Technical Data Sheet
TDS-05-09

Bekafix® Super Post

1 Scope

The Bekafix® super posts are made out of continuously hot-dip zinc coated steel strip and subsequently polyester coated.
Bekafix® Super posts are used in combination with panels: Nylofor® 3D and 3D Super, Nylofor® 3-M, Nylofor® 3D Multi, Nylofor® 2D and 2D Super, Nylofor® F, Securifor® , Securifor® 2D and Securifor® 3D panels.
The Bekafix® super post can be used for medium to high security fences up to 4.1 meter.
A section is given in figure 1.

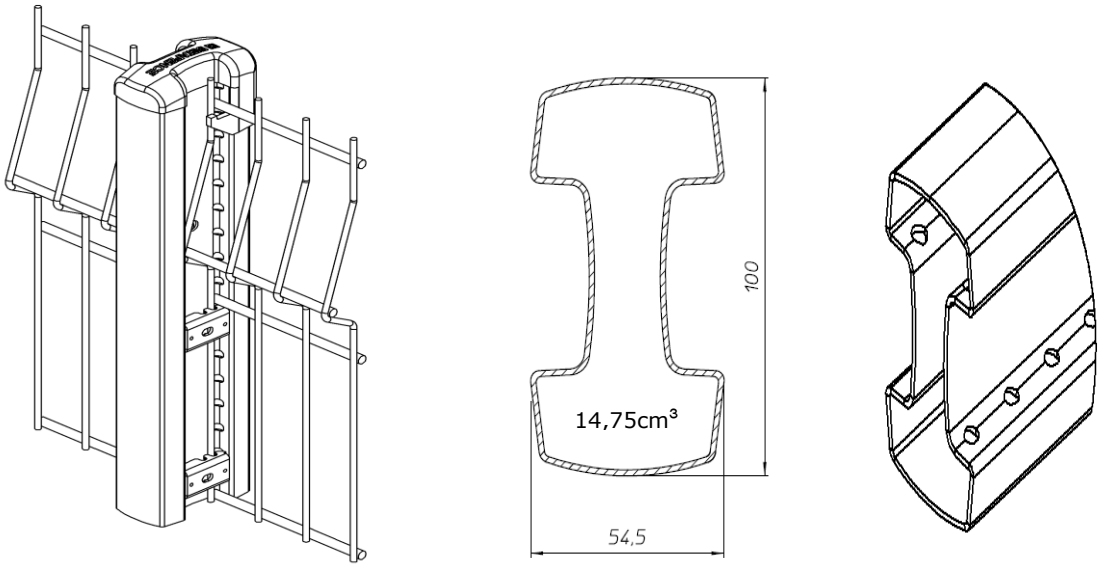


Figure 1

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.
- ISO 1461: Hot dip galvanized coatingson fabricated iron and steel articles – specifications and test methods.
- ISO 9227: Corrosion tests in artificial atmospheres; salt spray tests.
- ISO 16474-3: Paints and varnishes – Methods of exposure to laboratory light sources – Part 3 : Fluorescent UV lamps.

2 Raw material

2.1 Steel used for Bekafix® Super post

Chemical composition:

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.

2.2 Steel used for fixators, base plates, bent arms and extensions

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

2.3 Zinc (Zinc used for hot dip galvanisation bath)

In accordance with ISO 1461.

2.4 Polyester

The polyester is free from lead and cadmium.

3 Properties

3.1 Dimensions and tolerances

See table 2:

Table 2 : Different heights

Fence height (mm)	Post height (mm)
2000	2600
2400	3200
3100	3800
3600	4300
4100	4800

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

3.2 Plate thickness of the Bekafix® super post

The Bekafix® super post has a plate thickness of 2,00 mm, tolerance: +/- 0,12 mm.

3.2.1 Holes

Bekafix® Super posts have holes:

- For the fixation of panels by means of metal Bekafix®-brackets.
- For security-fixation of the brackets.
- To enable suspending the post during the powder-coating process.

Posts shall be holed as specified in the drawings, by punching.

There should be a central hole every 15 cm. (Measured from center to center: See figure 2)
Holes shall be free from obstructions. Tolerances not mentioned in this technical data sheet, are as specified in the technical drawings.

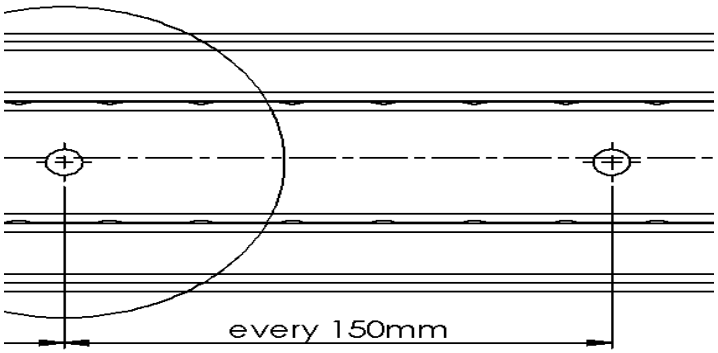


Figure 2

3.3 Tensile strength

The strength is specified by:

- Tensile strength: Min. 330 N/mm²
- Yield strength: Min. 250 N/mm²

Bekafix® Super Post

4 Coating

4.1 Metallic coating

4.1.1 Sendzimir (Bekafix® super post)

Zinc coating:
Min. of 275 g/m² as an average of 3 measurements and double side determined.
In accordance with EN 10346. (Z275)

4.1.2 Hot dip galvanising (Fixators, base plates, bent arms and extensions)

The hot dip galvanising is in accordance with ISO 1461.

Article and its thickness	Local coating thickness (minimum)[a] µm	Local coating mass (minimum)[b] g/m²	Mean coating thickness (minimum)[c] µm	Mean coating mass (minimum)[b] g/m²
Steel > 6 mm	70	505	85	610
Steel > 3 mm to ⩽ 6 mm	55	395	70	505
Steel ⩾ 1,5 mm to ⩽ 3 mm	45	325	55	395
Steel < 1,5 mm	35	250	45	325
Castings ⩾ 6 mm	70	505	80	575
Castings < 6 mm	60	430	70	505

An excellent corrosion protection is obtained through the thick layer of zinc covering the entire surface, including the cutting edges and the welds of the fabrication. Inherent to this process is the possible appearance of some visual surface roughness.

4.2 Polyester coating

Thickness:

Min. 60 µm (Average of 10 measurements done on 1 Bekafix® Super post)

Colours:
Post heights 2600 and 3200 mm are available as MTS in following colours: Green RAL 6005 and white RAL 9010
Other standard colours are available and can be found in the technical data sheet TDS-99-03: Polyester coating. Non-standard colours: On request.

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 16474-3.
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.

4.3 KTL & polyester coating

Some types of the fixators are KTL and polyester coated.

Thickness of the coating layer:

The total coating layer KTL & polyester shall be : > 80µm (Average of 10 measurements done on 1 fixator)
Standard colours: Green RAL 6005, white RAL 9010 and black RAL 9005

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 16474-3.
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 Form of delivery

The posts are packed on a wooden pallet, protected by UV resistible shrink or stretch foil.

Number of posts / pallet, weight, and dimensions: See table 3 and 4.

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

Table 3: Form of delivery and packaging (Colour 6005)

Post length (mm)	Number of posts / pallet	Weight / post (kg)	Dimensions of the pallet L x W x H (cm)	Sapcode
2600	54	13,26	265 x 100 x 40	7037785
3200	54	16,32	325 x 100 x 40	7037783
3800	54	19,38	385 x 100 x 40	MTO
4300	54	21,93	435 x 100 x 40	MTO
4800	54	24,48	485 x 100 x 40	MTO

Table 4: Form of delivery and packaging (Colour 9010)

Post length (mm)	Number of posts / pallet	Weight / post (kg)	Dimensions of the pallet L x W x H (cm)	Sapcode
2600	54	13,26	265 x 100 x 40	7037786
3200	54	16,32	325 x 100 x 40	7037784
3800	54	19,38	385 x 100 x 40	MTO
4300	54	21,93	435 x 100 x 40	MTO
4800	54	24,48	485 x 100 x 40	MTO

6 Accessories

6.1 Post caps

Each post is provided with a cap made out of UV resistant plastic. (PA6)

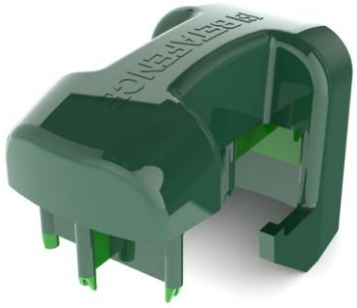


Table 5: Post caps

Sapcode	Colour	Betafence technical drawing
1016786	RAL 6005	NYL32P000002
1016787	RAL 9010	NYL32P000002
1016788	RAL 9005	NYL32P000002

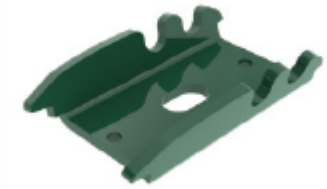
Dimensions and tolerances, see technical drawing available on request.

Bekafix® Super Post

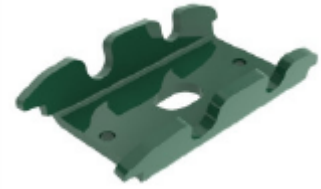
6.2 Fixators

Each fixator is made out of steel (S235), KTL and polyester coated or hot dip galvanized and polyester coated.

Table 6: Fixators for Nylofor® panels			
KTL and polyester coated			
Application	Sapcode	Colour	Betafence technical drawing
3D / 3-M / F/ 3D Multi / 2D panels	7038648	RAL 6005	NYL34P000021
3D / 3-M / F/ 3D Multi / 2D panels	7038649	RAL 9010	NYL34P000021
3D / 3-M / F/ 3D Multi / 2D panels	7038650	RAL 9005	NYL34P000021
Hot dip galvanized and polyester coated			
Application	Sapcode	Colour	Betafence technical drawing
2D Super / 3D Super panels	7038651	RAL 6005	NYL34P000022
2D Super / 3D Super panels	7038652	RAL 9010	NYL34P000022
2D Super / 3D Super panels	7038653	RAL 9005	NYL34P000022
Hot dip galvanized			
Application	Sapcode		
2D Super / 3D Super panels	4016918	HDG	NYL34P000022



Fixator 3D / 3-M / F / 3D multi / 2D panels



Fixator 2D Super / 3D Super panels

Technical Data Sheet
TDS-05-09

Bekafix® Super Post

Table 7: Spider fixators for Securifor® panels			
Hot dip galvanized and polyester coated			
Application	Sapcode	Colour	Betafence technical drawing
Securifor® panels	7041046	RAL 6005	NYL34P004001
Securifor® panels	7058780	RAL 9010	NYL34P004001
Securifor® panels	7045800	RAL 7030	NYL34P004001
Securifor® panels	7052963	RAL 9005	NYL34P004001
Securifor® panels	7055168	RAL 7016	NYL34P004001
Securifor® 2D panels	7045471	RAL 6005	NYL34P004002
Securifor® 3D panels	7045472	RAL 9005	NYL34P004003
Hot dip galvanized			
Application	Sapcode		Betafence technical drawing
Securifor® panels	4019099	HDG	NYL34P004001
Securifor® 2D panels	4019569	HDG	NYL34P004002
Securifor® 3D panels	4016567	HDG	NYL34P004003

Fixator Securifor® panel

Fixator Securifor® 2D panel

Fixator Securifor® 3D panel

Other colours available on request
Dimensions and tolerances, see technical drawing available on request.

6.3 Base plate

The base plate is made out of construction steel (S235), hot dip galvanized and afterwards polyester coated.

Table 8: Base plate (Hot dip galvanized and polyester coated)		
Sapcode	Colour	Betafence technical drawing
7039540	RAL 6005	NYL33P005001

Other colours available on request

Table 9: Base plate (Hot dip galvanized)		
Sapcode		Betafence technical drawing
4018926	Hot dip galvanized	NYL33P005001

Dimensions and tolerances, see technical drawing available on request.

6.4 Bent arm

The bent arm is made out of construction steel (S235), hot dip galvanized and afterwards polyester coated.

Single bent arm

Double bent arm

Table 10: Bent arm (Hot dip galvanized and polyester coated)		
Single bent arm		
Sapcode	Colour	Betafence technical drawing
7040683	RAL 6005	NYL34P002001
Double bent arm		
Sapcode	Colour	Betafence technical drawing
7040685	RAL 6005	NYL34P002002

Other colours available on request

Table 11: Bent arm (Hot dip galvanized)		
Single bent arm		
Sapcode		Betafence technical drawing
4018924	Hot dip galvanized	NYL34P002001
Double bent arm		
Sapcode		Betafence technical drawing
4018925	Hot dip galvanized	NYL34P002002

Dimensions and tolerances, see technical drawing available on request.

6.5 Extension

The extension is made out of construction steel (S235), hot dip galvanized and afterwards polyester coated.

Table 12: Extension (Hot dip galvanized and polyester coated)		
Sapcode	Colour	Betafence technical drawing
7058898	RAL 6005	NYL34P000107

Other colours available on request

Table 13: Extension (Hot dip galvanized)		
Sapcode		Betafence technical drawing
4025044	Hot dip galvanized	NYL34P000107

Dimensions and tolerances, see technical drawing available on request.