Product Specification – FilterGrid™ FG60

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.

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.

General

- 1. The needle punched nonwoven geotextile $(170 \text{ g/m}^2 \text{ [5 osy]})^2$ is thermally bonded to the geogrid.
- 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:

Product Properties - Geogrid

Index Properties ¹	Longitudinal/ Transverse	Diagonal	General		
 Rib pitch⁽²⁾, mm (in) 	40 (1.60)	40 (1.60)			
 Mid-rib depth⁽²⁾, mm (in) 	1.4 (0.06)	1.6 (0.06)			
 Mid-rib width⁽²⁾, mm (in) 	1.2 (0.05)	1.0 (0.04)			
 Rib shape 			Rectangular		
Aperture shape			Triangular		
Structural Integrity					
 Junction efficiency⁽³⁾, % 			93		
Isotropic Stiffness Ratio ⁽⁴⁾			0.6		
 Radial stiffness at low strain⁽⁵⁾, kN/m@0.5% strain 			300		
(lb/ft@0.5% strain)			(20,580)		
Durability					
 Resistance to chemical degradation⁽⁶⁾ 			100%		
 Resistance to ultra-violet light and weathering⁽⁷⁾ 		70%			
Product Properties - Geotextile					
Index Properties	Uni	ts	MD Values ¹	XMD Values ¹	
 CBR Puncture Strength (ASTM D6241) 	N (It	of)	1500 (337)		

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 Trapezoidal Tear (ASTM D4533) 		N (lbf)	230 (51.7)	230 (51.7)
 Grab Tensile Strength (ASTM D4 	632)	N (lbf)	600 (135)	600 (135)
 Grab Tensile Elongation (ASTM I 	04632)	%	>50	>50
 Apparent Opening Size, AOS (AS 	TM D4751)	μm (US Sieve)	70-150 (100-200)	
 Permeability (ASTM D4491) 		cm/sec (in/sec)	0.11 (0.04)	

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 (13.1feet) in width by 50 meters (164 feet) in length.

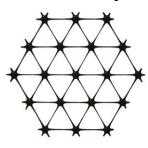
Notes

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. All index properties are measured prior to bonding.

2. Nominal dimensions.

3. Load transfer capability determined in accordance with ASTM D6637-10 and ASTM D7737-11 and expressed as a percentage of ultimate tensile strength.

Tensar TriAx® Geogrid



- 4. The ratio between the minimum and maximum observed values of radial stiffness at 0.5% strain, measured on rib and midway between rib directions.
- 5. Radial stiffness is determined from tensile stiffness measured in any in-plane axis from testing in accordance with ASTM D6637-10.
- 6. Resistance to loss of load capacity or structural integrity when subjected to chemically aggressive environments in accordance with EPA 9090 immersion testing.
- 7. 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.

Tensar International Corporation

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