

ESBX12 PRODUCT DATA SHEET

Our ESBX12 geogrid is manufactured using polypropylene that is extruded, punched and drawn forming a biaxial oriented grid with enhanced tensile properties. Our ESBX12 geogrid is resistant to construction damage and naturally encountered chemicals, alkalis, and acids. Our ESBX12 geogrid provides Positive Mechanical Interlock as its Load Transfer Mechanism with primary applications being Base Reinforcement and Subgrade Improvement.

Properties	Units	MD Values ¹	XMD Values ¹
INDEX PROPERTIES			
Aperture Dimensions ²	in (mm)	1.0 (25)	1.3 (33)
Minimum Rib Thickness ²	in (mm)	0.05 (1.27)	0.05 (1.27)
Tensile Strength @ 2% ³	lb/ft (kN/m)	410 (6.0)	620 (9.0)
Tensile Strength @ 5% ³	lb/ft (kN/m)	810 (11.8)	1340 (19.6)
Tensile Strength Ultimate ³	lb/ft (kN/m)	1310 (19.2)	1970 (28.8)
STRUCTURAL INTEGRITY			
Junction Efficiency ⁴	%	93	
Flexural Stiffness ⁵	mg-cm	750000	
Aperture Stability ⁶	m-N/deg	0.65	
DURABILITY			
Resistance to Installation Damage ⁷	%SC / %SW / %GP	95 / 93 / 90	
Resistance to Long Term Degradation ⁸	%	100	
Resistance to UV Degradation ⁹	%	100	
PACKAGING DETAILS ¹			
Roll Width	ft (m)	12.5 (3.81)	
Roll Length	ft (m)	246 (75)	
Roll Area	yd² (m²)	341.7 (285.7)	
Roll Weight	lbs (kg)	197 (89.4)	

NOTE

¹ Unless indicated otherwise, values shown are minimum average roll values determined in accordance with ASTM D4759-02

² Nominal dimensions

³ Determined in accordance with ASTM D6637-10 Method A

⁴ Load transfer capability determined in accordance with ASTM D7737-11

⁵ Resistance to bending force in accordance with ASTM D7748/D7748M-14

⁶ Resistance to in-plane rotational movement measured in accordance with ASTM D7864/D7864M-15

⁷ Resistance to load capacity or structural integrity when subjected to mechanical installation stress in clayey sand (SC), well graded sand (SW), and crushed stone classified as poorly graded gravel (GP); the geogrid shall be sampled in accordance with ASTM D5818 and load capacity shall be determined in accordance with ASTM D6637

⁸ Resistance to loss of load capacity or structural integrity when subjected to chemically aggressive environments in accordance with EPA 9090 immersion testing

⁹ Resistance to loss of load capacity or structural integrity when subjected to 500 hours of ultraviolet light and aggressive weathering in accordance with ASTM D4455-05

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