Mirafi® N-Series Nonwoven Polypropylene Geotextiles

For Soil Separation, Filtration and Protection

Ten Cate Nicolon

DESCRIPTION
Drainfield 3' x 360' (1,080 sq-ft.)
Drainfield 4' x 360' (1,440 sq-ft.)
135N – 3' x 360' (1,080 sq-ft.) - 3 oz.
140NL – 12.5' x 360' (4,500 sq-ft.) - 3.8 oz.
157-140NL125
140NL – 15' x 360' (5,400 sq-ft.) - 3.8 oz.
157-140NL15
140NC – 12.5' x 360' (4,500 sq-ft.) - 4 oz.
157-140NC125
140NC – 15' x 360' (5,400 sq-ft.) - 4 oz.
157-140NC15
140N – 12.5' x 360' (4,500 sq-ft.) - 4.5 oz.
157-140N125
140N – 15' x 360' (5,400 sq-ft.) - 4.5 oz.
157-140N15
160N – 15' x 300' (4,500 sq-ft.) - 6 oz.
157-160N15
170N - 15' x 300' (4,500 sq-ft.) - 7 oz.
157-170N15
180N – 15' x 300' (4,500 sq-ft.) - 8 oz.
157-180N15
1100N – 15' x 300' (4,500 sq-ft.) - 10 oz.
157-1100N15
1120N – 15' x 300' (4,500 sq-ft.) - 12 oz.
157-1120N
1160N – 15' x 150' (2,250 sq-ft.) - 16 oz.
157-1160N

CUSTOM SIZES AVAILABLE BY SPECIAL ORDER

PRODUCT DESCRIPTION

Mirafi N-Series products are nonwoven geotextiles comprised of polypropylene staple fibers. Mirafi N-Series Nonwoven Polypropylene Geotextiles provide excellent physical and hydraulic properties in addition to high tensile strengths.

FEATURES AND BENEFITS

- **Construction.** Mirafi N-Series geotextiles easily conform to the ground or trench surface for trouble-free installation.
- **Strength.** Mirafi N-Series geotextiles withstand severe installation stresses with high puncture and burst resistance.
- **Filtration.** High permeability properties provide high water flow rates while providing excellent filtration properties.
- **Environmental.** Mirafi N-Series geotextiles are chemically stable in a wide range of aggressive environments.
- **Cost effective.** Mirafi N-Series geotextiles provide economical solutions to many civil engineering applications including a cost-effective alternative to graded-aggregate filters.

APPLICATIONS

Mirafi N-Series Nonwovens are used in a wide variety of applications including separation, filtration, and protection applications.

Lightweight nonwovens are predominantly used for subsurface drainage applications along highways, within embankments, under airfields, and athletic fields. For these drainage structures to be effective, they must have a properly designed protective filter. Mirafi N-Series Nonwoven Geotextiles eliminate the problems of determining the aggregate gradation required to match soil conditions, finding a convenient and economical source of a specific aggregate gradation, transporting and placing graded aggregate, and assuring that the in-place aggregate gradation provides effective filter performance.

Heavyweight nonwovens are used in critical subsurface drainage systems, soil separation, permanent erosion control, and geomembrane liner protection within landfills. These geotextiles provide the required strength and abrasion resistance to withstand installation and application stresses to create an effective, long-term solution.

			CALTRANS				CALTRANS			
PROPERTY / TEST METHOD	**UNITS**	**140NL**	**140NC**	**140N**	**160N**	**170N**	**180N**	**1100N**	**1120N**	**1160N**
MECHANICAL PROPERTIES										
Grab Tensile Strength ASTM D 4632										
–Strength @ Ultimate	kN (lbs)	0.40 (90)	0.45 (100)	0.53 (120)	0.71 (160)	0.80 (180)	0.9 (205)	1.11 (250)	1.34 (300)	1.69 (380)
–Elongation @ Ultimate	%	50	50	50	50	50	50	50	50	50
Mullen Burst Strength ASTM D 3786	kPa (p.s.i.)	1205 (175)	1447 (210)	1550 (225)	2100 (305)	2273 (330)	2618 (380)	3445 (500)	4030 (585)	5098 (740)
Trapezoidal Tear Strength ASTM D 4355	kN (lbs)	0.16 (35)	0.20 (45)	0.22 (50)	0.27 (60)	0.33 (75)	0.36 (80)	0.45 (100)	0.51 (115)	0.62 (140)
Puncture Strength ASTM D 4833	kN (lbs)	0.24 (55)	0.30 (65)	0.30 (65)	0.42 (95)	0.46 (105)	0.58 (130)	0.69 (155)	0.78 (175)	1.05 (235)
UV Resistance after 500 hrs. ASTM D 4355	% strength	70	70	70	70	70	70	70	70	70
HYDRAULIC PROPERTIES										
Apparent Opening Size (AOS) ASTM D 4751	US Sieve mm	60 0.25	70 0.212	70 0.212	70 0.212	80 0.180	80 0.180	100 0.150	100 0.150	100 0.150
Permittivity ASTM D 4491	sec-1	2.0	1.9	1.8	1.4	1.4	1.2	1.0	0.8	0.7
Flow Rate ASTM D 4491	l/min/m² (gal/min/ft²)	5907 (145)	5698 (140)	5500 (135)	4477 (110)	4278 (105)	3866 (95)	3056 (75)	2648 (65)	2037 (50)

NOTE: All Mechanical Properties and Hydraulic Properties shown are Minimum Average Roll Values (MARV).