

## 2D and 3D panel Pre-Galvanized and Coated

### 1. Product description

This technical datasheet specifies properties for mesh panels produced by resistance welding of galvanized steel wire and then coated with a polyester powder coating. The panels can be used for industrial sites, sport stadiums, public buildings airports, schools ect.

### 2. Normative references

- EN ISO 16120-2:2011-10: Non-alloy steel wire rod for conversion to wire
- EN 10223-7: Steel wire and wire products for fences, Part 7: Steel wire welded panels for fencing
- EN 10244-2: Steel wire and wire products – non-ferrous metallic coatings on steel wire, Part 2: zinc or zinc-alloy coatings

### 3. Technical specifications

#### 3.1 Mechanical properties non-coated panels

Diameter	Diameter Tolerance (mm)	Tensile strength (N/mm <sup>2</sup> )	Min. Elongation Agt (%)	Material
4,60	± 0,06	600-800	1,5	C7D-Si
5,50	± 0,07	550-750	1,5	C7D-Si
7,50	± 0,08	550-750	1,5	C7D-Si

#### 3.2 Chemical Properties for non-coated panels

	C	Si	Mn	P	S	Cu	Cr	Ni	Mo	CEV
Min.	0,04	0,14	-	-	-	-	-	-	-	-
Max.	0,10	0,23	0,70	0,040	0,040	0,40	0,15	0,15	0,08	0,50

#### 3.3 Panel dimensions and tolerances

Height (mm)	Width (mm)	Pitch (mm)	Diagonal (mm)	Horizontal Arc (mm)	Vertical Arc (mm)	Horizontal Overhang (mm)	Vertical Overhang (mm)
± 6,0	± 4,0	± 2,0	≤ 10	≤ 10	≤ 20	≤ 3,0	± 4,0

#### 3.4 Welding points

Conform EN 10223-7.

#### 3.5 Zinc specification

Zinc	Zinc Mass (gr/m <sup>2</sup> )
Special High Grade Zinc (SHG) 99,995% EN 1179:2003 Grade ZI	≥ 40 gr/m <sup>2</sup> EN 10244-2:2010

**3.6 Coating**

Polyester powder coating. Standard colors are RAL 6005 / 7016.  
The polyester powder coating has an average thickness of 100 µm.

**4. Corrosion**

The wires are galvanized to EN 10244-2, Class-D, with a minimum zinc coating of 40 gr/m<sup>2</sup>. After the welding process, the panels will be pre-treated and provided with a conversion layer for a better anti-corrosive effect and better adhesion of the polyester powder coating.

Panels are checked to the next standards:

- EN ISO 2409:2013, Paints and varnishes - Cross-cut test
- EN ISO 1519:2011, Paints and varnishes - Bend test (cylindrical mandrel)
- EN ISO 2813:1999, Paints and varnishes - Determination of specular gloss of non-metallic paint films at 60°
- EN ISO 9227:2012, Corrosion tests in artificial atmospheres – Salt spray tests

**5. Packaging forms**

See drawing, packing of Fences.