZ KONSTRUKCIJU TABLE



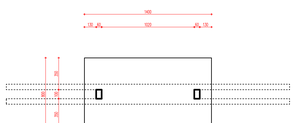
RAM KOJI NOSI LIM SA GRAFIKOM – B, SA PRESEKOM KROZ TEMELJ



OSNOVA NAMONTIRANE TABLE – BILBORDA

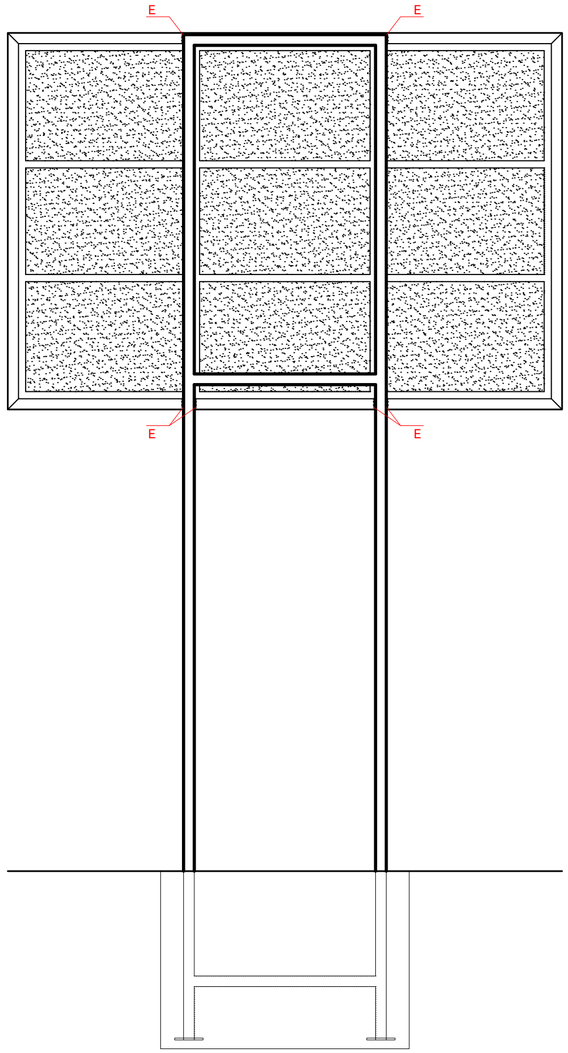


OSNOVA TEMELJA

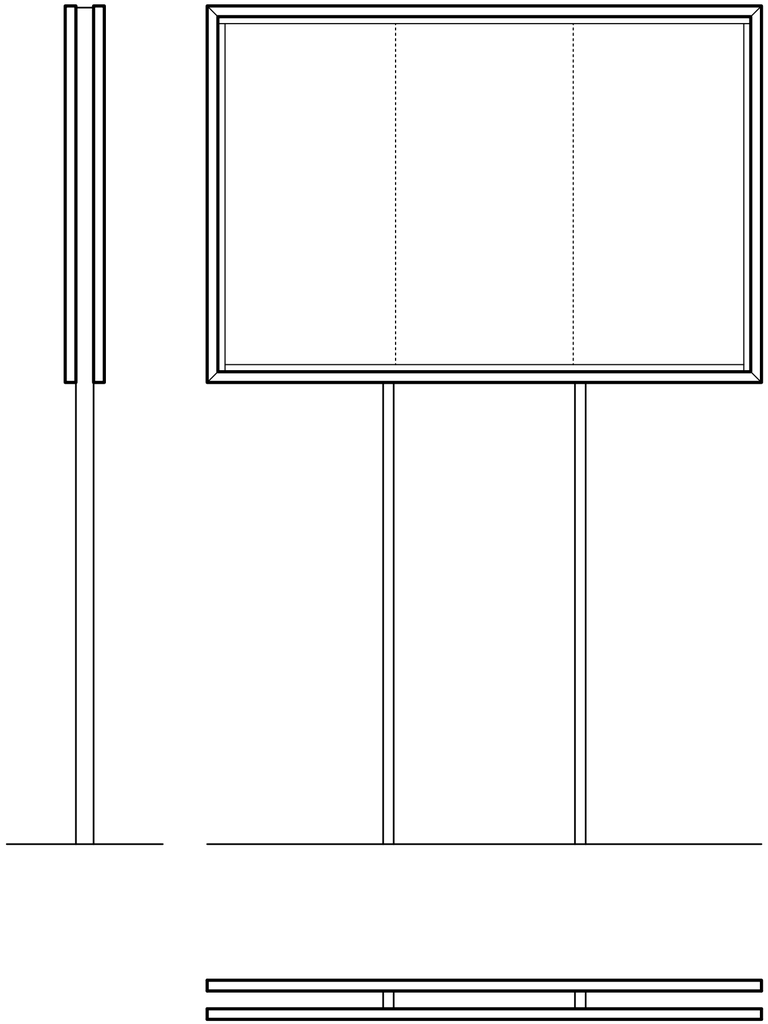


RAZMERA 1:25

IZGLED JEDNOSTRANO NAMONTIRANIH RAMOVA B + C NA GLAVNI NOSEĆI RAM – A



IZGLED NAMONTIRANE TABLE – BILBORDA



500mm 0 500 1.000mm

RAZMERA 1:25

PREDLOG POSTUPKA MONTAŽE SA ZAHTEVANIM DIMENZIJAMA I KVALITETOM BETONA

Faza I

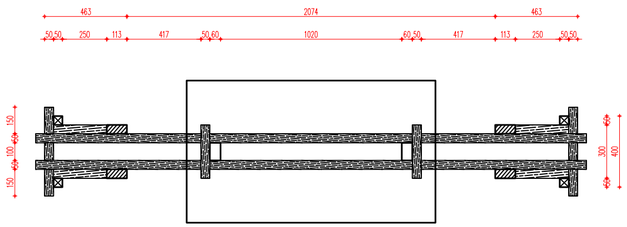
Iskop temeljne jame dimenzija 80 x 140 x 100 cm (širina x dužina x dubina). Nakon izlivanje sloja od "mršavog betona" debljine 5 cm, potrebno je fiksirati Montažni ram (A) i osigurati ga od prevrtanja. Prethodno je potrebno libelom ili laserski dovesti ga u idealno vertikalan i ortogonalan položaj. U prilogu je crtež predložene pomoćne drvene konstrukcije od štafni 5/8 cm. Ova konstrukcija može se koristiti više puta. Nakon toga potrebno je pažljivo zaliti temelj betonom marke MB30 (dodati aditiv za brzo vezivanje betona) i poravnati sa gornje strane. U toku betoniranja, neophodno je letvom rasporedjivati beton oko konstrukcije, kao se ne bi stvarali vazdušni čepovi, te se konstrukcija što bolje integrisala sa betonom. Nakon završetka posla neophodno je izvršiti odvoz zemlje do deponije, ili rasplanirati zemlju na terenu, ukoliko je to moguće.

Faza II

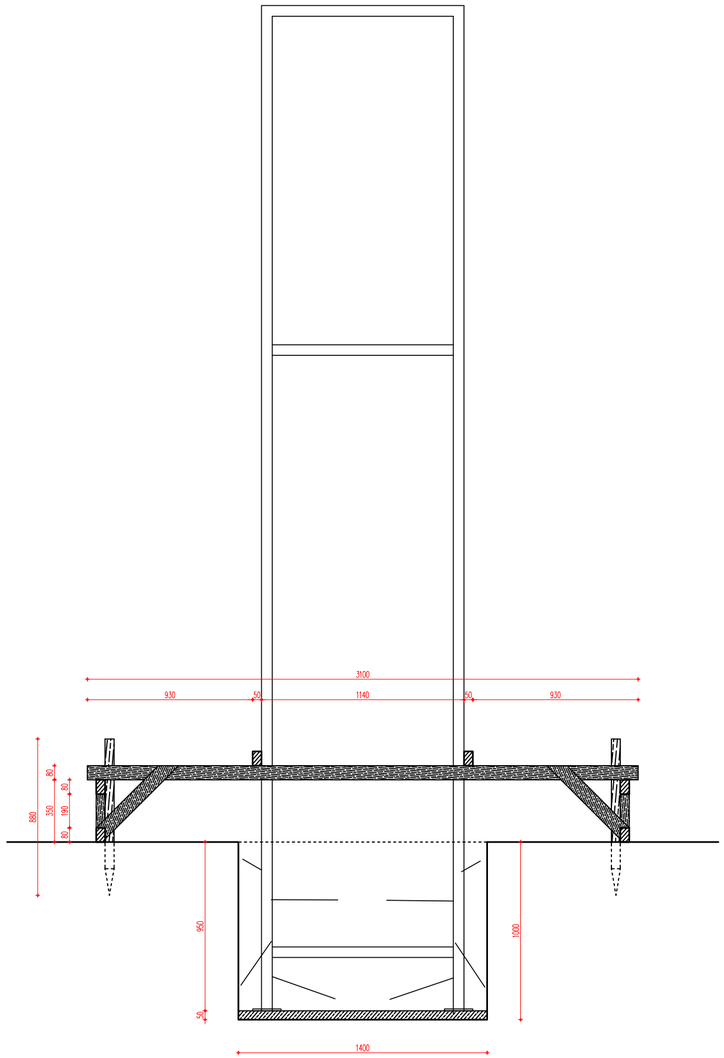
Nakon inicijalnog vezivanja betona od minimalno 48 sati, potrebno je zakačiti oba prethodno montirana rama (2 kom x B+C+D sa grafikom prethodno apliciranom na pocinkovani lim i pričvršćenom na ram B) na Montažni ram (A). Uzimajući u obzir težinu rama sa limom i okvirom, osmisliti najbolji način za bezbedno podizanje na odgovarajuću visinu.

Zatim treba fiksirati oba rama za Montažni ram (A), uz pomoć radionički navarenih i izbušenih montažnih pločica (E), kao na crtežu u prilogu. Pričvršćivanje izvesti zavrtnjima M10 sa mašinskom glavom (zategnuti uz pomoć okastog ili viljuškastog ključa). Po uzoru na ovo rešenje, može se predložiti i alternativni način ili položaj pločica, kako bi montaža bila brža ili pouzdanija.

DETALJ DRVENE POMOĆNE KONSTRUKCIJE ZA BETONIRANJE I MONTAŽU GLAVNOG NOSEĆEG RAMA – A



DETALJ DRVENE POMOĆNE KONSTRUKCIJE ZA BETONIRANJE I MONTAŽU GLAVNOG NOSEĆEG RAMA – A



500mm 0 500 1.000mm

RAZMERA 1:25