

## Non-Woven Geotextiles

TerraShield Non-Woven Geotextile made from staple fibers that are mechanically bonded by a needle punching process to produce a dimensionally stable network. The fibers used are 100% virgin white Polypropylene, ultra-violet resistant with 165°C melting point.

### Applications

- |   |   |
|---|---|
|  Basement Walls     |  Retaining Walls |
|  Metro/Road Tunnels |  Highways        |
|  Dams & Pipelines   |  Parking Areas   |
|  Terrace & Gardens |   |



### Features

- High permeability for reliable filtration and drainage.
- Excellent separation performance — prevents intermixing of dissimilar soils/aggregates.
- Strong puncture and tear resistance for long service life.
- Good chemical and biological stability (resists biodegradation).
- Conformable to irregular surfaces and easy to cut/lay.
- UV-stabilized options available for short-term exposed applications.
- Lightweight and easy to handle — speeds installation.



## Non-Woven Geotextile Polyester (100-600 GSM)

### NON-WOVEN GEO TEXTILE POLYESTER SPECIFICATIONS

TESTS/PROPERTIES	UNIT	ASTM METHOD	TSI 120	TSI 150	TSI 200	TSI 250	TSI 300	TSI 400	TSI 500	TSI 600
Mass per Unit Area	g/m <sup>2</sup>	D-5261	120 GSM	150 GSM	200 GSM	250 GSM	300 GSM	400 GSM	500 GSM	600 GSM
Thickness	mm	D-5199	1.1	1.3	1.6	1.8	1.9	2.5	2.9	3.4
Grab Tensile strength	N	D-4632	480	540	720	865	1010	1325	1570	1980
Elongation @ Break	%	D-4632	60	60	60	60	60	60	60	60
Trapezoidal tear	N	D-4533	210	230	300	360	415	510	600	705
Puncture Strength	N	D-4833	290	315	400	525	650	785	910	1080
Permittivity	s-l	D-4491	2.5	2.4	2	1.6	1.2	0.8	0.7	0.6
AOS (Apparent Opening Size)	μm	D-4751	180	180	150	150	120	106	90	<70
Mullen Burst	kpa	D-3786	1550	1655	2175	2630	3185	4050	4700	5500
UV Resistance @500hrs	%	D-4355	70%	70%	70%	70%	70%	70%	70%	70%
Roll Width	mtr		Upto 6	Upto 6	Upto 6	Upto 6	Upto 6	Upto 6	Upto 6	Upto 6



## Non-Woven Geotextile Polypropylene (100-600 GSM)

### NON-WOVEN GEOTEXTILE POLYPROPYLENE SPECIFICATIONS

Property	Standard	Unit	TSI100	TSI120	TSI150	TSI180	TSI200	TSI300	TSI400	TSI500	TSI600
Tensile Strength (MD/CD)	EN ISO 10319	kN/m	6	8	9.4	12.5	14	22	30	37	42
Elongation (MD/CD)	EN ISO 10319	%	40/55	40/55	40/55	45/55	45/55	50/55	50/55	60/65	60/65
CBR Puncture	EN ISO 12236	N	1085	1400	1630	2100	2500	4000	5000	5200	7000
Dynamic Cone Drop	EN ISO 13433	mm	30	28	24	20	18	12	9	5	4
Grab Strength (MD/CD)	ASTM D 4632	N	400	500	590	760	960	1400	1800	2300	2600
Grab Elongation (MD/CD)	ASTM D 4632	%	70/75	70/75	70/75	70/75	70/75	70/75	70/75	70/75	70/75
Puncture Strength	ASTM D 4833	N	220	270	320	450	500	750	900	1000	1075
Mullen Burst	ASTM D 3786	Psi	170	210	255	325	375	580	700	800	865
Trapezoidal Tear Strength	ASTM D 4533	N	200	265	290	370	475	600	650	850	1020
Permeability	EN ISO 11058	m/s.10 <sup>-3</sup>	116	110	102	95	80	60	50	40	33
Water Flow in Plane 20kpa	EN ISO 12958	m <sup>2</sup> /s	1x10 <sup>-7</sup>	1x10 <sup>-7</sup>	1x10 <sup>-7</sup>	1x10 <sup>-7</sup>	2x10 <sup>-7</sup>	3x10 <sup>-6</sup>	1x10 <sup>-5</sup>	6x10 <sup>-6</sup>	7x10 <sup>-6</sup>
Apparent Opening Size	EN ISO 12956	Mu	125	120	115	100	100	90	80	72	68
Permeability	ASTM D 4491	l/m <sup>2</sup> s	135	130	120	100	85	75	50	40	33
Apparent Opening Size	ASTM D 4751	Mu	190	180	170	140	110	80	65	60	60
Thickness under 2kpa	EN ISO 9863-1	mm	1	1.2	1.4	1.65	1.8	2.4	3	3.5	4
Thickness under 2kpa	ASTM D 5199	mm	1	1.2	1.4	1.65	1.8	2.4	3	3.5	4
Natural UV	ASTM D 4355	%	75	75	75	75	75	75	75	75	75
Roll Size		sqm	2x200m	2x200m	2x200m	2x100m	2x100m	2x100m	2x50m	2x50m	2x50m

