

PW3.1 Drainage Trackbed Geocomposite

DESCRIPTION:

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Trackbed drainage geocomposite consisting of an extruded high density polyethylene (HDPE) high flow net drainage core thermally bonded to a nonwoven PW1 geotextile filter/separator on one side and a black impermeable LDPE barrier geomembrane on the other side.

APPLICATION:

With over 50 years of unrivalled expertise and experience, Terram geotextiles are the original nonwoven geotextiles for separation and filtration applications. Terram PW3.1 is a specialist drainage composite with one impermeable side, which provides a barrier between water and formation where required.

FEATURES & BENEFITS:

- High flow drainage net core under high compressive load transmits water laterally into side drains quicker than drainage aggregate.
- Maintains good dry sub-base conditions by intercepting water.
- Lightweight, quick and easy to install compared to traditional aggregate drainage layer reducing installation time and cost.

APPROVAL:

Network Rail Product acceptance PADS 0057/100715.





INTENDED USE/FUNCTIONS:



INTENDED APPLICATION:



MECHANICAL PROPERTIES	TEST METHOD	UNIT	MEAN VALUE	
Tensile Strength	EN ISO 10319	kN/m	30.0	
Tensile Elongation	EN ISO 10319	%	35	
CBR Puncture Resistance	EN ISO 12236	kN	5.2	
HYDRAULIC PROPERTIES (GEOTEXTILE PW1)				
Pore Size - Mean AOS	EN ISO 12956	µm	60	
Permeability	EN ISO 11058	Litres/m ² s	30	
HYDRAULIC PROPERTIES (GEOCOMPOSITE PW3.1)				
In plane water flow (MD) with hard platens, hydraulic gradient = 1.0	EN ISO 12958	Litres/m/s	PRESSURE (kPa)	FLOW RATE
			20	0.65
			100	0.6
			200	0.55
DURABILITY PROPERTIES				
Weathering (UV Exposure)	EN 12224	Days	30	
Combined ageing (Oxidation, temperature & moisture)	EN ISO 13438	Service Life (Yrs)	100	
Abrasion resistance	EN ISO 13427		>80% retained strength	
PHYSICAL PROPERTIES				
Thickness (Nominal)	EN ISO 9863-1	mm	5.5	
Mass (Nominal)	BS EN ISO 9864	g/m ²	1100	
MATERIAL DIMENSIONS				
Width		m	4	4
Length		m	25	50
Gross Roll Weight (Nominal)		kg	110	220

PACKAGING & IDENTIFICATION Terram geosynthetics are supplied on cardboard cores and wrapped in Polyethylene sheeting with identification labels in accordance with ISO 10320.

STORAGE The rolls of geosynthetics shall be stored on stable/ level ground and stacked not more than two 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. For additional information please refer to Terram Geotextiles MSDS.

QUALITY Terram geosynthetics are supplied having met internal quality requirements in accordance with our Quality Management system which is certified to BS EN ISO 9001:2015.

NOTES Reported values are arithmetic mean values unless otherwise stated. For further details on physical parameters please refer to the individual Declaration of Performance certificates available for download from www.terram.com

Reported values related to durability testing are generally based on the lowest grade product within a family.

A Nominal value indicates that the value is not part of the performance specification and is provided for guidance only.

Gross roll weights are provided for lifting guidance only and does not form part of quality control.

ADDITIONAL INFORMATION Refer to the Terram Joining Methods (downloadable from www.terram.com) 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 Terram Technical Support.

How else can we help? Get in touch with us

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