

Product Specification - Biaxial Geogrid TYPE4A

Product Type: Integrally Formed Biaxial Geogrid
Polymer: Polypropylene

Product Properties

Index Properties	Units	MD Values ¹	XMD Values ¹
▪ Aperture Dimensions ²	mm (in)	33 (1.3)	33 (1.3)
▪ Minimum Rib Thickness ²	mm (in)	0.76 (0.03)	0.76 (0.03)
▪ Tensile Strength @ 2 % Strain ³	kN/m (lb/ft)	4.0 (270)	5.5 (380)
▪ Tensile Strength @ 5% Strain ³	kN/m (lb/ft)	8.0 (550)	10.5 (720)
▪ Ultimate Tensile Strength ³	kN/m (lb/ft)	12.8 (880)	13.5 (920)
Structural Integrity			
▪ Junction Efficiency ⁴	%	93	
▪ Flexural Stiffness ⁵	mg-cm	250,000	
▪ Aperture Stability ⁶	m-N/deg	0.28	
Durability			
▪ Resistance to Installation Damage ⁷	%SC / %SW / %GP	90 / 83 / 70	
▪ Resistance to Long Term Degradation ⁸	%	100	
▪ Resistance to UV Degradation ⁹	%	100	

Dimensions and Delivery

The biaxial geogrid shall be delivered to the jobsite in roll form with each roll individually identified and nominally measuring 3.0 meters (9.8 feet) or 4.0 meters (13.1 feet) in width and 75.0 meters (246 feet) in length. A typical truckload quantity is 185 to 250 rolls.

Notes

1. Unless indicated otherwise, values shown are minimum average roll values determined in accordance with ASTM D4759-02. Brief descriptions of test procedures are given in the following notes.
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 determined in accordance with ASTM D7748-12, using specimens of width two ribs wide, with transverse ribs cut flush with exterior edges of longitudinal ribs, and of length sufficiently long to enable measurement of the overhang dimension.
6. Resistance to in-plane rotational movement measured by applying a 20 kg-cm (2 m-N) moment to the central junction of a 9 inch x 9 inch specimen restrained at its perimeter in accordance with GRI GG9.
7. Resistance to loss of 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 D4355-05.

The manufacturer warrants that when shipped from the manufacturing facility, 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 specifications on this page and the manufacturer is notified within 60 days of sale and prior to installation, the manufacturer will replace the geogrid at no cost to the customer.

The geogrid specified herein has not been tested, calibrated, or validated in relation to any design methodology for either unpaved roads or flexible pavements.

This product specification supersedes all prior specifications for the product described above and is not applicable to any products shipped prior to January 1, 2015. The manufacturer reserves the right to alter or modify products and descriptions without prior notice.