

TECHNICAL DATASHEET

B1 NET GEOCOMPOSITE

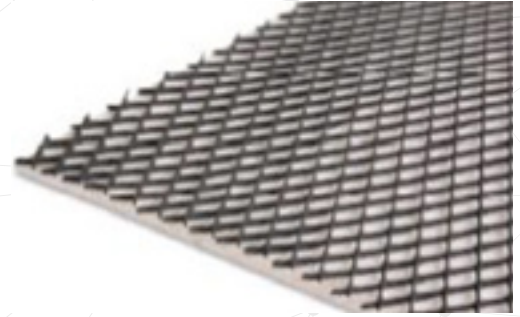
PRODUCT DESCRIPTION

Extruded high density polyethylene (HDPE) net drainage core with a nonwoven polypropylene (PP) geotextile filter/separator bonded to a single side.

APPLICATIONS

Typical Applications include:

- Retaining walls and bridge abutments: to reduce pore water pressure and avoid backfill saturation.
- Engineered landfills: with the additional requirement of long-term chemical resistance and high compressive strength.
- Tunnels: ground-water-seepage interception between rock face and the tunnel lining.
- Buried structures:



FEATURES

The B1 Net drainage geocomposite is manufactured using a unique geotextile filter developed specifically for use in drainage geocomposites for its high tensile modulus and ability to prevent soil ingress into the void space of the drainage void.

The B1 drainage nets are manufactured from HDPE nets which have been engineered to have good flow under high loading

PROPERTIES	TEST METHOD	UNITS	MEAN VALUES
4. MECHANICAL PROPERTIES			
TENSILE STRENGTH (MD)	EN ISO 10319	kN/m	11.0 (-1.1)
TENSILE STRENGTH (CMD)	EN ISO 10319	kN/m	9.5 (-1.0)
TENSILE ELONGATION	EN ISO 10319	%	35 (±15)
CBR PUNCTURE RESISTANCE	EN ISO 12236	N	2000 (-200)
CONE DROP	EN ISO 13433	mm	38 (+5)
5. HYDRAULIC PROPERTIES - GEOTEXTILE FILTER			
PORE SIZE - MEAN AOS	EN ISO 12956	µm	75 (±20)
PERMEABILITY _{H50}	EN ISO 11058	l/(m ² .s)	50 (-15)
6. HYDRAULIC PROPERTIES - COMPOSITE			
in plane water flow MD (hard platens)	EN ISO 12958	l/m.s (i=1@20 kPa)	1.1 (-0.27)
	EN ISO 12958	l/m.s (i=1@100 kPa)	1.0 (-0.25)
	EN ISO 12958	l/m.s (i=1@200 kPa)	0.9 (-0.23)
	EN ISO 12958	l/m.s (i=0.1@20 kPa)	0.30 (-0.03)
	EN ISO 12958	l/m.s (i=0.1@100 kPa)	0.25 (-0.03)
	EN ISO 12958	l/m.s (i=0.1@200 kPa)	0.20 (-0.06)
7. PHYSICAL PROPERTIES			
THICKNESS @ 2kPa	EN ISO 9863-1	mm	4.5 (-0.45)
8. PHYSICAL PROPERTIES			
STANDARD ROLL LENGTH		m	25 / 50 / 100
STANDARD ROLL WIDTH		m	2 / 3.8 / 4.0
FILTER OVERLAP		mm	100

9. PACKAGING IDENTIFICATION

B1 Geocomposite drains are supplied on cardboard cores and wrapped in Polyethylene sheeting with identification labels in accordance with ISO 10320.

10. STORAGE

The rolls of geocomposite shall be stored on stable/ level ground and stacked not more than five rolls high and no other materials shall be stacked on top. The rolls can be stored outdoors when packaged, but should be protected from exposure to UV. All materials should be stored in accordance with good health and safety practice and in accordance with local laws.

11. NOTES

- a) Reported values are arithmetic mean values unless otherwise stated, A set of test results shall be those results derived from specimens cut from one sample and taken across the full width of the roll. For sampling, EN ISO 9862 should be applied, i.e. samples should be taken not less than 5m from the end of the roll in machine direction and over the whole width in the cross machine direction. The location of the sample should be described exactly. Applied tolerances are based on 95% Confidence limits, this is the value below which not more than 5% of the test results may be expected to fall. For evaluation of conformance, statistical procedure should be used in line with section 5.2 of CEN/TR 15019: 2004. The tolerance value provided for tensile elongation is based on an absolute value; e.g. 60% ±20%=40%-80%.
- b) A Nominal value indicates that the value is not part of the performance specification and is provided for guidance only.

12. ADDITIONAL INFORMATION

Refer to the Jointing Methods for when simple overlaps are required for subsequent and adjacent roll lengths. However, pegging, sewing, stapling or gluing can also be used depending upon the application, the sub-grade conditions, the loading, the convenience and the cost. These figures relate to standard product weights and roll sizes. Other weights, sizes and colours may be available on request. For further information please contact TCS GEOTECHNICS.

REGISTERED OFFICE ADDRESS

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1. TCS Geotechnics is a trading name of Technical Civils Solutions Ltd.
2. TCS Geotechnics Ltd reserves the right to alter product specifications without prior notice.
3. It is the responsibility of all users to satisfy themselves that the above data is current.
4. The above figures are average values obtained from testing to current EN ISO standards.
5. TCS Ltd cannot accept responsibility for the performance of these products as the conditions of use are beyond our control. 6. Installation details are available on request.

