

PRODUCT COMPARISON

TerraFix® TBX1500 vs. Tensar® BX1100

The primary difference between these two products is the variation in machine direction (MD) strength and cross-machine direction (XMD) strength. Most geogrid applications require equal multi-directional strength in the geogrid; this is most important in road applications where a change of vehicular direction (curves and intersections) requires interlock of aggregate in both directions. This requirement essentially makes a geogrid only as strong as its weakest direction. A true biaxial geogrid supports the aggregate to provide 360° radial load distribution. It is also important to note that the test values for Tensile Strength at 2% strain is the most important value to consider; most roadway applications for geogrids require the product to perform at less than 2% strain.

TerraFix® TBX1500 is **THE** choice for true biaxial geogrid performance and long term reliability.

Property	Test Method	Unit	TerraFix® TBX1500		Tensar® BX1100	
			MD	XMD	MD	XMD
Tensile Strength @ 2%	ASTM D 6637	kN/m	6.5	7.0	4.1	6.6
Tensile Strength @ 5%	ASTM D 6637	kN/m	11.5	12.5	8.5	13.4
Ultimate Tensile Strength	ASTM D 6637	kN/m	16.0	16.0	12.4	19
Aperture Size	measured	mm	39	39	25	33
Junction Strength ¹	GRI-GG2	kN/m	16.0	16.0		
Junction Efficiency ¹	ASTM D 7737	%	100	100	93	93
Flexural Stiffness	ASTM D 7748	mg-cm	273,000		250,000	

Based on the above data, TerraFix® TBX1500 will perform as well as or better than Tensar® BX1100.



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Notes:

- Junction Efficiency is defined as the percentage of the product's Junction Strength as a function of its UTS. The test methods according to GRI-GG2 and ASTM D7737 (Meth. A) are essentially identical, other than a 1 degree C ambient temperature requirement.

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