



Product Specification - TriAx™ TX140 Geogrid

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General

- The geogrid is manufactured from a punched polypropylene sheet, which is then oriented in three substantially equilateral directions so that the resulting ribs shall have a high degree of molecular orientation, which continues at least in part through the mass of the integral node.
- The properties contributing to the performance of a mechanically stabilized layer include the following:

Tensar TriAx™ Geogrid



Index Properties	Longitudinal	Diagonal	Transverse	General
▪ Rib pitch ⁽²⁾ , mm (in)	40 (1.60)	40 (1.60)	–	
▪ Mid-rib depth ⁽²⁾ , mm (in)	–	1.2 (0.05)	1.2 (0.05)	
▪ Mid-rib width ⁽²⁾ , mm (in)	–	1.1 (0.04)	1.1 (0.04)	
▪ Nodal thickness ⁽²⁾ , mm (in)				3.1 (0.12)
▪ Rib shape				rectangular
▪ Aperture shape				triangular

Structural Integrity

▪ Junction efficiency ⁽³⁾ , %				93
▪ Aperture stability ⁽⁴⁾ , kg-cm/deg @ 5.0kg-cm				3.0
▪ Radial stiffness at low strain ⁽⁵⁾ , kN/m @ 0.5% strain (lb/ft @ 0.5% strain)				225 (15,430)

Durability

▪ Resistance to chemical degradation ⁽⁶⁾				100%
▪ Resistance to ultra-violet light and weathering ⁽⁷⁾				100%

Dimensions and Delivery

The TX geogrid shall be delivered to the jobsite in roll form with each roll individually identified and nominally measuring 3.8 meters (12.5 feet) and/or 4.0 meters (13.1 feet) in width and 75 meters (246 feet) in length.

Notes

- 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.
- Nominal dimensions.
- Load transfer capability determined in accordance with GRI-GG2-87 and GRI-GG1-87 and expressed as a percentage of ultimate tensile strength.
- In-plane torsional 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).
- Radial stiffness is determined from tensile stiffness measured in any in-plane axis from testing in accordance with ASTM D6637-01.
- Resistance to loss of load capacity or structural integrity when subjected to chemically aggressive environments in accordance with EPA 9090 immersion testing.
- 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.

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