

# MG 270 Biaxial Mining Geogrid

Integrally Formed Biaxial Geogrid

Flame-retardant Polypropylene

Positive Mechanical Interlock

Underground Mine and Tunnel Applications (roof and rib control, soft bottom reinforcement)

White in Color

## PRODUCT PROPERTIES

Technical Characteristics	Units	MD Values <sup>1</sup>	XMD Values <sup>1</sup>
Aperture Dimensions <sup>2</sup>	mm (in)	58 (2.3)	60 (2.4)
Minimum Rib Thickness <sup>2</sup>	mm (in)	1.0 (0.04)	1.0 (0.04)
Ultimate Tensile Strength <sup>3</sup>	kN/m (lb/ft)	21.9 (1,500)	21.9 (1,500)
Tensile Modulus <sup>3</sup>	kN/m (lb/ft)	321.0 (22,000)	321.0 (22,000)
Colorant & UV Inhibitor Content	%	2.0	

## STRUCTURAL INTEGRITY

Junction Efficiency <sup>4</sup>	%	93
Flexural Stiffness <sup>5</sup>	mg-cm	800,000

## FLAMMABILITY RESISTANCE

Maximum Flame Propagation <sup>6</sup>	m (ft)	1.2 (4.0)
Average Duration of Burning for Test Set <sup>6</sup>	minute	1.0 (max)
Maximum Duration of Burning for Single Test <sup>6</sup>	minute	2.0

## DIMENSIONS AND DELIVERY

The biaxial geogrid shall be delivered to the job site in roll form with each roll individually identified and nominally measuring 1.98 m (6.5-FT) or 4 m (13.1-FT) in width and 46 m (150 -FT) in length.

### Notes

1. Unless indicated otherwise, values shown are minimum values or minimum average roll values determined in accordance with ASTM D4759-11.
2. Nominal dimensions
3. True resistance to elongation when initially subjected to a load determined in accordance with ASTM D6637-15 without deforming test materials under load 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 ASTM D7737-15.
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. Values are for Machine Direction and Cross Machine Direction.

Tenax warrants that the geogrid products delivered hereunder conform to the stated specification at the time of delivery. All other warranties including claims for performance or suitability for application are excluded. This product specification supersedes all prior specifications for the product described above and is not applicable for products shipped before November 2014.

Tenax reserves the right to change its product specifications at any time. It is the responsibility of the specifier and purchaser to ensure that product specifications used for design and procurement purposes are current and consistent with the products used in each instance.



TENAX CORPORATION  
4800 E. Monument Street / Baltimore, MD 21205  
phone 410-522-7000 / www.tenaxus.com