

## Mirafi® BXG Geogrids for Base Course Reinforcement and Soil Stabilization Applications

TenCate develops and produces materials that deliver increased performance, reduce costs and measurable results when working with our customers to provide advanced solutions utilizing Mirafi® BXG geogrids that make a difference.

The Difference Mirafi® BXG Geogrids Make:

- Reinforcement Strength. High tensile modulus properties per ASTM D6637 for base reinforcement applications. 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.
- True biaxial strengths. 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.
- Durability. Superior damage resistance from moderate to severe stress installations.

- Soil Interaction. Superior soil confinement resulting in greater load distribution. A new combination of grid structure and polymers to create optimum soil-grid interaction.
- Roll Sizes. Available in multiple roll sizes to fit the project requirements.

### APPLICATIONS

Mirafi® BXG geogrids 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.

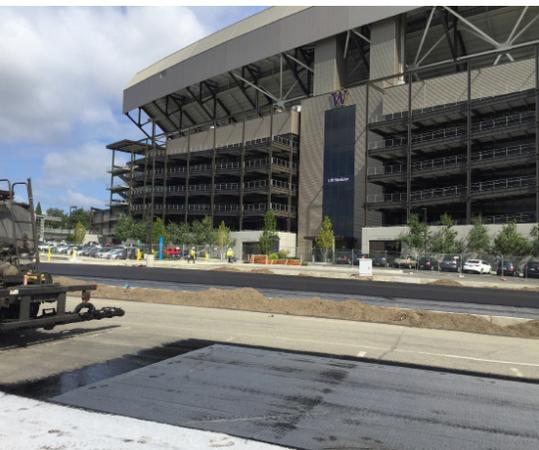
### INSTALLATION GUIDELINES\*

Prepare the ground by removing stumps, boulders, etc. and fill in low spots. Unroll the Mirafi® BXG geogrids directly over the ground to be stabilized. If more than one roll width is required, overlap rolls. Place the aggregate onto previously installed geogrid.



Maintain 6in (150mm) to 12in (300mm) cover between truck tires and geosynthetic. Compact the aggregate over the Mirafi® BXG geogrid to the design thickness and fill any ruts with new aggregate as specified in the project guidelines.

\* These guidelines serve as a general basis for installation. Detailed instructions are available from your TenCate representative.



# Mirafi® BXG Geogrids

## for Base Course Reinforcement and Soil Stabilization Applications

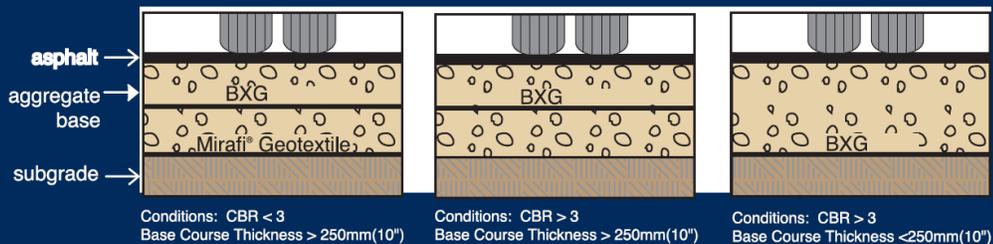
MECHANICAL PROPERTIES	TEST METHOD	UNIT	BXG110		BXG120	
			MD	CD	MD	CD
Tensile Strength (at ultimate) <sup>1</sup>	ASTM D6637	lbs/ft (kN/m)	850 (12.4)	1300 (19.0)	1310 (19.2)	1970 (28.8)
Tensile Strength (at 2% strain) <sup>1</sup>	ASTM D6637	lbs/ft (kN/m)	280 (4.1)	450 (6.6)	410 (6.0)	620 (9.0)
Tensile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

PHYSICAL PROPERTIES						
Rib Thickness	---	in(mm)	0.03 (0.76)	0.03 (0.76)	0.05 (1.27)	0.05 (1.27)
Grid Aperture Size (MD)	---	in (mm)	0.9 (23.0)		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)	12.9 x 246 (3.93 x 75)		12.9 x 164 (3.93 x 50)	
Roll Area	---	yd <sup>2</sup> (m <sup>2</sup> )	355 (295)		235 (196)	

- True resistance to elongation when initially subjected to a load determined in accordance with ASTM D6637 without deforming test materials under load before measuring such resistance or employing "secant" or "offset" tangent methods of measurement to overstate tensile properties.
- Load transfer capability expressed as a percentage of ultimate tensile strength.
- 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.
- 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.
- 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.
- Resistance to loss of load capacity or structural integrity when subjected to chemically aggressive environments in accordance with EPA 9090 immersion testing.
- 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.

### Typical Base Reinforcement Cross Sections



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365 South Holland Drive  
Pendergrass, GA 30567





# LOCATIONS & CONTACT INFO

## ASP ENTERPRISES

aspent.com  
salesasp@aspent.com

## BOWMAN CONSTRUCTION SUPPLY

bowmanconstructionsupply.com  
salesbcs@bowmanconstructionsupply.com

## QUICK SUPPLY CO.

quicksupplyco.com  
salesquick@quicksupplyco.com

## CASCADE GEOSYNTHETICS

cascadageos.com  
salescascade@cascadageos.com

St. Louis, MO 636.343.4357  
Omaha, NE 402.861.8579

Denver, CO 303.696.8960  
Loveland, CO 970.535.0863

Des Moines, IA 515.289.1271

Portland, OR 971.339.1020

Kansas City, MO 816.554.1191  
Wichita, KS 316.393.1554

Colorado Springs, CO 719.257.7840

Salt Lake City, UT 435.276.0820

# SOLUTIONS WE SUPPLY

## GEOSYNTHETICS

Filter Fabrics  
Stabilization Fabrics

### Geogrids

- Road Grids
- Wall Grids
- Slope Stabilization

### Specialty Fabrics

#### Composite Geomembranes

- GCLs, PVC, HDPE, LLDPE, EPDM, Granular Bentonite

## SEDIMENT CONTROL

### Inlet Protection

- Grated Inlet, Curb Inlet, Area Inlet Protection

### Ditch Checks

- Triangle Silt Dike
- GeoRidge

### Perimeter Protection

- High and Low-Porosity Silt Fence, Straw Wattles, Silt Socks
- Safety Fence

### Flocculants & Water Treatment

- Polymer-Based & Natural Flocculants

### Sediment Basin Skimmers

### Dewatering Bags

### Trackout Control

- FODS
- Rumble Grates

### Turbidity Curtains

## EROSION CONTROL

### Basic Hydraulically Applied Mulches

- Wood
- Paper
- Blends
- Straw

### High-Performance Hydraulically Applied Products

- BFM
- FGM
- Additives & Tackifiers

### Temporary Erosion Control Blankets

- Coir & Jute Mat/Nettings
- Short-Term ECBs
- Extended-Term ECBs

### Permanent Erosion Control Blankets

- Turf Reinforcement Mats
- HP-TRMs
- Anchor Reinforced Vegetation System

### Structural BMPs

- Transition Mats
- Geoweb Cellular Confinement
- Composite Vegetated Armor System
- Flex MSE Vegetated Wall System
- Articulated Concrete Block
- Gabions
- Grout-Filled Geotextile Mats

### Vegetation Establishment

- Native Seed & Turf Seed
- Fertilizers
- Organic Soil Additives
- Stratavault Soil Cells

## STORMWATER MANAGEMENT

### Water Quality

- Inlet Filter Boxes
- Pre-Treatment Chamber
- Nutrient Separating Baffle Boxes
- High-Flow Biofiltration Media
- Hydrodynamic Separators
- Stratavault

### Water Quantity

- Modular Underground Storage Systems
- Chamber Detention Systems

### Drainage

- HDPE Swale Liner
- Pipe & Fittings
- Drainage Composites
- Strip Drain

### Inlet Structures

- PVC
- Drain Basis, In-Line Drains
- Landscape

### Permeable Pavers

- Permeable Articulating Concrete Block
- Grass Pavers
- Gravel Pavers
- Concrete Pavers

## SPECIALTY

### Natural & Synthetic Coir Fiber Logs

### Vegetated Reinforced Soil Slopes

### Soil Anchors

### Root Barrier System

### AquaBlok

### Muscle Wall

We are full line distributors of construction materials for all project types. Contact us for assistance with a project. From specification and development to installation and completion, we're here to help with all of your site solution needs.

**GEOSYNTHETICS | EROSION CONTROL | STORMWATER MANAGEMENT  
SEDIMENT CONTROL | REVEGETATION & SOIL AMENDMENTS**