Technical Data Sheet TDS-04-70

Zenturo® panel & Zenturo® Super panel

1 Scope

This specification specifies requirements for galvanised steel wire welded and subsequently organically coated Zenturo® (Super) panels for fencing according to EN 10223-7. (See figure 1 & figure 2)

The panels are recommended as residential or professional fencing.

The vertical and horizontal wires will have no barb.

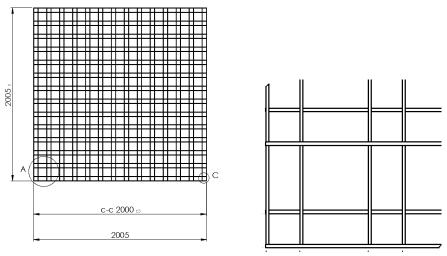


Figure 1: Zenturo® panel

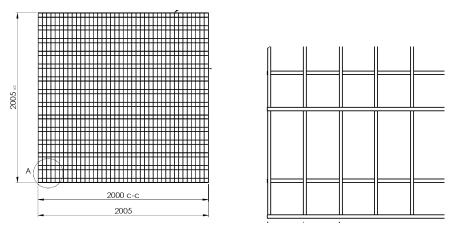


Figure 2: Zenturo®Super panel

Page: 1 / 5
DATE: 21/04/2011

CERTIFIED BY

Werner Frans

Cross Overline

Replaces edition: 09/09/2010 | CERTIFIED BY | Group Quality Department



Technical Data Sheet TDS-04-70

Zenturo® panel & Zenturo® Super panel

1.1 Normative references

- EN 10016-2: Non-alloy steel rod for drawing and/or for cold rolling,
 - Part 2: Specific requirements for general purposes rod.
- EN 10218-2: Steel wire and wire products General,
 - Part 2: Wire dimensions and tolerances.
- EN 10223-7: Steel wire and wire products for fences,
 - Part 7: Steel wire welded panels for fencing.
- EN 13438: Paints and varnishes: Powder organic coatings for galvanised or sherardised steel products for construction purposes.
- ISO 9227: Corrosion tests in artificial atmospheres; salt spray tests.

Definitions 1.2

- Nominal wire diameter (d): the diameter in mm to designate the wire.
- Real wire diameter: the average value of the minimal and the maximal diameter, measured in the same section of a straight piece of wire, by means of a micrometer accurate to 0,01
- Mesh sizes: the distance measured between the centres of two neighbouring wires.

2 Raw material

2.1 Wire Rod

In accordance with EN 10016-2 - C9D, see table 1.

Table 1: Chemical composition			
Element	%		
С	≤ 0,10		
Si	≤ 0,30		
Mn	≤ 0,60		
Р	≤ 0,035		
S	≤ 0,035		

2.2 Zinc

Minimum 99,95 % of pure zinc.

2.3 Polyester

Free of lead and Cadmium.

Page: 2/5 DATE: 21/04/2011

Replaces edition: 09/09/2010

CERTIFIED BY

Werner Frans Group Quality Department



Technical Data Sheet

TDS-04-70

Zenturo® panel & Zenturo® Super panel

3 Properties

Panels are fabricated by electrical resistance welding of zinc coated steel wires and are subsequently polyester coated.

3.1 Wire diameter and tolerances

See table 2

Table 2: wire diameters and tolerances					
	horizontal wire (mm)		vertical wire (mm)		
	core wire	polyester coated	core wire	polyester coated	
Zenturo® (Super) panels	4,65 ± 0,06	5,00 ± 0,20	$3,80 \pm 0,06$	4,15 ± 0,20	

The tolerances are in accordance with EN 10218-2

3.2 Tensile strength of the wire

Vertical Wire: Min. 400 N/mm². Horizontal wire: Min 500 N/mm².

3.3 Mesh sizes and tolerances

See table 3 and 4:

Table 3 mesh sizes Zenturo® panel				
Mesh size	Mesh zize	Mesh size		
100x100mm	100x50mm	50x50mm		
100 ± 3,0mm 100 ± 3,0mm	100 ± 3,0mm 50 ± 3,0mm	50 ± 3,0mm 50 ± 3,0mm		
	100x100mm	100x100mm 100x50mm 100 ± 3,0mm 100 ± 3,0mm		

Table 4 mesh sizes Zenturo® Super panel					
Mesh sizes	Mesh zize	Mesh size			
mm	100x50mm	50x50mm			
Distance between the horizontal wires Distance between the vertical wires	100 ± 3,0mm 50 ± 3,0mm	50 ± 3,0mm 50 ± 3,0mm			

The tolerances are in accordance with the European standard EN 10223-7

3.4 Overhang

The overhang of the horizontal wires shall be not more than 3 mm, burrs shall be avoided.

Page: 3 / 5	CERTIFIED BY	Werner Frans	
DATE: 21/04/2011	CEKITLIED DI	Group Quality Department	
Replaces edition: 09/09/2010		Group Quanty Department	



Technical Data Sheet TDS-04-70

Zenturo® panel & Zenturo® Super panel

3.5 Weld shear strength

Four welds selected at random from the panel shall be tested on weld shear strength. The average of these measurements shall be not less 50% of the min. breaking load of the wire, in accordance with EN 10223-7.

3.6 Barbs

The panel shall have no barbs.

3.7 Dimensions of the Panels

Height of the panel: see table 5 and 6, form of delivery - tolerance on the height: \pm 3 mm. Width of the panel: 2000 mm \pm 3 mm, measured from centre to centre,

3.8 Coating

3.8.1 Metallic coating

The wires are galvanised and the min. zinc weight for the horizontal and vertical wires is 30 g/m^2 .

3.8.2 Organic coating

Thickness polyester coating:

The panels are after welding subsequently polyester coated.

The total layer is minimum 100 μm thick. The minimum is the average of 10 measurements done on 1 panel.

Colour:

Zenturo® panels are standard available from stock in Green Ral 6005 and Metallic Anthracite BF7016M.

Zenturo® Super panels are standard available from stock in Metallic Anthracite BF7016M. For both panel types, other RAL, metallic & structured coatings are available on request.

Adhesion of the polvester:

Make a scratch in the longitudinal direction of the wire, by means of a hard metal pointed graving tool, penetrating through the metal .The length of the scratch will be about 50mm. The coating shall not be able to be lifted from the metal by more than 5 mm.

Resistance of the polyester to salt spray:

Make a scratch in the longitudinal direction of the wire, by means of a hard metal pointed graving tool, penetrating through the metal .The length of the scribe will be about 50mm. Test in accordance with ISO 9227.

There shall be, after 1000 h salt spray, no corrosion beneath the polyester or loss of adhesion in excess of 10 mm from the scratch and no signs of blistering, cracking or crazing on any part of the specimen

Page: 4 / 5

DATE: 21/04/2011

Replaces edition: 09/09/2010

CERTIFIED BY

Werner Frans Group Quality Department



Technical Data Sheet TDS-04-70

Zenturo® panel & Zenturo® Super panel

4 Form of delivery

Panels are delivered on a four-way pallet, protected by water resistant shrink foil.

Number of panels per pallet, weight and Sapcode: See table 5 and 6.

A label is stuck on each panel stating mesh size, width, height of the panel & Ean code.

Four wooden beams are used to give more stability to the pallet and to avoid gliding of the panels.

Table 5 : Form of delivery and packing (Zenturo® panel)						
Overall height of the panel	Width of the panel mm	number of panels per pallet	Palet dimensions L x W X H	Technical drawing	Sapcode RAL 6005	Sapcode BF7016 M
mm						
655	2000	100 (2x50)	210 x 106 x 58	BFO50P000001	7040762	7040768
955	2000	50	210 x 106 x 58	BFO50P000002	7040763	7040769
1255	2000	50	210 x 130 x 58	BFO50P000003	7040764	7040770
1555	2000	50	206 x 158 x 58	BFO50P000004	7040765	7040771
1705	2000	50	206 x 180 x 58	BFO50P000005	7040766	7040772
2005	2000	50	210 x 210 x 58	BFO50P000006	7040767	7040773

Table 6 : Form of delivery and packing (Zenturo® Super panel)					
Overall	Width	number	Palet dimensions	Technical	Sapcode
height of the panel	of the panel mm	of panels per pallet		drawing	BF7016M
mm					
955	2000	50	210 x 106 x 58	BFO50P002002	7054201
1255	2000	50	210 x 130 x 58	BFO50P002003	7054202
1555	2000	50	206 x 158 x 58	BFO50P002004	7054203
1705	2000	50	206 x 180 x 58	BFO50P002005	7045816
2005	2000	50	210 x 210 x 58	BFO50P002006	7045817

Page : 5 / 5

DATE: 21/04/2011

Replaces edition: 09/09/2010

CERTIFIED BY

Werner Frans Group Quality Department