



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 *2023 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 Advanced Textiles Association (ATA). The *2023 Geosynthetics Specifier's Guide* is intended as a guide, and *Geosynthetics* magazine and ATA encourage readers to contact the companies listed for further information.

Manufacturers engineer these products to provide cost-effective solutions and 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, resistance to temperature and ultraviolet exposure.

The numbers

Companies that submitted product data chart lines were asked to provide data determined through industry-accepted testing methods. Companies were asked to sign 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/m ² (oz/yd ²)	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)/%					
		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/m ² (gal/min/ft ²)	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]		Creep Limited Strength-MD ASTM D 5262 [6] kN/m (lb/ft)	LTDS GRI GT7-MD (in sand) [7] kN/m (lb/ft)	
										MD	XD	MD	XD			

ACE Geosynthetics Inc. | www.geoace.com

ACETex ES520 (W/PP)	NP	NP	0.425 (40)	1.10/3300 (80), CH	10.0 (2245)	1.0 x 1.0 (225 x 225)	2.5 x 2.5 (560 x 560)/ NP	1, 2, 3	SP, ST	35 (200)	45 (257)	70 (400)	70 (400)	NP	NP	F, R, SP, ST
ACETex ES710 (W/PP)	NP	NP	0.425 (40)	0.4/1200 (29), CH	9.0 (2021)	NP	2.0 x 2.0 (449 x 449)/ NP	1, 2, 3	SP, ST	45 (257)	60 (343)	70 (400)	70 (400)	NP	NP	F, R, SP, ST
ACETex GT500-II (W/PET)	NP	NP	NP	NP	NP	NP	NP	NP	ST	NP	NP	500 (2860)	500 (2860)	336 (22995)	289 (19778)	R, SP, ST
ACETex GT1400-I (W/PET)	NP	NP	NP	NP	NP	NP	NP	NP	ST	490 (2800)	NP	1400 (8000)	100 (570)	940 (64331)	810 (55434)	R

AFITEX-Texel Geosynthetics Inc. | www.draintube.net

GEOTER FN PET L 40/40 (K/PET+NW/PP)	188 (5)	NA	0.420 (40)	1.3/8150 (200)	1.46 (328)	NP	NP	NA	NA	19.9 (113)	19.9 (113)	40 (228) / 10	40 (228) / 10	NP	NP	R, S, F
GEOTER FN PET L 55/50 (K/PET+NW/PP)	227 (6.5)	NA	0.420 (40)	1.2/8150 (200)	1.76 (395)	NP	NP	NA	NA	27.3 (156)	24.6 (140)	55 (314) / 10	50 (286) / 10	NP	NP	R, S, F
GEOTER FN PET L 70/70 (K/PET+NW/PP)	272 (7.5)	NA	0.420 (40)	1.1/8150 (200)	2.18 (489)	NP	NP	NA	NA	34.7 (198)	34.7 (198)	70 (400) / 10	70 (400) / 10	NP	NP	R, S, F

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

- [1] NW = Non woven, -P = needlepunched, -h = calendered
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- [2] PP = Polypropylene, PET = Polyester, * = average
- [3] FH = Test is run by the falling head method
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ST = Stabilization D = Drainage
F = Filtration E = Erosion Control
A/O = Asphalt overlay SSG = Subgrade Stabilization Geosynthetic
[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
ST = Stabilization D = Drainage
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RC = Reinforcement Composite A/O = Asphalt overlay
SSG = Subgrade Stabilization Geosynthetic
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.

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Product Name (Structure [1]/ Polymer Type [2])	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)	
	Mass Per Unit Area ASTM D 5261 g/m ² (oz/yd ²)	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/m ² (gal/min/ft ²)	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				
Alkegan www.alkegan.com																	
TEXEL060E	203 (6)	NA	0.212 (70)	1.60/5080 (125)	2.000 (450)	0.312 (70)	0.712 (160)/50										
TEXEL080E (NW-PP)	271 (8)	NA	0.180 (80)	1.50/4482 (110)	2.670 (600)	0.423 (95)	1.024 (230)/50	NA	NA	NA	NA	NA	NA	NA	NA	NA	P, SP, D, E, ST
TEXEL100E (NW-PP)	340 (10)	NA	0.150 (100)	1.20/3463 (85)	3.220 (725)	0.470 (106)	1.200 (270)/50	NA	NA	NA	NA	NA	NA	NA	NA	NA	P, SP, D, E, ST
TEXEL120E (NW-PP)	407 (12)	NA	0.150 (100)	0.90/3056 (75)	4.115 (925)	0.556 (125)	1.470 (330)/50	NA	NA	NA	NA	NA	NA	NA	NA	NA	P, SP, D, E, ST
TEXEL140E (NW-PP)	475 (14)	NA	0.150 (100)	0.70/2037 (50)	4.650 (1045)	0.600 (135)	1.730 (390)/50	NA	NA	NA	NA	NA	NA	NA	NA	NA	P, SP, D, E, ST
TEXEL160E (NW-PP)	542 (16)	NA	0.150 (100)	0.70/2037 (50)	5.340 (1200)	0.690 (155)	1.891 (425)/50	NA	NA	NA	NA	NA	NA	NA	NA	NA	P, SP, D, E, ST
TEXEL200E (NW-PP)	675 (20)	NA	0.150 (100)	0.30/1050 (26)	6.200 (1394)	0.800 (180)	2.045 (460)/50	NA	NA	NA	NA	NA	NA	NA	NA	NA	P, SP, D, E, ST
TEXEL240E (NW-PP)	810 (24)	NA	0.150 (100)	0.40/1019 (25)	8.000 (1800)	0.910 (205)	2.220 (500)/50	NA	NA	NA	NA	NA	NA	NA	NA	NA	P, SP, D, E, ST
TEXEL280E (NW-PP)	950 (28)	NA	NP	NP	8.000 (1800)	1.110 (250)	2.500 (562)/50	NA	NA	NA	NA	NA	NA	NA	NA	NA	P, SP, D, E, ST
TEXEL320E (NW-PP)	1085 (32)	NA	NP	NP	8.800 (1978)	1.200 (270)	2.670 (600)/50	NA	NA	NA	NA	NA	NA	NA	NA	NA	P, SP, D, E, ST
BTL Liners www.bttl liners.com																	
Non-woven Geotextile (NW-p)			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

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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/m ² (gal/min/ft ²)	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			

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

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

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										MD	XD	MD	XD				

GEONIA www.egeonia.com																
Geonia DML-10 (W/PET)	220 (6.49)	NA	100	0.03/90 (2.21) CH	4.0 (898)	NA	2.50/20 (0.56)	NA	NA	50 (285)	25 (143)	100/10 (570)	50/10 (285)	65 (4477)	52 (3359)	R
Geonia DML-20 (W/PET)	370 (10.9)	NA	100	0.3/900 (22.1) CH	8.0 (1796)	NA	NA	NA	NA	100 (570)	25 (143)	200/10 (1142)	50/10 (285)	131 (8954)	103 (7078)	R
Geonia DML-30 (W/PET)	510 (15.0)	NA	200	0.3/900 (22.1) CH	10 (2245)	NA	NA	NA	NA	130 (742)	25 (143)	300/10 (1713)	50/10 (285)	196 (13431)	155 (10617)	R
Geonia DML-40 (W/PET)	660 (19.5)	NA	200	0.3/900 (22.1) CH	12 (2694)	NA	NA	NA	NA	150 (857)	25 (143)	400/10 (2284)	50/10 (285)	261 (17908)	207 (14156)	R
Geonia DML-50 (W/PET)	810 (23.9)	NA	100	0.05/150 (3.7) CH	NPD	NA	NA	NA	NA	180 (1026)	25 (143)	500/10 (2855)	50/10 (285)	327 (22385)	258 (17695)	R
Geonia DML-60 (W/PET)	980 (28.9)	NA	100	0.05/150 (3.7) CH	NPD	NA	NA	NA	NA	200 (1142)	25 (143)	600/10 (3426)	50/10 (285)	392 (26862)	310 (21235)	R
Geonia DML-70/10 (W/PET)	1170 (34.5)	NA	150	0.1/300 (7.4) CH	NPD	NA	NA	NA	NA	260 (1482)	45 (257)	700/10 (3997)	100/10 (570)	458 (31339)	362 (24774)	R
Geonia DML-80/10 (W/PET)	1400 (41.3)	NA	200	0.3/900 (22.1) CH	NPD	NA	NA	NA	NA	400 (2284)	45 (257)	800/10 (4568)	100/10 (570)	523 (35816)	413 (28313)	R
Geonia DML-100/10 (W/PET)	1700 (50.1)	NA	200	0.3/900 (22.1) CH	NPD	NA	NA	NA	NA	450 (2570)	45 (257)	1000/10 (5710)	100/10 (570)	654 (44770)	517 (35391)	R
Geonia DM-10/10 (W/PET)	290 (8.55)	NA	200	0.3/900 (22.1) CH	8 (1800)	NA	NA	NA	NA	45 (257)	45 (257)	100/10 (570)	100/10 (570)	65 (4477)	52 (3359)	R, SP, ST

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

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- A/O = Asphalt overlay SSG = Subgrade Stabilization Geosynthetic
- [5] MD = Machine direction XD = Cross-machine direction

- [6] For a minimum of 10,000 hours, extrapolated to a 75 year time period T_{ult}
- [7] LTDS = $\frac{RF_{CR} \times RF_{ID} \times RF_D}{T_{ult}}$
- RF_{CR} = Reduction factor for creep
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Product Name (Structure [1]/ Polymer Type [2])	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)/%						
	Mass Per Unit Area ASTM D 5261 g/m ² (oz/yd ²)	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/m ² (gal/min/ft ²)	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]		Creep Limited Strength-MD ASTM D 5262 [6] kN/m (lb/ft)	LTDS GRI GT7-MD (in sand) [7] kN/m (lb/ft)		
										MD	XD	MD	XD				
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	
Layfield Environmental Containment www.layfieldgroup.com																	
Geovolt 8, Conductive Textile	NP	NP	NP	NP	1.82 (400)	0.26 (60)	0.70 (160) / 50%	NP	NP	NP	NP	NP	NP	NP	NP	NP	Leak location under any non-conductive barrier
Maccaferri Inc. www.maccaferri.com/us																	
MacTex N47.1 (NW-P/PP)	NP	NP	0.18 (80)	1.4 / 3657 (95)	2.38 (535)	0.378 (85)	0.911 (205) / 50	>>1	ST, SP, D, F, E	NA	NA	NA	NA	NA	NA	NA	NA
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

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RF_{id} = Reduction factor for installation damage
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Product Name (Structure [1]/ Polymer Type [2])	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)/%					
	Mass Per Unit Area ASTM D 5261 g/m ² (oz/yd ²)	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/m ² (gal/min/ft ²)	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]		Creep Limited Strength-MD ASTM D 5262 [6] kN/m (lb/ft)	LTDS GRI GT7-MD (in sand) [7] kN/m (lb/ft)	
										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

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Product Name (Structure [1]/ Polymer Type [2])	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)	
	Mass Per Unit Area ASTM D 5261 g/m ² (oz/yd ²)	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/m ² (gal/min/ft ²)	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			

Solmax International Inc. | www.solmax.com

Mirafi 140N (NW-P/PP)	NA	NA	0.212 (70)	1.7/5500 (135), CH	1.4 (310)	0.223 x 0.223 (50x50)	0.534 x 0.534 (120 x 120)/50 x 50	3	D, E, SP, ST	NA	NA	NA	NA	NA	NA	SP, F, D, E
Mirafi 160N (NW-P/PP)	NA	NA	0.212 (70)	1.5/4481 (110), CH	1.8 (410)	0.267 x 0.267 (60x60)	0.712 x 0.712 (160 x 160)/50 x 50	2, 3	D, E, SP, ST	NA	NA	NA	NA	NA	NA	SP, F, D, E
Mirafi 180N (NW-P/PP)	NA	NA	0.18 (80)	1.4/3870 (95), CH	2.2 (500)	0.356 x 0.356 (80x80)	0.912 x 0.912 (205 x 205)/50 x 50	1, 2, 3	D, E, SP, ST	NA	NA	NA	NA	NA	NA	SP, F, D, E
Mirafi FW402 (W/PP)	NA	10	0.425 (40)	2.1/5907 (145), CH	3.0 (675)	0.512 x 0.334 (115x75)	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	F, D, E
Mirafi FW404 (W/PP)	NA	1	0.425 (40)	0.9/2852 (70), CH	5.1 (1150)	0.668 x 0.734 (150x165)	1.8 x 1.4 (400 x 320)/15 x 15	1, 2, 3	D, E	17.5 (100)	17.5 (100)	43.8 (250)	40.3 (230)	NA	NA	F, D, E
Mirafi FW700 (W/PP)	NA	4	0.212 (70)	0.28/733 (18), CH	4.2 (950)	0.445 x 0.267 (100x60)	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, D, E
Mirafi HP270 (W/PP)	NA	NA	0.60 (30)	0.60/1630 (40), CH	4.5 (1000)	0.490x0.579 (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
Mirafi HP370 (W/PP)	NA	NA	0.60 (30)	0.9/2444 (60), CH	6.5 (4500)	0.601 x 0.556 (135 x 125)	1.8 X 1.3 (400 X 300) 10 X 6	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)	0.5/1222 (30), CH	8.9 (2000)	0.8 x 0.8 (180x180)	2.2 x 2.1 (500 x 475)/11x4	1, 2, 3	SP, SSG	35.0 (200)	43.8 (250)	70.0 (400)	70.0 (400)	NA	NA	R, ST
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	P, F, D
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	P, F, D
PETROMAT® Enviro™	140 (4.1)	NA	NA	NA	NA	NA	450 (101) /50	Type 2	A/O	NA	NA	NA	NA	NA	NA	A/O

Note: Mirafi woven and nonwoven geotextiles are available in a variety of additional strength, weight and construction.

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Product Name (Structure [1]/ Polymer Type [2])	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)/%					
	Mass Per Unit Area ASTM D 5261 g/m ² (oz/yd ²)	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/m ² (gal/min/ft ²)	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]		Creep Limited Strength-MD ASTM D 5262 [6] kN/m (lb/ft)	LTDS GRI GT7-MD (in sand) [7] kN/m (lb/ft)	
										MD	XD	MD	XD			
TechFab India www.techfabindia.com																
TFI-3200HT (W/PET)	NP	NP	0.25 (60)	0.02/240 (5.89), CH	15 (3372)	NA	NA	NP	NP	80 (457)	80 (457)	200 (1142)	200 (1142)	140 (9590)	NP	R
R 42 (NW/PP)	NP	NP	0.212 (70)	1.5/4500 (110), CH	1.51 (340)	0.214 (48)	0.534 (120)/50	3	SP, ST, F, D, E	NA	NA	9.0 (51)	9.0 (51)	NA	NA	ST, SP, R
TN-15(NW/PET)	NP	NP	0.212 (70)	1.5 /4500 (110),CH	0.75(169)	0.12(27)	0.300(67)/50	NP	SP, ST, F, D, E	NA	NA	4.5(25)	4.5(25)	NA	NA	ST,SP,R
TechGeomattress TGCM-130 ((NW+W,+W)/PP)	NP	NP	0.35 (44)	NP	NP	NP	NP	NP	NP	NP	NP	110 (628)	90 (514)	NP	NP	Slope and Shore line Protection, Channel Slopes
TechTube Geotextile Tube TGT-1500Z (PPMF)	NP	NP	0.25 (60)	0.2/600 (14.67), CH	10 (2250)	NP	NP	NP	NP	NP	NP	100.0 (567)	100.0 (567)	NP	NP	Slope and Shore line Protection, Dewatering, flood control, Breakwater, Dyke formation
Tensor International Corp. www.tensor-international.com																
GlasPave® 50	237 (7.0)	NA	NA	NA	NA	NA	50 kN/m (285 lb/in)/ <5% [◇]	NA	NA	NA	NA	NA	NA	0.47 (0.10)	> 232 C (>450 F)	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/m ² (oz/yd ²)	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)	
		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/m ² (gal/min/ft ²)	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				

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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	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	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	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	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	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	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	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	NP	NA	NA	E, SP, ST, R, P
Terram T900 NW-PP/PE-t	115* (3.39)	NA	0.267 (50)	1.50 sec ⁻¹ /4500 l/min/m ² (112 gal/min/ft ²)	1.2 (270)	0.200 (45)	0.500 (113)/50	3	SP, ST, D, E	NP	NP	NP	NP	NP	NA	NA	SP, ST, F, D, E, P
Terram T1300 NW-PP/PE-t	155* (4.57)	NA	0.192 (70)	1.10 sec ⁻¹ /3300 l/min/m ² (82 gal/min/ft ²)	1.77 (398)	0.280 (63)	0.750 (169)/50	2	SP, ST, D, E	NP	NP	NP	NP	NP	NA	NA	E, SP, ST, R, P
Terram T1800 NW-PP/PE-t	190* (5.6)	NA	0.185 (70)	1.00 sec ⁻¹ /3000 l/min/m ² (74.8 gal/min/ft ²)	2.00 (450)	0.380 (85)	0.950 (214)/50	1	SP, ST, D, E	NP	NP	NP	NP	NP	NA	NA	E, SP, ST, R, P

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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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Product Name (Structure [1]/ Polymer Type [2])	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)	
	Mass Per Unit Area ASTM D 5261 g/m ² (oz/yd ²)	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/m ² (gal/min/ft ²)	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				

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SF 40	NA	NA	0.25 (60)	0.84	NR	0.289 (65)	0.650 (145) / 50	3*	D	NA	NA	NA	NA	NA	NA	NA
US 200	NA	NA	0.425 (40)	0.05	3.115 (700)	0.334 (75)	0.889 (200) / 15	3	NP	NA	NA	NA	NA	NA	NA	NA
US 315	NA	NA	0.425 (40)	0.05	4.005 (900)	0.534 (120)	1.402 (315) / 15	1	SP	NA	NA	NA	NA	NA	NA	NA
US 4800/30	NA	NA	0.595 (30)	0.4	8.9 (2000)	0.801 (180)	2.225 (500) / 15	4A	R, SP, ST	35.03 (200)	43.78 (250)	NA	NA	NA	NA	NA
US 670	NA	4.0	0.21 (70)	0.28	4.228 (950)	0.445 x 0.267 (100 x 60)	1.647 x 1.113 (370 x 250) / 15 x 15	2, 3	DE	NA	NA	NA	NA	NA	NA	NA
US 90NW	118.65 (3.5)	NA	0.297 (50)	2.0	1.113 (250)	0.178 (40)	0.401 (90) / 50	NA	NP	NA	NA	NA	NA	NA	NA	NA
US 120NW	152.55 (4.5)	NA	0.21 (70)	1.7	1.513 (340)	0.223 (50)	0.534 (120) / 50	3	S/F	NA	NA	NA	NA	NA	NA	NA
US 160NW	203.4 (6.0)	NA	0.21 (70)	1.5	1.825 (410)	0.267 (60)	0.711 (160) / 50	2	SP, D	NA	NA	NA	NA	NA	NA	NA
US 180NW	237.3 (7.0)	NA	0.21 (70)	1.4	2.114 (475)	0.334 (75)	0.801 (180) / 50	NA	SP, D	NA	NA	NA	NA	NA	NA	NA
US 205NW	271 (8.0)	NA	0.177 (80)	1.4	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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WINFAB 270HP	NA	NA	0.60 (30)	0.70/2037 (50), CH	5.12 (1150)	.578 x .445 (130 x 100)	1.33 x 1.11 (300 x 250)	2, 3	SP	21.9 (125)	21 (120)	41.6 (237.5)	36.5 (208.3)	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 (320x320) 15 x 15	1, 2, 3	D, E, SP, ST	16 (91.7)	24.8 (142)	39.4 (225)	40.9 (233.3)	NA	NA	F, R
WINFAB 370HP	NA	NA	0.60 (30)	0.52/1630 (40), CH	6.45 (1450)	0.601 x 0.556 (135 x 125)	1.78 x 1.56 (400 x 350)	1, 2, 3	SP	21.9 (125)	22.8 (130)	52.5 (300)	48.2 (275)	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)	0.5/1222 (30), CH	9.79 (2200)	0.80 x 0.80 (180 x 180)	2.114 x 1.958 (475 x 440) 12 x 12	1, 2, 3	SP	35 (200)	43.8 (250)	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 (575 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	13.34 (3000)	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	33.6 (191.7)	58.36 (333.3)	70.05 (400)	105.08 (600)	NA	NA	F, R

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RF_{CR} = Reduction factor for creep
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Product Name (Structure [1]/ Polymer Type [2])	M288 Transportation-Related Applications										Reinforcement Applications						Other Manufacturer's Suggested Applications [8]
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										MD	XD	MD	XD				
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)	0.26/815 (20), CH	NA	NA	NA	1, 2, 3	SP	21.9 (125)	78.8 (450)	105.04 (600)	157.57 (900)				
WINFAB 770HP	NA	NA	0.60 (30)	0.23/611 (15), CH	NA	NA	NA	1, 2, 3	SP	52.5 (300)	52.5 (300)	138.6 (708.3)	87.5 (500)	NA	NA	E, D, F, R, ST	
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	D	NA	NA	35 (200)	24.52 (140)	NA	NA	D, E, F	
WINFAB 2199	NA	4	0.212 (70)	0.28/733 (18), CH	4.228 (950)	0.445 x 0.445 (100 x 100)	1.65 x 1.112 (370 x 250) 15 x 15	2, 3	D,E,SP	NA	NA	NA	NA	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 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	3.113 (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)	0.08/244 (6), 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	0.30 (50)	2.2/6112 (150), CH	0.778 (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 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 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	

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