MINE-SHIELD GRID™ RIB24

MINING GRID WITH FIRE-RETARDANT ADDITIVES

TITAN
BUILD YOUR LEGEND

Mine-Shield Grid™ Rib24 is a virgin polypropylene (PP) bi-axial geogrid with a special formulated fire-retardant polymer, designed for underground mine and tunneling applications. Manufactured using a unique punching and drawing process this geogrid is bi-directional oriented, monolithic, and isotropic with integral nodes, and thick, wide ribs that feature a high degree of molecular orientation continuing in part through the mass of the integral node.
Mine-Shield Grid™ Rib24 is engineered to be mechanically and chemically stable in aggressive soil environments. It is not susceptible to hydrolysis, environmental stress cracking and micro-organisms attack and is formulated to resist ultra-violet light degradation.

TESTED PROPERTY	TEST METHOD	UNIT ENGLISH (METRIC)	VALUE ENGLISH (METRIC)	
			MD	XD
Ultimate Tensile Strength [1]	ASTM D 6637	lbs/ft (kN/m)	1,645 (24.0)	1,645 (24.0)
Tensile Strength at 2% Strain [1]	ASTM D 6637	lbs/ft (kN/m)	720 (10.5)	720 (10.5)
Seacant Modulus at 5% Strain [1]	ASTM D 6637	lbs/ft (kN/m)	26,868 (10.5)	26,868 (10.5)
STRUCTURAL PROPERTIES				
Junction Strength [2] [4]	GR1-GG_2 ASTM D 7737	%	>95	
Flexural Rigidity [1] [3]	ASTM D 7748	mg-cam	1,000,000	
Aperture Stability [2] [5]	US. COE	m-N/deg	0.65	
FIRE-RETARDANT PROPERTIES				
Maximum Flame Propogation	ASTP - 5011	m	1.2	
Average Duration of Burning for Test Set	ASTP - 5011	minute	1.0 (max)	
Maximum Duration of Burning for Single Test	ASTP - 5011	minute	2.0	
PHYSICAL PROPERTIES				
Minimum Rib Thickness	Callipered	mm (inch)	1.7 (0.06)	1.3 (0.05)
Aperture Size [2] [5]	Nominal	mm (inch)	60.0 (2.36)	60.0 (2.36)
Mass/Unit Area [2]	ASTM D 5261	g/m² (oz/yd²)	280 (8.4)	
Roll Width	Minimum	m (ft)	2.0 (6.56) 3.95 (12.95)	
Roll Length [6]	Minimum	m (ft)	100.0 (328.08) 50.0 (164.04)	

Notes:
(1) Minimum Average Roll Values (MARV) Values- 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 measured at an applied Moment = 20kg-cm (2m-N) 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 Containment

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