

GSE FabriNet HF-E

Two-layer, three-dimensional drainage geocomposite, consisting of a geonet core, resistant under load, heat-laminated on one side with a geotextile. 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 | --- | --- | B121 | B201 | | |
| Tensile Strength MD (T_{max}) CMD (T_{max}) | DIN EN ISO 10319 | kN/m | 15 10 | 21 16 | | |
| In-plane Flow Capacity (q_p); MD (rigid/rigid); $i = 1$ ^(a) at 20 kPa at 50 kPa at 100 kPa at 200 kPa at 500 kPa | DIN EN ISO 12958 | l/(m x s) | 1.6 1.5 1.3 1.1 0.8 | 1.4 1.3 1.0 0.8 0.5 | | |
| Ply Adhesion | DIN EN ISO 13426-2/B | N/m | 150 | 150 | | |
| 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 | 6 | | | |
| Geotextiles ^(b) | | | | | | |
| Raw Material | --- | --- | Polypropylene, white | | | |
| Unit Weight (ρ_A) | 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 | μ m | 100 | 60 | | |
| Water Permeability Velocity Index (VI_{H50}) Flux normal to the Plane (q_v) | 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 (C1; pH 10; 80°C; 5 MPa) | % | no significant change of initial properties | | | |
| Roll Dimensions | | | Container Load | | Truck Load | |
| | | | B121 | B201 | B121 | B201 |
| 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.

