

TE-BXR30PP

BI-AXIAL POLYPROPYLENE GEOGRID



Titan's TE-BXR is a large aperture (LA) bi-axial polypropylene (PP) geogrid. It is manufactured using a punching and drawing process whereby the polypropylene sheet is stretched in two directions, machine (longitudinal) and cross-machine (transverse). The result is a monolithic and isotropic geogrid with thick and wide ribs, thick integral nodes, and uniform square apertures. The ribs have a high degree of molecular orientation continuing in part through the mass of the integral node. Engineered to be mechanically and chemically stable in aggressive soil environments, TE-BXR's geometry allows for strong mechanical interlock with larger fill particles and feature high tensile stiffness at low strains and resist construction damage, environmental exposure and formulated to resist UV degradation. It is also not susceptible to hydrolysis, environmental stress cracking and micro-organism attack. This product provides an ideal solution for soil stabilization, railway ballast reinforcement and other highway challenges.

TESTED PROPERTY	TEST METHOD	UNIT ENGLISH (METRIC)	VALUE ENGLISH (METRIC)	
			MD	XD
Carbon Black Content	ASTM D 4218	%	2	
Ultimate Tensile Strength ⁽¹⁾	ASTM D 6637	lbs/ft (kN/m)	2,125 (31)	2,125 (31)
Tensile Strength at 2% Strain ⁽¹⁾	ASTM D 6637	lbs/ft (kN/m)	822 (12)	822 (12)
Tensile Strength at 5% Strain ⁽¹⁾	ASTM D 6637	lbs/ft (kN/m)	1,508 (22)	1,508 (22)
Junction Efficiency ^{(2) (3)}	GRI-GG ₂ ASTM D 7737	%	>95	>95
Flexural Rigidity ⁽¹⁾	ASTM D 7748	mg-cm	2,000,000	
Aperture Stability ^{(2) (4)}	US. COE	m-N/deg	0.75	
Minimum Rib Thickness	Callipered	inch (mm)	0.08 (2.1)	0.05 (1.5)
Aperture Size ^{(2) (5)}	Nominal	inch (mm)	2.16 (55)	2.16 (55)
Mass/Unit Area ⁽²⁾	ASTM D 5261	oz/yd ² (g/m ²)	10.8 (360)	
TYPICAL ROLL DIMENSIONS				
Roll Width	Minimum	ft (m)	12.95 (3.95)	
Roll Length ⁽⁶⁾	Minimum	ft (m)	164.04 (50)	

Notes:

- (1) Minimum Average Roll Values (MARV) – Calculated as (mean minus 2x standard deviation)
- (2) Average
- (3) Junction efficiency is defined as junction strength divided by multi-rib strength
- (4) Resistance to in plane rotational movement measure at an applied moment = 2m-N (20kg-cm) in accordance with US Army Corps of Engineers methodology for the measurement of torsional rigidity.
- (5) Aperture tolerance: within ± 10% coefficient of variance
- (6) Custom Length orders can be accommodated.

Titan Environmental warrants that the geogrid furnished hereunder shall conform to the specification stated herein. Any other warranty including merchantability and fitness for a particular purpose are hereby excluded. If the geogrid does not meet the specification on this page and is notified prior to installation Titan Environmental will replace the geogrid at no additional cost to the customer. Titan Environmental is not responsible for any loss or damage incurred during transit and storage after leaving the manufacturing site. This product specification supersedes all prior specifications for the product described above and is not applicable to any products shipped prior to November 14, 2019.

TITAN ENVIRONMENTAL CONTAINMENT

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(Rev. March 2020)

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