

LEXCAN Reinforced EPDM Membranes

06/12

PRODUCT DATA

For Superior Tensile Strength & Puncture Resistance

DESCRIPTION & USE

Lexcan Reinforced EPDM consists of twin thicknesses of Ethylene Polypropylene Diene Monomer synthetic rubber vulcanized to both sides of a reinforcing polyester scrim. The membrane is available in 1.1 mm (45 mil), 1.5 mm (60 mil) and 1.9 mm (75 mil) thicknesses and in sheet sizes up to 3.05 m (10 ft.) wide by 60.96 m (200 ft.) long. Membrane samples are available through your Lexcan representative.

Lexcan reinforced EPDM is a waterproofing membrane that is widely used in exposed roof applications, non-exposed waterproofing applications and geomembrane liner applications. In roofing, Lexcan reinforced EPDM membrane is the only acceptable EPDM membrane for mechanically fastened applications (Lexcan's Design E system). It may also be used in lieu of Lexcan's standard, unreinforced EPDM membrane wherever superior tensile strength and puncture resistance is preferred. In this regard, it may be substituted for standard EPDM in the following roof designs:

- Design A: Adhesive Adhered EPDM Roof System
- Design B: Ballasted EPDM Roof System
- Design C: Protected Membrane EPDM Roof System

In waterproofing, Lexcan reinforced EPDM membrane can be used in both pre-applied (blind side or "tanking") and post-applied applications to waterproof foundations, basement walls, tanks and floors. Lexcan's Waterproofing Design Guide and sample specifications has further information on using Lexcan reinforced EPDM membrane in these applications.

Finally, Lexcan reinforced EPDM can be used as a primary or secondary liner for reservoirs, holding ponds, tunnels and erosion control applications. Refer to Lexcan's Geomembrane Design Guide and sample specifications for further information on using Lexcan reinforced EPDM membrane in these applications.

FEATURES & BENEFITS

- **Superior Weatherability** - Lexcan EPDM possesses outstanding weathering, ozone, cold temperature and ultra-violet (sunlight) resistance, making it ideal for long-term exposed applications. Lexcan EPDM out performs most all other alternative materials including bitumen based products and PVC.
- **Superior Strength** - The scrim reinforced membrane offers superior tensile strength, tear and puncture resistance over non-reinforced membranes.
- **Compatibility** - Lexcan Reinforced EPDM is widely used as a primary waterproofing liner in a variety of roofing, waterproofing and geomembrane applications.

- **Proven Durability** - For over 45 years, Lexcan EPDM has been protecting thousands of buildings, in environments ranging from the arctic tundra of Baffin island to the deserts of the middle east.

TECHNICAL DATA

Property	Test Method	Specification	Typical Value
Nominal Thickness	ASTM D751	± 10%	± 10%
Thickness over Scrim / Felt	ASTM D4637 Annex	0.38 mm (0.015")	1.1 mm (45 mil) 0.41 mm (0.016") 1.5 mm (60 mil) 0.51 mm (0.020") 1.9 mm (75 mil) 0.81 mm (0.032")
Weight		1.1 mm (45 mil) 1.3 kg / m ² (0.27 lbs/ft ²) 1.5 mm (60 mil) 1.9 kg / m ² (0.39 lbs/ft ²) 1.9 mm (75 mil) 2.3 kg / m ² (0.48 lbs/ft ²)	
Factory Seam Strength, min	ASTM D816 (modified)	Membrane Rupture	Membrane Rupture
Ultimate Elongation, min	ASTM D412 Die C	250%**	480%** 500%**
Tearing Strength, min	ASTM D751 B Tongue Tear	45 N (10 lbf)	311 N (70 lbf)
Breaking Strength, min	ASTM D751 Grab Method	400 N (90 lbf)	623 N (140 lbf) 787 N (177 lbf)
Brittleness Temp., max	ASTM D2137	-45°C	-45°C
Water Absorption* Change in mass after 168 hours immersion @ 70°C	ASTM D471	+8%, -2%**	5.5%**
Ozone Resistance* 168 hours @ 100 pphm, 40°C	ASTM D1149	No Cracks	No Cracks wrapped around a 76 mm (3") mandrel
Outdoor (UV) Weathering Xenon-Arc, 7560 kJ/m ² @ 0.70 W/m ² , 80°C black panel	ASTM D 4537	No Cracks No Crizzling	No Cracks No Crizzling
Resistance to Heat Aging* 672 hours @ 116°C	ASTM D573		
Ultimate Elongation	ASTM D412 Die C	200%**	250%**
Breaking Strength	ASTM D751 Grab Method	355 N (80 lbf)	823 N (182 lbf)
Linear Dimensional Change	ASTM D1204	± 1.0%	-1.0%
* All tests are run on a statistical basis to ensure overall long-term performance of the sheeting. Not a Quality Control Test.			
** Specimens to be prepared from coating rubber compound, vulcanized in a similar method to the reinforced product.			

Cautions & Limitations

- Membranes are slippery when wet. Use caution when walking on wet membranes.

LEED INFORMATION

Pre-consumer Recycled Content	0%
Post-consumer Recycled Content	0%
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INSTALLATION / SPECIFICATION

The installation of reinforced EPDM is similar to unreinforced EPDM in each of Lexcan's standard design systems. Refer to the appropriate Design Guide and Sample Specification for the particular application you are interested in.