Let's talk about geotextiles

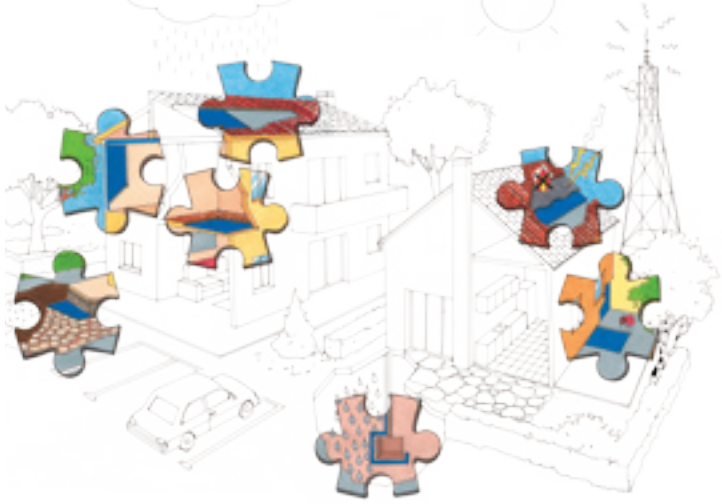
Geotextiles are a family of products that has taken on a fundamental importance in an extensive range of civil and hydraulic engineering applications.

Fibrous materials – such as straw, coconut husks, fascines, and others – have been used in engineering works since ancient times. With the advent of synthetic fibres there was a great development of applications. Thanks to properties of inalterability and resistance to moulds, mildew, bacteria, and rodents, possibility of optimizing their basic technical parameters, notable resistance to UVA and UVB radiation, ease of installation, and also low cost, geotextiles offer innumerable solutions to problems in civil and hydraulic engineering. Today the most commonly used geotextiles are nonwovens (spunbond or staple-fibre) manufactured with different polymers: polyester, polyamide, polypropylene, or polyethylene.

Freudenberg Politex offers a broad range of polyester geotextiles, available in different weights, to satisfy every requirement in the different fields of application. Drenotex is CE certified.

Applications:
- Road, highway, bridge, and railway construction;
- River and seashore banks;
- Separation layers of differing granulometries;
- Landfill construction;
- Sports fields and equestrian centres;
- Drainage systems;
- Protection for waterproofing membranes;
- Installation of self-locking surfacing;
- Hardstands, paths, bicycle paths, paving stones;
- Gardens and rooftop gardens;
- Hydraulic works;
- Sunken pools.

Protection for the Building Industry



Acoustic and Thermal Insulation
Ecozero

Floor underlayment
PhonoPAR

Geotextile
Drenotex

External walls and liquid waterproofing
VeloPAR

Reflective underslating
ReflexPAR

Waterproofing
AcquaPAR

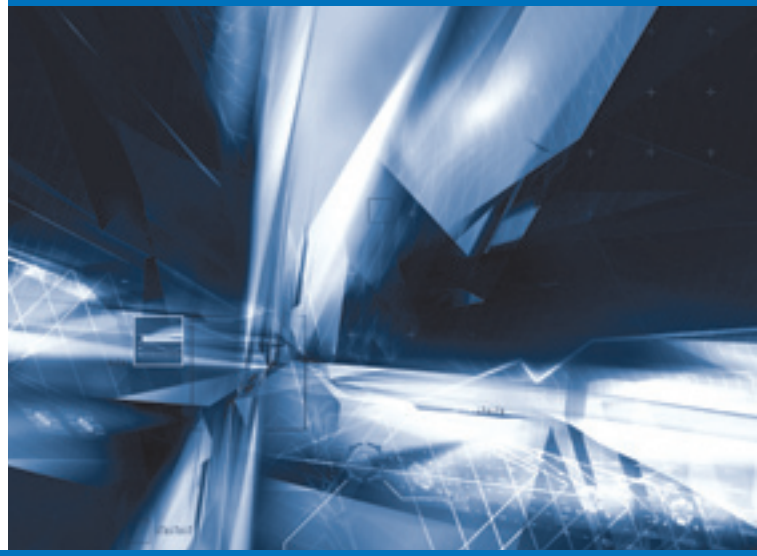
Breathable underslating
B-PAR
Breathable

Protection for the Building Industry

Drenotex

Geotextile

Polyester nonwovens used for drainage, filtration, load distribution, mechanical protection and anti-contamination.



Freudenberg Politex

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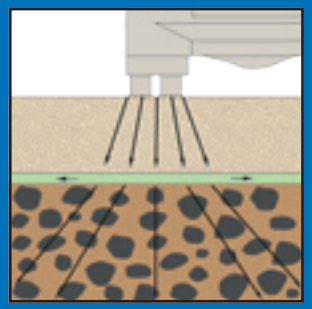
Drenotex

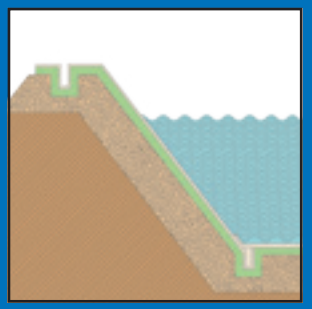
Drenotex

Load distribution



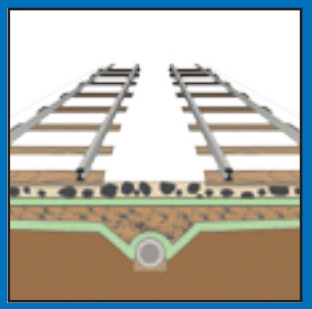
Road construction

Filtration



Coastline defence

Anti-contamination



Railway beds

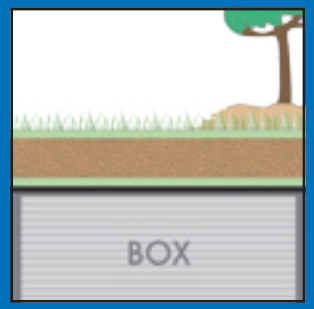
Drainage

Drainage channels

Mechanical protection

Landfill construction

Protection for waterproofing anti-contamination



Rooftop gardens

DATASHEET

		Drenotex 130 to 800 g/m² (special orders up to 1200 g/m²)								
Composition		Polyester staple-fibre								
Cohesion		Mechanical needle punching and thermosetting								
Certification		CE Nr. 1488-CDP-0019								
Resistance to UV rays and chemical agents		Excellent								
Rot, mould, bacteria, and rodent resistance		Total								
Specific weight	kg/dm³	1,38								
Humidity retention	20°C, 65% hum.	0,4 %								
Melting point	°C	260								
MASS PER UNIT AREA (UNI EN 965)	**g/m²**	**130**	**150**	**200**	**300**	**400**	**500**	**600**	**700**	**800**
Tensile strength (UNI EN ISO 10319)	kN/m	5,5	7	9	14	18	24	28	32	38
Elongation (UNI EN ISO 10319)	% >	60	60	60	60	60	60	60	60	60
CBR puncture test (UNI EN ISO 12236)	kN	0,9	1,0	1,3	2,0	3,0	4,4	5,0	5,8	6,7
Cone drop test (EN 918)	mm	33	30	28	12	9,5	8,0	6,5	4,6	3,5
Normal permeability (EN ISO 11058)	mm/s	110	100	93	57	37	24	22	20	17
Permittivity (CNR B.U. 144)	s^{-1}	0,70	0,68	0,62	0,45	0,35	0,24	0,20	0,19	0,18
Opening size (EN ISO 12956)	micron	86	85	80	75	70	57	55	50	50
Dimensions - length	m	150	150	100	100	70	60	40	40	30
Dimensions - height	m	up to 6								

	Drenotex FC 100 to 300 g/m²				
Composition	Polyester spunbond				
Cohesion	Mechanical needle punching				
Certification	UNI EN ISO 14001				
Resistance to UV rays and chemical agents	Excellent				
Rot, mould, bacteria, and rodent resistance	Total				
Specific weight	1,38				
Humidity retention	0,4 %				
Melting point	260				
MASS PER UNIT AREA (UNI EN 965)	**100**	**150**	**200**	**250**	**300**
Tensile strength (UNI EN ISO 10319)	5	7,5	10	15	18
Elongation (UNI EN ISO 10319)	50	50	50	50	50
CBR puncture test (UNI EN ISO 12236)	N/A				
Cone drop test (EN 918)	N/A				
Normal permeability (EN ISO 11058)	N/A				
Permittivity (CNR B.U. 144)	N/A				
Opening size (EN ISO 12956)	N/A				
Dimensions - length	100				
Dimensions - height	3				