

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 galvanized steel wire 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 10016-2: Non-alloy steel rod for drawing and/or cold rolling, Part 2: specific requirements for general purposes rod.
- 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.

3. Technical specifications

3.1 Mechanical and Chemical Properties for self color panels

Diameter	Mass per meter Tolerance* (%)	Tensile strength (N/mm ²)	Min. Elongation Agt (%)	Material (EN 10016-2)	C	Si	Mn	P	S
3,70	± 4,5	700-850	1	C7D-Si	0,04-0,10	0,14-0,23	≤ 0,60	≤ 0,035	≤ 0,035
4,70	± 4,5	600-800	2,5	C7D-Si	0,04-0,10	0,14-0,23	≤ 0,60	≤ 0,035	≤ 0,035
5,60	± 4,5	500-700	2,5	C7D-Si	0,04-0,10	0,14-0,23	≤ 0,60	≤ 0,035	≤ 0,035
7,60	± 4,5	500-700	2,5	C7D-Si	0,04-0,10	0,14-0,23	≤ 0,60	≤ 0,035	≤ 0,035

*The deviation from the nominal mass per meter. The values for the nominal mass per meter are calculated from the values of the nominal cross-section area using a density value of 7,85 kg/dm³

3.2 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

3.3 Welding points

Conform EN 10223-7.

3.4 Coating

Polyester powder coating.

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. The polyester powder coating has an average thickness of 100 µm.

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.