

GRIDPRO™ BXP42 is a punched and drawn geogrid containing polypropylene that is integrally formed into a biaxial geogrid. GRIDPRO BXP42 will meet the following Minimum Average Roll Values (MARV) when tested in accordance with the methods listed below. These characteristics make GRIDPRO BXP42 ideal for the construction of unpaved or asphalt paved roads, steepened slopes, and modular block and/or wrapped-face retaining walls. The geogrid is resistant to ultraviolet degradation and to biological and chemical environments normally found in soils.

PROPERTY	UNITS	MARV ²	
		ENGLISH	METRIC
ORIGIN OF MATERIALS			
% U.S. Manufactured		100%	100%
INDEX PROPERTIES			
Aperture Dimensions ²		1.3 x 1.3 in	33 x 33 mm
Minimum Rib Thickness ²		0.05 x 0.05 in	1.27 x 1.27 mm
Tensile Strength @ 2% Strain ³	ASTM D 6637 Procedure B	410 x 510 lb/ft	6 x 7.4 kN/m
Tensile Strength @ 5% Strain ³		800 x 1000 lb/ft	11.7 x 14.6 kN/m
Ultimate Tensile Strength ³		1400 x 1610 lb/ft	20.4 x 23.5 kN/m
STRUCTURAL PROPERTIES			
Junction Efficiency ⁴	ASTM D 7737/D 6637	93%	93%
Flexural Stiffness ⁵	ASTM D 7748	750000 mg-cm	750000 mg-cm
Aperture Stability ⁶	ASTM D 7864	0.48 m-N/deg	0.48 m-N/deg
DURABILITY			
Resistance to Long Term Degradation ⁸	EPA 9090	100%	100%
Resistance to UV Degradation ⁹	ASTM D 4355/D 6637	100%	100%
ROLL SIZES		12.9 ft x 164 ft	3.93 m x 50.0 m

NOTES:

- The property values listed above are effective 04/16/2019 and are subject to change without notice. Values represent testing at time of manufacture.
- All geometric properties are Nominal Values and may vary.
- True resistance to elongation when initially subjected to a load determined in accordance with ASTM D6637-15 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.
- Load transfer capability determined in accordance with ASTM D7737-15 and expressed as a percentage of ultimate tensile strength.
- Resistance to bending force determined in accordance with ASTM D7748-14, 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.
- 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 the U.S. Army Corps of Engineers Methodology for measurement of Torsional Rigidity.
- 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 D6637-15.
- 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 D4355-14.
- All mechanical properties are based on the manufacturer's laboratory test result at 21 ± 1° C.
- Unless indicated otherwise, values shown are minimum average roll values determined in accordance with ASTM D4759.