PRODUCT DATA SHEET

GSE PermaNet 330 mil Geocomposite

GSE PermaNet 330 mil geocomposite is manufactured with a GSE PermaNet geonet core heat-bonded on one or both sides with a nonwoven needlepunched geotextile. The round strand, creep resistant structure of this product ensures continuous flow performance and durability under rigorous environmental conditions and is ideal for extremely demanding applications.

AT THE CORE:
The product's structure provides superior performance under demanding conditions.

Product Specifications

Tested Property	Test Method	Frequency	Minimum Average Roll Value		
Geocomposite			6 oz/yd²	8 oz/yd²	10 oz/yd²
Transmissivity(2), gal/min/ft (m²/sec) Double-Sided Composite Single-Sided Composite	ASTM D 4716	1/540,000 ft²	 9.6 (2 x 10^{-3}) 12.5 (2.6 x 10^{-3})	 9.6 (2 x 10^{-3}) 12.5 (2.6 x 10^{-3})	 9.6 (2 x 10^{-3}) 12.5 (2.6 x 10^{-3})
Ply Adhesion, lb/in	ASTM D 7005	1/50,000 ft²	1.0	1.0	1.0
Geonet Core(1,3) – GSE PermaNet					
Geonet Core Thickness, mil	ASTM D 5199	1/50,000 ft²	330	330	330
Transmissivity(2), gal/min/ft (m²/sec)	ASTM D 4716	1/540,000 ft²	28.8 (6 x 10^{-3})	28.8 (6 x 10^{-3})	28.8 (6 x 10^{-3})
Compressive Strength, lb/ft²	ASTM D 6364	1/540,000 ft²	60,000	60,000	60,000
Creep Reduction Factor	ASTM D 7361	per formulation	1.3 @ 25,000 psf	1.3 @ 25,000 psf	1.3 @ 25,000 psf
Density, g/cm³	ASTM D 1505	1/50,000 ft²	0.94	0.94	0.94
Tensile Strength (MD), lb/in	ASTM D 7179	1/50,000 ft²	100	100	100
Carbon Black Content, %	ASTM D 4218	1/50,000 ft²	2.0	2.0	2.0
Geotextile(1,3)					
Mass per Unit Area, oz/yd²	ASTM D 5261	1/90,000 ft²	6	8	10
Grab Tensile, lb	ASTM D 4632	1/90,000 ft²	160	220	260
Grab Elongation	ASTM D 4632	1/90,000 ft²	50%	50%	50%
CBR Puncture Strength, lb	ASTM D 6241	1/540,000 ft²	435	575	725
Trapezoidal Tear Strength	ASTM D 4533	1/90,000 ft²	65	90	100
AOS, US Sieve, (mm)	ASTM D 4751	1/540,000 ft²	70 (0.212)	80 (0.180)	100 (0.150)
Permittivity, sec^{-1}	ASTM D 4491	1/540,000 ft²	1.5	1.3	1.0
Water Flow Rate, gpm/ft²	ASTM D 4491	1/540,000 ft²	110	95	75
UV Resistance, % Retained	ASTM D 4355 (after 500 hours)	per formulation	70	70	70
NOMINAL ROLL DIMENSIONS(4)					
Roll Width, ft			15	15	15
Roll Length, ft	Double-Sided Composite Single-Sided Composite		150 150	140 150	130 140
Roll Area, ft²	Double-Sided Composite Single-Sided Composite		2,250 2,250	2,100 2,250	1,950 2,100

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 nominal value.
- (2) Gradient of 0.1, normal load of 25,000 psf, water at 70° F between steel plates for 15 minutes. Contact GSE for performance transmissivity data for use in design.
- (3) Component properties prior to lamination.
- (4) Roll widths and lengths have a tolerance of ±1%.

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.

GSE ENVIRONMENTAL™

DURABILITY RUNS DEEP

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