



Thermoplastic Single Ply and Multi-Ply Roofing Systems

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FLEX 140N NONWOVEN POLYPROPYLENE **FOR SOIL SEPARATION, FILTRATION, AND PROTECTION**

PRODUCT DESCRIPTION

Flex 140N Geotextile is a non woven geotextile composed of polypropylene fibers, which are formed into a stable network such that the fibers retain their relative position. Flex 140N Geotextile is inert to biological degradation and resists naturally encountered chemicals, alkalis, and acids.

FEATURES AND BENEFITS

- **Construction.** Flex N-Series geotextiles easily conform to the ground or trench surface for trouble-free installation.
- **Strength.** Flex 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.
- **Environment.** Flex N-Series geotextiles are chemically stable in a wide range of aggressive environments.

APPLICATIONS

Flex 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. Flex 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.

INSTALLATION GUIDELINES

The Flex 140N Geotextile is installed as a separation or protection layer in Flex Protected Membrane Roof Systems. It also is used as a protection layer and filtration fabric in Flex Garden Roof Systems and Flex Below Grade Waterproofing Systems. The Flex 140N has excellent physical and hydraulic properties in addition to high tensile strength. The Flex 140N provides the required strength and abrasion resistance to protect Flex Thermoplastic Roofing and Waterproofing Membranes withstanding installation and application stress to create an effective, long term solution. Detailed installation instructions are available from your Flex representative.

TECHNICAL SERVICES

Complete technical assistance is available from Flex and its sales representatives. Service includes assistance during design and specification stages as well as initial stages of installation.

WARRANTY

Flex warrants that the product that it sells will conform to the specifications published in this literature. For information on limitations to this warranty, contact Flex Membrane International at 800-969-0108.

FLEX 140N NONWOVEN POLYPROPYLENE

TECHNICAL DATA

PROPERTY

<u>MECHANICAL PROPERTIES</u>	<u>TEST METHOD</u>	<u>UNITS</u>	<u>FLEX 140N</u>
Grab Tensile Strength			
Strength @ Ultimate	ASTM D 4632	lbs (kN)	120 (0.53)
Elongation @ Ultimate	ASTM D 4632	%	50
Mullen Burst Strength	ASTM D 3786	psi (kPa)	225 (1550)
Trapezoidal Tear Strength	ASTM D 4355	lbs (kN)	50 (0.22)
Puncture Strength	ASTM D 4833	lbs (kN)	65 (0.30)
UV Resistance after 500 hrs	ASTM D 4355	% strength	70
<u>HYDRAULIC PROPERTIES</u>			
AOS	ASTM D 4751	U.S. Seive (mm)	70 (0.212)
Permittivity	ASTM D 4491	sec ¹	1.8
Flow Rate	ASTM D 4491	gal/min/ft ² (l/min/m ²)	145 (5907)
<u>PACKAGING</u>			
Roll Width		ft (m)	12.5 (3.8) 15.0 (4.5)
Roll Length		ft (m)	360 (110)
Est. Gross Weight		lbs (kg)	148 (67) 197 (89)
Area		yd ² (m ²)	500 (418) 600 (502)

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