

NONWOVEN GEOTEXTILES

Protect your geomembrane materials from damage while staying compliant with your industry regulations. These nonwoven geotextiles are an industry favorite due to their cost-effective properties and consistent filtration.

Manufactured from high-quality polypropylene fibers, Layfield's nonwoven geotextiles achieve their unique properties through the interlocking fibers that are formed during the needle-punching process. Nonwovens are heat set and needle punched, which enhances their strength-to-weight ratio. Consequently, nonwoven needle-punched geotextiles not only provide excellent filtration, separation, and protection but also offer superior water flow properties for drainage and other applications.

March 2026		Non-Woven Geotextiles (US Values)								
Material Properties	ASTM	LP3.5	LP4	LP4.5	LP6	LP7	LP8	LP10	LP12	LP16
Grab Tensile (lbs)	D4632	90	100	120	160	180	205	250	300	380
Elongation (%)	D4632	50	50	50	50	50	50	50	50	50
Tear (lbs)	D4533	40	45	50	60	75	80	100	115	140
CBR Punc (lbs)	D6241	250	250	310	410	450	500	700	800	1025
AOS (sieve)	D4751	50	70	70	70	70	80	100	100	100
Permittivity (sec ⁻¹)	D4491	2.0	2.0	1.7	1.5	1.4	1.4	0.83	0.83	0.7
Water Flow (gpm/ft ²)	D4491	145	140	135	110	100	95	75	65	50
UV (500 hrs)	D4355	70%	70%	70%	70%	70%	70%	70%	70%	70%
Roll Size (ft)		15 x 360	15 x 360	15 x 360	15 x 300	15 x 150				
Roll Weight ^{1,4} (lbs)		160	167	190	202	220	250	308	400	250

Note1: Typical values. All other values are minimum average roll values (MARV).

Note2: LP6, LP7, and LP8 may be 15 x 360 ft depending on inventory.

Note3: LP10 also available in 1.2 and LP12 in 1.0

Note4: This is average shipping roll weight - it's not to be used to calculate grams/m2 weight of the actual material.

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March 2026		Non-Woven Geotextiles (Metric Values)								
Properties	ASTM	LP3.5	LP4	LP4.5	LP6	LP7	LP8	LP10	LP12	LP16
Grab Tensile (N)	D4632	401	445	533	711	800	911	1,112	1,330	1,690
Elongation (%)	D4632	50	50	50	50	50	50	50	50	50
Tear (N)	D4533	178	200	222	267	333	356	444	511	623
CBR Punc (N)	D6241	1110	1110	1380	1820	2000	2220	3114	3510	4560
AOS (microns)	D4751	250	212	212	212	212	180	150	150	150
Permittivity (sec ⁻¹)	D4491	2.0	2.0	1.7	1.5	1.4	1.4	0.83	0.83	0.7
Water Flow (l/min/m ²)	D4491	5,900	5,689	5,500	4,480	4,074	3,870	3,056	2,650	2,035
UV (500 hrs)	D4355	70%	70%	70%	70%	70%	70%	70%	70%	70%
Roll Size (m)		4.57 x 110	4.57 x 110	4.57 x 110	4.57 x 91.4	4.57 x 45.7				
Roll Weight ^{1,4} (kg)		73	78	86	92	99	113	140	181	112

Note1: Typical values. All other values are minimum average roll values (MARV).

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Note3: LP10 also available in 1.2 and LP12 in 1.0

Note4: This is average shipping roll weight - it's not to be used to calculate grams/m² weight of the actual material.

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