

Galvanised mesh sheet

Product code: WH/WG-OB

Product specification: obduro coated

Category: Welded mesh

Introduction

Protective coating system that affords additional protection to products used in harsh environment areas. This process uses a combination of application of a zinc substrate with a final top coating of Thermoplastic Coating. The Thermoplastic coating has been selected based on the considerations of strength, flexibility and resistance in areas with a low pH.

The welded wire mesh sheet is manufactured from individual wire strands electrically resistant welded together to form a mesh sheet. It can be supplied in a variety of configurations using different wire gauges and wire spacing.

The objectives of the welded wire mesh sheet have been incorporated into the design by a number of features:

Key features

- Designed to match unique mine drive dimensions and ground conditions
- Suitable for shotcrete application
- Provides consistency of rock bolt pattern
- Typically flush all round

Product code guide

| Type | Gal. coating | Wire diameter | Aperture | Length | Width | Coating | |
|------|--------------|---------------|----------|--------|-------|---------|---|
| W | G | 5A | 4 | 4 | 50 | 24 | P |
| W | H | 8 | 4 | 5 | 40 | 24 | P |

Physical properties

Minimum ultimate tensile

| Line wire | Cross wire | WH heavily galvanised 380 MPa Coating Weight 80 g/ m2 minimum | | WG galvanised 380 MPa Coating Weight 80 g/m2 minimum | |
|-----------|------------|--|------------|---|------------|
| | | Min. wire tensile | Weld shear | Min. wire tensile | Weld shear |
| 5.6 mm | 5.6 mm | 9.4 kN | 8.0 kN | | 8.0 kN |
| 8.0 mm | 8.0 mm | 19.1 kN | 15.1 kN | 19.1 kN | 15.1 kN |

Typical size options

| Length | Width | Aperture |
|----------------|----------------|---|
| 1000 - 6000 mm | 1200 - 2500 mm | Line wire 100 - 150 mm and cross wire 50 mm and greater |

Coating types

The product is supplied with a pre galvanized zinc wire to which a Thermo Plastic Coating is applied

- Thermoplastic– Obduro X60 or equivalent
- Pre-Gal Wire

Colours

- Silver-gray or yellow

Thickness

- X60 Thermoplastic Paint typical thickness 200µm
- WG - 5.6 mm wire 80GSM Pre-Gal
- WH – 8 mm wire 80GSM Pre-Gal

Product Certifications

- ISO 12944 part 6, corrosivity C5-M High and Im3 High
- ISO 20340 (offshore environments), category C5-M

Notes

- DSI Underground is Quality Assured to ISO 9001:2015

Mobile App

Discover more! Explore our full product range, knowledge center, and additional details through the "DSI Underground" App—available now on iOS and Android.



iOS



Android

Legal disclaimer

All dimensions, weights, quantities, and specifications are those applicable at the time of this publication and may be amended from time to time. Please contact your local representative for final confirmation of any key specifications.

Product code guide

| | | Measure | Unit | Standard and test conditions | |
|---|-----------------------------------|--------------------|-------------------------------------|--|-----------------------------|
| General properties | Maximum particle size | 150 | µm | ISO 8130-1 | |
| | Bulk density | 0.33 | g.cm ³ | ASTM D1895 (Method A) | |
| | Specific gravity | 0.94 | g.cm ³ | ISO 1183 | |
| | Melt flow index | 25 | g/10min | ISO 1133 (190°C, 2.16kg) | |
| | Gloss 60° | 60 - 80 | % | ISO 2813 | |
| Thermal properties | Melting temperature | 90 | °C | ISO 3146 | |
| | Vicat softening temperature | 63 | °C | ISO 306 | |
| | Maximum continuous temperature | 75 | °C | Test Axalta | |
| | Thermal conductivity | 0.25 | W.m ⁻¹ , K ⁻¹ | ASTM E 1530 | |
| | Flammability rating | V-0 | | UL 94 | |
| Mechanical Properties | Abrasion resistance (Taber) | 12 | mg (weight loss) | ISO 9352 (CS-10, 1,000g) | |
| | Adhesion | >8 (100% Y) | Mpa | ISO 4624 (20mm dolly) | |
| | Hardness | 60 | Shore D | ASTM D2240 | |
| | Impact resistance | >18.2 | J | ASTM D2794 (1.5mm steel; ball diameter: 15.9 mm) | |
| | Tensile strain at break | 460 | % | ISO 527 | |
| | Tensile strength | 23 | Mpa | ISO 527 | |
| | | | | | |
| Electrical properties | Dielectric strength | 48 | kV.mm ⁻¹ | ASTM D149 | |
| | Volume resistivity | 2.10 ¹⁸ | Ω.cm | ASTM D257 | |
| Properties under accelerated aging | Salt spray resistance | 2,000h | 0 | mm (steel substrate corrosion) | ISO 9227 (NSS, with scribe) |
| | | 3,500h | <1 | | |
| | UV stability ¹⁾ | 2,000 h | | no damage | ISO 4892-3 ²⁾ |
| | Chemical resistance ³⁾ | 20°C | | 60°C | |
| | | Acids | Excellent | | Excellent |
| | | Alkalis | Excellent | | Excellent |
| | | Fuels | Good | | Poor |

1) Color and gloss deviation is color dependent and available upon request.

2) UVB-313 lamp, cycles: 8h at 60°C (black panel) and 0.71W/m²/mm (at 310nm), then 4h at 50°C with condensation.

3) A specific chemical resistance test is recommended before any industrial application.