

LEXCAN

HI-PRO PVC

Fleece-Backed KEE HD FGR Membrane

DESCRIPTION & USE

Hi-Pro Fleece-Backed PVC KEE HD 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. For total scrim encapsulation, Hi-Pro Fleece-Backed PVC KEE HD FGR Membrane is made via hot-melt extrusion and is available in sheet thicknesses of 2.67mm (105 mil), 2.92mm (115 mil), and 3.43mm (135 mil) It also provides remarkable toughness, flexibility, and weatherability courtesy of it's fiberglass reinforced scrim, polyester fleecebacking, and Dupont Elvaloy copolymer make-up.

Dimensional stability for fully adhered utilizations is also assured due to the fiberglass 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. Hi-Pro Fleece-Backed PVC KEE HD FGR Membrane remains pliable, and weldable over time as it is a solid plasticizer and therefore won't migrate out of the sheet over time. It also reduces the amount of smoke generated when welded compared to other weldable roofing systems.

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 2.67mm (105 mil), 2.92mm (115 mil), and 3.43mm (135 mil) thicknesses. These thicknesses come in the following sizes:
 - 2.67mm (105 mil) - 10' x 100'
 - 2.92mm (115 mil) - 10' x 80'
 - 3.43mm (135 mil) - 10' x 65'
- Fiberglass reinforcing scrim creates remarkable dimensional stability.
- It is a low-volatile plasticizer and therefore won't migrate over time out of the sheet.
- 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 KEE HD FGR Membrane is only used in fullyadhered roofing systems. Typically there are two commonly used applications:

Water Based System

Ensure that the surface to which the water-based adhesive is to be applied is suitable, then apply it via a medium nap roller. From there roll the membrane in place. It is recommended that the adhesive be applied 3'-4' at a time so that over-drying can be prevented. Beginning at the center, and working out to the sides, begin brooming the membrane preferably using a soft bristle push broom so as to work out any potential air bubbles. Immediately afterwards, roll the adhered membrane in two directions in a cross pattern using a 100lb (45kg) split steel membrane roller.

Low Rise Foam System

In this, the insulation is either adhered or mechanically fastened to the roof deck. Adhesive will be either spray-applied or extruded onto the substrate, and given time for the foam to develop before setting the fleeceback membrane onto it. Fleeceback membrane is to be rolled with a 30" wide, 150 lbs (68 kg) weighted roller to ensure it is fully ingrained. Splices are to be hot-air welded.

APPROVALS & COMPLIANCES

Hi-Pro Fleece-Backed PVC KEE HD FGR Membrane meets or exceeds therequirements of ASTM D4434 Standard Specification for PVC Sheet Roofing. Hi-Pro Fleece-Backed PVC KEE HD 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.

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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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TECHNICAL DATA

LEED INFORMATION

Property	Result
Pre-consumer Recycled Content	5%
Post-consumer Recycled Content	0%
Solar Reflectance Index	See Radiative Chart

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

Physical Property	Test Method	White	Tan	Grey
ENERGY STAR – E-903 Initial solar reflectance	Solar Spectrum Reflectometer	0.82	0.74	0.57
ENERGY STAR – E-903 Solar reflectance after 3 years	Solar Spectrum Reflectometer (uncleaned)	Pending	Pending	Pending
CRRC Initial solar reflectance	ASTM C1549	0.82	0.74	0.57
CRRC Solar reflectance after 3 years	ASTM C1549 (uncleaned)	Pending	Pending	Pending
CRRC Initial thermal emittance	ASTM C1371	0.89	0.88	0.88
CRRC Thermal emittance after 3 years	ASTM C1371 (uncleaned)	Pending	Pending	Pending
SRI Solar Reflectance Index	ASTM E1980	102	90	67
SRI SRI after 3 years	ASTM E1980	Pending	Pending	Pending

TYPICAL PROPERTIES AND CHARACTERISTICS

Physical Property	ASTM D4434 Req.	2.67 mm (105-mil)	2.92 mm (115-mil)	3.43 mm (135-mil)
Tolerance on Nominal Thickness over fleece ASTM D751 Test Method	±10%	50 mil ±10%	60 mil ±10%	80 mil ±10%
Thickness over Scrim, min ASTM D7635/M	0.40mm min (0.016in)	0.46 mm (0.018 in.)	0.69 mm (0.027 in.)	0.97 mm (0.038 in.)
Breaking strength, ASTM D751 Grab Method (MD x CD)	200 kN/m min (35 lbf/in)	360 x 350	400 x 360	450 x 425
Elongation break of reinforcement (MD x CD) ASTM D751 grab method	15% min	PASS	PASS	PASS
Tearing strength (MD x CD) ASTM D751 proc. B, 8 in. x 8 in.	200 N min (45 lbf)	70 x 75	70 x 75	90 x 80
Weight	No Requirement	2 kg/m ² (0.41 lb/ft ²)	2.39 kg/m ² (0.49 lb/ft ²)	2.83 kg/m ² (0.59 lb/ft ²)
Low temperature bend ASTM D2135, no cracks 5x at -40 °C	PASS	PASS	PASS	PASS
Linear dimensional change ASTM D1204, 6 hours at 176 °F	±0.5% max	0.4% typ	0.4% typ	0.4% typ
Water absorption resistance mass ASTM D570, 166 hours at 158 °F water	±3.0% max	1.25%	0.87%	0.89%
Puncture resistance - Dynamic ASTM D5635	20J (14.7ft-lbf)	PASS	PASS	PASS
Puncture resistance - Static lbf (N) ASTM D5602	145N (33lbf)	PASS	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 exposure 10,000 hours	PASS	PASS	PASS	PASS
Properties after heat aging ASTM D3045, 56 days at 176 °F Breaking strength, Elongation reinf., % retained	90% min 90% min	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.