



Synteen Technical Fabrics, Inc.



**SYNTEEN TF 100 TYPE 1 GEOGRID  
BASE COURSE REINFORCEMENT AND SUBGRADE IMPROVEMENT**

1. The geogrid is composed of high molecular weight, high-tenacity multifilament polymer blends, woven into a stable network placed under tension.
2. The properties contributing to the performance of a mechanically stabilized layer are demonstrated as follows:

**INDEX PROPERTIES<sup>(1)</sup>**

Aperture Size <sup>(2)</sup>	1.0" x 1.0"
Aperture Shape	Rectangular
Rib Shape	Rectangular
Nodal Thickness, mm (in) <sup>(2)</sup>	1.55 (.05)

**STRUCTURAL INTEGRITY**

Junction Efficiency, % <sup>(3)</sup>	MD - 100	XMD-100
Aperture Stability, kg-cm/deg@5.0kg-cm <sup>(4)</sup>	4.8	
Min. Radial Stiffness at low strain <sup>(5)</sup> kN/m@0.5% strain	1,810	124,000lbs/ft
Max. Radial Stiffness at low strain <sup>(5)</sup> kN/m @.5% strain	2,598	178,000lbs/ft

**DURABILITY**

Resistance to Chemical Degradation <sup>(6)</sup>	100%
Resistance to Ultra-Violet Light <sup>(7)</sup>	84%

**Dimensions and Delivery**

Roll sizes are 12' x 150', 15' x 150' and 17' x 150'. Each roll is individually wrapped and identified with roll and lot numbers.

**Notes**

1. Unless otherwise indicated, values shown are minimum average roll values determined in accordance with ASTM D4759-02.
2. Nominal dimensions.
3. Efficiency calculated pursuant to FHWA Sum of the Junctions and expressed as % of ultimate tensile strength.
4. 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.
5. Radial Stiffness is determined from tensile stiffness measured in any in-plane-axis in conjunction with ASTM D 6637-01.
6. Inert to biological degradation and resistant to naturally encountered chemicals, alkalis and acids.
7. Resistance to loss of load capacity when subjected to 500 hours of UV light in accordance with ASTM D4355-05. All rolls are individually wrapped in UV protected wraps to insure minimal exposure.

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