

MIRAFI BXG Geogrid

Base course reinforcement and soil stabilization

MIRAFI® BXG Geogrids are biaxial grids that exhibit high tensile strength in both longitudinal and transverse directions, making them suitable for base course reinforcement and soil stabilization applications. They deliver strength, long-term performance, reliability and quick installation for base reinforcement for paved roads, construction haul roads, foundation reinforcement, working platforms on weak subgrades, and secondary reinforcement for soil retaining structures.



For structures with dynamic short-term loadings, MIRAFI BXG geogrids offer high strength at low strain and are designed for maximum bearing capacity and shear resistance.

Applications

- ☑ Paved roads
- ☑ Haul & construction roads
- ☑ Working platforms
- ☑ Surficial Reinforcement for Slopes and Berms

Primary functions

- Confinement
- Base course reinforcement

Proven Performance

- High tensile modulus properties per ASTM D6637
- High tensile strength in both longitudinal and transverse directions
- Resistant to moderate to severe installation stress
- Provides greater load distribution
- Available in multiple roll sizes

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MECHANICAL PROPERTIES	TEST METHOD	UNIT	BXG110		BXG120	
			MD	CD	MD	CD
Tensile strength @ ultimate ¹	ASTM D6637	lbs/ft (kN/m)	850 (12.4)	1300 (19.0)	1310 (19.2)	1970 (28.8)
Tensile strength @ 2% strain	ASTM D6637	lbs/ft (kN/m)	280 (4.1)	450 (6.6)	410 (6.0)	620 (9.0)
Tensile strength @ 5% strain	ASTM D6637	lbs/ft (kN/m)	580 (8.5)	920 (13.4)	810 (11.8)	1340 (19.6)
Junction Efficiency ²	ASTM D7737	%	93		93	
Flexural Rigidity ³	ASTM D7748	mg-cm	250,00		750,000	
Aperture Stability ⁴	ASTM D7864	m-N/deg	0.32		0.65	
Resistance to Installation Damage ⁵		% SC/%SW/GP	95/93/89		95/93/90	
Resistance to Long Term Degradation ⁶	EPA 9090	%	100		100	
Resistance to UV Degradation ⁷	ASTM D4355	%	100		100	
Resistance to UV Degradation ⁷		%	100		100	

PHYSICAL PROPERTIES	UNIT	BXG110		BXG120	
		MD	CD	MD	CD
Grid Aperture Size (MD)	in (mm)	1.0 (25.4)		1.0 (25.4)	
Grid Aperture Size (CD)	in (mm)	1.3 (33.0)		1.3 (33.0)	
Roll Dimensions (width x length)	ft (m)	12.5 x 328 (3.8 x 100)		12.5 x 246 (3.8 x 75)	
Roll Area	yd ² (m ²)	456 (381)		341 (285)	
Estimated Roll Weight	lbs (kg)	163 (74)		203 (92)	

¹ Determined in accordance with ASTM D6637-10 Method A. This product is intended for soil stabilization applications. The long-term creep performance has not been established, and therefore, should not be used for long-term loading conditions.

² Load transfer capability expressed as a percentage of ultimate tensile strength.

³ Resistance to bending force determined in accordance with ASTM D7748, 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 CD Flexural Stiffness values.

⁴ 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 GRI GG9.

⁵ 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.

⁶ Resistance to loss of load capacity or structural integrity when subjected to chemically aggressive environments in accordance with EPA 9090 immersion testing.

⁷ 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.

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