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Reinforcement Geogrids Comparison Sheet
BaseGrid 33
Vs.
BX1200

More than strength is required for a geosynthetic to be effective as reinforcement for base and sub-base applications. The product must be able to effectively transfer its strength to the soil and also maintain its strength for the design life of the project. The following table compares the key material, strength, and performance characteristics of US Fabrics' BaseGrid 33 Geogrid to Tensar BX1200 Geogrid.

GEOSYNTHETIC PROPERTY [1]	TEST METHOD	UNIT	BaseGrid 33		BX1200[2]	
			MD	TD	MD	TD
Material Characteristics						
Polymer Type		-	Polypropylene		Polypropylene	
Structure		-	3 Layers of bi-oriented geogrids sewn together		Single Layer of bi-oriented extruded geogrid	
PH Resistance		-	2 – 13		2 – 13	
Carbon Black Content	ASTM 4218	%	0.5		0.5	
Strength and Load Properties						
Ultimate Tensile Strength	GRI-GG1	lb/ft	1,370	2,100	1,320	2,100
- True Tensile Strength @ 2% Strain	GRI-GG1	lb/ft	418	616	410	600
- True Tensile Strength @ 5% Strain	GRI-GG1	lb/ft	925	1,342.6	810	1,340
True Initial Modulus in Use	GRI-GG1	lb/ft	27,400	44,525	33,000	44,525
- Tensile Modulus @ 2% Strain	GRI-GG1	lb/ft	20,900	30,800	19,000	29,750
- Tensile Modulus @ 5% Strain	GRI-GG1	lb/ft	18,500	26,850	16,400	26,800
Structural Integrity						
Flexural Rigidity	ASTM D 1388	Mg-cm	750,000	750,000	750,000	nr
Junction Strength	GRI-GG2	lb/ft	1,274	1,970	1,080	1,778
Performance Characteristics						
Maximum Pullout Resistance [3] (Coefficient of Interaction)						
- @ 205 psf		lb/ft	-	720 (1.15)	-	520 (0.83)
- @ 410 psf		lb/ft	-	1,280 (1.02)	-	1,020 (0.82)
- @ 625 psf		lb/ft	-	1,700 (0.91)	-	1,500 (0.80)
Maximum Rut Depth [4] (TEAL = 40,000 cycle)	-	in	0.457	0.457	0.457	0.457
Performance Characteristics						
Resistance to Installation Damage	ASTM D 5818	% [5]	>90/>90/90 [6]		91/83/71	

1 Chart for comparison purpose only. Consult your local Tenax representative for current design assistance.
2 Per manufacturer's literature or GFR's "Specifier's Guide", latest data available and/or Tensar's website.
3 Report GRID-TE-5: "Pullout Tests of Geogrids".
4 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 Report GRID-TE-4: "Construction Damage Tests of Geogrids"