

## **PRODUCT DATA SHEET** WINFAB® BX12 WINFAB® BX12-USA

WINFAB® BX12 & WINFAB® BX12-USA is a polypropylene geogrid product that is intergrally formed into a biaxial geogrid.

WINFAB® BX12 & WINFAB® BX12-USA resists ultraviolet deterioration, rotting, and biological degradation and is inert to commonly encountered soil chemicals.







**STABILIZATION** 

CONFINEMENT

PROPERTY	MARV ENGLISH	MARV METRIC			
Aperture Dimensions <sup>2</sup>	1.0 in x 1.3 in	25 mm x 33 mm			
Minimum Rib Thickness <sup>2</sup>	0.05 in x 0.05 in	1.27 mm x 1.27 mm			
Ultimate Tensile Strength <sup>3</sup>	1310 x 1970 lbs/ft	19.2 x 28.8 kN/m			
Tensile Strength at 2% Strain <sup>3</sup>	410 x 620 lbs/ft	6 x 9 kN/m			
Tensile Strength at 5% Strain <sup>3</sup>	810 x 1340 lbs/ft	11.8 x 19.6 kN/m			
Junction Efficiency <sup>4</sup>	93%	93%			
Flexural Stiffness <sup>5</sup>	750,000 mg-cm	750,000 mg-cm			
Aperture Stability <sup>6</sup>	0.65 m-N/deg	0.65 m-N/deg			
Resistance to Installation Damage <sup>7</sup>	95%SC/93%SW/90%GP	95%SC/93%SW/90%GP			
Resistance to Long Term Degradation <sup>8</sup>	100%	100%			
UV Resistance (500 Hours) <sup>9</sup>	100%	100%			

- 1. Unless notified 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 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 x 9 inch specimen restrained at its perimeter in accordance with the 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 D6637-01.
- 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.

## **Domestic Procurement Preference**

WINFAB® BX12-USA is compliant with the Build America, Buy America (BABA) Act, Pub. L. No. 117-58, div. G §§ 70901-52. To ensure BABA documentation is appropriately captured and maintained throughout the manufacturing process, BABA (along with any other regulatory requirements) must be specified at the time of quotation and order to WINFAB. The inclusion of a "-USA" suffix on the end of the style name indicates the product is BABA certifiable.

PROPERTY**	TEST METHOD	TYPICAL ENGLISH	TYPICAL METRIC
Roll Dimensions	Measured	12.5 ft x 164 ft	3.8 m x 50 m
Roll Area	Measured	227.8 yd²	190 m²

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