

# MIRAFI<sup>®</sup> BXG11 MEETS FHWA REQUIREMENTS FOR GEOGRIDS

Prepared by:

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Mirafi® BXG11 meets the newly released geogrid properties for stabilization and base reinforcement applications.

The newly revised FHWA Manual on Geosynthetic Design & Construction Guidelines, Publication No. FHWA NHI-07-092 was released at the end of 2008. This technical manual includes the use of Geosynthetics in Roadways and Pavements, Chapter 5. Table 5-5 outlines the minimum properties for biaxial geogrids for Stabilization and Base Reinforcement of pavement systems. Mirafi® BXG11 meets the geogrid properties for Class 1, 2 and 3. The properties outlined in the FHWA manual are shown in the table below with the comparative values of Mirafi® BXG11.

Property	Test Method (Units)	Class 1	Class 2	Class 3	Mirafi® BXG11
Ultimate Tensile Strength	ASTM D 6637 (lb/ft)	1230	820	820	2500
Junction Strength	GRI-GG2 (lb)	25 <sup>2</sup>	25	25	30
Ultraviolet Stability	ASTM D 4355 (%)	50% after 500 hours			70%
Aperture Size	Direct Measure (in.)	0.5 to 3 in. and Aperture Size ≥ D50 of aggregate above geogrid Aperture Size ≤ 2 x D85 of aggregate above geogrid			1.0 <sup>3</sup>
Separation <sup>1</sup>	ASTM D422 (mm)	D85 of aggregate above geogrid < 5 x D85 subgrade Otherwise use a separation geotextile with geogrid			

<sup>1</sup> Note – If separation geotextile is required, Mirafi® HP-Series reinforcement geotextile should be used instead of geogrid with separator combination.

<sup>2</sup> Full Scale Installation Damage Testing should be performed, contact a Tencate™ representative for data.

<sup>3</sup> Typical value

Design assistance is available using Mirafi® BXG or HP reinforcement products for stabilization and base reinforcement applications. Contact your local Tencate™ Regional Engineer for technical assistance.

Reference: *Geosynthetic Design & Construction Guidelines*, Pub. FHWA NHI-07-092, August 2008.

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