Geocomposite – Biplanar Drainage

Product Data Sheet

Penteco GC300-06-SS

300 mil Geocomposite

6 oz textile (1 side)

- Drainage
- Erosion Control
- Leak Detection
- Gas Mitigation
- Protection

Geocomposites provide a controlled/ engineered drainage median for applications requiring water or gas mitigation. They are commonly used in geomembrane containment systems where groundwater/gas is present. Also, it can provide protection to the liner against subgrade imperfections, and allow for leaks to be detected through the sump collection system.

The geocomposite is composed of a geonet core and a laminated nonwoven geotextile. The geonet itself is composed of a 2-layer (biplanar) mesh which allows the liquid/gas to travel in any direction. The geotextile facing-side is typically installed against the subgrade to prevent soil fines from clogging the geonet.

GC300-06-SS			M.A.R.V	
Property	**Test Method**	**Frequency**	**Imperial**	**Metric**
Geocomposite				
Transmissivity	ASTM D-4716	1/540,000 ft² (1/50,000 m²)	3 x 10^{-3} m²/sec	14.5 gal/min/ft
Ply Adhesion Average	ASTM D-7005	1/50,000 ft² (1/4,600 m²)	1.0 lbs/in	178 g/cm
Geonet Component[1]				
Thickness (min.avg)	ASTM D-5199	1/50,000 ft² (1/4,600 m²)	300 mil	7.6 mm
Transmissivity	ASTM D-4716	1/540,000 ft² (1/50,000 m²)	38.6 gal/min/ft	8 x 10^{-3} m²/sec
Density (min.)	ASTM D-792	1/50,000 ft² (1/4,600 m²)	0.94 g/cm³	0.94 g/cm³
Peak Tensile Strength (MD)	ASTM D-7179	1/50,000 ft² (1/4,600 m²)	75 lbs/in	13.3 N/mm
Carbon Black Content	ASTM D-4218	1/50,000 ft² (1/4,600 m²)	2.0%	2.0%
Geotextile Component[1] (single-sided)				
Mass	ASTM D-5261	1/90,000 ft² (1/8,400 m²)	6 oz/yd²	203 g/m²
Grab Tensile Strength	ASTM D-4632	1/90,000 ft²	170 lbs	757 N
Grab Elongation	ASTM D-4632	1/90,000 ft²	50%	50%
CBR Puncture Strength	ASTM D-6241	1/540,000 ft² (1/50,000 m²)	435 lbs	1935 N
Trapezoidal Tear Strength	ASTM D-4533	1/90,000 ft²	65 lbs	289 N
Apparent Opening Size (max.)	ASTM D-4751	1/540,000 ft² (1/50,000 m²)	70 U.S Sieve max	0.212 mm
Permittivity	ASTM D-4491	1/540,000 ft² (1/50,000 m²)	1.5 sec^{-1}	1.5 sec^{-1}
Water Flow Rate	ASTM D-4491	1/540,000 ft² (1/50,000 m²)	110 gpm/ft²	4478 (l/min/m²)
UV Resistance	ASTM D-4355	% Retained after 500 hrs.	70%	70%
Dimensions				
Typical Roll Size	Measured		14.75 ft x 180 ft	4.50 m x 54.9 m
Area	Calculated		2655 ft²	247 m²

Notes:

(1) Component properties prior to lamination.
(2) Roll Lengths may vary depending on the manufacturer. All roll widths/lengths have a tolerance of ±1 %.
(3) Custom roll lengths can be ordered. Transportation cost might be affected.
(4) Penteco is a distributor for this product with manufacturing partners based out of Canada & USA.
(5) Manufacturer data sheet provided at time of purchase.

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