



Product Specification – Biaxial Geogrid BX3316

Tensar International Corporation 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.

Product Type: Integrally Formed Biaxial Geogrid
Polymer: Flame-retardant Polypropylene
Load Transfer Mechanism: Positive Mechanical Interlock
Primary Applications: Underground Mine and Tunnel Applications (Roof and Rib Control, Soft Bottom Reinforcement)

Product Properties

Index Properties	Units	MD Values ¹	XMD Values ¹
<ul style="list-style-type: none"> ▪ Polypropylene Polymer ▪ Aperture Dimensions² ▪ Minimum Rib Thickness² ▪ Ultimate Tensile Strength³ ▪ Tensile Modulus³ ▪ Colorant and UV Inhibitor Content 	Group 1/ Class 1/ Grade 2 per ASTM D4101 mm (in) mm (in) kN/m (lb/ft) kN/m (lb/ft) %	46 (1.8) 1.0 (0.04) 21.9 (1,500) 321.0 (22,000) 2.0 (Black Color)	51 (2.0) 1.0 (0.04) 21.9 (1,500) 321.0 (22,000)
Structural Integrity			
<ul style="list-style-type: none"> ▪ Junction Efficiency⁴ ▪ Flexural Stiffness⁵ 	% mg-cm	90 600,000	800,000
Flammability Resistance⁶			
<ul style="list-style-type: none"> ▪ Maximum Flame Propagation⁶ ▪ Average Duration of Burning for Test Set⁶ ▪ Maximum Duration of Burning for Single Test⁶ 	m (ft) minute minute	1.2 (4.0) 1.0 (max) 2.0	1.2 (4.0) 1.0 (max) 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.
2. Nominal dimensions.
3. True resistance to elongation when initially subjected to a load determined in accordance with ASTM D6637-01 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 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.