

# **TERRAM** Geotextiles

Geosynthetics you can trust

## **About Terram**

- Market leading international manufacturer with over 40 years of expertise
- Innovative, technically superior design
- Dynamic research and development program
- Low cost due to unique manufacturing process



## Civil & Rural Sectors

- Road construction
- Soil reinforcement
- Ground stabilisation
- Filtration
- Drainage
- Erosion control
- Mud block



**Civil highway construction** 



Rural farm roads and tracks



# TERRAM Standard Geotextiles



TERRAM Standard Geotextiles enhance the performance and design life of granular layers by providing the filtration and separation functions. Typical uses for TERRAM Standard Geotextiles include ground stabilisation (between the sub-base and subgrade) and around drainage materials.

## Preventing intermixing of granular materials and soils

TERRAM Standard Geotextiles provide an effective solution to the problem of constructing a stable granular layer over soft foundation soils. When stone is placed directly on a soft subgrade, the imposed load often causes intermixing of two layers. This results in contamination of the stone layer and a resulting loss in bearing strength, surface rutting and deformation at the sub-base/ subgrade interface.

## Preventing the ingress of fines into drainage media

Whether it's a granular drain or a geosynthetic alternative such as open geocellular units, TERRAM Standard Geotextiles are ideal for preventing the ingress of fines.

#### Features:

- Engineered to provide high strength and high elongation at break
- Manufactured from high tenacity UV stabilised virgin polypropylene fibres to provide long term durability in all soil types
- Manufactured using a randomly orientated web to provide completely isotropic properties
- Excellent uniformity with high permeability and low pore size for soil filtration

## TERRAM filters/separators are used extensively in the construction of:

- · Paved and unpaved roads
- · Railways.
- · Car parks and hardstandings.
- Cycleways and footpaths.
- SuDS installations.
- · Green roofs.

#### Available sizes

Product Grade	T700	T900	T1000	T1300	T1500	T2000	T3000	T4000	T4500
Roll Width(*) m	4.5/6	4.5/6	4.5/6	4.5/6	4.5/6	4.5/6	4.5/6	4.5/6	4.5/6
Roll Length m	150	150	100	100	100	100	100	50	50

<sup>\*</sup>All products can be manufactured up to a maximum width of 6 metres.



## **TERRAM Performance Data**

**Product Data Sheet** 

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Product Grade		T700	T900	T1000	T1300	T1500	T2000	T3000	T4000	T4500	
Mechanical Properties (Mean values)											
Tensile Strength	EN ISO 10319	kN/m	6.0	7.5	8.0	10.5	12.5	14.5	18.0	22.0	30.0
Tensile at 5% Elongation EN ISO 10319 kN/m		2.6	3.2	3.4	4.3	4.7	5.5	6.3	7.5	9.0	
Tensile Elongation	EN ISO 10319	%	22	23	24	24	27	27	30	30	35
CBR Puncture Resistance EN ISO 12236 N		1050	1350	1500	2000	2250	2750	3250	4300	5350	
Cone Drop	EN ISO 13433	mm	42	40	38	34	32	26	24	22	14
Hydraulic Properties (Mean values)											
Permeability (H <sub>50</sub> )	EN ISO 11058	I/m².s	130	105	100	80	75	65	55	45	35
Opening Size (O <sub>90</sub> )	EN ISO 12956	μm	180	160	150	130	125	110	100	85	75
Physical Properties (Typical values)						4					
Thickness at 2kPa	EN ISO 9863-1	mm	0.6	0.7	0.75	0.85	0.9	1.1	1.2	1.4	1.6
Roll Dimensions <sub>(2)</sub>											
Roll Width		m	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Roll Length		m	150	150	100	100	100	100	100	50	50
Roll Weight		kg	65	85	60	75	85	100	120	80	95



### **Durability**

This product is predicted to be durable for more than 25 years in soils with a pH in the range 2 to 14 and with a temperature of less than 250C.

#### Chemical resistance

Polypropylene and polyethylene are unaffected by the chemicals which normally exist in soils.

#### **Biological resistance**

Polypropylene and polyethylene are not nutrients for micro-organisms and do not provide nourishment for animals & insects.

#### **UV** exposure

Fiberweb Geosynthetics' products are delivered to site in polyethylene wrapping to protect against the effects of ultra-violet radiation. It is recommended that the products remain wrapped until their installation. Once unwrapped, the products should be completely covered with fill within 14 days to avoid exposure to UV radiation.

Versions of most products can be manufactured with enhanced UV performance by incorporating stabilisers. These versions carry the suffix UV. The remaining properties are identical to the corresponding standard grade. Adequate precautions should always be taken to protect all products from UV radiation to achieve the stated durability.

#### Notes:

- Refer to the Terram Jointing 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.
- 2. 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 Fiberweb Geosynthetics' Technical Support.

As part of its continual improvement process Fiberweb Geosynthetics Ltd reserve the right to change the properties listed on this data sheet without prior notice.

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