

## **E-LOX<sup>®</sup> post**

### **1 Scope**

The rectangular E-LOX<sup>®</sup> posts are made out of continuously hot-dip zinc coated steel strip (sendzimir) and subsequently polyester coated.

(See figure 1)

Posts will be used in combination with following panels : Nylofor<sup>®</sup> F and Nylofor<sup>®</sup> 3D panels.



**Figure 1**

#### **1.1 Normative references**

- EN 10346: Continuously hot-dip coated steel flat products - Technical delivery conditions.
- EN 10025-2: Hot rolled products of structural steels – Part 2: Technical delivery conditions for non-alloy structural steels.
- EN 10088-3 : Stainless steels - Part 3: Technical delivery conditions for semi-finished products, bars, rods, wire, sections and bright products of corrosion resisting steels for general purposes.
- ISO 3506-1: Mechanical properties of corrosion resistant stainless steel fasteners – Part 1 : Bolts, screws and studs.
- ISO 3506-2: Mechanical properties of corrosion resistant stainless steel fasteners – Part 2 : Nuts.
- ISO 1461: Hot dip galvanized coatings on fabricated iron and steel articles – Specifications and test methods.
- ISO 9227: Corrosion tests in artificial atmospheres; salt spray tests.
- ISO 11507: Paints and varnishes – Exposure of coatings to artificial weathering – Exposure to fluorescent UV lamps and water.

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## E-LOX<sup>®</sup> post

## 2 Raw material

### 2.1 Steel used for the E-LOX<sup>®</sup> posts

Chemical composition: See table 1

<b>Table 1: Chemical composition</b>	
Element	%
C	≤ 0,20
Si	Max. 0,60
Mn	Max. 1,70
P	Max. 0,12
S	Max 0,045

The steel is in accordance with the European Standard EN 10346. The designation of the steel is: S250. The steel strip is continuously hot-dip galvanized, in accordance with EN 10346 Z275.

If DX51D or S220 quality is used in accordance to EN 10346, the yield strength shall be minimum 235 N/mm<sup>2</sup>.

### 2.2 Steel used for the hook connectors and panel connectors slopes

The steel is in accordance with the European standard 10025-2.

The designation of the steel is: S235.

### 2.3 Steel used for the hookscrews, panel connectors, bolts, nuts and washers

The hookscrews and panel connectors are made out of stainless steel, grade 304, number 1.4301 in accordance with EN 10088-3.

The bolts, nuts and washers are made out of stainless steel A2 in accordance with ISO 3506.

### 2.4 Zinc (Zinc used for hot dip galvanisation bath)

In accordance with ISO 1461.

### 2.5 Polyester

The polyester is free of lead and cadmium.

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**E-LOX<sup>®</sup> post**

### 3 Properties

#### 3.1 Dimensions and tolerances

See table 2 and 3 :

**Table 2 : Dimensions E-LOX<sup>®</sup> post : Intermediate (Nylofor<sup>®</sup> F)**

Height of the post (mm)	Dimensions of the side lengths (mm)	Plate thickness (mm)	Betafence technical drawings	Sapcode Colour RAL 6005	Sapcode Colour RAL 7030	Sapcode Colour RAL 9010	Sapcode Colour RAL 7016
1000 (*)	60 x 40	2,0	NYL31P012001	7012197	+++	7012345	7012359
1300			NYL31P012002	7012198	7012332	7012346	7012360
1500			NYL31P012003	7012199	7012333	7012347	7012361
1700			NYL31P012004	7012200	7012334	7012348	7012362
2000			NYL31P012005	7012201	7012335	7012349	7012363
2200			NYL31P012006	7012202	7012336	7012350	7012364
2400			NYL31P012007	7012203	7012337	7012351	7012365
2600			NYL31P012008	7012204	7012338	7012352	7012366
3000			NYL31P012009	7012325	7012339	7012353	7012367
3200			NYL31P012010	7012326	7012340	7012354	7012368

(\*) Also available in combination with Nylofor<sup>®</sup> 3D

**Table 3 : Dimensions E-LOX<sup>®</sup> post : Intermediate (Nylofor<sup>®</sup> 3D)**

Height of the post (mm)	Dimensions of the side lengths (mm)	Plate thickness (mm)	Betafence technical drawings	Sapcode Colour RAL 6005	Sapcode Colour RAL 7030	Sapcode Colour RAL 9010	Sapcode Colour RAL 7016
1500	60 x 40	2,0	NYL31P012011	7012210	7012399	7012406	7012413
1700			NYL31P012012	7012215	7012441	7012444	7012447
2000			NYL31P012013	7012212	7012401	7012408	7012415
2400			NYL31P012014	7012216	7012442	7012445	7012448
2600			NYL31P012015	7012214	7012403	7012410	7012417

Tolerance on the side lengths (Section):  $\pm 0,35$  mm

Tolerance on the plate thickness :  $\pm 10$  %

Tolerance on the height :  $\pm 2$  mm

The bottom plate is electro galvanized and afterwards polyester coated.

Intermediate posts with bottom plate are also available on request

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Other dimensions not mentioned in this technical data sheet can be found on the technical drawings, available on request.

### 3.2 Tensile strength

The strength is specified by :

- Tensile strength: Min. 330 N/mm<sup>2</sup>
- Yield strength: Min. 235 N/mm<sup>2</sup>

## 4 Coating

### 4.1 Metallic coating

Zinc coating:

Min. of 275 g/m<sup>2</sup> as an average of 3 measurements and double side determined.  
 In accordance with EN10346. (Z275)

### 4.2 Polyester coating

**Thickness:** Min. 60 µm (Average of 10 measurements done on 1 E-LOX<sup>®</sup> post)

**Colour:** Green RAL 6005.

Other standard colours are available and can be found in the technical data sheet TDS-99-03.  
 (Polyester coating)

**Adhesion:**

Make two scratches by means of a hard metal pointed graving tool, penetrating through the metal and intersecting at an angle of 30° ± 5°. Lift a 30° peak with the point of a knife.  
 The coating shall not be able to be lifted from the metal by more than 5 mm.

**Resistance of the polyester to saltspray:**

Make a diagonal cross by means of a hard metal pointed graving tool, penetrating through the metal. Test in accordance with ISO 9227.  
 After 1000 h there shall be no corrosion beneath the polyester or loss of adhesion in excess of 10 mm from the diagonals.

**Resistance against UV:** In accordance with ISO 11507.

After 1000 h QUV and after washing with pure water, the colour difference, expressed as ΔE\* is maximum 3.

Loss of gloss: After 1000 hours max. 50 % of the original one, measured after being washed with pure water.

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**Technical Data Sheet**  
**TDS-05-65**

## E-LOX<sup>®</sup> post

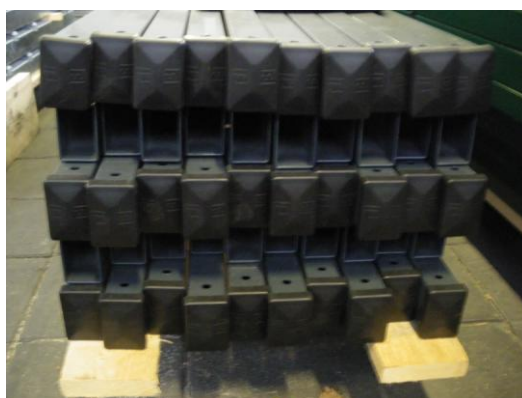
### 5 Packaging

The E-lox<sup>®</sup> posts are packed on a wooden pallet, protected by UV resistible shrink and stretch foil.

There are 5 layers of 10 posts.

In total 50 posts are put on the pallet.

See picture below.



An identification label with the Sapcode, product description, number of posts and colour shall be put on each side of the pallet.

### 6 Accessories

#### 6.1 Post cap

Each post is provided with a plastic cap out of UV resistant plastic.

Standard colours : RAL 6005 and RAL 9005

Dimensions : 60 x 40 mm

Technical drawing : NYL32P003001

Sapcode RAL 6005 : 7040009

Sapcode RAL 9005 : 7040011

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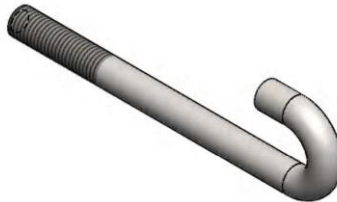
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**TDS-05-65****E-LOX<sup>®</sup> post****6.2 Hookscrews**

Dimensions of the hookscrews: Nylofor<sup>®</sup> F: M8 x 90 mm and Nylofor<sup>®</sup> 3D: M8 x 80 mm  
Other dimensions can be found on the technical drawings.

The hookscrews are made out of stainless steel, grade 304, number 1.4301 in accordance with EN 10088-3.

Two types :

- Nylofor<sup>®</sup> F : Drawing NYL40P006001 : Sapcode 7027813



- Nylofor<sup>®</sup> 3D : Drawing NYL40P006002 : Sapcode 7027814



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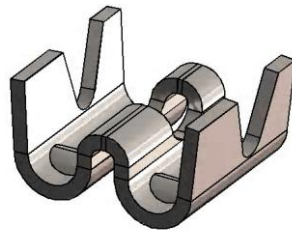
### **6.3 Panel connector**

Dimensions of the connectors can be found on the technical drawings.

The panel connectors are made out of stainless steel, grade 304, number 1.4301 in accordance with EN 10088-3.

Two types :

- Nylofor<sup>®</sup> 3D : Drawing NYL54P001001 : Sapcode 7027604



- Nylofor<sup>®</sup> F : Drawing NYL54P002001 : Sapcode 7027811



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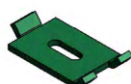
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### 6.4 Hook connector

The hook connector is made out of S235JR steel quality, hot dip galvanized and afterwards subsequently polyester coated in the colour of the corresponding post.



**Hook connector**

<b>Table 4 : Hook connector</b>		
Standard colours	Betafence technical drawing	Sapcode
RAL 6005 RAL 7016	SEC34P005001	7010771 7013495

Other colours available on request.

The hook connector is also available in a set: RAL 6005, Sapcode 7017246  
Betafence technical drawing: SEC34A002001.

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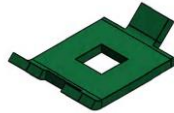
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### 6.5 Panel connector slopes

The panel connector (slopes) is made out of S235 steel quality, hot dip galvanized and afterwards subsequently polyester coated in the colour of the corresponding post.



<b>Table 5 : Panel connector</b>		
Standard colours	Betafence technical drawing	Sapcode
RAL 6005	NYL34P015001	7028094
RAL 7016		7028095

Other colours available on request.

Drawing panel connector slopes (set): NYL34A003001

The set exists out of:

- 2 panel connectors
- 1 bolt, 1 nut, 1 washer made out of stainless steel A2 in accordance with ISO 3506.

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