

GSE BioDrain HP Geocomposite (Double-Sided)

GSE BioDrain HP consists of a GSE HyperNet geonet heat-laminated with a nonwoven geotextile on one side and with a high permittivity (HP) woven geotextile on the other side. The geotextile serves as a filter and separator, while the core provides liquid flow medium. The type of geotextile and thickness of the core can be varied depending on requirements of a project.



AT THE CORE:
BioDrain is used as a leachate distribution layer to disperse leachate uniformly over the waste system

Product Specifications

Tested Property	Test Method	Frequency	Minimum Average Roll Value ⁽¹⁾	
Geocomposite				
Transmissivity ⁽¹⁾ , gal/min/ft (m ² /sec)	ASTM D 4716	1/540,000 ft ²	0.48 (1 x 10 ⁻⁴)	
Ply Adhesion ⁽⁴⁾ , lb/in	ASTM D 7005	1/50,000 ft ²	0.5	
Geonet Core (Prior to lamination)				
Transmissivity ⁽¹⁾ , gal/min/ft (m ² /sec)	ASTM D 4716	1/540,000 ft ²	9.6 (2 x10 ⁻³)	
Density, g/cm ³	ASTM D 1505	1/50,000 ft ²	0.94	
Tensile Strength (MD), lb/in	ASTM D 5035/7179	1/50,000 ft ²	45	
Carbon Black Content, %	ASTM D 1603 ⁽⁵⁾ /4218	1/50,000 ft ²	2.0	
Geotextile (Prior to lamination)			Nonwoven	HP Woven
Mass per Unit Area, oz/ycd ²	ASTM D 5261	1/90,000 ft ²	6	N/A
Grab Tensile, lb	ASTM D 4632	1/90,000 ft ²	160	230 x 150
Puncture Strength, lb	ASTM D 4833	1/90,000 ft ²	90	100
AOS, US sieve (mm)	ASTM D 4751	1/540,000 ft ²	70 (0.212)	30 (0.542)
Permittivity, sec ⁻¹	ASTM D 4491	1/540,000 ft ²	1.5	0.5
Flow Rate, gpm/ft ²	ASTM D 4491	1/540,000 ft ²	110	36
UV Resistance, % retained	ASTM D 4355 (after 500 hours)	per formulation	70	85
NOMINAL ROLL DIMENSIONS				
Geonet Core Thickness, mil	ASTM D 5199	1/50,000 ft ²	200	
Roll Width ⁽²⁾ , ft			14.5	
Roll Length ⁽²⁾ , ft			230	
Roll Area, ft ²			3,335	

NOTES:

- ⁽¹⁾This is an index transmissivity value measured at stress = 10,000 psf; gradient = 0.1; between steel plates for 15 minutes. Contact GSE for performance transmissivity value for use in design.
- ⁽²⁾Roll widths and lengths have a tolerance of ±1%.
- ⁽³⁾All properties are minimum average values except AOS (mm) which is a maximum average roll value and UV resistance which is a typical value.
- ⁽⁴⁾Typical Value.
- ⁽⁵⁾Modified.

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.



[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.