

Geotextile physical properties (PP-Nonwoven, Needleponched)

Properties ¹	Standard		Unit	ET330X	ET335X	ET340X	ET345X	ET360X	ET370X	ET380X
Mass/ Unit Area	ASTM D 5261	ISO 9864	Oz/y ² (g/ m ²)	3.0 (103) †	3.5 (119) †	4.0 (135) †	4.5 (150) †	6.0 (205) †	7.4 (250) †	8.25 (280) †
Thickness	ASTM D 5199	ISO 9863	mm	2	2.1	2.2	2.3	2.7	2.9	3.1
Tensile - Wide Width - MD	ASTM D 4595	ISO 10319	lb/inch (kN/m)	40 (7)	46 (8)	51 (9)	63 (11)	80 (14)	91 (16)	108 (19)
Tensile - Wide Width - CD	ASTM D 4595	ISO 10319	lb/inch (kN/m)	38 (6.6)	42 (7.9)	45 (8)	57 (10)	68 (12)	80 (14)	97 (17)
Elongation	ASTM D 4595	ISO 10319	%	55	55	55	55	55	55	55
Grab Strength - MD	ASTM D 4632		lb (N)	79 (350)	90 (401)	101 (450)	124 (550)	135 (600)	180 (800)	191 (850)
Grab Strength - CD	ASTM D 4632		lb (N)	67 (300)	80 (351)	90 (400)	107 (475)	118 (525)	157 (700)	168 (750)
Grab Elongation	ASTM D 4632		%	60	60	60	60	60	60	60
Trapezoidal - MD	ASTM D 4533		lb (N)	34 (150)	41 (180)	45 (200)	56 (250)	67 (300)	79 (350)	90 (400)
Trapezoidal - CD	ASTM D 4533		lb (N)	29 (130)	35 (160)	39 (175)	50 (220)	60 (265)	67 (300)	79 (350)
Mullen Burst	ASTM D 3786		Psi (kPa)	145 (1000)	185 (1275)	225 (1550)	297 (2050)	348 (2400)	435 (3000)	500 (3450)
Puncture Strength (CBR)	ASTM D 6241	ISO 12236	lb (N)	247 (1100)	265 (1179)	292 (1300)	348 (1550)	436 (1940)	523 (2330)	607 (2700)
Dynamic Resistance (cone drop)		EN 918	mm	20	19	18	15	14	12	10
Opening Size ²	ASTM D 4751	ISO 12956	mm	0.11	0.105	0.10	0.085	0.085	0.07	0.07
Permittivity	ASTM D 4491	ISO 11058	Sec ⁻¹	2	1.9	1.7	1.5	1.34	1.2	1.06
Permeability	ASTM D 4491	ISO 11058	m/s	0.004	0.0039	0.0037	0.0034	0.0036	0.0035	0.0033
Flow Rate - 10cm head	ASTM D 4491	ISO 11058	GPM/ft ² (l/m ² /s)	287 (195)	263 (182)	250 (170)	184 (125)	140 (95)	132 (90)	125 (85)
UV Stability (@ 500hrs)	ASTM D 4355	ISO 12959	%	70	70	70	70	70	70	70
Roll Dimensions										
Roll Width			ft/ft (m/m)	12.5/15 (3.81/4.57)	12.5/15 (3.81/4.57)	12.5/15 (3.81/4.57)	12.5/15 (3.81/4.57)	12.5/15 (3.81/4.57)	12.5/15 (3.81/4.57)	12.5/15 (3.81/4.57)
Roll Area			yd ² (m ²)	500 (418)	500 (418)	500 (418)	500 (418)	500 (418)	500 (418)	500 (418)
Roll Weight			lbs	125	135	150	170	230	270	290

1 : Minimum Average Roll Value (MARV)

2 : Maximum Average Roll Value

† : Typical Roll Properties

*** Custom roll sizes available

*** Roll widths available up to 19.5 ft

*** Custom colors available

*** Other GSM can be provided on request

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Information deemed to be accurate but not guaranteed



Geotextile physical properties (PP-Nonwoven, Needleponched)

Properties ¹	Standard		Unit	ET390X	ET3100X	ET3120X	ET3140X	ET3150X	ET3160X	ET3180X
Mass/ Unit Area	ASTM D 5261	ISO 9864	Oz/y ² (g/ m ²)	8.8 (300) †	10.3 (350) †	11.80 (400) †	13.25 (450) †	14.7 (500) †	16.11 (550) †	17.7 (600) †
Thickness	ASTM D 5199	ISO 9863	mm	3.3	3.5	3.8	4.2	4.7	4.9	5.2
Tensile - Wide Width - MD	ASTM D 4595	ISO 10319	lb/ inch (kN/m)	120 (21)	137 (24)	160 (28)	188 (33)	217 (38)	237 (42)	257 (45)
Tensile - Wide Width - CD	ASTM D 4595	ISO 10319	lb/ inch (kN/m)	108 (19)	125 (22)	148 (26)	171 (30)	194 (34)	220 (39)	240 (42)
Elongation	ASTM D 4595	ISO 10319	%	55	55	55	55	55	55	55
Grab Strength - MD	ASTM D 4632		lb (N)	202 (900)	214 (950)	225 (1000)	247 (1100)	270 (1200)	280 (1250)	292 (1300)
Grab Strength - CD	ASTM D 4632		lb (N)	180 (800)	191 (850)	202 (900)	225 (1000)	247 (1100)	258 (1150)	270 (1200)
Grab Elongation	ASTM D 4632		%	60	60	60	60	60	60	60
Trapezoidal - MD	ASTM D 4533		lb (N)	101 (450)	112 (500)	124 (550)	146 (650)	169 (750)	185 (825)	202 (900)
Trapezoidal - CD	ASTM D 4533		lb (N)	90 (400)	101 (450)	112 (500)	135 (600)	157 (700)	169 (750)	180 (800)
Mullen Burst	ASTM D 3786		Psi (kPa)	537 (3700)	580 (4000)	653 (4500)	725 (5000)	798 (5500)	865 (6000)	943 (6500)
Puncture Strength (CBR)	ASTM D 6241	ISO 12236	lb (N)	652 (2900)	697 (3100)	742 (3300)	809 (3600)	900 (4000)	1011 (4500)	1124 (5000)
Dynamic Resistance (cone drop)		EN 918	mm	9	8	7	6	5	4.5	4
Opening Size ²	ASTM D 4751	ISO 12956	mm	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Permittivity	ASTM D 4491	ISO 11058	Sec ⁻¹	0.98	0.76	0.7	0.6	0.5	0.042	0.36
Permeability	ASTM D 4491	ISO 11058	m/s	0.0032	0.0027	0.0026	0.0025	0.0024	0.0021	0.0018
Flow Rate - 10cm head	ASTM D 4491	ISO 11058	GPM/ft ² (l/m ² /s)	118 (80)	103 (70)	96 (65)	80 (55)	74 (50)	61 (42)	52 (35)
UV Stability (@ 500hrs)	ASTM D 4355	ISO 12959	%	70	70	70	70	70	70	70
Roll Dimensions										
Roll Width			ft/ft (m/m)	12.5/15 (3.81/4.57)	12.5/15 (3.81/4.57)	12.5/15 (3.81/4.57)	12.5/15 (3.81/4.57)	12.5/15 (3.81/4.57)	12.5/15 (3.81/4.57)	12.5/15 (3.81/4.57)
Roll Area			yd ² (m ²)	500 (418)	500 (418)	500 (418)	500 (418)	500 (418)	500 (418)	500 (418)
Roll Weight			lb	315	350	410	425	470	515	565

1 : Minimum Average Roll Value (MARV)

2 : Maximum Average Roll Value

† : Typical Roll Properties

*** Custom roll sizes available

*** Roll widths available up to 19.5 ft

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