

## **Product Specification - TriAx® TX120 Geogrid**

TXDOT DMS 6240 Type 2

Tensar International Corporation reserves the right to change its product specifications at any time. It is the responsibility of the person specifying the use of this product and of the purchaser to ensure that product specifications relied upon for design or procurement purposes are current and that the product is suitable for its intended use in each instance.

## General

- 1. 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:



Index Properties	Longitudinal	Diagonal	General
Rib pitch (2), mm (in)	33 (1.30)	33 (1.30)	
<ul><li>Rib shape</li></ul>			Rectangular
<ul><li>Percent Open Area (%)</li></ul>			80
<ul> <li>Rib Thickness <sup>(2)</sup>, mm (in)</li> </ul>	1.27 (0.05)	1.15 (0.045)	
<ul> <li>Junction Thickness (2), mm (in)</li> </ul>			2.54 (0.10)
<ul> <li>Aperture shape</li> </ul>			Triangular
<ul><li>Ribs per node</li></ul>			6
Structural Integrity			
<ul> <li>Junction efficiency <sup>(3)</sup>, %</li> </ul>			90
<ul> <li>Isotropic Stiffness Ratio (4)</li> </ul>			0.6
<ul> <li>Tensile modulus <sup>(5)</sup>, N/m @ 2% strain</li> </ul>			175,500
(lb/ft@2% strain)			(12,021)
Durability			
Resistance to chemical degradation (6)			100%
<ul> <li>Resistance to ultra-violet light and weathering<sup>(7)</sup></li> </ul>			70%

## **Dimensions and Delivery**

The TX geogrid shall be delivered to the jobsite in roll form with each roll individually identified and nominally measuring 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. Brief descriptions of test procedures are given in the following notes.
- 2. Nominal dimensions.
- 3. Load transfer capability determined in accordance with ASTM D6637 and ASTM D7737 and expressed as a percentage of ultimate tensile strength.
- The ratio between the minimum and maximum observed values of radial stiffness at 0.5% strain, measured on rib and midway between rib directions. 4.
- 5. Tensile modulus measured in any rib direction from testing in accordance with ASTM D6637.
- 6. 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. 7.