GSE TenFlow 8.9 mm Geocomposite

GSE TenFlow geocomposite consists of an 8.9 mm thick GSE TenFlow geonet heat-laminated on both sides with a GSE nonwoven needle-punched geotextile. TenFlow 8.9 is a T-shape tri-axial geonet comprised of HDPE strands forming a three dimensional structure to provide planar water flow. The geotextile is available in mass per unit area range of 200 g/m² to 540 g/m². TenFlow 8.9 geocomposite provides high transmissivity under high and low loads.

Product Specifications

<table>
<thead>
<tr>
<th>Tested Property</th>
<th>Test Method</th>
<th>Frequency</th>
<th>Minimum Average Roll Value(1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geocomposite(6)</td>
<td></td>
<td></td>
<td>200 g/m² to 270 g/m²</td>
</tr>
<tr>
<td>Transmissivity(2), m²/sec at gradient=0.1</td>
<td>ASTM D 4716</td>
<td>1/50,000 m²</td>
<td>7x10⁻⁴ to 7x10⁻³</td>
</tr>
<tr>
<td>Transmissivity(2), m²/sec at gradient=0.33</td>
<td>ASTM D 4716</td>
<td>1/50,000 m²</td>
<td>3.5x10⁻³ to 3.5x10⁻²</td>
</tr>
<tr>
<td>Ply Adhesion, g/cm</td>
<td>ASTM D 7005</td>
<td>1/4,600 m²</td>
<td>89 to 89</td>
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</tbody>
</table>

Geonet Core(3) – GSE TenFlow

- Geonet Core Thickness, mm: ASTM D 5199 | 1/4,600 m² | 8.9 to 8.9
- Density, g/cm³: ASTM D 1505 | 1/4,600 m² | 94.0 to 94.9
- Carbon Black Content, %: ASTM D 4218 | 1/4,600 m² | 2.0 to 2.0
- Creep Reduction Factor(4): GRI-GC8 per formulation | 1.05 to 1.05

Geotextile(1,3)

- Mass per Unit Area, g/m²: ASTM D 5261 | 1/8,300 m² | 200 to 270
- Grab Tensile Strength, N: ASTM D 4632 | 1/8,300 m² | 710 to 975
- Grab Elongation, %: ASTM D 4632 | 1/8,300 m² | 50 to 50
- CBR Puncture Strength, N: ASTM D 6241 | 1/50,000 m² | 1,936 to 2,557
- Trapezoidal Tear Strength, N: ASTM D 4435 | 1/8,300 m² | 290 to 395
- AOS, US sieve(1) (mm): ASTM D 4751 | 1/50,000 m² | 0.212 to 0.180
- Permittivity, (sec⁻¹): ASTM D 4491 | 1/50,000 m² | 1.5 to 1.3
- Water Flow Rate, lpm/m²: ASTM D 4491 | 1/50,000 m² | 4,480 to 3,865
- UV Resistance, % Retained: ASTM D 4355 (after 500 hours) | per formulation | 70 to 70

NOMINAL ROLL DIMENSIONS(5)

- Roll Width, m: 3.8
- Roll Length, m: 45.7
- Roll Area, m²: 174

NOTES:

- (1) All geotextile properties are minimum average roll values except AOS which is maximum average roll value and UV resistance is typical value. Geonet core thickness is minimum average value.
- (2) Normal load of 48 kPa, boundary condition: plate/sand/geocomposite/geomembrane/plate, water at 21°C for 1 hour.
- (3) Component properties prior to lamination.
- (4) 10,000 hour creep test under 100 kPa at 20°C temperature.
- (5) Roll widths and lengths have a tolerance of ±1%
- (6) The Tenflow geonet has a circular aperture side and a cusped side. The side with circular apertures should be placed against the soil while the cusped side should be placed against the geomembrane.

GSE is a leading manufacturer and marketer of geosynthetic lining products and services. We've built a reputation of reliability through our dedication to providing consistency of product, price and protection to our global customers.

Our commitment to innovation, our focus on quality and our industry expertise allow us the flexibility to collaborate with our clients to develop a custom, purpose-fit solution.

For more information on this product and others, please visit us at GSEworld.com, call 800.435.2008 or contact your local sales office.