

LEXCAN

HI-PRO PVC

Fleece-Backed FGR Membrane

DESCRIPTION & USE

Hi-Pro Fleece-Backed PVC FGR Membrane is ideal for a broad variety of both new, and re-roofing construction projects due to it's tough, durable, and versatile composition. Hi-Pro FleeceBacked PVC FGR is available in sheet thicknesses of 2.92mm (115 mil), and 3.43mm (135 mil). It also provides remarkable toughness, flexibility, and weatherability.

Dimensional stability for fully adhered utilizations is also assured due to the fibreglass reinforcing of the scrim. The fleece-backing augments the puncture resistance of the membrane and produces a built-in separation layer against existing asphalt roofing systems or coarse concrete decks.

FEATURES & BENEFITS

- Fleece backing increases durability, puncture resistance, and toughness.
- Produces exceptional wind uplift performance through the mechanical bond between the adhesive and the fleece.
- Saves Labour through the 10' wide sheets which result in 67% less seams than other roof systems of equal size.
- Available in white, grey, or tan and can be provided in 2.92mm (115 mil), and 3.43mm (135 mil) thicknesses. These thicknesses come in the following sizes:
 - 2.92mm (115 mil) - 10' x 80'
 - 3.43mm (135 mil) - 10' x 65'
- Fiberglass reinforcing scrim creates great breaking strength
- It is a low-volatile plasticizer
- California Title 24 Compliant and is a LEED contributor.
- Decreased smoke during the welding process.
- Highly resistant to chemicals; e.g. acids, oils, fats, and greases

INSTALLATION

Hi-Pro Fleece-Backed PVC FGR is used in adhesive adhered and mechanically fastened roofing systems. Insulation is either adhered, or fastened in place to the roof deck. Review Lexcan specifications and design guides which can be found on the Lexcan website for installation instructions.

APPROVALS & COMPLIANCES

Hi-Pro Fleece-Backed PVC FGR Membrane meets or exceeds the requirements of ASTM D4434 Standard Specification for PVC Sheet Roofing. Hi-Pro Fleece-Backed PVC FGR Membrane is classified as a Type III as defined by ASTM D4434.

PRECAUTIONS

- Potentially slippery when wet, icy, or frosty so exercise caution
- Membrane is highly reflective so use U.V. resistant sunglasses
- To ensure stability, stack using proper procedures
- Exercise care when around roof-edge especially when snow is present.
- Tarp and elevate rolls prior to installation to keep them dry and if fleece gets wet, use a wet vac system to remove any moisture
- Use Lexcan membrane cleaner prior to hot-air welding if membrane has been exposed to weather.

TECHNICAL DATA

LEED INFORMATION

Property	Result
Pre-consumer Recycled Content	5%
Post-consumer Recycled Content	0%
Solar Reflectance Index	W: 111, T: 89, G: 69

Radiative Properties for ENERGY STAR, Cool Roof Rating Council (CRRC) and LEED

Property	Test Method	White	Tan	Grey
ENERGY STAR – E-903 Initial solar reflectance	Solar Spectrum Reflectometer	0.87	0.73	0.59
ENERGY STAR – E-903 Solar reflectance after 3 years	Solar Spectrum Reflectometer (uncleaned)	0.61	Pending	Pending
CRRC Initial solar reflectance	ASTM C1549	0.87	0.73	0.59
CRRC Solar reflectance after 3 years	ASTM C1549 (uncleaned)	0.61	Pending	Pending
CRRC Initial thermal emittance	ASTM C1371	0.95	0.86	0.85
CRRC Thermal emittance after 3 years	ASTM C1371 (uncleaned)	0.86	Pending	Pending
SRI Solar Reflectance Index	ASTM E1980	111	89	69
SRI SRI after 3 years	ASTM E1980	72	Pending	Pending

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LEXCAN SINGLE PLY ROOFING SYSTEMS

Ontario and Western Canada
1 877 792.8308



Quebec and Eastern Canada
1 800 363.2307

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TYPICAL PROPERTIES AND CHARACTERISTICS

Physical Property	ASTM D4434 Req.	2.92 mm (115-mil)	3.43 mm (135-mil)
Thickness	-	60 mil + 55 mil fleece	80 mil + 55 mil fleece
Thickness over Scrim, min ASTM D4434 optical method av. 3 areas	0.40mm min (0.016 in)	0.635 mm (0.025 in.)	0.762 mm (0.03 in.)
Breaking strength, (MD x CD), ASTM D751 proc A.	890N min (200 lbf)	450 x 400	500 x 450
Elongation break of reinforcement (MD x CD) ASTM D751 grab method	15% min	70 x 100	70 x 100
Tearing strength (CD) ASTM D751 proc. B, 8 in. x 8 in.	200N min (45 lbf)	60	60
Seam Strength ASTM D751 grab method (% of breaking strength)	>75%	PASS	PASS
Field Seam Strength ASTM D1876 tested in peel	No Requirement	4.4 (25) min 10.5 (60) typ kN/m (lbf/in.)	4.4 (25) min 10.5 (60) typ kN/m (lbf/in.)
Water Vapor Permeance ASTM E96 proc. B	No Requirement	0.1 max 0.05 typ Perms	0.1 max 0.05 typ Perms
Ozone Resistance No cracks 7x ASTM D1149, 100pphm, 168 hrs	PASS	PASS	PASS
Low temperature bend ASTM D2135, no cracks 5x	PASS	PASS (-40 °C)	PASS (-40 °C)
Linear dimensional change ASTM D1204, 6 hours at 176 °F (MD x CD)	±0.5% max	0.36 x 0 typ.	0.36 x 0 typ.
Water absorption resistance mass ASTM D570, 166 hours at 158 °F water	±3.0% max	2.0% typ	2.0% typ
Puncture resistance - Dynamic ASTM D5635	20J (14.7 ft-lb)	PASS	PASS
Puncture resistance - Static ASTM D5602	145N (33lbf)	PASS	PASS
Xenon-Arc resistance no cracks/crazing 10x, ASTM G155 0.35 W/m ² at 340-nm, 63 °C B.P.T. 12,600 kJ/m ² Total radiant exposure 10,000 hours	PASS	PASS	PASS
Properties after heat aging ASTM D3045, 56 days at 176 °F Breaking strength, % retained Elongation reinf., % retained	90% min 90% min	90% min 90% min	90% min 90% min

Typical properties and characteristics are based on samples tested and are not guaranteed for all samples of this product. This data and information is intended as a guide and does not reflect the specification range for any particular property of this product.

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