terrafix® geosynthetics inc.

Product Specifications

TBX2500 *Biaxial Geogrid*

Polypropylene - extruded single layer biaxial geogrid

Terrafix TBX2500 is a Polypropylene Single Layer Extruded Biaxial Geogrid. Used as an effective base reinforcement and subgrade improvement. Terrafix TBX2500 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)
Mechanical Properties			
• Ultimate Tensile Strength[2]	D 6637	25.0 kN/m	25.0 kN/m
• Junction Strength[2]	GRI-GG2	22.5 kN/m	23.4 kN/m
• Junction Efficiency	%	90%	94%
• Tensile Strength @ 2% Strain[2]	D 6637	9.5 kN/m	10.5 kN/m
• Tensile Strength @ 5% Strain[2]	D 6637	18.0 kN/m	20.0 kN/m
• Flexural Stiffness/Rigidity	D 7748	1312 g-cm	875 g-cm
• Aperture Stability[1]		4.5 kg-cm/deg. @ 20kg-cm torque	
• Radial Stiffness at Low Strain[3]		329.9 kN/m @ 0.5% strain	
• Multi-Axial Tension Test	D 5617		
• Vessel Pressure at Rupture		13.2 psi	
• Axisymmetric Break Resistance Strain		8.2 %	
• Average Deflection at Rupture		107 mm	
Roll Properties			
• Aperture Size	--	39mm (±1mm)	39mm (±1mm)
• Average Rib Width	--	3.5mm	3.5mm
• Average Rib Thickness	--	1.5mm	1.5mm
• Roll Size	--	50m	3.95m
Typical Geogrid Properties			
• Minimum Carbon Black Content	D 4218	2%	2%
• Resistance to UV Degradation	D 4355	100%	

[1] In-plane torsional rigidity 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)

[2] Values shown are MARV as per GRI.

[3] Radial stiffness is determined from tensile stiffness measured in any in-plane axis from testing in accordance with ASTM D6637-01.