

Product Specification - Biaxial Geogrid BX1100

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Product Type: Integrally Formed Biaxial Geogrid
Polymer: Polypropylene
Load Transfer Mechanism: Positive Mechanical Interlock
Primary Applications: Spectra System (Base Stabilization, Subgrade Improvement)

Product Properties

Index Properties	Units	MD Values ¹	XMD Values ¹
▪ Aperture Dimensions ²	mm (in)	25 (1.0)	33 (1.3)
▪ Rib Thickness ²	mm (in)	0.76 (0.03)	0.76 (0.03)
▪ Tensile Strength @ 2% Strain ³	kN/m (lb/ft)	4.1 (280)	6.6 (450)
▪ Tensile Strength @ 5% Strain ³	kN/m (lb/ft)	8.5 (580)	13.4 (920)
▪ Ultimate Tensile Strength ³	kN/m (lb/ft)	12.4 (850)	19.0 (1,300)
Structural Integrity			
▪ Junction Efficiency ⁴	%	93	
▪ Overall Flexural Rigidity ⁵	mg-cm	250,000	
▪ Aperture Stability ⁶	m-N/deg	0.32	
Durability			
▪ Resistance to Installation Damage ⁷	%SC / %SW / %GP	95 / 93 / 90	
▪ Resistance to Long Term Degradation ⁸	%	100	
▪ Resistance to UV Degradation ⁹	%	100	

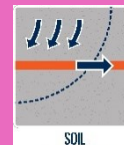
Dimensions and Delivery

The biaxial geogrid shall be delivered to the jobsite in roll form with each roll individually identified and nominally measuring 4.0 meters (13.1 feet) in width and 75.0 meters (246 feet) in length and 3.93 meters (12.9 feet) in width and 75.0 meters (246 feet) in length.

Notes

1. Unless indicated otherwise, values shown are 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. Determined in accordance with ASTM D6637-10 Method A.
4. Load transfer capability determined in accordance with ASTM D7737-11.
5. Resistance to bending force determined in accordance with ASTM D7748/D7748M-14.
6. Resistance to in-plane rotational movement measured in accordance with ASTM D7864/D7864M-15.
7. Resistance to loss of load capacity or structural integrity when subjected to mechanical installation stress in clayey sand (SC), well graded sand (SW), and crushed stone classified as poorly graded gravel (GP). The geogrid shall be sampled in accordance with ASTM D5818 and load capacity shall be determined in accordance with ASTM D6637.
8. Resistance to loss of load capacity or structural integrity when subjected to chemically aggressive environments in accordance with EPA 9090 immersion testing.
9. Resistance to loss of load capacity or structural integrity when subjected to 500 hours of ultraviolet light and aggressive weathering in accordance with ASTM D4355-05.

Mirafi® HP370



Mirafi® HP370 geotextile is composed of high-tenacity monofilament polypropylene yarns, which are woven into a network such that the yarns retain their relative position. Mirafi® HP370 geotextile is inert to biological degradation and resistant to naturally encountered chemicals, alkalis, and acids.

TenCate Geosynthetics Americas is accredited by Geosynthetic Accreditation Institute – Laboratory Accreditation Program (GAI-LAP).

Mechanical Properties	Test Method	Unit	Minimum Average Roll Value	
			MD	CD
Tensile Strength (at ultimate)	ASTM D4595	lbs/ft (kN/m)	3600 (52.5)	3240 (47.3)
Tensile Strength (at 5% strain)	ASTM D4595	lbs/ft (kN/m)	1500 (21.9)	1560 (22.8)
			Minimum Roll Value	
Flow Rate	ASTM D4491	gal/min/ft ² (l/min/m ²)	60 (2444)	
Permittivity	ASTM D4491	sec ⁻¹	0.8	
			Maximum Opening Size	
Apparent Opening Size (AOS)	ASTM D4751	U.S. Sieve (mm)	30 (0.600)	
			Minimum Test Value	
UV Resistance (at 500 hours)	ASTM D4355	% strength retained	80	

Physical Properties	Unit	Roll Size
Roll Dimensions (width x length)	ft (m)	15 x 300 (4.5 x 91)
Roll Area	yd ² (m ²)	500 (418)

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