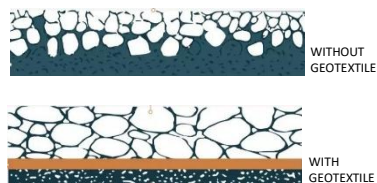


BTL GEOTEXTILES PP / PET

Filter-Reinforcement Membrane

JUNE 2024
REV 05

APPLICATIONS



THE PRODUCT

BTL GEOTEXTILES are **mechanically and thermally bonded** fabrics designed to deliver high-performance solutions by combining durability, filtration capacity, and reinforcement properties:

- GEOTEXTILE-PP: Woven polypropylene fabric, needle-punched, high-modulus fibers.
- GEOTEXTILE-PET: Non-woven polyester fabric, needle-punched.

USES

- Separation, reinforcement, and stabilization of soil layers.
- Moisture barrier and waterproofing support.
- Erosion control for slopes, embankments, and coastal areas.
- Drainage and filtration layer in underground drainage systems, canals, rivers, harbours, seashores, and basins.
- Protection and separation membrane in roofing systems (inverted roofs, re-roofing, remedial works, maintenance, concrete decks, metal decks).
- Landfills and reservoir work, including as a filter membrane under insulation boards.

BENEFITS

- ✓ High mechanical strength with long-term stability
- ✓ Effective filtration and separation of soil layers
- ✓ Resistance to erosion, water flow, and soil movement
- ✓ Contributes to increased lifespan of infrastructure projects
- ✓ Easy to install and adaptable to various site conditions

SPECIFICATIONS

Property	BTL GEOTEXTILE-PP	BTL GEOTEXTILE-PET
Polymer type	Polypropylene	Polyester
Soil chemical resistance	Excellent	Excellent
Water resistance	Excellent	Excellent
Hydrocarbons & bitumen	Excellent	Excellent
Bacteria resistance	Excellent	Excellent
Aging & weathering resistance	Excellent	Excellent

Property	Standard	Unit	BTL GEOTEXTILE - PP			
			100	150	200	300
Thickness	UNI EN 964/1	mm	1.3	1.8	2.7	3.6
Unit Weight	UNI EN 965	g/m ²	100	150	200	300
Tensile Strength	UNI EN ISO 10319	N/5cm	500	650	1000	1350
Elongation at Break	UNI EN ISO 10319	%	80	80	80	80
Water Permeability	UNI EN ISO 11058	m/Ex10 ⁻³	5.0	4.5	4.0	3.0
CBR	UNI EN ISO 12236	N	1300	2200	3300	4500
Porometry 090	UNI EN ISO 12956	µm	110	90	70	60

Property	Standard	Unit	BTL GEOTEXTILE - PET								
			RWP 100	RWP 150	RWP 200	RWP 250	RWP 300	RWP 350	RWP 400	RWP 450	RWP 500
Raw Material	-	-	Polyester	Polyester	Polyester	Polyester	Polyester	Polyester	Polyester	Polyester	Polyester
Thickness	TS EN ISO 9864	mm	1.3	1.6	1.9	2.3	2.6	2.6	3.1	3.6	4
Unit Weight	TS EN ISO 9864	g/m ²	100	150	200	250	300	350	400	450	500
Tensile Strength -MD -CMD	TS EN ISO 10319	KN/m	1.8 2	2.9 3	3.6 4	5 6	6 7	6 7	7 8	7 8	8 10
Elongation at Break -MD -CMD	TS EN ISO 10319	%	110-120 120-130	100-110 110-120	90-100 100-110	85-95 95-110	80-90 90-100	70-80 75-85	60-70 65-75	55-65 65-75	50-60 60-70
Water Flow Rate	TS EN ISO 11058	L/Sqm.sec	1.2	1.18	1.15	1.13	1.06	0.99	0.95	0.92	0.8
Static Puncture	TS EN ISO 12236	N	250	400	500	600	700	800	900	1000	1200

ADDITIONAL INFORMATION

Handling and storage

Supplied in rolls of standard widths and lengths.

Store in a dry, shaded area, protected from direct sunlight, moisture, and mechanical damage.

Installation

Preparation: Ensure excavation is completed before installation (roads, railroads, reservoirs). Place BTL geotextiles directly over prepared soil or foundation layers.

Alignment: Unroll and align DRANEX rolls. Maintain overlaps of at least **100 mm (4 inches)**.

Joining: Where required, stitch overlaps with polyester filament.

Precautions: Avoid unnecessary traffic and mechanical damage on the membrane after installation and prior to final covering...

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BTL reserves the right to modify the technical data in this specification sheet, which is based on current production without prior warning. All indicators in this specification sheet are based upon our experience and current working practices.