



The Pioneer Of Geosynthetics

S I N C E 1 9 7 2

GSE FabriNet TRxH Geocomposites

GSE FabriNet TRxH (Tri-axial High-flow), a member of the GSE Advanced Drainage Geocomposite family, is manufactured with a HyperNet TRxH geonet core head-bonded to single-sided or double-sided nonwoven geotextile filtration media. FabriNet TRxH achieves high in-situ transmissivity from optimally oriented flow channels that maintain porosity because of the intrusion- and creep-resistant nature of the tri-axial geonet structure. FabriNet TRxH provides exceptional high flow performance over a broad range of conditions, such as surface water collection and removal systems, gas venting as well as landfill liner system drainage applications. Please contact GSE for 100-hour performance transmissivity value for use in design.

Product Specifications

TESTED PROPERTY	TEST METHOD	FREQUENCY	MINIMUM AVERAGE VALUE ⁽¹⁾		
Geocomposite			6 oz/yd ²	8 oz/yd ²	10 oz/yd ²
Transmissivity ⁽²⁾ , gal/min/ft (m ² /sec) Double-Sided Composite Single-Sided Composite	ASTM D 4716	1/540,000 ft ²	19.2 (4 x 10 ⁻³) 24.0 (5 x 10 ⁻³)	19.2 (4 x 10 ⁻³) 24.0 (5 x 10 ⁻³)	19.2 (4 x 10 ⁻³) 24.0 (5 x 10 ⁻³)
Ply Adhesion, lb/in (g/cm)	ASTM D 7005	1/50,000 ft ²	1.0 (178)	1.0 (178)	1.0 (178)
Geonet Core ⁽³⁾ – GSE HyperNet TRxH					
Transmissivity ⁽²⁾ , gal/min/ft (m ² /sec)	ASTM D 4716		48.0 (1.0 x 10 ⁻²)	48.0 (1.0 x 10 ⁻²)	48.0 (1.0 x 10 ⁻²)
Density, g/cm ³	ASTM D 1505	1/50,000 ft ²	0.94	0.94	0.94
Tensile Strength (MD), lb/in (N/mm)	ASTM D 5035/7179	1/50,000 ft ²	80 (14.2)	80 (14.2)	80 (14.2)
Carbon Black Content, %	ASTM D 1603*/4218	1/50,000 ft ²	2.0	2.0	2.0
Geotextile ^(3,4)					
Mass per Unit Area, oz/yd ² (g/m ²)	ASTM D 5261	1/90,000 ft ²	6 (200)	8 (270)	10 (335)
Grab Tensile, lb (N)	ASTM D 4632	1/90,000 ft ²	160 (710)	220 (975)	260 (1,155)
Puncture Strength, lb (N)	ASTM D 4833	1/90,000 ft ²	90 (395)	120 (525)	165 (725)
AOS, US Sieve (mm)	ASTM D 4751	1/540,000 ft ²	70 (0.212)	80 (0.180)	100 (0.150)
Permittivity, (sec ⁻²)	ASTM D 4491	1/540,000 ft ²	1.5	1.3	1.0
Flow Rate, gpm/ft ² (lpm/m ²)	ASTM D 4491	1/540,000 ft ²	110 (4,480)	95 (3,865)	75 (3,050)
UV Resistance, % Retained	ASTM D 4355 (after 500 hours)	once per formulation	70	70	70
NOMINAL ROLL DIMENSIONS					
Geonet Core Thickness, mil (mm)	ASTM D 5199	1/50,000 ft ²	340 (8.6)	340 (8.6)	340 (8.6)
Roll Width ⁽⁵⁾ , ft (m)			15 (4.5)	15 (4.5)	15 (4.5)
Roll Length ⁽⁵⁾ , ft (m)	Double-Sided Composite Single-Sided Composite		160 (48.8) 170 (51.8)	150 (45.7) 170 (51.8)	140 (42.7) 160 (51.8)
Roll Area, ft ² (m ²)	Double-Sided Composite Single-Sided Composite		2,400 (223) 2,550 (237)	2,250 (209) 2,550 (237)	2,100 (193) 2,400 (223)

NOTES:

- ⁽¹⁾ AOS in mm is a maximum value
- ⁽²⁾ Gradient of 0.1, normal load of 1,000 psf, water at 70° F between steel plates for 15 minutes. Contact GSE for performance transmissivity value for use in design.
- ⁽³⁾ Component properties prior to lamination.
- ⁽⁴⁾ Refer to geotextile product data sheet for additional specifications.
- ⁽⁵⁾ Roll widths and lengths have a tolerance of ±1%.
- *Modified.