The Pioneer Of Geosynthetics
S I N C E 1 9 7 2

Product Data Sheet

GSE FabriNet TRx Geocomposite

GSE FabriNet TRx high flow geocomposite is produced with a unique one step process that coexrudes creep resistant columns to an intrusion resistant roof. The resulting triaxial geonet is then laminated to a nonwoven geotextile filtration media. This product achieves high in-situ transmissivity from optimally oriented flow channels that maintain porosity because of the intrusion and creep resistant nature of the triaxial structure. The geocomposite provides continuous performance over a broad range of conditions. It is also well suited for use in surface water collection and removal systems, gas venting, and landfill liner system drainage applications.

Product Specifications

TESTED PROPERTY	TEST METHOD	FREQUENCY	MINIMUM AVERAGE VALUE		
Geocomposite			**4 oz/yd²**	**6 oz/yd²**	**8 oz/yd²**
Transmissivity[1], gal/min/ft (m²/sec)	ASTM D 4716	1/540,000 ft²			
Double-Sided Composite			12.1 (2.5 x10^{-3})	12.1 (2.5 x10^{-3})	10.1 (2.2 x 10^{-3})
Single-Sided Composite			15.7 (3.2 x 10^{-3})	15.7 (3.2 x 10^{-3})	13.8 (2.9 x 10^{-3})
Ply Adhesion, lb/in (g/cm)	ASTM D 7005	1/50,000 ft²	1.0 (178)	1.0 (178)	1.0 (178)
Geonet Core - GSE HyperNet TRx					
Transmissivity[2], gal/min/ft (m²/sec)	ASTM D 4716		43.5 (9.0x 10^{-3})	43.5 (9.0x 10^{-3})	43.5 (9.0x 10^{-3})
Density, g/cm³	ASTM D 1505	1/50,000 ft²	>0.94	>0.94	>0.94
Tensile Strength[3], lb/in (N/mm)	ASTM D 5035/7179	1/50,000 ft²	75 (13.3)	75 (13.3)	75 (13.3)
Carbon Black Content, %	ASTM D 1603*/4218	1/50,000 ft²	>2.0	>2.0	>2.0
Geotextile (prior to lamination)[4]					
Mass per Unit Area, oz/yd²(g/m²)	ASTM D 5261	1/90,000 ft²	4	6	8
Grab Tensile, lb (N)	ASTM D 4632	1/90,000 ft²	120 (530)	160 (710)	220 (975)
Puncture Strength, lb (N)	ASTM D 4833	1/90,000 ft²	60 (265)	90 (395)	120 (525)
AOS, US sieve (mm)	ASTM D 4751	1/540,000 ft²	70 (0.212)	70 (0.212)	80 (0.180)
Permittivity, (sec⁻¹)	ASTM D 4491	1/540,000 ft²	1.8	1.5	1.3
Flow Rate, gpm/ft² (lpm/m²)	ASTM D 4491	1/540,000 ft²	135 (5,495)	110 (4,480)	95 (3,865)
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 ft²	300 (7.6)	300 (7.6)	300 (7.6)
Roll Width[5], ft (m)			15 (4.5)	15 (4.5)	15 (4.5)
Roll Length[5], ft (m)	Double-Sided Composite		160 (48.8)	160 (48.8)	150 (45.7)
	Single-Sided Composite		180 (54.9)	170 (51.8)	170 (51.8)
Roll Area, ft² (m²)	Double-Sided Composite		2,400 (223)	2,400 (223)	2,250 (209)
	Single-Sided Composite		2,700 (251)	2,550 (237)	2,550 (237)

NOTES:

- [1]This is an index transmissivity value measured at stress = 1,000 psf; gradient = 0.1; time = 15 minutes; boundary conditions = plate/geocomposite/plate. Contact GSE for performance transmissivity value for use in design.
- [2]This is an index transmissivity value measured at stress = 1,000 psf; gradient = 0.1; time = 15 minutes; boundary conditions = plate/geonet/plate. Contact GSE for performance transmissivity value for use in design.
- [3]Tested in machine direction (MD).
- [4]All properties are minimum average values except AOS (mm) which is a maximum value and UV resistance which is a typical value.
- [5]Roll widths and lengths have a tolerance of ±1%.
- *Modified.

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