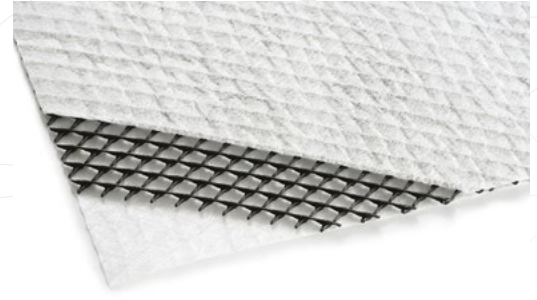


1B1 GEOCOMPOSITE DRAIN

PRODUCT DESCRIPTION

Extruded high density polyethylene (HDPE) net drainage core with a Non-woven polypropylene (PP) geotextile filter/seperator bonded to both sides.



TYPICAL APPLICATIONS INCLUDE

- Highways: vertical edge-of-carriageway drains intercept the lateral flow of ground water. Modern fin drains reduce excavation, reduce backfill quantities and reduce installation time. In-slope drainage increases geotechnical stability.
- 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: Vertical and horizontal drains for basements, culverts, car parks, reservoirs, etc

Features Net drainage geocomposites are manufactured using a unique geotextile filter developed specifically for use in drainage geocomposites for its high tensile modules and ability to prevent soil ingress into the void space of the drainage core.

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

PROPERTIES	TEST METHOD	UNITS	TOLERANCE	1B1	
HYDRAULIC PROPERTIES - GEOTEXTILE FILTER					
PORE SIZE - MEAN AOS	EN ISO 12956	µm	±20	75	
PERMEABILITY - (H ₅₀)	EN ISO 11058	l/m ² s	-15	50	
MECHANICAL PROPERTIES - COMPOSITE					
TENSILE STRENGTH MD/CMD	EN ISO 10319	kN/m	MD/CMD -2.0	20	
TENSILE ELONGATION MD/CMD	EN ISO 10319	%	MD/CMD - ±15	35	
CBR PUNCTURE RESISTANCE	EN ISO 12236	N	-330	3300	
CONE DROP	EN ISO 13433	mm	±5	38	
HYDRAULIC PROPERTIES - COMPOSITE					
IN PLANE WATERFLOW MD (HARD PLATENS)	EN ISO 12958	l/m.s	i=1 @ 20kPa	0.70	-0.10
			i=1 @ 100kPa	0.65	-0.10
			i=1 @ 200kPa	0.60	-0.07
IN PLANE WATERFLOW MD (SOFT PLATENS)	EN ISO 12958	l/m.s	i=0.1 @ 20kPa	0.18	-0.03
			i=0.1 @ 100kPa	0.15	-0.02
			i=0.1 @ 200kPa	0.10	-0.02
IN PLANE WATERFLOW MD (SOFT PLATENS)	EN ISO 12958	l/m.s	i=1 @ 20kPa	0.65	-0.075
			i=1 @ 100kPa	0.35	-0.04
			i=1 @ 200kPa	0.15	-0.03
IN PLANE WATERFLOW MD (SOFT PLATENS)	EN ISO 12958	l/m.s	i=0.1 @ 20kPa	0.07	-0.02
			i=0.1 @ 100kPa	0.03	-0.015
			i=0.1 @ 200kPa	0.018	-0.03
PHYSICAL PROPERTIES - COMPOSITE					
THICKNESS @2kPa	EN ISO 9863-1	mm		5.0(-0.5)	

Packing and Information

-Geocomposite drains are supplied on cardboard core and wrapped in polyethylene sheetin with identification labels in accordance with ISO 10320.

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 inaccordance with local laws.

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.

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