

GSE FabriNet ST-E

Three-layer, three-dimensional drainage geocomposite, consisting of a geonet core, resistant under load, heat-laminated on both sides with geotextiles. Geonet core: 100% HDPE (black) - Geotextile 100% Polypropylene (white) - 1a quality. The layers are heat-bonded by thermal lamination. The geocomposite is designed and formulated to perform drainage function under a range of anticipated site loads, gradients and boundary conditions.



AT THE CORE:
Multilayer,
multifunctional HDPE
geocomposite providing
increased durability for
drainage, filtration and
puncture protection.

Product Specifications

Tested Property	Test Method	Unit	Value(*)			
Geocomposite						
Product Type	---	---	B120		B200	
Tensile Strength MD (T _{max}) CMD (T _{max})	DIN EN ISO 10319	kN/m	22 17			
In-plane Flow Capacity (q _p); MD (rigid/rigid) i = 1 ^(a) at 20 kPa at 50 kPa at 100 kPa at 200 kPa	DIN EN ISO 12958	l/(m x s)	i = 1 1.1 1.0 0.9 0.6	i = 0.1 0.25 0.21 0.17 0.12	i = 1 0.9 0.8 0.65 0.3	i = 0.1 0.2 0.15 0.11 0.05
Ply Adhesion	DIN EN ISO 13426-2/B	N/m	100		100	
Geonet ^(b)						
Raw Material	---	---	High Density Polyethylene, black			
Density	DIN EN ISO 1183	g/cm ³	≥ 0.94			
Thickness at 20 kPa (d)	DIN EN ISO 9863-1	mm	5			
Geotextiles ^(b)						
Raw Material	---	---	Polypropylene, white			
Unit Weight (pA)	DIN EN ISO 9864	g/m ²	120	200		
Tensile Strength MD (T _{max}) CMD (T _{max})	DIN EN ISO 10319	kN/m	8 8	14 14		
Puncture Resistance (x - s) (F _p)	DIN EN ISO 12236	N	1,120	1,890		
Characteristic Opening Size (O ₉₀)	DIN EN ISO 12956	µm	100	60		
Water Permeability Velocity Index (V _{I50}) Flux normal to the Plane (q _n)	DIN EN ISO 11058	mm/s l/(m ² x s)	100 100	65 65		
Durability Characteristics						
Carbon Black Content ^(c)	ASTM D 4218	%	2.0 - 3.0			
Oxidative Induction Time (OIT) ^(c)	ASTM D 3895 (190°C; Pure O ₂ ; 1 atm)	min	100			
UV Resistance ^(d)	---	---	to be covered within 2 weeks			
Resistance to Oxidation at elevated Oxygen Pressure ^(c) Tensile Strength and Tensile Elongation - retained values after 14 days	EN ISO 13438 (Cl; pH 10; 80°C; 5 MPa)	%	no significant change of initial properties			
Roll Dimensions			Container Load		Truck Load	
			B120	B200	B120	B200
Roll Width (Geonet Core) (approx.) ^(e)		m	4.1	4.1	4.1	4.1
Roll Length (approx.) ^(e)		m	65	65	70	70
Roll Area (approx.)		m ²	266.5	266.5	287	287

NOTES:

- (*): All values - unless otherwise noted - are guiding values. Minimum values are within the 95% confidence interval.
- (**): Leaving a width of approx. 20 cm without heat-bonding at both edges in the MD / on both sides -enabling sufficient geonet overlapping during installation.
- (a): Test specimen with 300 x 300 mm.
- (b): Component properties prior to lamination.
- (c): Geonet properties.
- (d): Geotextile properties.
- (e): Roll width and length 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.



[DURABILITY RUNS DEEP] For more information on this product and others, please visit us at GSEworld.com, call 49.40.767420 or contact your local sales office.

