



The Pioneer Of Geosynthetics

S I N C E 1 9 7 2

GSE FabriNet HS Geocomposite

GSE FabriNet HS geocomposite consists of a 275 mil thick GSE HyperNet HS geonet heat-laminated on one or both sides with a GSE nonwoven needlepunched geotextile. The geotextile is available in mass per unit area range of 6 oz/yd² (200 g/m²) to 16 oz/yd² (540 g/m²). The geocomposite is designed and formulated to perform drainage function under a range of anticipated site loads, gradients and boundary conditions.

Product Specifications

TESTED PROPERTY	TEST METHOD	FREQUENCY	MINIMUM AVERAGE VALUE ⁽¹⁾		
			6 oz/yd ²	8 oz/yd ²	10 oz/yd ²
Geocomposite					
Transmissivity ⁽²⁾ , gal/min/ft (m ² /sec)	ASTM D 4716	1/540,000 ft ²			
Double-Sided Composite			3.4 (7 x 10 ⁻⁴)	3.4 (7 x 10 ⁻⁴)	2.4 (5 x 10 ⁻⁴)
Single-Sided Composite			9.6 (2 x 10 ⁻³)	9.6 (2 x 10 ⁻³)	7.2 (1.5 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 HS					
Transmissivity ⁽²⁾ , gal/min/ft (m ² /sec)	ASTM D 4716		28.98 (6 x 10 ⁻³)	28.98 (6 x 10 ⁻³)	28.98 (6 x 10 ⁻³)
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	65 (11.5)	65 (11.5)	65 (11.5)
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	275 (7)	275 (7)	275 (7)
Roll Width ⁽⁵⁾ , ft (m)			15 (4.5)	15 (4.5)	15 (4.5)
Roll Length ⁽⁵⁾ , ft (m)	Double-Sided Composite		212 (64.6)	200 (61.0)	190 (57.9)
	Single-Sided Composite		240 (73.2)	240 (73.2)	230 (70.1)
Roll Area, ft ² (m ²)	Double-Sided Composite		3,180 (295)	3,000 (279)	2,850 (265)
	Single-Sided Composite		3,600 (334)	3,600 (334)	3,450 (321)

NOTES:

- ⁽¹⁾AOS in mm is a maximum value.
- ⁽²⁾Gradient of 0.1, normal load of 10,000 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.