



PTT GEOTEXTILES ● PRODUCT BROCHURE















Geotextiles

Product Overview

PTT Geotextiles by Prime Terratech are high-quality **nonwoven geotextile fabrics** engineered for superior soil stabilization and geotechnical performance. Manufactured using premium polypropylene and polyester **fibers**, these geotextiles are **needle-punched** and **thermo-calendared** to deliver excellent strength, dimensional stability, and long-term durability.

Designed for civil, infrastructure, environmental, and transportation projects, PTT Geotextiles offer high permeability, optimal pore size distribution, and consistent mechanical properties—making them ideal for reinforcement, separation, drainage, erosion control, and filtration applications.





Key Features of PTT Geotextiles

- High tensile strength & excellent elongation characteristics.
- Superior dimensional stability.
- Needle-punched & thermo-calendared bonding for durability.
- Resistant to chemicals, biological organisms & soil conditions.
- High permeability & controlled pore size for filtration.
- UV stabilized for short-term exposure during installation.
- Available in a wide GSM range for varied engineering needs.

Benefits

- Enhances soil strength & load-bearing capacity.
- Prevents intermixing of soil layers (separation).
- Provides efficient drainage & filtration.
- Reduces soil erosion in embankments & slopes.
- Extends service life of roadways & earth structures.
- Cost-effective replacement for natural filter materials.

Applications

- Roads & highways.
- Railways & embankments.
- Retaining walls & reinforced soil structures.
- Landfills & environmental containment.
- Canal & reservoir protection.
- Building foundations.
- Subsurface drainage systems.
- Erosion control systems.



PPT Polypropylene (PP) Nonwoven Geotextiles

High-strength PP Fiber for Civil & Infrastructure Project

Manufactured from high-quality polypropylene fibers, PTT PP Geotextiles are needle-punched and thermo-calendared to create a strong, flexible fabric with excellent permeability and resistance to chemical and biological degradation.

PP Geotextile Technical Highlights

Grab Strength (MD/CD): 425–1750 N

Tensile Strength (MD/CD): 7.5–28 kN/m

longation at Break: >50-60%

CBR Puncture Strength: 1150–5275 N

AOS (O95): 100 to <75 microns

Mass per Unit Area: 120–500 GSM

Thickness (2 kN/m): 0.9–3.2 mm

UV Resistance @ 500 hours: 70% retained strength

Available GSM Range

120, 150, 200, 250, 300, 350, 400, 500 GSM Roll Size: **5 m × 100 m** (Higher GSM in 5 m × 50 m)





PTT GEOTEXTILES are Nonwoven Geotextile manufactured from high quality Polyprolylene Fiber. The fibers are mechanically & Thermally bonded through needle-punched Thermo-Calendered to form a strong, flexible and dimensionally stable fabric structure, with optimum pore sizes and high permeability. GEOTEX is resistant to chemicals and biological organisms normally founded in soils and is stabilized against degradation due to shorter exposure to Ultraviolet radiation. PTT GEOTEXTILES confirms to the following property values.

PTT POLYPROPYLENE TECHNICAL DATA SHEET

TEST PROPERTIES	UNIT	ASTM Method	120 GSM	150 GS M	200 GS M	250 GSM	300 GS M	350 GS M	400 GSM	500 GSM
Grab Strength (MD/CD)	N	D-4632	425	580	750	860	1180	1250	1410	1750
Elongation at Break (MD/CD)	%	D-4632	>60	>60	>60	>60	>60	>60	>60	>60
Tensile Strength (MD/CD)	kn/mtr	D-4595	7.5	9	12	14	17	20	23	28
Elongation at Break (MD/CD)	%	D-4595	>50	>50	>50	>50	>50	>50	>50	>50
Trapezoidal Tear Strength (MD/CD)	N	D-4533	145	180	250	300	360	425	470	650
Static Puncture Strength (CBR)	N	D-6241	1150	1550	1850	2600	3100	3600	4150	5275
Permittivity Co-Efficient	cm/sec	D-4491	0.22	0.26	0.26	0.24	0.21	0.21	0.21	0.18
Flow Rate	1/m2/s	D-4491	80	70	60	50	40	35	30	30
Opening Size 095	microns	D-4751	100	80	80	<75	<75	<75	<75	<75
Thickness (2kN/m)	mm	D-5199	0.9	1.1	1.5	1.8	2.1	2.5	2.9	3.2
Mass Per Unit Area	g/m2	D-5261	120	150	200	250	300	350	400	500
Roll Dimension (WxL)	m		5x100	5x100	5x100	5x100	5x100	5x100	5x100	5x50
UV Resistance @ 500 hrs	% Strength Retained	D-4355	70	70	70	70	70	70	70	70

The Values published in this leaflet are to the best of our knowledge true and correct. The product specification may change at any time without prior notice. Nor warrenty is expressed or implied



PPT Polyester (PET) Nonwoven Geotextiles

High-performance PET Geotextiles for Heavy-Duty Engineering Applications

PTT Polyester Geotextiles are engineered using high-strength **polyester fibers**, offering superior mechanical stability with excellent resistance to installation damage, creep, environmental chemicals, and biological agents.

PTT GEOTEXTILE are Nonwoven Geotextile manufactured from high quality Polyester Fibers. The fibers are Mechanically & Thermally bonded through needle-punched Thermo- Calendared to form a strong, flexible and dimensionally stable fabric structure, with optimum pore sizes and high permeability. GEOTEX is resistant to chemical and biological organisms normally founded in soils and is stabilized against degradation due to shorter exposure to Ultraviolet radiation. PTT GEOTEXTILES confirms to the following property values.

PTT POLYESTER TECHNICAL DATA SHEET

TEST PROPERTIES	UNIT	ASTM Method	RG-10	RG-12	RG-15	RG-20	RG-25	RG-30	RG-35	RG-40	RG-50
Mass Per Unit Area	G/m²	D-5261	100	120	150	200	250	300	350	400	500
Tensile	kn/m	D-4595	2.5	3.5	4.5	6	8	11	13	15	17
Thickness	mm	EN ISO 9863-1	1	1	1.2	1.5	2	2.2	2.5	2.8	3.5
Grab Tensile Strength	N	D-4632	200	220	280	400	480	600	700	800	8
Elongation at Break	%	D-4632								50	60
Trapezoidal Tear Strength	N	D-4533	70	85	125	170	220	260	340	360	600
Puncture Strength	N	D-6241	600	710	930	1200	1400	1600	1800	2000	2000
Permittivity/Flow Rate	Cm/s	D-4491	.23	.28	.26	.24	.24	.21	.21	.21	0.7
AOS (Apparent Opening Size)	Micron	D-4751	1100	100	90	80	70	70	70	70	90
Roll Length	mtr		200	200	100	100	100	100	100	1	100
Roll Width	mtr		2.0 to 3	3	200	2.0 to 3	3	2.0 to 3	2.0 to 3	0.7	3

The Values published in this leaflet are to the best of our knowledge true and correct. The product specification may change at any time without prior notice. Nor warrenty is expressed or implied



PP Geotextile Technical Highlights

Mass per Unit Area: 100–500 GSM

• Tensile Strength: 2.5-17 kN/m

• Thickness: 1.0-3.5 mm

• Grab Tensile Strength: 200-800 N

Trapezoidal Tear Strength: 70–600 N

• CBR Puncture Strength: 600–2000 N

Permittivity: 0.21–0.28 cm/s

AOS: 70–110 microns

Roll Width: 2.0–3.0 m

Roll Length: 100–200 m

Why Choose PTT Geotextiles?

- Manufactured using ISO 9001:2015 certified processes
- Tested as per international ASTM & EN ISO standards
- Custom GSM, width, and roll length options available
- Consistent quality assured through stringent QC systems
- Long service life in demanding environmental conditions
- Backed by technical support for project-specific requirements





About Prime Terratech

Prime Terratech is an ISO 9001:2015 certified manufacturer of high-quality geosynthetic and geomembrane solutions for environmental, civil, and industrial engineering projects.

With state-of-the-art production facilities in Ahmedabad, India, we combine innovation, quality control, and sustainability to deliver long-lasting geotechnical solutions trusted nationwide.



Registered Office: B2-111, Palladium Tower, Prahladnagar, Ahmedabad – 380051, Gujarat, India
Manufacturing Unit: A-9, Pushkar Industrial Hub, Lambha Mandir Road, Ahmedabad – 382405

****+91-90334-38345 | **** 079 45853464