TECHNICAL DATASHEET
STANDARD DRAINAGE NET GEOCOMPOSITES

PRODUCT DESCRIPTION

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

FEATURES

Features Net drainage geocomposites are 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 core.

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

PROPERTIES	TEST METHOD	UNITS		1A1	1B1	1C1	1D1	1E1
4.MECHANICAL PROPERTIES - COMPOSITE								
TENSILE STRENGTH	EN ISO 10319	kN/m	MD/CMD	15.5(-1.5)	20.0(-2.0)	20.0(-2.0)	20.0(-2.0)	20.0(-2.0)
TENSILE ELONGATION	EN ISO 10319	%	MD/CMD	35(±15)	35(±15)	35(±15)	35(±15)	35(±15)
CBR PUNCTURE RESISTANCE	EN ISO 12236	N		2500(-250)	3300(-330)	3300(-330)	3300(-330)	3300(-330)
CONE DROP	EN ISO 13433	mm		38(+5)	38(+5)	38(+5)	38(+5)	38(+5)
5.HYDRAULIC PROPERTIES - GEOTEXTILE FILTER								
PORE SIZE - MEAN AOS	EN ISO 12936	µm		75(±20)	75(±20)	75(±20)	75(±20)	75(±20)
PERMEABILITY-(H_{50})	EN ISO 11058	l/m²s		50(-15)	50(-15)	50(-15)	50(-15)	50(-15)
6.HYDRAULIC PROPERTIES - COMPOSITE								
IN PLANE WATERFLOW MD (HARD PLATENS)	EN ISO 12958	l/m.s	i=1 @ 20kPa	0.45(-0.10)	0.70(-0.10)	1.1(-0.1)	2.0(-0.2)	2.7(-0.27)
			i=1 @ 100kPa	0.40(-0.10)	0.65(-0.10)	1.0(-0.1)	1.9(-0.2)	2.5(-0.25)
			i=1 @ 200kPa	0.35(-0.07)	0.60(-0.07)	0.9(-0.1)	1.8(-0.2)	2.3(-0.23)
			i=1 @ 400kPa	-	-	-	1.7(-0.2)	2.0(-0.20)
			i=0.1 @ 20kPa	0.10(-0.02)	0.18(-0.03)	0.30(-0.03)	0.60(-0.06)	0.80(-0.08)
			i=0.1 @ 100kPa	0.07(-0.02)	0.15(-0.02)	0.25(-0.02)	0.55(-0.05)	0.70(-0.07)
			i=0.1 @ 200kPa	0.05(-0.02)	0.10(-0.02)	0.20(-0.02)	0.50(-0.05)	0.65(-0.06)
			i=0.1 @ 400kPa	-	-	-	0.45(-0.05)	0.60(-0.06)
IN PLANE WATERFLOW MD (SOFT PLATENS)	EN ISO 12958	l/m.s	i=1 @ 20kPa	0.30(-0.035)	0.65(-0.075)	0.85(-0.15)	1.9(-0.4)	2.3(-0.2)
			i=1 @ 100kPa	0.20(-0.02)	0.35(-0.04)	0.40(-0.1)	1.3(-0.2)	1.85(-0.2)
			i=1 @ 200kPa	0.10(-0.03)	0.15(-0.03)	0.22(-0.07)	0.9(-0.2)	1.55(-0.2)
			i=1 @ 400kPa	-	-	-	0.18(-0.03)	0.60(-0.01)
			i=0.1 @ 20kPa	0.04(-0.02)	0.07(-0.02)	0.21(-0.04)	0.5(-0.08)	0.6(-0.1)
			i=0.1 @ 100kPa	0.02(-0.015)	0.03(-0.015)	0.08(-0.02)	0.35(-0.07)	0.5(-0.1)
			i=0.1 @ 200kPa	0.005(-0.03)	0.018(-0.03)	0.05(-0.02)	0.25(-0.05)	0.35(-0.05)
			i=0.1 @ 400kPa	-	-	-	0.05(-0.02)	0.10(-0.02)
7.PHYSICAL PROPERTIES - COMPOSITE								
THICKNESS @2kPa	EN ISO 9863-1	mm		4.5(-0.5)	5.0(-0.5)	5.5(-0.55)	7.5(-0.7)	8.0(-0.8)
8.MATERIAL DIMENSIONS - COMPOSITE								
STANDARD ROLL LENGTH (S)		m				25/50/100		
STANDARD ROLL WIDTH		m				2.0/3.8/4.0		
FILTER OVERLAP		mm				100		

9. PACKAGING & IDENTIFICATION

Geocomposite drains are supplied on cardboard cores and wrapped in polyethylene sheeting with identification labels.

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 evaulation 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.

REGISTERED OFFICE ADDRESS

Units 2 & 5 Tetbury Close
Martland Industrial Park
Wigan
Greater Manchester
WN5 0LA

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sales@tcs-geotechnics.co.uk | 01942 218597 | www.tcs-geotechnics.co.uk