

# Product Data Sheet

## Robust Geotextiles

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### DESCRIPTION:

Nonwoven geotextile manufactured from UV stabilised, high tenacity, virgin polypropylene fibres that have been mechanically entangled to provide high strength, high extensibility, high loft and excellent abrasion characteristics.

### APPLICATIONS:

Typical uses for Terram Robust Geotextiles include the protection of impermeable membranes in landfill basal areas, side walls and caps, tailing lagoons, reservoirs, balancing ponds, reed beds, artificial lakes to prevent soil erosion from beneath rock armour and pre-cast concrete revetments, sea shores, rivers and water channels, lakes and reservoirs.

Application areas include:-

- Environmental engineering
- SUDS
- Coastal and Waterways
- Pipeline and utility protection

### FEATURES & BENEFITS:

- Manufactured from inert high tenacity virgin polypropylene fibres giving excellent long term durability in all soil types.
- High static and dynamic puncture resistance ensures a low risk of damage during and post construction.
- Random orientated web with isotropic properties provide the same strength, permeability and filtration in all directions.
- High elongation at break maintains separation and filtration functions under load, particularly in soft and variable ground conditions.
- High loft gives excellent cushioning, protecting underlying geomembranes from puncture.
- Mechanical entanglement of the fibres produces an extremely flexible material, ensuring full contact with highly undulating ground contours maintaining the protection, filtration and separation function



## INTENDED USE/FUNCTION:



## INTENDED APPLICATION:



MECHANICAL PROPERTIES	Test Method	Unit	Mean Value								
			RG3	RG3.3	RG4	RG5	RG6	RG7	RG8	RG9	RG11
Tensile Strength	EN ISO 10319	kN/m	20.0	22.0	25.0	30	35	40	45	50	60
Tensile Elongation	EN ISO 10319	%	80	80	80	80	80	80	80	80	80
CBR Puncture Resistance	EN ISO 12236	kN	3.0	3.3	4.0	5.0	6.0	7.0	8.0	9.0	11.0
Cone Drop	EN ISO 13433	mm	6	5	5	5	4	3	2	2	1
<b>HYDRAULIC PROPERTIES</b>											
Pore Size - Mean AOS	EN ISO 12956	µm	80	80	80	75	70	70	70	60	60
Permeability—(H50)	EN ISO 11058	l/m <sup>2</sup> s	60	60	50	40	30	30	30	25	15
<b>DURABILITY PROPERTIES</b>											
Weathering (UV Exposure)	EN 12224	Days	30	30	30	30	30	30	30	30	30
Combined ageing (Oxidation, temperature & moisture)	EN ISO 13438	Service Life (Yrs)	100	100	100	100	100	100	100	100	100
<b>PHYSICAL PROPERTIES</b>											
Thickness @ 2kPa (Nominal)	EN ISO 9863-1	mm	2.6	2.8	2.9	3.5	4.0	5.0	5.5	6.0	7.5
<b>MATERIAL DIMENSIONS</b>											
Standard Roll Length		m	175	175	150	150	150	125	125	100	75
Standard Roll Width		m	5.85	5.85	5.85	5.85	5.85	5.85	5.85	5.85	5.85
Maximum Roll Width		m	6	6	6	6	6	6	6	6	6
Gross Roll Weight (Nominal)		kg	360	380	420	520	620	550	620	570	520

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

**STORAGE** The rolls of geotextile 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 Geotextiles 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 weight is based on 4.5m wide rolls at standard length; information provided is 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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