D-LOX® post

1 Scope

The rectangular D-LOX® posts are made out of continuously hot-dip zinc coated steel strip (sendzimir) and subsequently polyester coated.
There are 2 possible ways to mount the panels on the D-LOX® post, with clamps and with a coverplate. (See pictures 1 and 2)
The D-LOX® post can be used in combination with Nylofor® 2D and Nylofor® 2D Super panels

Picture 1 : Post D-LOX® with clamps

Picture 2 : Post D-LOX® with coverplate

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 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.

2 Raw material

2.1 Steel used for the D-LOX® posts and coverplates

Chemical composition: See table 1

Table 1: Chemical composition	
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/mm².

2.2 Steel used for the metal fixators, hook connectors and mounting supports

The steel is in accordance with the European standard 10025-2.
The designation of the steel is: S235.

2.3 Steel used for the bolts

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

2.4 Zinc

In accordance with ISO 1461.

2.5 Polyester

The polyester is free of lead and cadmium.

D-LOX® post

3 Properties

3.1 Dimensions and tolerances

See table 2 and 3:

Table 2 : Dimensions D-LOX® intermediate posts

Height of the post (mm)	Dimensions of the side lengths (mm)	Plate thickness (mm)	Betafence technical drawings	Sapcode Colour RAL 6005	Sapcode Colour RAL 7016
1000	60 x 40	1,5	NYL31P007001	7046025	7046039
1300			NYL31P007002	7046026	7046040
1500			NYL31P007003	7046027	7046041
1700			NYL31P007004	7046028	7046042
2000			NYL31P007005	7046029	7046043
2200			NYL31P007006	7046030	7046044
2400		2,0	NYL31P007007	7046031	7046045
2600			NYL31P007008	7046032	7046046
3000			NYL31P007009	7046024	7046047
3200			NYL31P007010	7046034	7046048

Table 3 : Dimensions D-LOX® corner posts

Height of the post (mm)	Dimensions of the side lengths (mm)	Plate thickness (mm)	Betafence technical drawings	Sapcode Colour RAL 6005	Sapcode Colour RAL 7016
1000	60 x 40	1,5	NYL31P007011	7046052	7046065
1300			NYL31P007012	7046055	7046066
1500			NYL31P007013	7046058	7046067
1700			NYL31P007014	7046059	7046070
2000			NYL31P007015	7046060	7046071
2200			NYL31P007016	7046061	7046072
2400		2,0	NYL31P007017	7046062	7046073
2600			NYL31P007018	7046063	7046074
3000			NYL31P007019	7047715	7046075
3200			NYL31P007020	7046064	7046076

Tolerance on the side lengths (Section): ± 0,35 mm
Tolerance on the plate thickness : ± 10 %
Tolerance on the height : ± 2 mm

The D-LOX® post will have M8 inserts.
Position of the inserts and other dimensions can be found back on the technical drawings, available on request.

The bottom plate is electro galvanized and afterwards polyester coated.
Intermediate and corner posts with bottom plate are also available on request.

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/mm²
- Yield strength: Min. 235 N/mm²

4 Coating

4.1 Metallic coating

Zinc coating:

Min. of 275 g/m² 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 D-LOX® 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.

5 Packaging

The posts are packed on a wooden pallet.
The pallet is afterwards shrink of stretch foiled with a UV resistant foil.

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.

Dimensions of the post cap: 60 x 40 mm

Table 4 : Post cap D-LOX® post		
Sapcode	Colours	Betafence technical drawing
7040009 7040011	RAL 6005 RAL 9005	NYL32P003001

6.2 Bolts

Dimensions of the bolts: M8 x 40 mm

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

Hexagon socket button head screw: NYL40P005001
Sapcode : 7021641

6.3 Coverplate

The coverplate is made out of Sendzimir (S250) steel and afterwards polyester coated in the colour of the corresponding post**.**

Table 5 : Dimensions D-LOX® U-shaped cover plate				
Height of the cover plate (mm)	Dimensions (mm)	Betafence technical drawings	Sapcode colour RAL 6005	Sapcode colour RAL 7016
660 860 1060 1260 1460 1660 1860 2060 2260 2460	25 x 44 x 25 x 2	NYL31P008001 NYL31P008002 NYL31P008003 NYL31P008004 NYL31P008005 NYL31P008006 NYL31P008007 NYL31P008008 NYL31P008009 NYL31P008010	7046077 7046078 7046079 7046080 7046081 7046084 7046085 7046086 7046087 7046088	8001620

Other colours available on request.

6.4 Mounting support

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

Table 6 : Mounting support D-LOX® post		
Sapcode	Colours	Betafence technical drawing
7046092 7046093 7046094 7046095 7046090	RAL 6005 RAL 7016 RAL 9010 RAL 7030 Other colours	NYL34P012001

One mounting support is **pre-mounted** on every post in the top hole.
The mounting support is used to hang the panel during installation.

6.5 Metal fixator

The fixators for Nylofor® 2D and Nylofor® 2D super panels are made out of alloy steel, hot dip galvanized and afterwards subsequently polyester coated in the colour of the corresponding post.

Fixator Nylofor® 2D

Fixator Nylofor 2D® Super

Table 7 : Metal fixator D-LOX® post			
Panel type	Sapcode	Colour	Betafence technical drawing
Nylofor® 2D	7050708	RAL 6005	NYL34P011002
	7050720	RAL 7016	
	7050721	Other colours	
Nylofor® 2D super	7050723	RAL 6005	NYL34P011001
	7050724	RAL 7016	
	7050725	Other colours	

Metal fixator Nyl® 2D Super panels per 50 pieces: RAL 6005 : 7050728 and RAL 7016 : 7050729

6.6 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

Table 8 : Hook connector D-LOX® post		
Sapcode	Colours	Betafence technical drawing
7010771 7013495 7013501	RAL 6005 RAL 7016 Other colours	SEC34P005001

Other colours available on request.

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