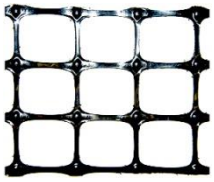
Carthage Mills **Product Data**

Geotextiles | Erosion Control | Geogrids | Geomembranes

GBX®-42 Biaxial Geogrid

Product Type: Integrally Formed Biaxial Geogrid
Polymer: Polypropylene
Load Transfer Mechanism: Positive Mechanical Interlock
Primary Applications: Base Reinforcement, Subgrade Improvement



PRODUCT PROPERTIES

■ Index Properties	Units	MD Values[1]	XMD Values[1]
Aperture Dimensions[2]	mm (in)	33 (1.3)	33 (1.3)
Minimum Rib Thickness[2]	mm (in)	1.27 (0.05)	1.27 (0.05)
Tensile Strength @ 2% Strain[3]	kN/m (lbs/ft)	5.5 (380)	7.4 (510)
Tensile Strength @ 5% Strain[3]	kN/m (lbs/ft)	10.5 (720)	14.6 (1,000)
Ultimate Tensile Strength[3]	kN/m (lbs/ft)	20.5 (1,400)	23.5 (1,610)
■ Structural Integrity			
Junction Efficiency[4]	%	93	
Flexural Stiffness[5]	mg-cm	750,000	
Aperture Stability[6]	m-N/deg	0.48	
■ Durability			
Resistance to Installation Damage[7]	%SC / %SW / %GP	90 / 83 / 75	
Resistance to Long Term Degradation[8]	%	100	
Resistance to UV Degradation[9]	%	100	
■ Dimensions and Delivery			
Roll Sizes Available	3.0 m x 50.0 m / 150 m²	(9.8 ft x 164 ft / 179 yd²)	
	4.0 m x 50.0 m / 200 m²	(13.1 ft x 164 ft / 239 yd²)	

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. 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. Resistance to in-plane rotational movement measured by applying a 20 kg-cm (2 m-N) moment to the central junction of a 9 inch x 9 inch specimen restrained at its perimeter in accordance with U.S. Army Corps of Engineers Methodology for measurement of Torsional Rigidity.
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 D5818-06 and load capacity shall be determined in accordance with ASTM D6637-01.
8. Resistance to loss of load capacity or structural integrity when subjected to chemically aggressive environments.
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.

- The properties reported above are effective 12-01-17 and are subject to change without notice.

★ Proudly Made in the U.S.A.! ★

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