

Get the Royal Edge Advantage with RPI

## Royal Edge Reinforced EPDM Membrane

### ROYAL EDGE EPDM MEMBRANE

#### DESCRIPTION

RPI Royal Edge Reinforced EPDM membrane is a 45 mil, 60 mil, or 75 mil EPDM sheet re-inforced with a polyester scrim for added strength and puncture resistance. The membrane is available in widths up to 10' (3m) and lengths of 100' (30m). A perimeter sheet of 6.5' is available.

The standard Royal Edge Reinforced membrane meets or exceeds UL Class A code body testing criteria for Fire Retardant roofing membranes for slopes up to 3". A Royal Edge FR Reinforced 45 mil and 60 mil membrane is available for higher slope UL Class A rated assemblies.

### THE RPI ROYAL EDGE ADVANTAGE

#### WARRANTIES

RPI offers the longest Membrane Only Warranty in the roofing industry. Up to 40 Years when installed as a Fully Adhered System over an RPI approved assembly. RPI offers 20 and 30 year Membrane Only Warranties for 045 mil, 060 mil, and 075 mil Royal Edge Reinforced EPDM.

RPI Labor and Material Warranties are available for commercial/industrial installations thru the RPI Registered Applicators Program.

#### DURABILITY

After decades of proven in-field performance, RPI EPDM is still performing, showing little signs of aging while maintaining all the characteristics that have made EPDM the roofing industries longest performing single-ply membrane. RPI Royal Edge EPDM remains dimensionally stable and flexible down to -40° F (5° C).

The excellent resistance to weathering and high elongation qualities result in superior resistance to hail damage. (UL 2218 Class 4).

#### BEST COLD WEATHER MEMBRANE

Dark membranes are better suited to cold climates with more heating days than cooling days. Buildings and homes that are properly insulated will benefit from solar heat gain resulting in reduced snow and ice build-up. Lower heating costs reduce the carbon footprint.

#### FASTER EASIER APPLICATION

RPI's Clean Sheet means less preparation time is required for seams and flashings. Seam Tape Primer can be applied with a roller on new RPI CSFR membranes without having to clean the membrane, saving time and labor.

#### ENVIRONMENTAL

The Life Cycle Assessment for EPDM, TPO, PVC, and Modified Bitumen using EPA's TRACI model determined:

- EPDM has the lowest global warming potential
- EPDM has the lowest acid rain impact
- EPDM has the lowest contribution to smog

#### APPROVALS

RPI Royal Edge Reinforced EPDM is a 45 mil, 60 mil, and 75 mil EPDM membrane designed to be installed as part of an FM Approved and UL Classified Assembly.

### Typical Properties and Characteristics

Physical Property	Test Method	SPEC. (PASS)	Typical
<b>Tolerance on Nominal Thickness, %</b>	ASTM D751	±10	±10
<b>Elongation, Ultimate, min, % .045/.060 .075</b>	ASTM D412 Die C	250**	480** 500**
<b>Tear Strength, min, lbf/in (kN/) .045/.060 .075</b>	ASTM D751 B Tongue Tea	150 (26.3) 10 (45)	200 (35.0) 70 (311) 70 (311)
<b>Resistance to Heat Aging* Properties after 28 days @ 240°F (116°C) Breaking Strength, min, lbf (N) Elongation, Ultimate, min, %</b>	ASTM D573 ASTM D751 ASTM D412 Die C	80 (355) 200**	182 (823) 250**
<b>Linear Dimensional Change, max, %</b>	ASTM D1204	±1.0	-1.0
<b>Thickness over Scrim min, in. (mm) .045 .060 .075</b>	ASTM D4637 Annex	0.015 (0.381)	0.016 (0.406) 0.020 (0.508) 0.032 (0.81)
<b>Ozone Resistance* Condition after exposure to 100 pphm Ozone in air for 168 hours @ 104°F (40°C) Specimen is at 50% strain</b>	ASTM D1149	No Cracks	No Cracks
<b>Brittleness Temp., max, °F (°C)*</b>	ASTM D2137	-49 (-45)	-49 (-45)
<b>Resistance to Water Absorption* After 7 days immersion @ 158°F (70°C) Change in mass, max, %</b>	ASTM D471	+8, -2**	5.5**
<b>Water Vapor Permeance* Max, perms</b>	ASTM E 96 (Proc. B or BW)	0.10	0.02
<b>Fungi Resistance</b>	ASTM G21	N/A	0 (No Growth)
<b>Resistance to Outdoor (Ultraviolet) Weathering* Xenon-Arc, total radiant exposure at 0.70 W/m<sup>2</sup> irradiance, 80°C black panel temperature</b>	ASTM G155	No Cracks No Cracking 7,560 kJ/m <sup>2</sup> 3,000 hrs	No Cracks No Cracking 35,320 kJ/m <sup>2</sup> 14,000 hrs
<b>At 0.35 W/m<sup>2</sup> irradiance, 80°C black panel temperature</b>		6,000 hrs	28,000 hrs
<b>Weight, lbs/ft<sup>2</sup> (kg/m<sup>2</sup>) 45-mil 60-mil 75-mil</b>			0.27 (1.3) 0.39 (1.9) 0.48 (2.3)

\*Not a quality control test due to the time required for the test or the complexity of the test. All tests are run on a statistical basis to ensure overall long-term performance of the membrane.

Note: Roofing Products International Royal Edge Reinforced EPDM Membrane meets or exceeds the minimum requirements set forth by ASTM D4637 for Type II reinforced EPDM single-ply roofing membranes.

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.

**Get the Royal Edge Advantage with RPI**



## Royal Edge Reinforced EPDM Membrane

### ROYAL EDGE EPDM MEMBRANE

#### INSTALLATION

RPI Royal Edge Reinforced EPDM membrane is a talc free sheet of cured, fire-retardant single-ply EPDM membrane designed for use in new or re-roof low slope Mechanically Attached and Fully Adhered roofing applications using RPI Royal Edge Bonding Adhesives, approved insulations, and cover boards.

#### RPI Royal Edge Fully Adhered System

Approved insulation boards are mechanically attached or adhered to the roof deck using an approved insulation adhesive. The RPI membrane is unrolled into position and allowed to relax. The membrane is folded back and the bonding adhesive is applied to the substrate and membrane. After the appropriate "flash-off" time, the membrane is rolled onto the substrate and broomed into place using a stiff push broom.

All seams are completed with RPI Seam Tape Primer and RPI Seam Tape. Flashings and other details are made using RPI Royal Edge EPDM accessories.

#### STORAGE

Store in unopened original packaging in a cool, dry, space. Do not store in areas exposed to the sun, rain, or snow.

Royal Edge CSFR EPDM membrane with factory applied tape has a shelf life of one year.

#### Available Reinforced Membrane Roll Sizes

Width	Length
10 ft.	100 ft.
6.5 ft.	100 ft.






#### RPI Pre-Taped EPDM

Royal Edge Reinforced EPDM is available with pre-installed RPI Seam Tape. The Seam Tape is applied as part of the manufacturing process in a quality controlled environment using state of the art equipment that enables the installer to save time, labor, and materials while ensuring the highest possible level of system performance.




When using RPI Reinforced EPDM membrane, RPI Seam Tape Primer may be applied with a hand roller.

### APPLICATION PRECAUTIONS

#### Cold Weather

-  Membrane is slippery when wet. Use precaution when walking on wet, ice, or snow covered membrane.
-  When using adhesives in cold weather temperatures (50°F or below), air moisture content may have an adverse affect on the performance of the adhesives and tapes. Do not attempt to use adhesives or tape products in cold temperatures unless the sky is clear and sunny with little or no wind.
-  Store adhesives and flashing products at room temperature or in rooftop warming boxes for 24 hours prior to application. The use of a heat gun to warm seaming and/or flashing areas prior to priming and seaming is acceptable. Take care to not overheat, burn or blister the membrane.
-  Do not attempt installing Primers, Tapes, or Flashings until any frost has completely "burnt off" and all surfaces are dry.
-  Do not attempt to install Primers, Tapes, or Flashings when any sign of condensed moisture becomes apparent on the adhesives or flashings.

#### Hot Weather

-  Store membranes with factory laminated tape and any flashings with or without tape in cool, dry conditions. Avoid prolonged storage temperatures in excess of 90° F (32° C).
-  In hot dry conditions, an additional coating of adhesive may be required over porous substrates.
-  When the adhesives have "flashed off", mate the adhered surfaces together. Leaving the adhesives exposed "open" during high heat will "cook out" the adhesive and require another coat of adhesive. Do not leave the adhered surfaces open and exposed to any windblown dust, dirt, or other debris.



See UL Roofing Materials and Systems Directory R10073

#### LEED® Information

Pre-consumer Recycled Content	0%
Post-consumer Recycled Content	0%
Manufacturing Location	Carlisle, PA
Solar Reflectance Index	9