

## PW1 Trackbed Separator

### DESCRIPTION:

PDS024 Issue 6—June 2021

Nonwoven geotextile trackbed separator manufactured from UV stabilised, high tenacity, virgin polypropylene fibres that have been both mechanically and thermally bonded to provide high strength and excellent abrasion characteristics.

### APPLICATION:

With over 50 years of unrivalled expertise and experience, Terram geotextiles are the original nonwoven geotextiles for separation and filtration applications. Terram PW1 filter/separator is designed to maintain separation between the adjacent sand/sub-grade and ballast layers within the trackbed construction, preventing the upward movement of fine sub-grade particles and the intermixing of ballast with the blanket. Suitable for use in the following ground conditions:-

- Good quality granular formation with low (Up to 15%) fines content.
- Good quality granular formation with low (less than 10% weight) coarse (less than 14mm size) particle content.
- Clays and silts formation in conjunction with a 100mm sand blinding.
- Localised sub-grade variations.



### FEATURES & BENEFITS:

- High strength and elongation at break maintains separation from the formation and extends ballast life.
- Mechanical bonding using needle punching technology and secondary thermal treatment gives very high abrasion and puncture resistance ensuring long term durability.

### APPROVAL:

- Network Rail Product acceptance certificate PA05/04556.
- Complies with NR/SP/TRK/010:1996, NR/SP/TRK/9039:2005 and NR/SP/TRK/4239:2020.



## INTENDED USE/FUNCTIONS:



## INTENDED APPLICATION:



MECHANICAL PROPERTIES	TEST METHOD	UNIT	MEAN VALUE			
Tensile Strength	EN ISO 10319	kN/m	22.0			
Tensile Elongation	EN ISO 10319	%	60			
CBR Puncture Resistance	EN ISO 12236	kN	4.3			
Cone Drop	EN ISO 13433	mm	22			
<b>HYDRAULIC PROPERTIES</b>						
Pore Size - Mean AOS	EN ISO 12956	µm	60			
Permeability	EN ISO 11058	Litres/m <sup>2</sup> s	30			
<b>DURABILITY PROPERTIES</b>						
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			
<b>PHYSICAL PROPERTIES</b>						
Thickness (Nominal)	EN ISO 9863-1	mm	2			
<b>MATERIAL DIMENSIONS</b>						
Width		m	2.0	4.0	3.5	3.9
Length		m	50	50	25	25
Gross Roll Weight (Nominal)		kg	35	60	27	30
Network Rail PADS (Parts and Drawings System) Item Code			057/100568	057/100561	057/100560	057/100555

### PACKAGING & IDENTIFICATION STORAGE

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

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](http://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 Jointing Methods (downloadable from [www.terram.com](http://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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Geosynthetics you can trust