GEOTEXTILES
PRODUCT DATA

FOR MORE INFORMATION

Geosynthetics magazine has provided information on the geotextile specification charts for comparative purposes only. Designers should contact manufacturers for additional details and to discuss site-specific considerations.

Information on the use and specification of geotextiles is also available from the Geosynthetic Materials Association (GMA).

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PUBLISHER'S NOTE

Geosynthetics magazine compiled all information included in the *2018 Geosynthetics Specifier's Guide* from information submitted by firms in the geosynthetics industry. Companies provided specifications voluntarily, and specification accuracy is the responsibility of the manufacturer. The appearance of a listing in this directory is not an endorsement of the company or product by *Geosynthetics* magazine or the Industrial Fabrics Association International (IFAI). The *2018 Geosynthetics Specifier's Guide* is intended as a guide, and *Geosynthetics* magazine and IFAI encourage readers to contact the companies listed for further information.

Manufacturers engineer these products to provide cost-effective solutions to meet specific design requirements for separation, reinforcement, filtration, drainage and protection applications.

Although engineers have developed numerous applications for geotextiles, there are five major functions: separation, reinforcement, filtration, drainage and protection. The major geotextile classifications are woven, nonwoven and knitted. Generally, woven fabrics exhibit high tensile strength, high modulus and low elongation. Needle-punched nonwoven fabrics typically have high permeability as a result of high porosity and conformability because of their high elongation characteristics. Thermally spun, bonded, nonwoven fabrics typically have high modulus, compared to needle-punched nonwoven fabrics, and high conformability. Depending on the manufacturing process, knitted geotextiles can offer high tensile strength and elasticity.

Geotextiles are available in a variety of structures and polymer compositions designed to meet a wide range of applications. It is important that all geotextiles be composed of strong, durable, chemically inert polymeric materials that are resistant to the effects of site-specific ground conditions, weather and aging.

In permanent installations, long-term material performance is a result of the polymer structure's durability. Depending on the application, geotextiles may have other survivability requirements, such as creep resistance and resistance to temperature and/or ultraviolet exposure.

The numbers

Companies that submitted product data chart lines were asked to provide data determined through industry-accepted testing methods. Companies signed a certificate of compliance verifying the accuracy of this data.

Product Name (Structure [1]/ Polymer Type [2])	Mass Per Unit Area ASTM D 5261 g/m² (oz/yd²)	M288 Transportation-Related Applications								Reinforcement Applications						Other Manufacturer's Suggested Applications [8]
		Filtration/Hydraulic Properties			Physical Properties					Wide Width Tensile/Elongation ASTM D 4595 kN/m (lb/in)/%				Creep Limited Strength-MD ASTM D 5262 [6] kN/m (lb/ft)	LTDS GRI GT7-MD (in sand) [7] kN/m (lb/ft)	
										Strength @ 5% Strain [5]		Ultimate Strength % (Tult) [5]				
		Percent Open Area CWO-22125 %	Apparent Opening Size ASTM D 4751 mm (U.S. sieve)	Permittivity ASTM D 4491 sec-1 Flow Rate (FH or CH) [3] l/min/m² (gal/min/ft²)	Puncture ASTM D 6241 kN (lb)	Trapezoid Tearing Strength ASTM D 4533 kN (lb)	Grab Tensile/Elongation ASTM D 4632 kN (lb)/%	M288 Survivability Class	M288 Applications [4]	MD	XD	MD	XD			
ACE Geosynthetics Inc. | www.geoace.com																
ACETex GT70-II PP (W/PP)	NP	NP	0.425 (40)	0.60/1800 (43), CH	9.0 (2021)	0.9 x 0.9 (202 x 202)	2.5 x 2.5 (449 x 449)/NP	NP	F, SP, ST	NP	NP	70 (399)	70 (399)	NP	NP	F, R, SP, ST
ACETex GT300-II (W/PET)	NP	NP	NP	NP	NP	NP	NP	NP	ST	NP	NP	300 (1714)	300 (1714)	NP	NP	R, SP, ST
ACETex GT1200-I (W/PET)	NP	NP	NP	NP	NP	NP	NP	NP	ST	450 (2568)	NP	1200 (6854)	NP	NP	NP	R
AGRU America Inc. | www.agruamerica.com																
Agrutex 041 (NW-P/PP)	136 (4)	NA	0.212 (70)	1.8/CH 5467 (135)	1.5 (335)	0.223 (50)	0.445 (120)/50	3	D, SP	NA	NA	NA	NA	NA	NA	S/T, S/P, F, D, E, P
Agrutex 061 (NW-P/PP)	203 (6)	NA	0.212 (70)	1.5/CH 4479 (110)	1.9 (435)	0.289 (65)	0.756 (170)/50	2, 3	D, SP, ST	NA	NA	NA	NA	NA	NA	S/T, S/P, F, D, E, P
Agrutex 081 (NW-P/PP)	271 (8)	NA	0.180 (80)	1.3/CH 3895 (95)	2.7 (600)	0.423 (95)	0.979 (220)/50	1, 2, 3	F, E, SP, ST	NA	NA	NA	NA	NA	NA	S/T, S/P, F, D, E, P, R
Agrutex 101 (NW-P/PP)	339 (10)	NA	0.150 (100)	1.1/CH 3280 (80)	3.2 (725)	0.467 (105)	1.20 (270)/50	1, 2, 3	F, E, SP, ST	NA	NA	NA	NA	NA	NA	S/T, S/P, F, D, E, P, R
Agrutex 121 (NW-P/PP)	401 (12)	NA	0.150 (100)	1.0/CH 2870 (60)	4.1 (925)	0.556 (125)	1.42 (320)/50	1, 2, 3	F, E, SP, ST	NA	NA	NA	NA	NA	NA	S/T, S/P, F, D, E, P, R
Agrutex 161 (NW-P/PP)	544 (16)	NA	0.150 (100)	0.7/CH 2050 (50)	5.0 (1125)	0.668 (150)	1.74 (390)/50	1, 2, 3	F, E, SP, ST	NA	NA	NA	NA	NA	NA	S/T, S/P, F, D, E, P, R
Belton Industries Inc. | www.beltonindustries.com																
Beltech 940 (W-SF/PP)	103 (3.0) Typical	NA	0.825 (20)	0.10/360 (8.5), FH	0.41 (91)	0.33 x 0.36 (60 x 65)	0.80 x 0.59 (147 x 108)/ 20.5 x 15.5	NA	S/F	NP	NP	NP	NP	NP	NP	S/F
Beltech 315, (W-SF/PP)	223 (6.6) Typical	NA	0.50 (35)	0.02/63 (1.5), FH	5.19 (1167)	0.84 x 0.66 (153 x 122)	1.98 x 1.78 (363 x 326)/ 23.1 x 16.8	1	ST	NP	NP	37.3 (213) 17.5	35.6 (203) 13.2	NP	NP	ST
Beltech 2x2 (W-SF/PP)	228 (6.7) Typical	NA	0.710 (25)	0.53/1625 (40), FH	4.68 (1051)	0.69 x 0.60 (126 x 110)	1.65 x 1.31 (303 x 241)/ 20.6 x 12.0	NP	NP	NP	NP	35.9 (205) 15.1	36.7 (209) 8.3	NP	NP	ST
Beltech 4x4 (W-SF/PP)	432 (12.8) Typical	NA	0.825 (20)	0.23/700 (17), FH	11.1 (2500)	1.44 x 1.59 (263 x 291)	NP	NP	NP	NP	NP	70 (396) 10.2	70 (400) 10.0	NP	NP	ST
Beltech 4x6 (W-SF/PP)	543 (16) Typical	NA	0.710 (25)	0.24/715 (18), FH	11.9 (2675)	1.57 x 2.09 (287 x 384)	NP	NP	NP	18 (102)	54 (307)	75.4 (430) 14.1	106 (608) 10.7	NP	NP	ST

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[2] PP = Polypropylene, PET = Polyester, * = average

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[4] SP = Separation S/F = Silt Fence
ST = Stabilization D = Drainage
F = Filtration E = Erosion Control
A/O = Asphalt overlay

[5] MD = Machine direction XD = Cross-machine direction

[6] For a minimum of 10,000 hours, extrapolated to a 75 year time period

[7] LTDS = $\frac{T_{ult}}{RF_{CR} \times RF_{ID} \times RF_{D}}$

RF_{CR} = Reduction factor for creep
RF_{ID} = Reduction factor for installation damage
RF_{D} = Reduction factor for durability

NOTE: this equation does not include other reduction factors which may apply to design. Reduction factors are site specific and should be reviewed on a per project basis. Contact the manufacturer for recommendations.

[8] R = Reinforcement P = Protection
SP = Separation S/F = Silt Fence
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RC = Reinforcement Composite
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NP = Not provided by manufacturer
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Companies were requested to provide minimum average roll values (MARV). All claims are the responsibility of the manufacturer.

Product Name (Structure [1]/ Polymer Type [2])	Mass Per Unit Area ASTM D 5261 g/m² (oz/yd²)	M288 Transportation-Related Applications								Reinforcement Applications						Other Manufacturer's Suggested Applications [8]
		Filtration/Hydraulic Properties			Physical Properties					Wide Width Tensile/Elongation ASTM D 4595 kN/m (lb/in)/%				Creep Limited Strength-MD ASTM D 5262 [6] kN/m (lb/ft)	LTDS GRI GT7-MD (in sand) [7] kN/m (lb/ft)	
										Strength @ 5% Strain [5]		Ultimate Strength % (Tult) [5]				
		Percent Open Area CWO-22125 %	Apparent Opening Size ASTM D 4751 mm (U.S. sieve)	Permittivity ASTM D 4491 sec-1 Flow Rate (FH or CH) [3] l/min/m² (gal/min/ft²)	Puncture ASTM D 6241 kN (lb)	Trapezoid Tearing Strength ASTM D 4533 kN (lb)	Grab Tensile/Elongation ASTM D 4632 kN (lb)/%	M288 Survivability Class	M288 Applications [4]	MD	XD	MD	XD			
BTL Liners | www.btlliners.com																
8oz Black Geo			0.18 (80)	1.4/3870 (95), CH	2.2 (500)	0.356 x 0.356 (80 x 80)	0.912 x 0.912 (205 x 205)/ 50 x 50	1, 2, 3	D, E, SP, ST							F, P
Carthage Mills | www.carthagemills.com																
Carthage 6% (W-PP)	NA	4–6	0.212 (70)	0.28/733 (18), CH	4.23 (950)	0.44 x 0.27 (100 x 60)	1.64 x 1.11 (370 x 250)/15	2	D, E (15–50% & >50%)	NA	NA	39.4 (225)	25.4 (145)	NA	NA	E, F, S, S/F, ST, SP, R
FX-55 (W-PP)	NA	<1	0.425 (40)	0.05/204 (5), FH	3.11 (700)	0.33 (75)	0.89 (200)/15	3	SP, ST	NA	NA	21.0 (120)	21 (120)	NA	NA	SP, ST, R
FX-66 (W-PP)	NA	<1	0.425 (40)	0.05/160 (4), FH	4.0 (900)	0.51 (115)	1.40 (315)/15	2, 1	SP, ST	NA	NA	30.6 (175)	35 (200)	NA	NA	SP, ST, R
FX-400MF (W-PP)	NA	NA	0.60 (30)	0.40/1222 (30), CH	NP	NP	NP	NA	NA	35 (200)	39.4 (225)	70 (400)/9	70 (400)/9	NA	NA	SP, ST, R
FX-45HS (NW-PP-P-h)	NA	NA	0.212 (70)	1.70/4890 (120), CH	1.38 (310)	0.22 (50)	0.53 (120)/50	3	D, SP, ST	NA	NA	NA	NA	NA	NA	D, SP
FX-60HS (NW-PP-P-h)	NA	NA	0.212 (70)	1.50/4480 (110), CH	1.82 (410)	0.27 (60)	0.71 (160)/50	2	D, SP, ST, E	NA	NA	NA	NA	NA	NA	D, SP, ST, E
FX-80HS (NW-PP-P-h)	NA	NA	0.180 (80)	135/3666 (90), CH	2.23 (500)	0.36 (80)	0.91 (205)/50	1	D, SP, ST, E	NA	NA	NA	NA	NA	NA	D, SP, ST, E
Crown Resources LLC | www.crownresources.net																
R031✧ (NW/PP)	NA	NA	0.425 (40)	2.1/6095 (150), FH	0.76 (175)	0.11 (25)	0.35 (80)/50	NA	NA	NA	NA	NA	NA	NA	NA	F, D, SP, E, S/F
R035✧ (NW/PP)	NA	NA	0.30 (50)	2.1/6095 (150), FH	1.11 (250)	0.178 (40)	0.400 (90)/50	NA	NA	NA	NA	NA	NA	NA	NA	F, D, SP, E, S/F
R040✧ (NW/PP)	NA	NA	0.25 (60)	1.9/5704 (140), FH	1.20 (270)	0.200 (45)	0.444 (100)/50	NA	NA	NA	NA	NA	NA	NA	NA	F, D, SP, E, S/F
R042✧ (NW/PP)	NA	NA	0.212 (70)	1.7/4885 (120), FH	1.38 (310)	0.222 (50)	0.533 (120)50	3	S/F	NA	NA	NA	NA	NA	NA	F, D, SP, E, S/F
R060✧ (NW/PP)	NA	NA	0.212 (70)	1.5/4880 (110), FH	1.82 (410)	0.267 (60)	0.711 (160)/50	2	SP, D	NA	NA	NA	NA	NA	NA	F, D, SP, E, ST
R080✧ (NW/PP)	NA	NA	0.180 (80)	1.3/3765 (90), FH	2.33 (525)	0.356 (80)	0.911 (205)/50	1	SP, D, ST, E	NA	NA	NA	NA	NA	NA	F, D, E, ST, SP
R100✧ (NW/PP)	NA	NA	0.150 (100)	1.1/3251 (80), FH	2.89 (650)	0.444 (100)	1.11 (250)/50	1	SP, D, ST, E	NA	NA	NA	NA	NA	NA	P, F, D, E, SP, ST
R160✧ (NW/PP)	NA	NA	0.150 (100)	0.7/2035 (50), FH	4.56 (1025)	0.644 (145)	1.69 (380)/50	1	SP, D, ST, E	NA	NA	NA	NA	NA	NA	P, F, D, E, SP, ST

✧ **AASHTO NTPEP styles**

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GEOTEXTILES

Product Name (Structure [1]/ Polymer Type [2])	Mass Per Unit Area ASTM D 5261 g/m² (oz/yd²)	M288 Transportation-Related Applications								Reinforcement Applications						
		Filtration/Hydraulic Properties			Physical Properties					Wide Width Tensile/Elongation ASTM D 4595 kN/m (lb/in)/%				Creep Limited Strength-MD ASTM D 5262 [6] kN/m (lb/ft)	LTDS GRI GT7-MD (in sand) [7] kN/m (lb/ft)	Other Manufacturer's Suggested Applications [8]
		Percent Open Area CWO-22125 %	Apparent Opening Size ASTM D 4751 mm (U.S. sieve)	Permittivity ASTM D 4491 sec-1 Flow Rate (FH or CH) [3] l/min/m² (gal/min/ft²)	Puncture ASTM D 6241 kN (lb)	Trapezoid Tearing Strength ASTM D 4533 kN (lb)	Grab Tensile/Elongation ASTM D 4632 kN (lb)/%	M288 Survivability Class	M288 Applications [4]	Strength @ 5% Strain [5]		Ultimate Strength % (Tult) [5]				
										MD	XD	MD	XD			
Crown Resources LLC | www.crownresources.net																
E100P✧ (NW/PP)	NA	NA	0.150 (100)	1.0/3055 (75), FH	2.89 (650)	0.444 (100)	1.20 (270)/50	1	SP, D, ST, E	NA	NA	NA	NA	NA	NA	P, F, D, E, SP, ST
W200 (W/PP)	NA	NA	0.425 (40)	0.05/200 (5), FH	3.11 (700)	0.334 (75)	0.890 (200)/12	3	SP,ST	NA	NA	NA	NA	NA	NA	SP, ST
W315 (W/PP)	NA	NA	0.425 (40)	0.05/163 (4), FH	4.0 (900)	0.533 (120)	1.40 (315)/12	1	SP,ST	NA	NA	NA	NA	NA	NA	SP, ST
CR1 (W/PP)	NA	NA	0.60 (30)	0.05/163 (4), FH	NA	0.44 x 0.44 (100 x 100)	NA	1	ST, R	NA	NA	47.3 (270)	47.3 (270)	NA	NA	ST, SP, R
CO39✧ (NW/PP)	NA	NA	NA	NA	NA	NA	0.4 (90)/50	NA	paving	NA	NA	NA	NA	NA	NA	paving
C040✧ (NW/PP)	140 (4.1)	NA	NA	NA	NA	NA	0.45 (101)/50	paving	paving	NA	NA	NA	NA	NA	NA	paving
C050 (NW/PP)	153 (4.5)	NA	NA	NA	NA	NA	0.53 (120)/50	paving	paving	NA	NA	NA	NA	NA	NA	paving
✧ AASHTO NTPEP styles																
Dalco Nonwovens | www.dalcononwovens.com																
Dalco 1031 (NW-P/PP)	NP	NP	0.30 (50)	2.2/6927 (170), CH	0.934 (210)	0.11 (25)	0.35 (80)/50	NP	NP	NA	NA	NA	NA	NA	NA	F, D, E
Dalco 1035 (NW-P/PP)	NP	NP	0.30 (50)	2.1/6095 (165), CH	1.157 (260)	0.178 (40)	0.401 (90)/50	NP	NP	NA	NA	NA	NA	NA	NA	F, D, E
Dalco 1040 (NW-P/PP)	NP	NP	0.212 (70)	2.0/5700 (140), CH	1.379 (310)	0.202 (45)	0.45 (100)/50	NP	NP	NA	NA	NA	NA	NA	NA	F, D, E
Dalco 1045 (NW-P/PP)	NP	NP	0.212 (70)	1.8/4885 (120), CH	1.490 (335)	0.22 (50)	0.54 (120)/50	3	SP, D, F, E	NA	NA	NA	NA	NA	NA	F, D, E
Dalco 1060 (NW-P/PP)	NP	NP	0.212 (70)	1.4/4479 (110), CH	1.824 (410)	0.269 (60)	0.71 (160)/50	2	SP, D, F, E	NP	NP	NP	NP	NP	NP	P
Dalco 1070 (NW-P/PP)	NP	NP	0.212 (70)	1.4/4479 (110), CH	2.046 (460)	0.333 (75)	0.80 (180)/50	2	SP, D, F, E	NP	NP	NP	NP	NP	NP	P
Dalco 1080 (NW-P/PP)	NP	NP	0.18 (80)	1.3/4074 (100), CH	2.335 (525)	0.359 (80)	0.91 (205)/50	1	ST, SP, D, F, E	NP	NP	NP	NP	NP	NP	P
Dalco 1100 (NW-P/PP)	NP	NP	0.18 (80)	1.2/3251 (80), CH	2.780 (625)	0.444 (100)	1.1 (250)/50	1	ST, SP, D, F, E	NP	NP	NP	NP	NP	NP	P
Dalco 1120 (NW-P/PP)	NP	NP	0.15 (100)	0.9/3055 (75), CH	3.670 (825)	0.51 (115)	1.33 (300)/50	1	ST, SP, D, F, E	NP	NP	NP	NP	NP	NP	P
Dalco 1160 (NW-P/PP)	NP	NP	0.15 (100)	0.7/2035 (50), CH	4.559 (1025)	0.644 (145)	1.69 (380)/50	1	ST, SP, D, F, E	NP	NP	NP	NP	NP	NP	P
Dalco 1101 (NW-P/PP)	339 (10.0)	NP	0.15 (100)	0.94/3055 (75), CH	3.225 (725)	0.445 (100)	1.201 (270)/50	1	ST, SP, D, F, E	NP	NP	NP	NP	NP	NP	P

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		Percent Open Area CWO-22125 %	Apparent Opening Size ASTM D 4751 mm (U.S. sieve)	Permittivity ASTM D 4491 sec-1 Flow Rate (FH or CH) [3] l/min/m² (gal/min/ft²)	Puncture ASTM D 6241 kN (lb)	Trapezoid Tearing Strength ASTM D 4533 kN (lb)	Grab Tensile/Elongation ASTM D 4632 kN (lb)/%	M288 Survivability Class	M288 Applications [4]	Strength @ 5% Strain [5]		Ultimate Strength % (Tult) [5]				
										MD	XD	MD	XD			
GEONIA | www.egeonia.com																
Geonia DML-10 (W/PET)	NP	NA	NP	0.03/90 (2.21)CH	5.5 (1235)	NA	NA	NA	NA	50 (285)	NP	100/10 (570)	50/10 (285)	65 (4477)	52 (3359)	R
Geonia DML-20 (W/PET)	NP	NA	NP	0.4/1200 (29.5)CH	9 (2020)	NA	NA	NA	NA	100 (570)	NP	200/10 (1142)	50/10 (285)	131 (8954)	103 (7078)	R
Geonia DML-30 (W/PET)	NP	NA	NP	0.4/1200 (29.5)CH	11 (2470)	NA	NA	NA	NA	150 (856)	NP	300/10 (1713)	50/10 (285)	196 (13431)	155 (10617)	R
Geonia DML-40 (W/PET)	NP	NA	NP	0.3/900 (22.1)CH	NP	NA	NA	NA	NA	200 (1142)	NP	400/10 (2284)	50/10 (285)	261 (17908)	207 (14156)	R
Geonia DML-50 (W/PET)	NP	NA	NP	0.05/150 (3.7)CH	NP	NA	NA	NA	NA	250 (1425)	NP	500/10 (2855)	50/10 (285)	327 (22385)	258 (17695)	R
Geonia DML-60 (W/PET)	NP	NA	NP	0.05/150 (3.7)CH	NP	NA	NA	NA	NA	300 (1713)	NP	600/10 (3426)	50/10 (285)	392 (26862)	310 (21235)	R
Geonia DML-70/10 (W/PET)	NP	NA	NP	0.1/300 (7.4)CH	NP	NA	NA	NA	NA	350 (1996)	NP	700/10 (3997)	100/10 (570)	458 (31339)	362 (24774)	R
Geonia DML-80/10 (W/PET)	NP	NA	NP	0.1/300 (7.4)CH	NP	NA	NA	NA	NA	400 (2284)	NP	800/10 (4568)	100/10 (570)	523 (35816)	413 (28313)	R
Geonia DML-100/10 (W/PET)	NP	NA	NP	0.1/300 (7.4)CH	NP	NA	NA	NA	NA	500 (2855)	NP	1000/10 (5710)	100/10 (570)	654 (44770)	517 (35391)	R
Geonia DM-10/10 (W/PET)	NP	NA	NP	0.4/1200 (29.5)CH	8 (1800)	NA	NA	NA	NA	50 (285)	50 (285)	100/10 (570)	100/10 (570)	65 (4477)	52 (3359)	R, SP, ST
GSE Environmental | www.gseworld.com																
NW6 (NW-P/PP)	200 (6)	NA	0.212 (70)	1.5 4480 (110)	0.395 (90)	0.29 (65)	0.71 (160)/50	2	SP, D, F, E, A/O	NP	NP	NP	NP	NP	NP	NP
NW8 (NW-P/PP)	270 (8)	NA	0.18 (80)	1.3 3865 (95)	0.525 (120)	0.40 (90)	0.97 (220)/50	1	SP, D, F, E, P	NP	NP	NP	NP	NP	NP	NP
NW10 (NW-P/PP)	335 (10)	NA	0.15 (100)	1.0 3050 (75)	0.725 (165)	0.45 (100)	1.15 (260)/50	>1	SP, D, F, E, P	NP	NP	NP	NP	NP	NP	NP
NW12 (NW-P/PP)	405 (12)	NA	0.15 (100)	0.8 2440 (60)	0.835 (190)	0.55 (125)	1.42 (320)/50	>>1	SP, D, F, E, P	NP	NP	NP	NP	NP	NP	NP
NW16 (NW-P/PP)	540 (16)	NA	0.15 (100)	0.6 1830 (45)	1.055 (240)	0.66 (150)	1.73 (390)/50	>>>1	SP, D, F, E, P	NP	NP	NP	NP	NP	NP	NP
Additional heavy weights available																

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[6] For a minimum of 10,000 hours, extrapolated to a 75 year time period

[7] LTDS = $\frac{T_{ult}}{RF_{CR} \times RF_{ID} \times RF_{D}}$

RF_{CR} = Reduction factor for creep
RF_{ID} = Reduction factor for installation damage
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GEOTEXTILES

Product Name (Structure [1]/ Polymer Type [2])	Mass Per Unit Area ASTM D 5261 g/m² (oz/yd²)	M288 Transportation-Related Applications								Reinforcement Applications						
		Filtration/Hydraulic Properties			Physical Properties					Wide Width Tensile/Elongation ASTM D 4595 kN/m (lb/in)/%				Creep Limited Strength-MD ASTM D 5262 [6] kN/m (lb/ft)	LTDS GRI GT7-MD (in sand) [7] kN/m (lb/ft)	Other Manufacturer's Suggested Applications [8]
										Strength @ 5% Strain [5]		Ultimate Strength % (Tult) [5]				
		Percent Open Area CWO-22125 %	Apparent Opening Size ASTM D 4751 mm (U.S. sieve)	Permittivity ASTM D 4491 sec-1 Flow Rate (FH or CH) [3] l/min/m² (gal/min/ft²)	Puncture ASTM D 6241 kN (lb)	Trapezoid Tearing Strength ASTM D 4533 kN (lb)	Grab Tensile/Elongation ASTM D 4632 kN (lb)/%	M288 Survivability Class	M288 Applications [4]	MD	XD	MD	XD			
Hanes Geo Components | www.hanesgeo.com																
TerraTex GS (W-SF/PP)	NA	1	0.425(40)	0.05/203(5), CH	3.12 (700)	0.333 (75)	0.90 (200)/15	3	SP, ST	NP	NP	NP	NP	NP	NP	E
TerraTex HD (W-SF/PP)	NA	1	0.425(40)	0.05/163(4), CH	4.45 (1000)	0.533 (120)	1.40 (315)/15	1, 2, 3	SP, ST	NP	NP	NP	NP	NP	NP	E
TerraTex N04.5 (NW-P/PP)	NA	NA	0.212(70)	1.7/4885(120), CH	1.46 (340)	0.222 (50)	0.533 (120)/50	3	D, SP, ST, E	NP	NP	NP	NP	NP	NP	F, S/F
TerraTex N06 (NW-P/PP)	NA	NA	0.212(70)	1.5/4480(110), CH	1.82 (410)	0.267 (60)	0.711 (160)/50	2, 3	SP, D	NP	NP	NP	NP	NP	NP	F, S/F, E
TerraTex N08 (NW-P/PP)	NA	NA	0.180(80)	1.35/3657(90), CH	2.38 (535)	0.378 (85)	0.911 (205)/50	1, 2, 3	ST, SP, E, D	NP	NP	NP	NP	NP	NP	F, E
TerraTex HPG-27 (W/PP)	NA	NA	0.60(30)	0.7/2037(50), CH	NP	NP	NP	2, 3	SP	17.7 (101)	19.8 (113)	38.5 (220)	35.9 (205)	NP	NP	D, F, E, S/F, ST
TerraTex HPG-37 (W/PP)	NA	NA	0.60(30)	0.52/1630(40), CH	NP	NP	NP	1, 2, 3	SP	21.9 (125)	22.8 (130)	52.5 (300)	48.2 (275)	NP	NP	E, F, D, ST, R, S/F
TerraTex HPG-57 (W/PP)	NA	NA	0.60(30)	0.4/1222(30), CH	NP	NP	NP	1, 2, 3	ST, SP	35.0 (200)	39.4 (225)	70 (400)	70 (400)	NP	NP	R, E, S/F
HUESKER Inc. | www.huesker.com																
Stabilenka® 200 (W/PET)	400 (11.8)	NA	NA	NA	NA	NA	NA	NA	NA	100 (570)	NA	200/10 (1142)	N/A	130 (8899)	101 (6918)	R
Stabilenka® 300 (W/PET)	560 (16.5)	NA	NA	NA	NA	NA	NA	NA	NA	150 (856)	NA	300/10 (1710)	N/A	195 (13,344)	151 (10,368)	R
Stabilenka® 400 (W/PET)	700 (21)	NA	NA	NA	NA	NA	NA	NA	NA	200 (1141)	NA	400/10 (2280)	N/A	260 (17,797)	214 (14,704)	R
Stabilenka® 600 (W/PET)	1020 (30)	NA	NA	NA	NA	NA	NA	NA	NA	300 (1712)	NA	600/10 (3425)	N/A	390 (26,696)	322 (22,062)	R
Stabilenka® 800 (W/PET)	1380 (40.7)	NA	NA	NA	NA	NA	NA	NA	NA	400 (2283)	NA	800/10 (4565)	N/A	519 (35,584)	429 (29,408)	R
Stabilenka® 1000 (W/PET)	1800 (53)	NA	NA	NA	NA	NA	NA	NA	NA	500 (2854)	NA	1000/10 (5708)	N/A	649 (44,480)	536 (36,760)	R
Basetrac® Woven PP 45	240 (7)	NA	0.4 (40)	0.15 (CH) 450 (11)	6.7 (1000)	0.5 x 0.5 (120 x 120)	1.6 x 1.6 (350 x 350) 20 x 15	2, 3	SP	20 (114)	29 (165)	46 (262)	50 (288)	NA	NA	ST, R
Basetrac® Woven PP 80	430 (12.7)	NA	0.18 (80)	0.2 (CH) 612 (15)	7.1 (1600)	1 x 1 (220 x 220)	2.9 x 2.7 (650 x 600) 20 x 15	1, 2, 3	SP, ST	24 (137)	47 (268)	80 (457)	80 (457)	NA	NA	ST, R
Basetrac® Woven PP105	500 (15)	NA	0.33 (45)	0.33 (CH) 813 (20)	16.3 (3666)	1.4 x 1.4 (320 x 320)	3.6 x 3.3 (800 x 750) 20 x 15	1, 2, 3	SP, ST	50 (285)	55 (315)	105 (600)	105 (600)	NA	NA	ST, R

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Product Name (Structure [1]/ Polymer Type [2])	Mass Per Unit Area ASTM D 5261 g/m² (oz/yd²)	M288 Transportation-Related Applications								Reinforcement Applications						
		Filtration/Hydraulic Properties			Physical Properties					Wide Width Tensile/Elongation ASTM D 4595 kN/m (lb/in)/%				Creep Limited Strength-MD ASTM D 5262 [6] kN/m (lb/ft)	LTDS GRI GT7-MD (in sand) [7] kN/m (lb/ft)	Other Manufacturer's Suggested Applications [8]
										Strength @ 5% Strain [5]		Ultimate Strength % (Tult) [5]				
		Percent Open Area CWO-22125 %	Apparent Opening Size ASTM D 4751 mm (U.S. sieve)	Permittivity ASTM D 4491 sec-1 Flow Rate (FH or CH) [3] l/min/m² (gal/min/ft²)	Puncture ASTM D 6241 kN (lb)	Trapezoid Tearing Strength ASTM D 4533 kN (lb)	Grab Tensile/Elongation ASTM D 4632 kN (lb)/%	M288 Survivability Class	M288 Applications [4]	MD	XD	MD	XD			
L & M Supply | www.landmsupplyco.com																
LM400 NT (NW-P/PP)	NP	N/A	0.212 (70)	2.1/6095 (150), FH	1.11 (250)	0.178 (40)	0.400 (90)/50	NP	NP	N/A	N/A	N/A	N/A	N/A	N/A	F, D, E
LM600 NT (NW-P/PP)	NP	N/A	0.212 (70)	1.5/4880 (110), FH	1.82 (410)	0.267 (60)	0.711 (160)/50	2	SP, D	N/A	N/A	N/A	N/A	N/A	N/A	S/F, F, E
LM800 NT (NW-P/PP)	NP	N/A	0.18 (80)	1.35/3657 (90), FH	2.33 (525)	0.356 (80)	0.911 (205)/50	1	SP, D, ST, E	N/A	N/A	N/A	N/A	N/A	NA	S/F, F, D. E
LM1000 NT (NW-P/PP)	NP	N/A	0.15 (100)	1.1/3251 (80), FH	2.89 (650)	0.444 (100)	1.11 (250)/50	1	SP, D, ST, E	N/A	N/A	N/A	N/A	N/A	N/A	S/F, F, D. E
LM1600 NT (NW-P/PP)	NP	N/A	0.15 (100)	0.7/2035 (50), FH	4.56 (1025)	0.644 (145)	1.69 (380)/50	1	SP, D, ST, E	N/A	N/A	N/A	N/A	N/A	N/A	S/F, F, D. E
LM200 NT (W-SP/PP)	NP	1	0.43 (40)	0.05/200 (5), FH	3.11 (700)	0.330 (75)	0.9 (200)/15	3	SP, ST	N/A	N/A	N/A	N/A	N/A	N/A	
LM315 NT (W-SP/PP)	NP	1	0.43 (40)	0.05/163 (4), FH	4.0 (900)	0.533 (75)	1.4 (315)/15	1, 2, 3	SP, ST	N/A	N/A	N/A	N/A	N/A	N/A	
LM2199 FW	NP	4	0.212 (70)	0.28/733 (18)	4.2 (950)	0.445 x 0.267 (100 x 60)	1.6 x 1.1 (370 x 250) 15 x 15	2, 3	D, E	N/A	N/A	N/A	N/A	N/A	N	S/F Bulk Head
LM270 HP	NP	NA	0.60 (30)	0.7/2037 (50)	4.5 (1000)	N/A	1.3 x 1.2 (295 x 250)			17.7 (1212)	19.8 (1356)	38.5 (2640)	35.9 (2460)	N/A		
LM570 HP	NP	N/A	0.60 (30)	0.40/1222 (30)	8.9 (2000)	N/A	2.2 x 2.1 (500 x 475) 11 x 4	1A	Enhanced Stabilization	35.0 (2400)	39.4 (2700)	70.0 (4800)	70.0 (4800)	N/A		
LM-SS300 DOT	NP	N/A	0.425 (40)	1.09/3260 (80)	NP	NP	NP			23.6 (1620)	23.6 (1620)	NP	NP	N/A	N/A	Soil Stabilization
LM-SS600 DOT	NP	N/A	0.426 (40)	1.09/3260 (80)	NP	NP	NP			21.0 (1440)	69.3 (4380)	NP	NP	N/A	N/A	Soil Stabilization
Low & Bonar Inc. | www.lowandbonar.com																
Enkaforce G 300/100 (W-PET)	NP	NA	NP	NP	NP	NP	NP	NP	NP	NP	NP	300 (1700)	100 (570)	NP	NP	R, ST, F
Enkaforce G 600/100 (W-PET)	NP	NA	NP	NP	NP	NP	NP	NP	NP	NP	NP	600 (3400)	100 (570)	NP	NP	R, ST, F
Enkaforce G 1250/100 (W-PET)	NP	NA	NP	NP	NP	NP	NP	NP	NP	NP	NP	1250 (7100)	100 (570)	NP	NP	R, ST, F
Enkaforce G 1000/50 (W-PVA)	NP	NA	NP	NP	NP	NP	NP	NP	NP	NP	NP	1000 (5700)	50 (285)	NP	NP	R, ST, F

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Product Name (Structure [1]/ Polymer Type [2])	Mass Per Unit Area ASTM D 5261 g/m² (oz/yd²)	M288 Transportation-Related Applications								Reinforcement Applications						
		Filtration/Hydraulic Properties			Physical Properties					Wide Width Tensile/Elongation ASTM D 4595 kN/m (lb/in)/%				Creep Limited Strength-MD ASTM D 5262 [6] kN/m (lb/ft)	LTDS GRI GT7-MD (in sand) [7] kN/m (lb/ft)	Other Manufacturer's Suggested Applications [8]
										Strength @ 5% Strain [5]		Ultimate Strength % (Tult) [5]				
		Percent Open Area CWO-22125 %	Apparent Opening Size ASTM D 4751 mm (U.S. sieve)	Permittivity ASTM D 4491 sec-1 Flow Rate (FH or CH) [3] l/min/m² (gal/min/ft²)	Puncture ASTM D 6241 kN (lb)	Trapezoid Tearing Strength ASTM D 4533 kN (lb)	Grab Tensile/Elongation ASTM D 4632 kN (lb)/%	M288 Survivability Class	M288 Applications [4]	MD	XD	MD	XD			
Maccaferri Inc. | www.maccaferri.com/us																
MacTex N21.1 (NW-P/PP)	150 (4.4)	NP	0.212 (70)	1.7/4885 (120)	1.51 (340)	0.22 (50)	0.533 (120)/50	>>3	ST, SP, D, F, E	NA	NA	NA	NA	NA	NA	NA
MacTex N47.1 (NW-P/PP)	540 (16.0)	NP	0.18 (80)	1.35/3657 (90)	2.38 (535)	0.378 (85)	0.911 (205)/50	>>1	ST, SP, D, F, E	NA	NA	NA	NA	NA	NA	NA
MacTex W1 200 (W-SF/PP)	NP	NP	0.425 (40)	0.05/203 (5)	3.12 (700)	0.33 (75)	0.9 (200)/15	>>3	ST, SP, D, F, E	NA	NA	NA	NA	NA	NA	NA
MacTex W1 315 (W-SF/PP)	NP	NP	0.425 (40)	0.05/163 (4)	4.45 (1000)	0.533 (120)	1.4 (315)/15	>>1	ST, SP, D, F, E	NA	NA	NA	NA	NA	NA	NA
MacTex AR 1 (NW-P/PP)	140 (4.15)	NP	NA				0.45 (101)	NA	A/O	NA	NA	NA	NA	NA	NA	NA
MacTex Ballast (W/PE)	220 (6.5)	NP	NA	NA	2.97 (668)	NA	NA	NA	P	NA	NA	10 (685)	27.2 (1870)	NA	NA	NA
Propex GeoSolutions | www.propexglobal.com																
GEOTEX® 401 (NW-P/PP)	NA	NA	0.212 (70)	1.7/5,704 (140), CH	1,512 (340)	222 (50)	534 (120) / 50	3	SP, ST, D	NA	NA	NA	NA	NA	NA	F, D, E, ST, SP
GEOTEX® 601 (NW-P/PP)	NA	NA	0.212 (70)	1.5/4,482 (110), CH	1,824 (410)	267 (60)	712 (160) / 50	2, 3	SP, ST, D, E	NA	NA	NA	NA	NA	NA	F, D, E, ST, SP
GEOTEX® 801 (NW-P/PP)	NA	NA	0.180 (80)	1.4/4,074 (100), CH	2,380 (535)	356 (80)	912 (205) / 50	1, 2, 3	SP, ST, D, E	NA	NA	NA	NA	NA	NA	F, D, E, ST, SP
GEOTEX® 1001 (NW-P/PP)	NA	NA	0.150 (100)	1.2/3,260 (80), CH	3,114 (700)	445 (100)	1,112 (250) / 50	1, 2, 3	SP, ST, D, E	NA	NA	NA	NA	NA	NA	F, D, E, ST, SP
GEOTEX® 1601 (NW-P/PP)	NA	NA	0.150 (100)	0.7/2,037 (50), CH	4,804 (1080)	645 (145)	1,690 (380) / 50	1, 2, 3	SP, ST, D, E	NA	NA	NA	NA	NA	NA	F, D, E, ST, SP
GEOTEX® 200ST (W-PP)	NA	NA	0.425 (40)	0.05/163 (4), FH	3,114 (700)	334 (75)	890 (200) / 15	3	SP, ST	NA	NA	NA	NA	NA	NA	SP, ST
GEOTEX® 350ST (W-PP)	NA	NA	0.600 (30)	0.35/1,222 (30), FH	5,338 (1,200)	578 (130)	2,002 x 1,557 (450 x 350)/15	NA	NA	19.8 (113)	19.8 (113)	52.5 (300)/8	47.3 (270)/8	NA	NA	R, SP, ST
GEOTEX® 2X2HF (W-PP)	NA	NA	0.600 (30)	0.6/1,630 (40), FH	4,448 (1,000)	489 x 578 (110 x 130)	NA	NA	NA	18.6 (106)	21.0 (120)	38.5 (220)/7	35.9 (205)/7	NA	NA	R, SP, ST, F, D, E
GEOTEX® 3X3HF (W-PP)	NA	NA	0.425 (40)	0.9/1,630 (40), FH	5,783 (1,300)	667 x 712 (150 x 160)	NA	1, 2, 3	SP, ST, D, E	21.9 (125)	22.8 (130)	52.5 (300)/10	47.3 (270)/5	NA	NA	R, SP, ST, F, D, E
GEOTEX® 4X4HF (W-PP)	NA	NA	0.600 (30)	0.4/1,222 (30), FH	8,896 (2,000)	801 x 801 (180 x 180)	NA	NA	NA	35.0 (200)	39.4 (225)	70.1 (400)/9	70.1 (400)/9	NA	NA	R, SP, ST, F, D, E
GEOTEX® 2X2UF (W-PP)	NA	NA	0.425 (40)	0.9/2,852 (70), FH	NA	NA	NA	1, 2, 3	SP, ST, D, E	21.9 (125)	22.8 (130)	NA	NA	NA	NA	R, SP, ST, F, D, E

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		Filtration/Hydraulic Properties			Physical Properties					Wide Width Tensile/Elongation ASTM D 4595 kN/m (lb/in)/%				Creep Limited Strength-MD ASTM D 5262 [6] kN/m (lb/ft)	LTDS GRI GT7-MD (in sand) [7] kN/m (lb/ft)	
										Strength @ 5% Strain [5]		Ultimate Strength % (Tult) [5]				
		Percent Open Area CWO-22125 %	Apparent Opening Size ASTM D 4751 mm (U.S. sieve)	Permittivity ASTM D 4491 sec-1 Flow Rate (FH or CH) [3] l/min/m² (gal/min/ft²)	Puncture ASTM D 6241 kN (lb)	Trapezoid Tearing Strength ASTM D 4533 kN (lb)	Grab Tensile/Elongation ASTM D 4632 kN (lb)/%	M288 Survivability Class	M288 Applications [4]	MD	XD	MD	XD			
Propex GeoSolutions | www.propexglobal.com																
GEOTEX® 3X3 UF (W-PP)	NA	NA	0.425 (40)	0.9/3,056 (75) FH	NA	NA	NA	1, 2, 3	SP, ST, D, E	26.3 (150)	32.9 (188)	NA	NA	NA	NA	R, SP, ST, F, D, E
GEOTEX® 4X4 UF (W-PP)	NA	NA	0.425 (40)	1/3,056 (75), FH	NA	NA	NA	1, 2, 3	SP, ST, D, E	21 (120)	63.9 (365)	NA	NA	NA	NA	R, SP, ST, F, D, E
GEOTEX® 311 HI VIS (NW-P/PP)	NA	NA	0.300 (50) (TYPICAL)	2.0/6,112 (150), CH (TYPICAL)	934 (210) (TYPICAL)	133 (30) (TYPICAL)	356 (80)/50 (TYPICAL)	NA	NA	NA	NA	NA	NA	NA	NA	F, D, E, ST, SP
GEOTEX® 401 HI VIS (NW-P/PP)	NA	NA	0.212 (70) (TYPICAL)	2.0/6,112 (150), CH (TYPICAL)	1,379 (310) (TYPICAL)	222 (50) (TYPICAL)	534 (120)/70 (TYPICAL)	NA	NA	NA	NA	NA	NA	NA	NA	F, D, E, ST, SP
GEOTEX® 601 HI VIS (NW-P/PP)	NA	NA	0.212 (70) (TYPICAL)	2.0/6,112 (150), CH (TYPICAL)	2,193 (493) (TYPICAL)	378 (85) (TYPICAL)	881 (198)/70 (TYPICAL)	NA	NA	NA	NA	NA	NA	NA	NA	F, D, E, ST, SP
GEOTEX® 801 HI VIS (NW-P/PP)	NA	NA	0.180 (80) (TYPICAL)	1.7/4,482 (110), CH (TYPICAL)	2,691 (605) (TYPICAL)	423 (95) (TYPICAL)	1,068 (240)/70 (TYPICAL)	NA	NA	NA	NA	NA	NA	NA	NA	F, D, E, SP, ST
PETROMAT® 4597 (NW-P/PP)	156 (4.6)	NA	NA	NA	NA	NA	534 (120)/50	NA	NA	NA	NA	NA	NA	NA	NA	A/O
PETROMAT® 4598 (NW-P/PP)	140 (4.1)	NA	NA	NA	NA	NA	450 (101)/50	Type 2	A/O	NA	NA	NA	NA	NA	NA	A/O
PETROMAT® 4599 (NW-P/PP)	122 (3.6)	NA	NA	NA	NA	NA	400 (90)/50	NA	NA	NA	NA	NA	NA	NA	NA	A/O
GEOTEX® 1341 NH (NW-P/PP)	509 (15.0)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.0 (57)	10.0 (57)	NA	NA	SP, F, P
REFLECTEX® (NW-P/PP)	509 (15.0)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.0 (57)	10.0 (57)	NA	NA	SP, F, P
Saint-Gobain ADFORS America | www.adfors.com																
GlasPave 25 (N/W,O/C), (FG/PET)	136 (4.0)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	25 (140)✧/ <5%	25 (140)✧/ <5%	NA	NA	A/O, PR
GlasPave 50 (N/W,O/C), (FG/PET)	237 (7.0)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	50 (280)✧/ <5%	50 (280)✧/ <5%	NA	NA	A/O, PR

✧Tensile test performed under ASTM D5035

[1] NW = Non woven, -P = needlepunched, -h = calendered
W = Woven, -SF = slit film t = thermally bonded
K = Knitted O/C = Other/combination

[2] PP = Polypropylene, PET = Polyester, * = average

[3] FH = Test is run by the falling head method
CH = Test is run by the constant head method

[4] SP = Separation S/F = Silt Fence
ST = Stabilization D = Drainage
F = Filtration E = Erosion Control
A/O = Asphalt overlay

[5] MD = Machine direction XD = Cross-machine direction

[6] For a minimum of 10,000 hours, extrapolated to a 75 year time period

[7] LTDS = $\frac{T_{ult}}{RF_{CR} \times RF_{ID} \times RF_{D}}$

RF_{CR} = Reduction factor for creep
RF_{ID} = Reduction factor for installation damage
RF_{D} = Reduction factor for durability

NOTE: this equation does not include other reduction factors which may apply to design. Reduction factors are site specific and should be reviewed on a per project basis. Contact the manufacturer for recommendations.

[8] R = Reinforcement P = Protection
SP = Separation S/F = Silt Fence
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NP = Not provided by manufacturer
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Companies were requested to provide minimum average roll values (MARV). All claims are the responsibility of the manufacturer.

Product Name (Structure [1]/ Polymer Type [2])	Mass Per Unit Area ASTM D 5261 g/m² (oz/yd²)	M288 Transportation-Related Applications								Reinforcement Applications						
		Filtration/Hydraulic Properties			Physical Properties					Wide Width Tensile/Elongation ASTM D 4595 kN/m (lb/in)/%				Creep Limited Strength-MD ASTM D 5262 [6] kN/m (lb/ft)	LTDS GRI GT7-MD (in sand) [7] kN/m (lb/ft)	Other Manufacturer's Suggested Applications [8]
										Strength @ 5% Strain [5]		Ultimate Strength % (Tult) [5]				
		Percent Open Area CWO-22125 %	Apparent Opening Size ASTM D 4751 mm (U.S. sieve)	Permittivity ASTM D 4491 sec-1 Flow Rate (FH or CH) [3] l/min/m² (gal/min/ft²)	Puncture ASTM D 6241 kN (lb)	Trapezoid Tearing Strength ASTM D 4533 kN (lb)	Grab Tensile/Elongation ASTM D 4632 kN (lb)/%	M288 Survivability Class	M288 Applications [4]	MD	XD	MD	XD			
SKAPS Industries | www.skaps.com																
GC140 (NW-P/PP)	143 (4.2)	NA	NA	NA	1.33 (300)	0.200 (45)	0.453 (102)/50	NP	NP	NA	NA	NA	NA	NA	NA	A/O
GE116 (NW-P/PP)	542 (16)	NA	0.150 (100)	0.57/1833 (45), CH	5.34 (1200)	0.667 (150)	1.89 (425)/50	1	SP, E	NA	NA	NA	NA	NA	NA	S/F, F, D, P, E
GE160 (NW-P/PP)	203 (6)	NA	0.212 (70)	1.63/5080 (125), CH	2.0 (450)	0.290 (65)	0.711 (160)/50	2	SP, D	NA	NA	NA	NA	NA	NA	S/F, F, D, P, E
GE180 (NW-P/PP)	271 (8)	NA	0.180 (80)	1.26/4074 (100), CH	2.67 (600)	0.400 (90)	1.00 (225)/50	1	SP, D, ST	NA	NA	NA	NA	NA	NA	S/F, F, D, P, E
GT110 (NW-P/PP)	NP	NA	0.150 (100)	1.20/3251 (80), CH	3.11 (700)	0.444 (100)	1.11 (250)/50	1	SP, D, ST, E	NA	NA	NA	NA	NA	NA	S/F, F, D, E
GT116 (NW-P/PP)	NP	NA	0.150 (100)	0.70/2035 (50), CH	4.80 (1080)	0.644 (145)	1.69 (380)/50	1	SP, D, ST, E	NA	NA	NA	NA	NA	NA	S/F, F, D, E
GT135 (NW-P/PP)	NP	NA	0.300 (50)	2.0/6095 (150), CH	1.18 (265)	0.178 (40)	0.401 (90)/50	NP	NP	NA	NA	NA	NA	NA	NA	F, D, E
GT142 (NW-P/PP)	NP	NA	0.212 (70)	1.7/5500 (135), CH	1.38 (310)	0.222 (50)	0.533 (120)/50	3	S/F	NA	NA	NA	NA	NA	NA	F, D, E
GT160 (NW-P/PP)	NP	NA	0.212 (70)	1.5/4480 (110), CH	1.82 (410)	0.267 (60)	0.711 (160)/50	2	SP, D	NA	NA	NA	NA	NA	NA	S/F, F, E
GT180 (NW-P/PP)	NP	NA	0.180 (80)	1.35/3657 (90), CH	2.38 (535)	0.378 (85)	0.911 (205)/50	1	SP, D, ST, E	NA	NA	NA	NA	NA	NA	S/F, F, E, D
SW200 (W-SF/PP)	NP	1	0.425 (40)	0.05/203 (5), CH	3.11 (700)	0.333 (75)	0.90 (200)/15	3	NP	NP	NP	NP	NP	NP	NP	NP
SW315 (W/PP)	NP	1	0.425 (40)	0.05/163 (4), CH	4.45 (1000)	0.533 (120)	1.40 (315)/15	1	SP, ST	NP	NP	NP	NP	NP	NP	SF
TechFab India | www.techfabindia.com																
TFI-3200HT (W/PET)	NP	NP	0.25 (60)	0.02/240 (5.89), CH	12 (2698)	NA	NA	NP	NP	80 (457)	80 (457)	200 (1142)	200 (1142)	140 (9590)	NP	R
TFI-31000 (W/PET)	NP	NP	0.45 (40)	0.01/180 (4.41), CH	7 (1573)	NA	NA	NP	NP	415 (2370)	18 (103)	1000 (5711)	50 (286)	709 (48566)	NP	W, S, E
R 42 (NW/PP)	NP	NP	0.212 (70)	1.5/4500 (110), CH	1.51 (340)	0.214 (48)	0.534 (120) / 50	NP	SP, ST, F, D, E	NA	NA	9.0 (51)	9.0 (51)	NA	NA	ST, SP, R

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K = Knitted O/C = Other/combination

[2] PP = Polypropylene, PET = Polyester, * = average

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A/O = Asphalt overlay

[5] MD = Machine direction XD = Cross-machine direction

[6] For a minimum of 10,000 hours, extrapolated to a 75 year time period

[7] LTDS = $\frac{T_{ult}}{RF_{CR} \times RF_{ID} \times RF_{D}}$

RF_{CR} = Reduction factor for creep
RF_{ID} = Reduction factor for installation damage
RF_{D} = Reduction factor for durability

NOTE: this equation does not include other reduction factors which may apply to design. Reduction factors are site specific and should be reviewed on a per project basis. Contact the manufacturer for recommendations.

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SP = Separation S/F = Silt Fence
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Companies were requested to provide minimum average roll values (MARV). All claims are the responsibility of the manufacturer.

Product Name (Structure [1]/ Polymer Type [2])	Mass Per Unit Area ASTM D 5261 g/m² (oz/yd²)	M288 Transportation-Related Applications								Reinforcement Applications						Other Manufacturer's Suggested Applications [8]
		Filtration/Hydraulic Properties			Physical Properties					Wide Width Tensile/Elongation ASTM D 4595 kN/m (lb/in)/%				Creep Limited Strength-MD ASTM D 5262 [6] kN/m (lb/ft)	LTDS GRI GT7-MD (in sand) [7] kN/m (lb/ft)	
										Strength @ 5% Strain [5]		Ultimate Strength % (Tult) [5]				
		Percent Open Area CWO-22125 %	Apparent Opening Size ASTM D 4751 mm (U.S. sieve)	Permittivity ASTM D 4491 sec-1 Flow Rate (FH or CH) [3] l/min/m² (gal/min/ft²)	Puncture ASTM D 6241 kN (lb)	Trapezoid Tearing Strength ASTM D 4533 kN (lb)	Grab Tensile/Elongation ASTM D 4632 kN (lb)/%	M288 Survivability Class	M288 Applications [4]	MD	XD	MD	XD			
TenCate Geosynthetics | www.mirafi.com																
Mirafi 140NC (NW-P/PP)	NA	NA	0.212 (70)	2.0/5704(140), CH	1.1 (250)	0.2 x 0.2 (45 x 45)	0.445 x 0.445 (100 x 100)/ 50 x 50	NA	NA	NA	NA	NA	NA	NA	NA	F, D, E
Mirafi 140N (NW-P/PP)	NA	NA	0.212 (70)	1.7/5500 (135), CH	1.4 (310)	0.223 x 0.223 (50 x 50)	0.534 x 0.534 (120 x 120)/ 50 x 50	3	D, E, SP, ST	NA	NA	NA	NA	NA	NA	F
Mirafi 160N (NW-P/PP)	NA	NA	0.212 (70)	1.5/4481 (110), CH	1.8 (410)	0.267 x 0.267 (60 x 60)	0.712 x 0.712 (160 x 160)/ 50 x 50	2, 3	D, E, SP, ST	NA	NA	NA	NA	NA	NA	F
Mirafi 180N (NW-P/PP)	NA	NA	0.18 (80)	1.4/3870 (95), CH	2.2 (500)	0.356 x 0.356 (80 x 80)	0.912 x 0.912 (205 x 205)/ 50 x 50	1, 2, 3	D, E, SP, ST	NA	NA	NA	NA	NA	NA	F, P
Mirafi 1100N (NW-P/PP)	NA	NA	0.15 (100)	0.8/3056 (75), CH	3.1 (700)	0.445 x 0.445 (100 x 100)	1.1 x 1.1 (250 x 250)/ 50 x 50	1, 2, 3	D, E, SP, ST	NA	NA	NA	NA	NA	NA	F, P
Mirafi 1120N (NW-P/PP)	NA	NA	0.15 (100)	0.8/2648 (65), CH	3.6 (800)	0.512 x 0.512 (115 x 115)	1.3 x 1.3 (300 x 300)/ 50 x 50	1, 2, 3	D, E, SP, ST	NA	NA	NA	NA	NA	NA	F, P
Mirafi 1160N (NW-P/PP)	NA	NA	0.15 (100)	0.7/2037 (50), CH	4.6 (1025)	0.623 x 0.623 (140 x 140)	1.7 x 1.7 (380 x 380)/ 50 x 50	1, 2, 3	D, E, SP, ST	NA	NA	NA	NA	NA	NA	F, P
Mirafi 500X (W/SF-PP)	NA	1	0.425 (40)	0.05/163 (4), CH	3.1 (700)	0.334 x 0.334 (75 x 75)	0.890 x 0.890 (200 x 200)/ 15 x 15	3	SP, ST	NA	NA	NA	NA	NA	NA	NA
Mirafi 600X (W/SF-PP)	NA	1	0.425 (40)	0.05/163 (4), CH	4.0 (900)	0.534 x 0.534 (120 x 120)	1.4 x 1.4 (315 x 315)/ 15 x 15	1, 2, 3	SP, ST	NA	NA	NA	NA	NA	NA	NA
Mirafi FW402 (W/PP)	NA	10	0.425 (40)	2.1/5907 (145), CH	3.0 (675)	0.512 x 0.334 (115 x 75)	1.6 x 0.9 (365 x 200)/ 24 x 10	2, 3	D	7.0 (40)	8.8 (50)	35 (200)	24.5 (140)	NA	NA	E, F
Mirafi FW404 (W/PP)	NA	1	0.425 (40)	0.9/2852 (70), CH	5.1 (1150)	0.668 x 0.668 (150 x 165)	1.8 x 1.4 (400 x 315)/ 15 x 15	1, 2, 3	D, E	17.5 (100)	17.5 (100)	43.8 (250)	40.3 (230)	NA	NA	F
Mirafi FW500 (W/PP)	NA	3	0.30 (50)	0.2/611 (15), CH	5.3 (1200)	0.534 x 0.534 (120 x 120)	1.7 x 1.7 (375 x 375)/ (15 x 8)	2, 3	D	12.3 (70)	43.8 (250)	35.0 (200)	48.2 (275)	NA	NA	E, F
Mirafi FW700 (W/PP)	NA	4	0.212 (70)	0.28/733 (18), CH	4.2 (950)	0.445 x 0.267 (100 x 60)	1.6 x 1.1 (370 x 250)/ 15 x 15	2, 3	D, E	12.3 (70)	7.0 (40)	39.4 (225)	25.4 (145)	NA	NA	F
Mirafi HP270 (W/PP)	NA	NA	0.60 (30)	0.60 /1630 (40), CH	4.5 (1000)	0.490 x 0.579 (110 x 130)	1.3 x 1.2 (295 x 260)	2, 3	SP	18.6 (106)	21.0 (120)	38.5 (220)	35.9 (205)	NA	NA	R, ST

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RF_{CR} = Reduction factor for creep
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NOTE: this equation does not include other reduction factors which may apply to design. Reduction factors are site specific and should be reviewed on a per project basis. Contact the manufacturer for recommendations.

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Product Name (Structure [1]/ Polymer Type [2])	Mass Per Unit Area ASTM D 5261 g/m² (oz/yd²)	M288 Transportation-Related Applications								Reinforcement Applications						
		Filtration/Hydraulic Properties			Physical Properties					Wide Width Tensile/Elongation ASTM D 4595 kN/m (lb/in)/%				Creep Limited Strength-MD ASTM D 5262 [6] kN/m (lb/ft)	LTDS GRI GT7-MD (in sand) [7] kN/m (lb/ft)	Other Manufacturer's Suggested Applications [8]
		Percent Open Area CWO-22125 %	Apparent Opening Size ASTM D 4751 mm (U.S. sieve)	Permittivity ASTM D 4491 sec-1 Flow Rate (FH or CH) [3] l/min/m² (gal/min/ft²)	Puncture ASTM D 6241 kN (lb)	Trapezoid Tearing Strength ASTM D 4533 kN (lb)	Grab Tensile/Elongation ASTM D 4632 kN (lb)/%	M288 Survivability Class	M288 Applications [4]	Strength @ 5% Strain [5]		Ultimate Strength % (Tult) [5]				
										MD	XD	MD	XD			
TenCate Geosynthetics | www.mirafi.com																
Mirafi HP370 (W/PP)	NA	NA	0.425 (40)	"0.9	5.8 (1300)	0.668 x 0.712 (150 x 160)	2.0 x 1.4 (450 x 320)/ 12 x 10	1, 2, 3	SP	21.9 (125)	22.8 (130)	52.5 (300)	47.3 (270)	NA	NA	R, ST
Mirafi HP570 (W/PP)	NA	NA	0.60 (30)	0.4/1222 (30), CH	8.9 (2000)	0.8 x 0.8 (180 x 180)	2.2 x 2.1 (500 x 475)/ 11 x 4	1, 2, 3	SP	35.0 (200)	43.8 (250)	70.0 (400)	70.0 (400)	NA	NA	R, ST
Mirafi HP665 (W/PP)	NA	NA	0.425 (40)	0.26/815 (20), CH	8.9 (2000)	0.8 x 1.2 (180 x 270)	2.7 x 3.1 (600 x 700)/ 15 x 15	1, 2, 3	SP, ST	17.5 (100)	61.3 (350)	78.8 (450)	109.4 (625)	NA	NA	R, E
Mirafi HP770 (W/PP)	NA	NA	0.085 (20)	0.23/611 (15), CH	8.5 (1900)	0.890 x 0.979 (200 x 220)	2.4 x 2.0 (550 x 450)/ 12 x 6	1, 2, 3	SP, ST	52.5 (300)	52.5 (300)	105.1 (600)	84.0 (480)	NA	NA	R
Mirafi S600 (NW-P/PP)	203 (6.0)	NA	0.18 (80)	1.5/4481 (110), CH	2.0 (450)	0.312 x 0.312 (70 x 70)	0.757 x 0.757 (170 x 170)/ 50 x 50	NA	NA	NA	NA	NA	NA	NA	NA	ST, P
Mirafi S800 (NW-P/PP)	271 (8.0)	NA	0.15 (100)	1.4/4481 (110), CH	2.7 (600)	0.423 x 0.423 (95 x 95)	1.0 x 1.0 (230 x 230)/ 50 x 50	NA	NA	NA	NA	NA	NA	NA	NA	ST, P
Mirafi S1600 (NW-P/PP)	542 (16.0)	NA	0.15 (100)	0.7/2037 (50), CH	5.3 (1200)	0.69 x 0.69 (155 x 155)	1.891 x 1.891 (425 x 425)/ 50 x 50	NA	NA	NA	NA	NA	NA	NA	NA	ST, P
MPV400 (NW-P/PP)	119 (3.5)	NA	NA	NA	NA	NA	0.4 x 0.4 (90 x 90)/ 50 x 50	NA	A/O	NA	NA	NA	NA	NA	NA	A/O
MPV500 (NW-P/PP)	140 (4.1)	NA	NA	NA	NA	NA	0.449 x 0.449 (101 x 101)/ 50 x 50	NA	A/O	NA	NA	NA	NA	NA	NA	A/O
Tensar International Corp. | www.tensar-international.com																
GlasPave® 25	136 (4.0)	NA	NA	NA	NA	NA	25 kN/m (140 lb/in)/<5%✧	NA	NA	NA	NA	NA	NA	NA	NA	A/O, PR
GlasPave® 50	237 (7.0)	NA	NA	NA	NA	NA	50 kN/m (280 lb/in)/<5%✧	NA	NA	NA	NA	NA	NA	NA	NA	A/O, PR

✧ Tensile strength per ASTM D 5035

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Product Name (Structure [1]/ Polymer Type [2])	Mass Per Unit Area ASTM D 5261 g/m² (oz/yd²)	M288 Transportation-Related Applications								Reinforcement Applications						
		Filtration/Hydraulic Properties			Physical Properties					Wide Width Tensile/Elongation ASTM D 4595 kN/m (lb/in)/%				Creep Limited Strength-MD ASTM D 5262 [6] kN/m (lb/ft)	LTDS GRI GT7-MD (in sand) [7] kN/m (lb/ft)	Other Manufacturer's Suggested Applications [8]
										Strength @ 5% Strain [5]		Ultimate Strength % (Tult) [5]				
		Percent Open Area CWO-22125 %	Apparent Opening Size ASTM D 4751 mm (U.S. sieve)	Permittivity ASTM D 4491 sec-1 Flow Rate (FH or CH) [3] l/min/m² (gal/min/ft²)	Puncture ASTM D 6241 kN (lb)	Trapezoid Tearing Strength ASTM D 4533 kN (lb)	Grab Tensile/Elongation ASTM D 4632 kN (lb)/%	M288 Survivability Class	M288 Applications [4]	MD	XD	MD	XD			
Texel Technical Materials Inc. | www.texel.ca																
TEXEL060E	203 (6)	NA	0.212 (70)	1.60/5080 (125)	2.000 (450)	0.289 (65)	0.712 (160)/50									
TEXEL080E (NW-PP)	271 (8)	NA	0.180 (80)	1.26/4074 (100)	2.670 (600)	0.400 (90)	0.979 (220)/50	NA	NA	NA	NA	NA	NA	NA	NA	P, SP, D, E, ST
TEXEL100E (NW-PP)	339 (10)	NA	0.150 (100)	0.94/3055 (79)	3.220 (725)	0.444 (100)	1.200 (270)/50	NA	NA	NA	NA	NA	NA	NA	NA	P, SP, D, E, ST
TEXEL120E (NW-PP)	407 (12)	NA	0.150 (100)	0.90/2544 (62)	4.000 (900)	0.556 (125)	1.470 (330)/50	NA	NA	NA	NA	NA	NA	NA	NA	P, SP, D, E, ST
TEXEL140E (NW-PP)	475 (14)	NA	0.150 (100)	0.64/2037 (50)	4.650 (1045)	0.600 (135)	1.730 (389)/50	NA	NA	NA	NA	NA	NA	NA	NA	P, SP, D, E, ST
TEXEL160E (NW-PP)	542 (16)	NA	0.150 (100)	0.57/1833 (45)	5.340 (1200)	0.667 (150)	1.891 (425)/50	NA	NA	NA	NA	NA	NA	NA	NA	P, SP, D, E, ST
TEXEL200E (NW-PP)	675 (20)	NA	NP	NP	6.200 (1395)	0.800 (180)	2.045 (460)/50	NA	NA	NA	NA	NA	NA	NA	NA	P, SP, D, E, ST
TEXEL240E (NW-PP)	810 (24)	NA	NP	0.4/1019	7.150 (1607)	0.910 (205)	2.220 (500)/50	NA	NA	NA	NA	NA	NA	NA	NA	P, SP, D, E, ST
TEXEL280E (NW-PP)	950 (28)	NA	NP	NP	8.000 (1800)	1.010 (228)	2.500 (560)/50	NA	NA	NA	NA	NA	NA	NA	NA	P, SP, D, E, ST
TEXEL320E (NW-PP)	1080 (32)	NA	NP	NP	8.800 (1980)	1.100 (247)	2.640 (595)/50	NA	NA	NA	NA	NA	NA	NA	NA	P, SP, D, E, ST
TEXEL430E (NW-PP)	1460 (43)	NA	NP	NP	9.500 (2135)	1.350 (303)	3.300 (742)/50	NA	NA	NA	NA	NA	NA	NA	NA	P, SP, D, E, ST
PAVETEX L	120 (3.5)	NA	NA	NA	NA	NA	0.400 (90)/50	NA	A/O	NA	NA	NA	NA	NA	NA	A/O
PAVETEX M	140 (4.1)	NA	NA	NA	NA	NA	0.450(101/50	NA	A/O	NA	NA	NA	NA	NA	NA	A/O
PAVETEX H	156 (4.6)	NA	NA	NA	NA	NA	555 (125)/50	NA	A/O	NA	NA	NA	NA	NA	NA	A/O
PAVETEX SH	203 (6.0)	NA	NA	NA	NA	NA	667(150)/50	NA	A/O	NA	NA	NA	NA	NA	NA	A/O

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Product Name (Structure [1]/ Polymer Type [2])	Mass Per Unit Area ASTM D 5261 g/m² (oz/yd²)	M288 Transportation-Related Applications								Reinforcement Applications						
		Filtration/Hydraulic Properties			Physical Properties					Wide Width Tensile/Elongation ASTM D 4595 kN/m (lb/in)/%				Creep Limited Strength-MD ASTM D 5262 [6] kN/m (lb/ft)	LTDS GRI GT7-MD (in sand) [7] kN/m (lb/ft)	Other Manufacturer's Suggested Applications [8]
		Percent Open Area CWO-22125 %	Apparent Opening Size ASTM D 4751 mm (U.S. sieve)	Permittivity ASTM D 4491 sec-1 Flow Rate (FH or CH) [3] l/min/m² (gal/min/ft²)	Puncture ASTM D 6241 kN (lb)	Trapezoid Tearing Strength ASTM D 4533 kN (lb)	Grab Tensile/Elongation ASTM D 4632 kN (lb)/%	M288 Survivability Class	M288 Applications [4]	Strength @ 5% Strain [5]		Ultimate Strength % (Tult) [5]				
										MD	XD	MD	XD			
Thrace-LINQ Inc. | www.thracelinq.com																
120EX (NW-PP)	NP	NP	0.21 (70)	2.2/6519 (160), FH	0.934 (210)	0.133 (30)	0.356 (80)/50	NP	NP	NP	NP	NP	NP	NP	NP	A/O, F, D
125EX (NW-PP)	NP	NP	0.21 (70)	2.1/6112 (150), FH	1.179 (265)	0.178 (40)	0.400 (90)/50	NP	NP	NP	NP	NP	NP	NP	NP	A/O, F, D
130EX (NW-PP)	NP	NP	0.21 (70)	2.0/5908 (145), FH	1.334 (300)	0.200 (45)	0.467 (105)/50	NP	NP	NP	NP	NP	NP	NP	NP	A/O, F, D
140EX (NW-PP)	NP	NP	0.21 (70)	1.8/5297 (130), FH	1.512 (340)	0.222 (50)	0.534 (120)/50	3	ST, SP, D, A/O	NP	NP	NP	NP	NP	NP	E, F
150EX (NW-PP)	NP	NP	0.18 (80)	1.5/4482 (110), FH	1.824 (410)	0.267 (60)	0.712 (160)/50	2, 3	ST, SP, D	NP	NP	NP	NP	NP	NP	E, F
160EX (NW-PP)	NP	NP	0.15 (100)	1.5/4482 (110), FH	2.113 (475)	0.334 (75)	0.801 (180)/50	2, 3	ST, SP, D	NP	NP	NP	NP	NP	NP	E, F
180EX (NW-PP)	NP	NP	0.15 (100)	1.5/4482 (110), FH	2.380 (535)	0.356 (80)	0.912 (205)/50	1, 2, 3	ST, SP, D, E	NP	NP	NP	NP	NP	NP	F, P
245EX (NW-PP)	NP	NP	0.15 (100)	1.2/3463 (85), FH	3.114 (700)	0.445 (100)	1.112 (250)/50	1, 2, 3	ST, SP, D, E	NP	NP	NP	NP	NP	NP	P, F
250EX (NW-PP)	NP	NP	0.15 (100)	1.2/3463 (85), FH	3.225 (725)	0.445 (100)	1.201 (270)/50	1, 2, 3	ST, SP, D, E	NP	NP	NP	NP	NP	NP	P, F
275EX (NW-PP)	NP	NP	0.15 (100)	0.9/2648 (65), FH	3.692 (830)	0.512 (115)	1.334 (300)/50	1, 2, 3	ST, SP, D, E	NP	NP	NP	NP	NP	NP	P, F
350EX (NW-PP)	NP	NP	0.15 (100)	0.7/2037 (50), FH	4.67 (1050)	0.645 (145)	1.690 (380)/50	1, 2, 3	ST, SP, D, E	NP	NP	NP	NP	NP	NP	P, F
AOL (NW-PP)	NP	NP	NP	NP	NP	NP	0.400 (90)/50	NP	NP	NP	NP	NP	NP	NP	NP	A/O
AOM (NW-PP)	NP	NP	NP	NP	NP	NP	0.449 (101)/50	NP	A/O	NP	NP	NP	NP	NP	NP	A/O
GTF-180/ GTF190 (W-PP)	NP	NP	0.60 (30)	0.05/448 (11), FH	1.112 (250)	0.178 (40)	0.56 x 0.45 (125x101)/15	NP	SF unsupported	NP	NP	NP	NP	NP	NP	S/F

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Product Name (Structure [1]/ Polymer Type [2])	Mass Per Unit Area ASTM D 5261 g/m² (oz/yd²)	M288 Transportation-Related Applications								Reinforcement Applications						
		Filtration/Hydraulic Properties			Physical Properties					Wide Width Tensile/Elongation ASTM D 4595 kN/m (lb/in)/%				Creep Limited Strength-MD ASTM D 5262 [6] kN/m (lb/ft)	LTDS GRI GT7-MD (in sand) [7] kN/m (lb/ft)	Other Manufacturer's Suggested Applications [8]
										Strength @ 5% Strain [5]		Ultimate Strength % (Tult) [5]				
		Percent Open Area CWO-22125 %	Apparent Opening Size ASTM D 4751 mm (U.S. sieve)	Permittivity ASTM D 4491 sec-1 Flow Rate (FH or CH) [3] l/min/m² (gal/min/ft²)	Puncture ASTM D 6241 kN (lb)	Trapezoid Tearing Strength ASTM D 4533 kN (lb)	Grab Tensile/Elongation ASTM D 4632 kN (lb)/%	M288 Survivability Class	M288 Applications [4]	MD	XD	MD	XD			
Thrace-LINQ Inc. | www.thracelinq.com																
GTF200 (W-PP)	NP	1	0.425 (40)	0.08/244 (6), FH	3.114 (700)	0.334 (75)	0.890 (200)/15	3	ST, SP	NP	NP	NP	NP	NP	NP	SP
GTF250 (W-PP)	NP	NP	0.425 (40)	0.05/163 (4), FH	4.003 (900)	0.400 (90)	1.112 (250)/15	2, 3	ST, SP	NP	NP	NP	NP	NP	NP	SP
GTF300 (W-PP)	NP	1	0.425 (40)	0.05/163 (4), FH	4.45 (1000)	0.512 (115)	1.401 (315)/15	1, 2, 3	ST, SP	NP	NP	30.6 (175)	30.6 (175)	NP	NP	ST, SP
GTF350 (W-PP)	NP	NP	0.425 (40)	0.150/448 (11), FH	4.45 (1000)	0.53 x 0.53 (120 x 120)	1.56 x 1.56 (350 x 350) 20/15	NP	NP	NP	NP	46 (265)	40 (226)	NP	NP	ST, SP, R
GTF500 (W-PP)	NP	NP	0.180 (80)	0.136/407 (10), FH	6.23 (1400)	0.89 x 0.89 (200 x 200)	2.67 x 2.67 (600 x 600) 20/15	NP	NP	NP	NP	70 (400)	70 (400)	NP	NP	ST, SP, R
GTF 400E (W-PP)	NP	4 - 6	0.21 (70)	0.28/733 (18), FH	4.23 (950)	0.45 x 0.27 (100 x 60)	1.65 x 1.11 (370 x 250)/15	2, 3	D, E	NP	NP	39 (225)	25 (145)	NP	NP	F
GTF 400EO (W-PP)	NP	10	0.425 (40)	2.1/5908 (145), FH	3.004 (675)	0.51 x 0.33 (115 x 75)	1.64 x 0.98 (370 x 220)/10	3	D	NP	NP	35 (200)	25 (145)	NP	NP	E, F
GTF 404 (W-PP)	NP	1	0.425 (40)	0.90/2852 (70), FH	5.12 (1150)	0.67 x 0.73 (150 x 165)	1.78 x 1.40 (400 x 315)/15	1, 2, 3	D, E	NP	NP	44 (250)	40 (230)	NP	NP	F
GTF 320 (W-PP)	NP	NP	0.425 (40)	0.70/2037 (50)FH	NP	0.73 x 0.64 (166 x 145)	1.77 x 1.55 (400 x 350)/20	2, 3	SP	NP	NP	39 (225)	39 (220)	NP	NP	R, ST
GTF 570 (W-PP)	NP	NP	0.600 (30)	0.40/1222 (30), FH	8.90 (2000)	0.80 x 0.80 (180 x 180)	2.11 x 1.95 (475 x 440)12/6	1, 2, 3	SP	NP	NP	70 (400)	70 (400)	NP	NP	R, ST
600EX (NW-PP)	6	NP	0.18 (80)	1.5/4482 (110), FH	1.935 (435)	0.289 (65)	0.712 (160)/50	2, 3	ST, SP, D, E	NP	NP	NP	NP	NP	NP	E, F, P
800EX (NW-PP)	8	NP	0.15 (100)	1.4/4075 (100), FH	2.558 (575)	0.400 (90)	0.979 (220)/50	1, 2, 3	ST, SP, D, E	NP	NP	NP	NP	NP	NP	E, F, P
2400EX (NW-PP)	24	NP	NP	NP	7.784 (1750)	0.890 (200)	2.224 (500)/50	1, 2, 3	P, E	NP	NP	NP	NP	NP	NP	P, F, P
3200EX (NW-PP)	32	NP	NP	NP	10.453 (2350)	1.201 (270)	2.669 (600)/50	1, 2, 3	P, E	NP	NP	NP	NP	NP	NP	P, F, P

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										Strength @ 5% Strain [5]		Ultimate Strength % (Tult) [5]				
		Percent Open Area CWO-22125 %	Apparent Opening Size ASTM D 4751 mm (U.S. sieve)	Permittivity ASTM D 4491 sec-1 Flow Rate (FH or CH) [3] l/min/m² (gal/min/ft²)	Puncture ASTM D 6241 kN (lb)	Trapezoid Tearing Strength ASTM D 4533 kN (lb)	Grab Tensile/Elongation ASTM D 4632 kN (lb)/%	M288 Survivability Class	M288 Applications [4]	MD	XD	MD	XD			
Typar Geosynthetics | www.typargeosynthetics.com																
Typar 3201 NW-PP-t	65* (1.9)	NA	0.59 (30)	1.0/7790 (190), FH	NP	0.110 (25)	0.267 (60)/60	NP	NP	NP	NP	NP	NP	NA	NA	SP, D
Typar 3301 NW-PP-t	104* (3.0)	NA	0.30 (50)	0.8/3895 (95), FH	NP	0.156 (35)	0.533 (120)/60	NP	NP	NP	NP	NP	NP	NA	NA	SP, S/F, F, D
Typar 3341 NW-PP-t	116* (3.4)	NA	0.20 (70)	0.7/3485 (85), FH	NP	0.18 (40)	0.533 (120)/60	NP	NP	NP	NP	NP	NP	NA	NA	SP, ST, F, D, E, P
Typar 3401 NW-PP-t	136* (4.0)	NA	0.21 (70)	0.7/2460 (60), FH	0.99 (225)	0.270 (60)	0.578 (130)/60	3	SP, ST, D, E	NP	NP	NP	NP	NA	NA	SP, ST, F, D, E, P
Typar 3501 NW-PP-t	170* (5.0)	NA	0.20 (70)	0.5/2050 (50), FH	1.375 (310)	0.270 (60)	0.710 (160)/60	2	SP, ST, D, E	NP	NP	NP	NP	NA	NA	F, D, SP, ST, E, P
Typar 3601 NW-PP-t	204* (6.0)	NA	0.10 (140)	0.10/615 (15), FH	1.650 (370)	0.400 (90)	1.067 (240)/60	2	SP, ST, D, E	NP	NP	NP	NP	NA	NA	F, D, SP, ST, E, R, P
Typar 3801 NW-PP-t	272* (8.0)	NA	0.09 (170)	0.10/328 (8), FH	2.285 (510)	0.425 (95)	1.335 (300)/60	1	SP, ST, D, E	NP	NP	NP	NP	NA	NA	E, SP, ST, R, P
Typar 3100 NW-PP-t	339* (10.0)	NA	0.074 (200)	0.123/328 (8) FH	3.136 (697)	0.556(125)	2.000 (450)/60	1	SP, ST, D, E	NP	NP	NP	NP	NA	NA	E, SP, ST, R, P
Terram T700 NW-PP/PE-t	NP	NA	0.294(50)	2.6/7800 (190), FH	1.05 (236)	0.25 (56)	0.5 (112)/60	NP	SP, ST, D, E	NP	NP	NP	NP	NA	NA	SP, S/F, F, D
Terram T900 NW-PP/PE-t	NP	NA	0.206(70)	2.1/6300 (154), FH	1.35 (304)	0.275 (62)	0.6 (135)/60	3	SP, ST, D, E	NP	NP	NP	NP	NA	NA	SP, ST, F, D, E, P
Terram T1000 NW-PP/PE-t	NP	NA	0.208(70)	2.0/6000 (146), FH	1.5 (337)	0.3 (67)	0.66 (148)/60	2	SP, ST, D, E	NP	NP	NP	NP	NA	NA	F, D, SP, ST, E, R, P
Terram T1300 NW-PP/PE-t	NP	NA	0.148(100)	1.6/4800 (117), FH	2 (450)	0.41 (92)	0.9 (202)/60	2	SP, ST, D, E	NP	NP	NP	NP	NA	NA	E, SP, ST, R, P
Terram T1500 NW-PP/PE-t	NP	NA	0.143(100)	1.5/4500 (110), FH	2.25 (506)	0.47 (106)	0.97 (218)/60	1	SP, ST, D, E	NP	NP	NP	NP	NA	NA	E, SP, ST, R, P

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										Strength @ 5% Strain [5]		Ultimate Strength % (Tult) [5]				
		Percent Open Area CWO-22125 %	Apparent Opening Size ASTM D 4751 mm (U.S. sieve)	Permittivity ASTM D 4491 sec-1 Flow Rate (FH or CH) [3] l/min/m² (gal/min/ft²)	Puncture ASTM D 6241 kN (lb)	Trapezoid Tearing Strength ASTM D 4533 kN (lb)	Grab Tensile/Elongation ASTM D 4632 kN (lb)/%	M288 Survivability Class	M288 Applications [4]	MD	XD	MD	XD			
US Fabrics | www.usfabrics.com																
US 200	NA	NA	0.43 (40)	0.05	3.115 (700)	0.334 (75)	0.890 (200)/15	3	NP	NA	NA	NA	NA	NA	NA	NA
US 250	NA	NA	0.425 (40)	0.05	4.005 (900)	0.405 (90)	1.112 (250)/15	2	ST, SP	NA	NA	NA	NA	NA	NA	NA
US 315	NA	NA	0.425 (40)	0.05	4.450 (1000)	0.533 (120)	1.402 (315)/15	1	SP	NA	NA	NA	NA	NA	NA	NA
US 4800	410 (12.1)	NA	0.180 (80)	0.15	6.228 (1400)	0.890 x 0.890 (200 x 200)	2.669 x 2.669 (600 x 600)/ 20 x 15	NA	SP	24.6 (140.3)	41.4 (236.2)	70 (400)	70 (400)	NA	NA	NA
US 670	190 (5.6)	4–6	0.212 (70)	0.28	4.228 (950)	0.445 x 0.267 (100 x 60)	1.646 x 1.112 (370 x 250)/ 15 x 15	2, 3	DE	NA	NA	NA	NA	NA	NA	NA
US 90NW	119 (3.5)	NA	0.300 (50)	2.0	1.179 (265)	0.178 (40)	0.401 (90)/50	NA	NP	NA	NA	NA	NA	NA	NA	NA
US 120NW	142 (4.5)	NA	0.212 (70)	1.7	1.513 (340)	0.222 (50)	0.533 (120)/50	3	S/F	NA	NA	NA	NA	NA	NA	NA
US 160NW	203 (6.0)	NA	0.212 (70)	1.5	1.824 (410)	0.267 (60)	0.711 (160)/50	2	SP, D	NA	NA	NA	NA	NA	NA	NA
US 180NW	237 (7.0)	NA	0.212 (70)	1.4	2.114 (475)	0.333 (75)	0.800 (180)/50	NA	SP, D	NA	NA	NA	NA	NA	NA	NA
US 205NW	271 (8.0)	NA	0.180 (80)	1.35	2.381 (535)	0.378 (85)	0.912 (205)/50	1	SP, D, ST, E	NA	NA	NA	NA	NA	NA	NA

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Product Name (Structure [1]/ Polymer Type [2])	Mass Per Unit Area ASTM D 5261 g/m² (oz/yd²)	M288 Transportation-Related Applications								Reinforcement Applications						
		Filtration/Hydraulic Properties			Physical Properties					Wide Width Tensile/Elongation ASTM D 4595 kN/m (lb/in)/%				Creep Limited Strength-MD ASTM D 5262 [6] kN/m (lb/ft)	LTDS GRI GT7-MD (in sand) [7] kN/m (lb/ft)	Other Manufacturer's Suggested Applications [8]
										Strength @ 5% Strain [5]		Ultimate Strength % (Tult) [5]				
		Percent Open Area CWO-22125 %	Apparent Opening Size ASTM D 4751 mm (U.S. sieve)	Permittivity ASTM D 4491 sec-1 Flow Rate (FH or CH) [3] l/min/m² (gal/min/ft²)	Puncture ASTM D 6241 kN (lb)	Trapezoid Tearing Strength ASTM D 4533 kN (lb)	Grab Tensile/Elongation ASTM D 4632 kN (lb)/%	M288 Survivability Class	M288 Applications [4]	MD	XD	MD	XD			
Willacoochee Industrial Fabrics Inc. | www.winfabusa.com																
WINFAB 270HP	NA	NA	0.60 (30)	0.70/2037 (50), CH	NA	NA	NA	2, 3	SP	17.7 (101)	19.8 (113)	38.5 (220)	35.9 (205)	NA	NA	E, D, F, R, ST
WINFAB 2x2HF	NA	NA	0.425 (40)	0.70/2037 (50), CH	6.23 (1400)	0.556 x 0.556 (125 x 125)	1.424 x 1.424	1, 2, 3	D,E,SP,ST	11.4 (65)	20.5 (117)	35 (200)	35 (200)	NA	NA	F, R
WINFAB 370HP	NA	NA	0.60 (30)	0.52/1630 (40), CH	NA	NA	NA	1, 2, 3	SP	21.9 (125)	22.8 (130)	52.5 (300)	48.2 (225)	NA	NA	E, D, F, R, ST
WINFAB 3x3HF	NA	NA	0.60 (30)	0.52/1630 (40), CH	7.12 (1600)	0.801 x 0.623 (180 x 140)	2.003 x 1.558 (450 x 350) 15 x 6	1, 2, 3	SP	20.3 (116)	25.4 (145)	52.5 (300)	52.5 (300)	NA	NA	E, D, F, R, ST
WINFAB 570HP	NA	NA	0.60 (30)	0.4/1222 (30), CH	9.79 (2200)	0.89 x 0.89 (200 x 200)	2.114 x 1.958 (475 x 440) 15 x 15	1, 2, 3	SP	35 (200)	39.4 (225)	70 (400)	70 (400)	NA	NA	E, D, F, R, ST
WINFAB 4x4	NA	NA	0.60 (30)	0.15/407.4 (10), CH	9.79 (2200)	0.89 x 0.89 (200 x 200)	2.558 x 2.225 (570 x 500) 15 x 12	1, 2, 3	SP	21.2 (121)	38 (217)	70 (400)	70 (400)	NA	NA	E, D, F, R, ST
WINFAB 4x6	NA	NA	0.425 (40)	0.26/815 (20), CH	10.676 (2400)	0.801 x 1.224 (180 x 275)	2.67 x 3.115 (600 x 700) 15 x 15	1, 2, 3	D, E, SP, ST	17.5 (100)	38.5 (220)	70 (400)	105.1 (600)	NA	NA	F, R
WINFAB 6x6	NA	NA	0.60 (30)	.23/611 (15), CH	NA	NA	NA	1, 2, 3	SP	43.8 (250)	58.4 (333.3)	105.1 (600)	105.1 (600)	NA	NA	E, D, F, R, ST
WINFAB 6x9	NA	NA	0.60 (30)	NA	NA	NA	NA	1, 2, 3	SP	21.9 (125)	78.8 (450)	105.04 (600)	157.57 (900)			
WINFAB 770HP	NA	NA	0.6 (30)	0.23/611 (15), CH	NA	NA	NA	1, 2, 3	SP	52.5 (300)	52.5 (300)	105.1 (600)	84 (480)	NA	NA	E, D, F, R, ST
WINFAB 2196	NA	6	0.425 (40)	1.5/4480 (110), CH	3.113 (700)	0.4 x 0.285 (90 x 65)	1.557 x 0.89 (350 x 200) 15 x 15	3	NA	NA	NA	NA	NA	NA	NA	D, E, F
WINFAB 2197	NA	10	0.425 (40)	2.1/5907 (145), CH	3.336 (750)	0.512 x 0.334 (115 x 75)	1.624 x 0.89 (365 x 200) 24 x 15	3	NA	NA	NA	35 (200)	24.52 (140)	NA	NA	D, E, F
WINFAB 2198	NA	6	0.425 (40)	0.5/2460 (60), CH	3.559 (800)	0.445 x 0.312 (100 x 70)	1.557 x 0.89 (350 x 200) 15 x 15	3	NA	NA	NA	NA	NA	NA	NA	D, E, F
WINFAB 2199	NA	4	0.212 (70)	0.28/733 (18), CH	4.228 (950)	0.445 x 0.267 (100 x 60)	1.647 x 1.113 (370 x 250) 15 x 15	2, 3	D, E, SP	NA	NA	39.4 (225)	25.39 (145)	NA	NA	F
WINFAB 2300	NA	8	0.60 (30)	1.5/4685 (115), CH	5.563 (1250)	0.645 x 0.556 (145 x 125)	1.78 x 1.491 (400 x 335) 20 x 15	1, 2, 3	SP	NA	NA	40.3 (230)	39.4 (225)	NA	NA	D, E, F
WINFAB 2403	NA	6	0.425 (40)	0.96/2852 (70), CH	5.963 (1340)	0.645 x 0.556 (145 x 125)	1.891 x 1.558 (425 x 350) 21 x 21	1, 2, 3	D, E, SP, ST	NA	NA	47.3 (270)	39.4 (225)	NA	NA	F

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		Filtration/Hydraulic Properties			Physical Properties					Wide Width Tensile/Elongation ASTM D 4595 kN/m (lb/in)/%				Creep Limited Strength-MD ASTM D 5262 [6] kN/m (lb/ft)	LTDS GRI GT7-MD (in sand) [7] kN/m (lb/ft)	Other Manufacturer's Suggested Applications [8]
										Strength @ 5% Strain [5]		Ultimate Strength % (Tult) [5]				
		Percent Open Area CWO-22125 %	Apparent Opening Size ASTM D 4751 mm (U.S. sieve)	Permittivity ASTM D 4491 sec-1 Flow Rate (FH or CH) [3] l/min/m² (gal/min/ft²)	Puncture ASTM D 6241 kN (lb)	Trapezoid Tearing Strength ASTM D 4533 kN (lb)	Grab Tensile/Elongation ASTM D 4632 kN (lb)/%	M288 Survivability Class	M288 Applications [4]	MD	XD	MD	XD			
Willacoochee Industrial Fabrics Inc. | www.winfabusa.com																
WINFAB 2404	NA	1	0.425 (40)	0.96/2852 (70), CH	5.118 (1150)	0.668 x 0.734 (150 x 165)	1.78 x 1.402 (400 x 315) 15 x 15	1, 2, 3	D, E, SP, ST	NA	NA	43.8 (250)	40.3 (230)	NA	NA	F
WINFAB 200W	NA	NA	0.425 (40)	0.05/204 (5), FH	3.114 (700)	0.33 x 0.33 (75 x 75)	0.89 x 0.89 (200 x 200) 15 x 15	3	SP	NA	NA	NA	NA	NA	NA	ST
WINFAB 250W	NA	NA	0.425 (40)	0.05/163 (4), FH	3.338 (750)	0.4 x 0.4 (90 x 90)	1.113 x 1.113 (250 x 250) 15 x 15	2, 3	SP	NA	NA	NA	NA	NA	NA	ST
WINFAB 315W	NA	NA	0.425 (40)	0.05/163 (4), FH	4.005 (900)	0.503 x 0.503 (113 x 113)	1.402 x 1.402 (315 x 315) 15 x 15	1, 2, 3	SP, ST	NA	NA	NA	NA	NA	NA	R
WINFAB 310N	NA	NA	0.3 (50)	2.2/6112 (150), CH	0.775 (175)	0.111 x 0.111 (25 x 25)	0.355 x 0.355 (80 x 80) 50 x 50	NA	NA	NA	NA	NA	NA	NA	NA	D, E, F
WINFAB 350N	NA	NA	0.3 (50)	2.0/6112 (150), CH	1.157 (260)	0.178 x 0.178 (40 x 40)	0.401 x 0.401 (90 x 90) 50 x 50	NA	NA	NA	NA	NA	NA	NA	NA	D, E, F
WINFAB 400N	NA	NA	0.212 (70)	2.0/5704 (140), CH	1.334 (300)	0.2 x 0.2 (45 x 45)	0.445 x 0.445 (100 x 100) 50 x 50	NA	NA	NA	NA	NA	NA	NA	NA	D, E, F
WINFAB 450N	NA	NA	0.212 (70)	1.7/4889 (120), CH	1.49 (335)	0.222 x 0.222 (50 x 50)	0.534 x 0.534 (120 x 120) 50 x 50	3	D, SP, ST	NA	NA	NA	NA	NA	NA	E, F
WINFAB 600N	NA	NA	0.212 (70)	1.4/4276 (105), CH	1.825 (410)	0.267 x 0.267 (60 x 60)	0.711 x 0.711 (160 x 160) 50 x 50	2, 3	D, SP, ST	NA	NA	NA	NA	NA	NA	E, F
WINFAB 700N	NA	NA	0.212 (70)	1.4/4074 (100), CH	2.047 (460)	0.333 x 0.333 (75 x 75)	0.8 x 0.8 (180 x 180) 50 x 50	2, 3	D, SP, ST	NA	NA	NA	NA	NA	NA	E, F
WINFAB 800N	NA	NA	0.18 (80)	1.3/3667 (90), CH	2.336 (525)	0.356 x 0.356 (80 x 80)	0.912 x 0.912 (205 x 205) 50 x 50	1, 2, 3	D, E, SP, ST	NA	NA	NA	NA	NA	NA	F
WINFAB 1000N	NA	NA	0.18 (80)	1.2/3454 (85), CH	2.781 (625)	0.445 x 0.445 (100 x 100)	1.113 x 1.113 (250 x 250) 50 x 50	1, 2, 3	D, E, SP, ST	NA	NA	NA	NA	NA	NA	F
WINFAB 1000NE	339 (10)	NA	0.15 (100)	.94/3055 (75), CH	3.225 (725)	0.445 x 0.445 (100 x 100)	1.201 x 1.201 (270 x 270) 50 x 50	1, 2, 3	D, E, SP, ST	NA	NA	NA	NA	NA	NA	F
WINFAB 1200N	NA	NA	0.15 (100)	1.0/3055 (75), CH	3.671 (825)	0.511 x 0.511 (115 x 115)	1.335 x 1.335 (300 x 300) 50 x 50	1, 2, 3	D, E, SP, ST	NA	NA	NA	NA	NA	NA	F
WINFAB 1600N	NA	NA	0.15 (100)	.70/2037 (50), CH	4.561 (1025)	0.644 x 0.644 (145 x 145)	1.69 x 1.69 (380 x 380) 50 x 50	1, 2, 3	D, E, SP, ST	NA	NA	NA	NA	NA	NA	F

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