

Geocomposite – Biplanar Drainage

Product Data Sheet

Penteco GC250-10-DS 250 mil Geocomposite 10 oz textile (2 sides)

- ❖ **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.

GC250-10-DS			M.A.R.V	
Property	Test Method	Frequency	Imperial	Metric
Geocomposite				
Transmissivity	ASTM D-4716	1/540,000 ft ² (1/50,000 m ²)	3 x 10 ⁻⁴ m ² /sec	1.4 gal/min/ft
Ply Adhesion Average	ASTM D-7005	1/50,000 ft ² (1/4,600 m ²)	1.0 lbs/in	178 g/cm
Geonet Component¹				
Thickness (min.avg)	ASTM D-5199	1/50,000 ft ² (1/4,600 m ²)	250 mil	6.4 mm
Transmissivity	ASTM D-4716	1/540,000 ft ² (1/50,000 m ²)	14.5 gal/min/ft	3 x 10 ⁻³ m ² /sec
Density (min.)	ASTM D-792	1/50,000 ft ² (1/4,600 m ²)	0.94 g/cm ³	0.94 g/cm ³
Peak Tensile Strength (MD)	ASTM D-7179	1/50,000 ft ² (1/4,600 m ²)	55 lbs/in	9.6 N/mm
Carbon Black Content	ASTM D-4218	1/50,000 ft ² (1/4,600 m ²)	2.0%	2.0%
Geotextile Component¹ (double-sided)				
Mass	ASTM D-5261	1/90,000 ft ² (1/8,400 m ²)	10 oz/yd ²	339 g/m ²
Grab Tensile Strength	ASTM D-4632	1/90,000 ft ²	270 lbs	1200 N
Grab Elongation	ASTM D-4632	1/90,000 ft ²	50%	50%
CBR Puncture Strength	ASTM D-6241	1/540,000 ft ² (1/50,000 m ²)	725 lbs	3230 N
Trapezoidal Tear Strength	ASTM D-4533	1/90,000 ft ²	105 lbs	467 N
Apparent Opening Size (max.)	ASTM D-4751	1/540,000 ft ² (1/50,000 m ²)	100 U.S Sieve max	0.150 mm
Permittivity	ASTM D-4491	1/540,000 ft ² (1/50,000 m ²)	1.1 sec ⁻¹	1.1 sec ⁻¹
Water Flow Rate	ASTM D-4491	1/540,000 ft ² (1/50,000 m ²)	80 gpm/ft ²	3280 (l/min/m ²)
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 ft ²	247 m ²

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.

DISCLAIMER: The data above represents the manufacturer's laboratory testing of their product. It is the user's responsibility to determine the suitability of the products. Penteco is a distributor for these products through its manufacturing partners. Penteco will provide the manufacturers data sheet at the time of sale. There may be very slight variation, but overall, the data represents standard industry specifications. Penteco and manufacturing partners assume no liability, nor can they provide any warranty, without having additional information regarding the use of the products. The same goes for any infringement on patents - no permission can be granted without further disclosure.