

## TMP GEOSYNTHETICS - Non-woven Geotextiles

### Introduction

- TMP Non-woven Geotextiles are needle-punched and made of polyester continuous filament fibers. The product can offer excellent water flow properties for drainage and other applications.

### Applications

- Filtration: when water passes from a fine-grained to a coarse grained layer, Non-woven Geotextiles can retain fine particles well. Such as when water flows from a sandy soil into a Geotextile wrapped gravel drain.
- Separation: to separate two layers of soil with different physical properties, such as the separation of road gravel from soft sub-base materials.
- Drainage: to drain liquid or gas from the plane of the fabric, which leads to draining or venting of the soil, such as the gas vent layer in a landfill cap.
- Reinforcement: to improve the load bearing capacity of a specific soil structure, such as the reinforcement of a retaining wall.

Specifications	Test Method	Unit	GT100N	GT150N	GT200N	GT250N	GT300N
Index Properties							
Color	-		White or Black				
Ultimate Tensile Strength, MD	ASTM D4595	kN/m	7	11	14	17	19
Ultimate Tensile Strength, TD	ASTM D4595	kN/m	6	10	12	15	17
Tensile Elongation	ASTM D4595	%	45	45	50	50	50
Grab Tensile Strength, MD	ASTM D4632	N	400	600	850	1000	1250
Grab Tensile Strength, TD	ASTM D4632	N	350	550	700	900	1100
Grab Elongation	ASTM D4632	%	45	45	50	50	50
Trapezoid Tear Strength, MD	ASTM D4533	N	160	300	350	430	490
Trapezoid Tear Strength, TD	ASTM D4533	N	140	270	330	400	450
CBR Puncture Strength	ASTM D6241	N	1000	1800	2300	2700	3200
Apparent Opening Size O <sub>90</sub>	ASTM D4751	mm	0.12	0.11	0.11	0.10	0.09
Water Flow Q <sub>100</sub>	ASTM D4491	L/m <sup>2</sup> /s	250	235	220	200	185
Weight	ASTM D5261	g/m <sup>2</sup>	100	150	200	250	300
Thickness	ASTM D5199	mm	1.2	1.8	2.3	2.9	3.2
Roll Width	-	m	6	6	6	6	6
Roll Length	-	m	300	200	150	100	100

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Specifications	Test Method	Unit	GT350N	GT400N	GT450N	GT500N	GT600N
■ Index Properties							
■ Color	-		White or Black				
■ Ultimate Tensile Strength, MD	ASTM D4595	kN/m	24	27	30	37	41
■ Ultimate Tensile Strength, TD	ASTM D4595	kN/m	21	25	28	34	38
■ Tensile Elongation	ASTM D4595	%	60	60	60	60	60
■ Grab Tensile Strength, MD	ASTM D4632	N	1450	1700	1900	2100	2500
■ Grab Tensile Strength, TD	ASTM D4632	N	1250	1450	1600	1800	2150
■ Grab Elongation	ASTM D4632	%	60	60	60	60	60
■ Trapezoid Tear Strength, MD	ASTM D4533	N	540	630	710	770	920
■ Trapezoid Tear Strength, TD	ASTM D4533	N	510	610	690	750	900
■ CBR Puncture Strength	ASTM D6241	N	3600	4400	4800	5800	6900
■ Apparent Opening Size O <sub>90</sub>	ASTM D4751	mm	0.09	0.08	0.08	0.08	0.08
■ Water Flow Q <sub>100</sub>	ASTM D4491	L/m <sup>2</sup> /s	165	125	110	90	80
■ Weight	ASTM D5261	g/m <sup>2</sup>	350	400	450	500	600
■ Thickness	ASTM D5199	mm	3.6	3.9	4.2	4.4	4.8
■ Roll Width	-	m	6	6	6	6	6
■ Roll Length	-	m	100	80	80	50	50