



Product Data 'Comparison Sheet'

■ MS™ 330 vs. BX1200

To be effective as reinforcement for base and sub-base applications, a geosynthetic product must not only be strong, it must be able to transfer its strength to the soil that it is reinforcing and maintain its strength for the design life of the project. The following table compares the key material, strength, and performance characteristics for the MS™ 330 geogrid to the Tensar BX1200.

PROPERTY ¹	TEST METHOD	UNIT	MS™ 330		BX1200 ²	
			MD	TD	MD	TD
<input type="checkbox"/> MATERIAL						
Polymer Type			Polypropylene		Polypropylene	
Structure			Three layers of bi-oriented geogrids sewn together		Single layer of extruded geogrid	
PH Resistance			2 – 13		2 – 13	
Carbon Black Content	ASTM D 4218	%	0.50		0.50	
<input type="checkbox"/> TECHNICAL / MECHANICAL						
Strengths and Load Capacity:						
Ultimate Tensile Strength	GRI-GG1	lb/ft	1,370	2,100	1,320	2,100
True Tensile Strength: @ 2% Strain			418	616	410	600
@ 5% Strain			925	1,340	810	1,340
True Initial Modulus In Use			32,972	44,709	33,000	44,725
Tensile Modulus: @ 2% Strain			20,900	30,800	19,000	29,750
@ 5% Strain	18,500	26,850	16,400	26,800		
Structural Integrity:						
Junction: Strength	GRI-GG2	lb/ft	1,230	1,920	1,080	1,778
Flexural Rigidity	ASTM D 1388	mg-cm	750,000		750,000	NA
Performance Characteristics:						
Maximum Pullout Resistance ³ (Coefficient of Interaction):						
@ 205 psf		lb/ft		720		520
@ 410 psf				1,280		1,020
@ 625 psf				1,700		1,500
Maximum Rut Depth ⁴ (TEAL = 40,000 cycles)		in.	0.457		0.630	
Durability:						
Resistance to Installation Damage	ASTM D 5818	% ⁵	> 90 / > 90 / 90 ⁶		90 / 83 / 71	

NOTES:

¹ Chart for comparison purpose only. Consult with us for current design assistance.

² Per manufacturer's literature, GFR's "Specifier's Guide", latest data available, and/or Tensar's website (http://www.tensarcorp.com/literature/content_spec_bx.htm).

³ Geogrid Report GRID-TE-5: "Pullout Tests of Geogrids".

⁴ Geogrid Report GRID-TE-3: "Full Scale In-Ground Tests for Geosynthetic Reinforced Flexible Paved Roads".

⁵ Resistance to loss of load capacity or structural integrity — %SC (clayey sand) / %SW (well graded sand) / %GP (poorly graded gravel)

⁶ Geogrid Report GRID-TE-4: "Construction Damage Tests of Geogrids".

The properties reported above are effective 02/01/03 and are subject to change without notice.