

Security Fence 358 "Light" and "Heavy"

1. Product description

This technical datasheet specifies properties for 358 mesh panels produced by resistance welding of galvanized steel wire suitable for subsequent polyester powder coating. These panels consist a mesh pattern of 76.2mm x 12.7mm. These panels can be used for applications where total security is essential for example industrial sites, prisons, public buildings, power plants, airports, military bases, ect.

2. Normative references

- EN ISO 16120-2:2011-10: Non-alloy steel wire rod for conversion to wire.
- 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 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 for non-coated panels

Diameter	Diameter Tolerance(mm)	Tensile strength (N/mm ²)	Min. elongation Agt (%)	Material
3,75	± 0,06	750-900	1,0	C7D-Si
5,50	± 0,07	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)
± 10,0	± 5,0	± 3,0	≤ 15	≤ 10	≤ 20	≤ 3,0	± 3,0

3.4 Zinc specification

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

3.5 Coating

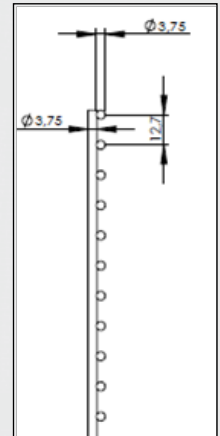
Polyester powder coating. Standard colors are RAL 6005 / 7016.
The polyester powder coating has an average thickness of 100 µm.

Fences

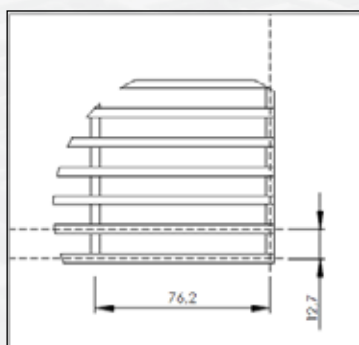
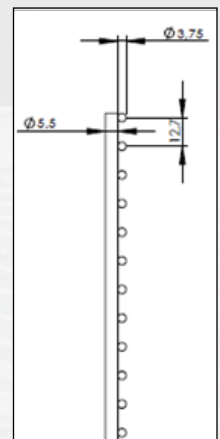
Technical Datasheet

4. Product specifications

Panel type	Panel Height (mm)	Panel Width (mm)	Mesh Pattern (mm)	Vertical Wires	Horizontal wires	Quantity / Pallet	Weight / Panel
358 Light 2000	1997,7	2518,4	76.2 x 12.7	34	158	30	40,53
358 Light 2400	2391,4	2518,4	76.2 x 12.7	34	189	30	48,48
358 Light 3000	3001,0	2518,4	76.2 x 12.7	34	237	25	60,80
358 Light 3600	3597,9	2518,4	76.2 x 12.7	34	284	25	72,87
358 Light 4000	3991,6	2518,4	76.2 x 12.7	34	315	25	80,82
358 Light 4700	4702,8	2518,4	76.2 x 12.7	34	371	15	95,20
358 Light 5400	5401,3	2518,4	76.2 x 12.7	34	426	10	109,31
358 Light 6000	5998,2	2518,4	76.2 x 12.7	34	473	10	121,36



Panel type	Panel Height (mm)	Panel Width (mm)	Mesh Pattern (mm)	Vertical Wires	Horizontal wires	Quantity / Pallet	Weight / Panel
358 Heavy 2000	1997,7	2520,1	76.2 x 12.7	34	158	30	47,47
358 Heavy 2400	2391,4	2520,1	76.2 x 12.7	34	189	30	56,56
358 Heavy 3000	3001,0	2520,1	76.2 x 12.7	34	237	25	70,94
358 Heavy 3600	3597,9	2520,1	76.2 x 12.7	34	284	25	85,02
358 Heavy 4000	3991,6	2520,1	76.2 x 12.7	34	315	25	94,31
358 Heavy 4700	4702,8	2520,1	76.2 x 12.7	34	371	15	111,08
358 Heavy 5400	5401,3	2520,1	76.2 x 12.7	34	426	10	127,56
358 Heavy 6000	5998,2	2520,1	76.2 x 12.7	34	473	10	141,64



5. Corrosion

The wires are galvanized to EN 10244-2, Class-D, with a minimum zinc coating of 40 gr/m². 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

6. Packaging forms

See drawing, packing of Fences.