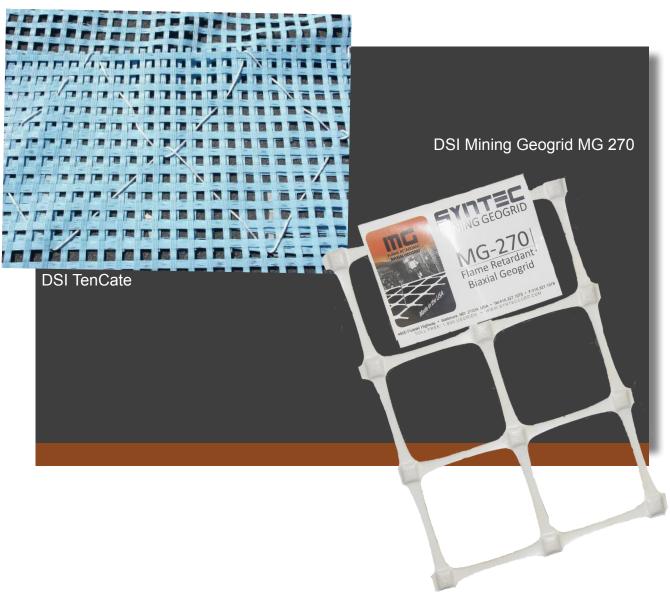


DSI MESH SYSTEMS



www.dsiunderground.com



DSI TenCate



Product Specification

- Full strength test certificates are supplied with each roll.
- Full Flame Retardant Antistatic Polymer
- Full sewn fabric with 1000 denier thread for high strength.
- 5m wide x 150m long rolls producing less joints.
- Multiple strengths to 600/400 kN/m (41,000/27,400 lbs/ft)

Product Specification Fully Compliant

- Accurate recording of Mine Site requirements for each install system.
- On site technical information provided prior to installation.
- · Quality fabrication and construction system.
- U/G support during the installation of the recovery mat.
- On going improvement of product and process.

Pre Installation Technical Support

- •Inspection of Long wall prior to supply.
- •Information sessions for all Longwall crews.
- Assessment of installation procedures.
- •In addition to technical support a photographic report with notes of the process are kept for further discussion of the next installation.

Fabrication Technique

- Rolls laid side by side, normally overlapped 300mm in the longitudinal direction.
- Sewn together with 6mm nylon rope in diamond pattern.
- Wire ropes secured to mat with 6mm nylon rope with "barrel loop stitch" and rope clamp.
- Longwall Screen tied at intervals to allow for controlled installation.
- Red plastic ribbon threaded in the center line of the mat or at each end to indicate block width.
- Length checks confirmed with the quality system.
- Headgate end is setup to reduce manual handling U/G.
- Roll is folded into a 6 or 7m long skid.

Benefits of the Quality System

- Cost effective & correct product.
- The approved product arrives at the mine site fully assembled ready to take underground.







DSI Mining Geogrid MG 270

DSI Polymer Mining Geogrid is an alternative to weld wire mesh products and can be used as a supplemental support structure between roof/rib bolts in underground mining and or tunneling operations. It is corrosion resistant and is especially applicable to screening projects when it will need to be "mined through" such as for pillar wrapping or for pilot tunnels. It is also especially useful in corrosive environments.





	<u>Units</u>	MD Values ¹	XMD Values ²
Index Properties			
Polypropylene Polymer	Group 1/ Class 1/ Grade 2 per ASTM D4101		
Aperture Dimensions ²	mm (in)	46 (1.8)	51 (2.0)
Minimum Rib Thickness ²	mm (in)	1.0 (0.04)	1.0 (0.04)
Ultimate Tensile Strength³	kN/m (lb/ft)	21.9 (1,500)	21.9 (1,500)
Tensile Modulus ³	kN/m (lb/ft)	321.0 (22,000)	321.0 (22,000)
Colorant and UV Inhibitor Content	%	2.0	
		(White Color)	
Structural Integrity			
Junction Efficiency⁴	%	90	
Flexural Stiffness ⁵	mg-cm	600,000	800,000
Flammability Resistance ⁶			
Maximum Flame Propagation ⁶	m (ft)	1.2 (4.0)	1.2 (4.0)
Average Duration of Burning for Test Set ⁶	minute	1.0 (max)	1.0 (max)
Maximum Duration of Burning for Single Test ⁶	minute	2.0	2.0

Dimensions and Delivery:

The biaxial geogrid shall be delivered to the jobsite in roll form with each roll individually identified and nominally measuring from 1.5 meters (4.9 feet) to 4.0 meters (13.1 feet) in width and up to 56.0 meters (184 feet) in length. Depending on the roll size the typical truckload or container quantity varies between 135 and 315 rolls.

Notes:

- 1. Unless indicated otherwise, values shown are minimum values or minimum average roll values determined in accordance with ASTM D4759-02. Brief Descriptions of test procedures are given in the following notes. Complete descriptions of test procedures are available on request from Syntec Corporation.
- Nominal dimensions
- 3. True resistance to elongation when initially subjected to a load determined in accordance with ASTM D6637-01 without deforming test materials underload before measuring such resistance or employing "secant" or "offset tangent methods of measurement so as to overstate tensile properties.
- 4. Load transfer capability determined in accordance with GRI-GG2-05 and expressed as a percentage of ultimate tensile strength.
- 5. Resistance to bending force determined in accordance with ASTM D5732-01, using specimens of width two ribs wide, with transverse ribs cut flush with exterior edges of longitudinal ribs ("as a ladder"), and of length sufficiently long to enable measurement of the overhang dimension. The overall Flexural Stiffness is calculated as the square root of the product of MD and XMD Flexural Stiffness values.
- 6. Flammability resistance determined from vertical and horizontal flame tests in accordance with 30 CFR, Part 7, Subpart A & B and ASTP5011 Standardized Small Scale Flame Test Procedure for the Acceptance of Roof-Rib Grid.



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