

# Product Specification - FilterGrid™ FG7

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FilterGrid™ is a composite geosynthetic consisting of a nonwoven geotextile bonded to Tensar TriAx geogrid. This product combines the most advanced TriAx geogrid technology with the added functionality of a geotextile for applications where site conditions require additional filtration and/or separation.

# Tensar TriAx® Geogrid

### General

- 1. The needle punched nonwoven geotextile (nominal 6 oz/sy) is thermally bonded to the geogrid and is manufactured at a NTPEP audited facility.
- 2. 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.
- 3. The properties contributing to the performance of a mechanically stabilized layer include the following:

Index Properties¹ - Geogrid	Longitudinal	Diagonal	Transverse	General
Rib pitch <sup>(2)</sup> , mm (in)	40 (1.60)	40 (1.60)		
<ul> <li>Mid-rib depth<sup>(2)</sup>, mm (in)</li> </ul>	-	2.0 (0.08)	1.6 (0.06)	
<ul> <li>Mid-rib width<sup>(2)</sup>, mm (in)</li> </ul>	-	1.0 (0.04)	1.3 (0.05)	
<ul><li>Rib shape</li></ul>				Rectangular
<ul><li>Aperture shape</li></ul>				Triangular

Index Properties - Geotextile	Test Method	English (MARV <sup>2</sup> )	Metric (MARV²)
<ul> <li>Grab Tensile Strength</li> </ul>	ASTM D 4632	160lbs.	0.711 kN
<ul><li>Grab Elongation</li></ul>	ASTM D 4632	50%	50%
<ul><li>Trapezoid Tear Strength</li></ul>	ASTM D 4533	60 lbs.	0.267 kN
<ul> <li>CBR Puncture Resistance</li> </ul>	ASTM D 6241	410 lbs.	1.823 kN
<ul><li>Permittivity</li></ul>	ASTM D 4491	1.5 sec <sup>-1</sup>	1.5 sec <sup>-1</sup>
<ul><li>Water Flow</li></ul>	ASTM D 4491	110 gmp/ft <sup>2</sup>	4480 l/min/m <sup>2</sup>
<ul><li>Apparent Opening Size (AOS)</li></ul>	ASTM D 4751	70 Std. U.S. Sieve	0.212 mm
<ul><li>UV Resistance</li></ul>	ASTM D 4355	70%/500 hrs.	70%/500 hrs.

## **Dimensions and Delivery**

The FilterGrid™ shall be delivered to the jobsite in roll form with each roll individually identified. Rolls are shipped with nominal measurements: Equal to 4.0 meters (13.1 feet) in width by 50 meters (164 feet) in length. The width of the attached geotextile is 3.81 meters (12.5 feet). All Index properties are measured prior to bonding.

# 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.

**Tensar International Corporation** 

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