

## TBX1500 Biaxial Geogrid

### Polypropylene – extruded single layer geogrid

Terrafix TBX1500 is a Polypropylene Single Layer Extruded Biaxial Geogrid. Used as an effective base reinforcement and subgrade improvement. Terrafix TBX1500 Biaxial Geogrid is inert to biological degradation and resists naturally encountered chemicals, alkalis, and acids. Polypropylene is stable within a pH range of 2 to 13.

Property	ASTM Test Method	Machine Direction Strength (MD)	Cross Machine Direction Strength (XMD)
<b>Mechanical Properties</b>			
• Ultimate Tensile Strength <sup>(2)</sup>	D 6637	16.0 kN/m	16.0 kN/m
• Junction Strength	GRI-GG2	15.5 kN/m	16.0 kN/m
• Tensile Strength @ 2% Strain <sup>(2)</sup>	D 6637	6.5 kN/m	7.0 kN/m
• Tensile Strength @ 5% Strain <sup>(2)</sup>	D 6637	11.5 kN/m	12.5 kN/m
• Flexural Stiffness/Rigidity	D 7748	960 g-cm	273 g-cm
• Aperture Stability <sup>(1)</sup>		2.4 kg-cm/deg. @ 20kg-cm torque	
• Radial Stiffness at Low Strain <sup>(3)</sup>		209.9 kN/m @ 0.5% strain	
• Multi-Axial Tension Test	D 5617		
• Vessel Pressure at Rupture			8.2 psi
• Axisymmetric Break Resistance Strain			9.1 %
• Average Deflection at Rupture			114 mm

### Roll Properties

• Aperture Size	--	39 mm (± 1mm)	39 mm(± 1mm)
• Average Rib Width	--	3mm	3mm
• Average Rib Thickness	--	1mm	1mm
• Roll Size	--	50m	3.95m

### Typical Geogrid Properties

• Minimum Carbon Black Content	D 4218	2%	2%
• Resistance to UV Degradation	D 4355	100%	

<sup>(1)</sup> In-plane torsional rigidity measured by applying a moment to the central junction of a 225mm x 225mm specimen restrained at its perimeter in accordance with U.S. Army Corps of Engineers Methodology for measurement of Torsional Rigidity (Kinney, T.C. Aperture Stability Modulus ref 3, 3.1.2000)

<sup>(2)</sup> Values shown are MARV as per GRI.

<sup>(3)</sup> Radial stiffness is determined from tensile stiffness measured in any in-plane axis from testing in accordance with ASTM D6637-01.