

# Rail Geosynthetics

## PRODUCT LIST



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 **TERRAM**  
Geosynthetics you can trust

# TERRAM Rail PRODUCT Overview

TERRAM's PW range of geosynthetics provides one or more of four functions when used in track-bed construction:

- **SEPARATION** to maintain the integrity of adjacent soil types i.e. prevent intermixing.
- **FILTRATION** to prevent leaching of soil particles.
- **DRAINAGE** to allow the free passage of water.
- **REINFORCEMENT** to provide additional strength.

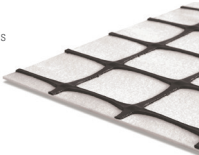
## PW1

A close-up photograph of a light-colored, fibrous geotextile material, identified as TERRAM PW1, showing its texture and how it is used as a separator layer.

TERRAM PW1 trackbed separator is designed to maintain separation between the adjacent sand/ballast layers within the trackbed construction, preventing the upward movement of fine sub-grade particles.

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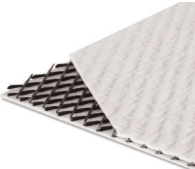
## PW4-LA

A photograph of a geotextile material with a black grid pattern, identified as TERRAM PW4-LA, showing its reinforced structure.

TERRAM PW4-LA is a reinforced trackbed separator designed where the sub-grade is weak, i.e. soft and boggy conditions. Combines a filter/separator geotextile and reinforcement geogrid.

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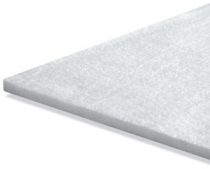
## PW2

A photograph showing a cross-section of a trackbed construction. A dark, textured geotextile (PW2) is placed over a layer of angular stones, separating it from the sub-grade below.

TERRAM PW2 is a robust trackbed separator designed where the sub-grade soils are good but contain angular stone. This angular stone could damage a standard geotextile, so a robust geotextile that protects the separation function of the geotextile is essential.

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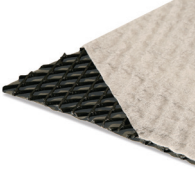
## PW9

A photograph of a light-colored, fibrous geotextile material, identified as TERRAM PW9, showing its texture and how it is used as a separator layer.

TERRAM PW9 is a Robust Separator for trackbed, designed where the sub-grade soils are good but contain angular stone. This angular stone could damage a standard geotextile, so a robust geotextile that protects the separation function of the geotextile is essential.

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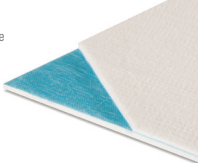
## PW3.1

A photograph showing a cross-section of a trackbed construction. A dark, textured geotextile (PW3.1) is placed over a layer of angular stones, separating it from the sub-grade below.

TERRAM PW3.1 is an impermeable geocomposite designed for use over soils prone to 'pumping' failure. PW3.1 comprises a high quality black LDPE impermeable membrane, a drainage net and TERRAM PW1.0 geotextile.

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## Hydrotex

A photograph showing a cross-section of a trackbed construction. A blue, textured geotextile (Hydrotex) is placed over a layer of angular stones, separating it from the sub-grade below.

TERRAM Hydrotex provides a permanent way solution for trackbed stability where clay pumping can cause loss of trackbed stability. Removes the requirement for a sand blanket.

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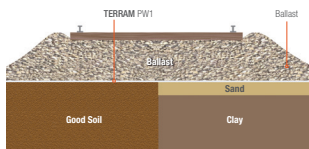
To find out more about any of these product ranges, email: [info@terram.com](mailto:info@terram.com) or call 01621 874 200

# PW1

## Trackbed Separator

TERRAM PW1 trackbed separator is designed to maintain separation between the adjacent sand/ballast layers within the trackbed construction, preventing the upward movement of fine sub-grade particles.

- Needle-punched geotextile
- Suitable for good even sized particle sub-grade soil
- Separation between ballast and a sand blanket
- High puncture and abrasion resistance
- High permeability properties



Scenario 1  
Good soil subgrade

Scenario 2  
Clay subgrade and sand blanket

Roll Width (m)	Length (m)	Area m <sup>2</sup>	TERRAM Code	PADs Code
2	50	100	153725	0057/100568
3.5	25	87.5	157600	0057/100560
3.5	50	175	155439	0057/100569
3.7	25	92.5	157617	0057/100559
3.9	25	97.5	157532	0057/100555
4	25	100	152926	0057/100567
4	50	200	152919	0057/100561

# PW2

## Robust Trackbed Separator

TERRAM PW2 is a robust trackbed separator designed where the sub-grade soils are good but contain angular stone. This angular stone could damage a standard geotextile, so a robust geotextile that protects the separation geotextile is essential.

- Suitable for sub-grades containing angular stone
- Prevents sub-grade erosion
- Incorporates a geonet sandwiched between two geotextile layers



Roll Width (m)	Length (m)	Area m <sup>2</sup>	TERRAM Code	PADs Code
2	25	50	153732	0057/100777
3.5	25	87.5	157570	0057/100637
3.7	25	92.5	157587	0057/100636
3.9	25	97.5	157594	0057/072410
4	25	100	153749	0057/100638

# PW3.1

## Trackbed Drainage Geocomposite

Terram PW3.1 is an impermeable geocomposite designed for use over soils prone to 'pumping' failure. PW3.1 comprises a high quality black LDPE impermeable membrane, a drainage net and Terram PW1.0 geotextile.



- Suitable for soils prone to "pumping"
- Intercepts water draining through the ballast
- Drains laterally into side drains
- Maintains good dry sub-base conditions



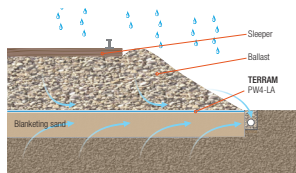
Roll Width (m)	Length (m)	Area m <sup>2</sup>	TERRAM Code	PADs Code
4	50	200	166282	0057/100715

# PW4-LA

## Reinforced Trackbed Separator

TERRAM PW4-LA is a reinforced trackbed separator designed where the sub-grade is weak, ie. soft and boggy conditions. Combines a filter/separator geotextile and reinforcement geogrid.

- Suitable weak sub-grade soils (soft & boggy conditions)
- Helps to improve track life by stiffening ballast laid over weak ground
- Improves load-bearing capacity



Roll Width (m)	Length (m)	Area m <sup>2</sup>	TERRAM Code	PADs Code
1.9	25	47.5	157983	0057/100644
3.8	25	95	153435	0057/100779

# PW9

## Robust Trackbed Separator

TERRAM PW9 is a Robust Separator for trackbed, designed where the sub-grade soils are good but contain angular stone. This angular stone could damage a standard geotextile, so a robust geotextile that protects the separation function of the geotextile is essential.

- Suitable for good soils containing angular stone
- Robust non-woven geotextiles protect the separation function
- Separates ballast and angular sub-bases



Roll Width (m)	Length (m)	Area m <sup>2</sup>	TERRAM Code	PADs Code
1.95	25	48.75	TBC	TBC
3.5	25	87.5	161464	0057/072424
3.7	25	92.5	161454	0057/072425
3.9	25	97.5	161447	0057/072426
3.9	50	195	161409	0057/072440
3.9	100	390	161362	0057/072439
4	25	100	161430	0057/072441
4	50	200	161393	0057/072423
4	100	400	161355	0057/072427



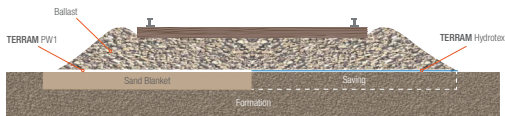
# HYDROTEX™

## Trackbed Separator for Clay Pumping

TERRAM Hydrotex provides a permanent way solution for trackbed stability where clay pumping can cause loss of trackbed stability. Removes the requirement for a sand blanket.



- Acts as a filter/separator for fine soils
- Removes the requirement for a sand blanket
- Prevents upward particle passage
- Allows upward and downward water transmission



Roll Width (m)	Length (m)	Area m <sup>2</sup>	TERRAM Code	PADs Code
3.5	25	87.5	171309	0057/101455
3.7	25	92.5	171323	0057/100454
3.9	25	97.5	171347	0057/100453
3.9	50	195	171101	0057/100457





Application specific literature, product data sheets, case studies and installation guides are available on request or can be freely downloaded from **[www.terram.com](http://www.terram.com)**

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TERRAM excels in the innovative application of technology to create versatile, high-performance materials which are unique, cost-efficient and deliver significant added value.



**Contact details:**

**United Kingdom**

Tel: +44 (0)1621 874200

Fax: +44 (0)1621 874299

Email: [info@terram.com](mailto:info@terram.com)

[www.terram.com](http://www.terram.com)

A Berry Plastics Company  
Fiberweb Geosynthetics Ltd  
Blackwater Trading Estate  
The Causeway, Maldon, CM9 4GG  
United Kingdom