PRODUCT DATA SHEET

GSE BioDrain HP Geocomposite (Double-Sided)

METRIC

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 geotextiles serve as filters and separators, while the geonet 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[2], m^2/sec	ASTM D 4716	1/50,000 m^2	1×10^{-4}
Geonet Core - HyperNet 5 mm			
Geonet Core Thickness, mm	ASTM D 5199	1/4,650 m^2	5 mm
Density, g/cm^3	ASTM D 1505	1/4,650 m^2	0.94
Tensile Strength (MD), N/mm	ASTM D 7179	1/4,650 m^2	7.9
Carbon Black Content, %	ASTM D 4218	1/4,650 m^2	2.0
Geotextile[1,3]- 200 g/m^2			
Mass per Unit Area, g/m^2	ASTM D 5261	1/8,365 m^2	200
Grab Tensile Strength, N	ASTM D 4632	1/8,365 m^2	710
Grab Elongation	ASTM D 4632	1/8,365 m^2	50%
CBR Puncture Strength, N	ASTM D 6241	1/50,000 m^2	1,936
Trapezoidal Tear Strength, N	ASTM D 4533	1/8,365 m^2	290
AOS, mm	ASTM D 4751	1/50,000 m^2	0.212
Permittivity, sec^{-1}	ASTM D 4491	1/50,000 m^2	1.5
Water Flow Rate, l/min/m^2	ASTM D 4491	1/50,000 m^2	4,480
UV Resistance, % retained	ASTM D 4355 (after 500 hours)	per formulation	70
Geotextile[1,3]- HP			
Grab Tensile Strength, N	ASTM D 4632	1/50,000 m^2	670
Puncture Strength, N	ASTM D 4833	1/16.750 m^2	445
AOS, (mm)	ASTM D 4751	1/16.750 m^2	0.595 mm
Permittivity, sec^{-1}	ASTM D 4491	1/16.750 m^2	0.5
Water Flow Rate, l/min/m^2	ASTM D 4491	1/16.750 m^2	1,463
UV Resistance, % retained	ASTM D 4355 (after 500 hours)	per formulation	85
NOMINAL ROLL DIMENSIONS[4]			
Roll Width, m			4.4
Roll Length, m			70.1
Roll Area, m^2			308.5

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]This is an index transmissivity value measured at stress = 480 kPa, water at 21 C gradient = 0.1; between steel plates for 15 minutes. Contact GSE for performance transmissivity value 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.

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