

2D and 3D panel Hot Dip-Galvanized and Coated

1. Product description

This technical datasheet specifies properties for mesh panels produced by resistance welding of steel wire, Hot Dip Galvanized and then coated with a polyester powder coating. The panels can be used for industrial sites, sport stadiums, public buildings airports, 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 1461: Hot Dip Galvanized coatings on fabricated iron and steel articles
- EN 10218-2: Wire dimensions and tolerances

3. Technical specifications

3.1 Mechanical properties for self color panels

Diameter	Diameter Tolerance (mm)	Tensile strength (N/mm ²)	Min. Elongation Agt (%)	Material (EN 10016-2)
4,60	0,05	600-800	1,5	C7D-Si
5,50	0,05	500-700	1,5	C7D-Si
7,50	0,06	500-700	1,5	C7D-Si

3.2 Chemical Properties

	C	Si	Mn	P	S	Cu	Cr	Ni	Mo	CEV
Min.	0,04	-	-	-	-	-	-	-	-	-
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 ²)
Special High Grade Zinc (SHG) 99,995% EN 1179:2003 Grade ZI	≥ 55 µm EN 1461

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 1461. 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.