



PRODUCTS FOR OUR ENVIRONMENT

## TECHNICAL DATA SHEET

### ERS-Reinforced EPDM Membrane

For Professional Use Only



#### PRODUCT DESCRIPTION:

ERS-Reinforced EPDM Membrane is a high performance reinforced membrane that stands up to tearing, impacts, punctures and normal roof traffic. The elastomeric properties of the EPDM membrane compensate for thermal shock and building movement. EPDM membranes provide excellent resistance to ozone and aging. The membrane is manufactured in accordance with the guidelines established by the RMA (Rubber Manufacturers Association) and meets or exceeds the ASTM Standard Specification D 4637. Fire retardant (FR) membranes are specially formulated to inhibit spread of flame and meet or exceed code body testing criteria for fire retardant roofing membranes.

ERS-Reinforced EPDM Membranes are available with in-seam tape that is pre-applied to the sheet. See below for sizes available.

#### RECOMMENDED USES:

ERS-Reinforced EPDM Membrane can be installed as a new elastomeric roofing membrane in mechanically attached and fully adhered roofing systems.

#### ADVANTAGES:

- Economical system
- Ease of Installation
- Outstanding Weatherability
- Lightweight
- Can eliminate tear-off of existing roof if appropriate.

#### APPROVALS:

ERS-Reinforced EPDM Membrane may be provided with UL and FM labels. Both UL and FM classified assemblies are available (ex: FM 1-60 and 1-90, UL class A, B and C).



#### INSTALLATION:

Install the EPDM membrane in accordance with the appropriate current printed Ecology Roof Systems specification. Carefully review and follow the installation instructions in the Ecology Specifications Manual. All flashing details are to be installed in accordance with Ecology's current published details.

**PACKAGING:**

Roll sizes for .045" and .060" ERS-Reinforced EPDM Membrane are widths of 7' and 10', by a length of 100'. Fore retardand (FR) membranes are 10' wide and 100' in length. `:

Product	Packaging	Roll Size	Tape Width
.045 Reinforced, Pre-Taped	2 - Pack	10' x 100'	6"
.060 Reinforced, Pre-Taped	2 - Pack	10' x 100'	6"

**PHYSICAL PROPERTIES:**

Physical Properties	Test Method	Spec. (Pass)	Typical Standard	Typical FR
Tolerance on Nominal Thickness, %	ASTM D 751	± 10	± 10	± 10
Thickness Over Scrim, min, in. (mm) .045 .060	ASTM D 4637 Annex	0.015 (0.381) 0.015 (0.381)	0.016 (0.406) 0.020 (0.508)	0.016 (0.406) 0.020 (0.508)
Weight, lbf/ft <sup>2</sup> (kg/m <sup>2</sup> ) .045 .060			0.24 (1.2) 0.34 (1.7)	0.27 (1.3) 0.39 (1.9)
Elongation, Ultimate, min, %	ASTM D 412 Die C	250**	480**	480**
Tear Strength min, lbf (N)	ASTM D 751 B Tongue Tear	10 (45)	30 (132)	30 (132)
Breaking Strength, Min, lbf(N)	ASTM D 751	90 (400)	180 (800)	180 (800)
Factory Seam Strength, min.	ASTM D 816 (Modified)	Membrane Rupture	Membrane Rupture	Membrane Rupture
Brittleness point, max, deg. F (deg. C)	ASTM D 2137	-49 (-45)	-60 (-51)	-60 (-51)
Resistance to Heat Aging* Properties after 4 weeks @ 240°F (116°C) Breaking Strength, min, lbf(N) Elongation, Ultimate, min, %	ASTM D 573  ASTM D 751 ASTM D 412 Die C	80(355) 200**	200(890) 250**	200(890) 250**
Linear Dimensional Change, max, %	ASTM D 1204	±1.0	-0.7	-0.7
Ozone Resistance* Conditions after exposure 100 pphm Ozone in air for 168 hrs @ 104°F(40°C) Specimen wrapped around 3 inch mandrel	ASTM D 1149	No Cracks	No Cracks	No Cracks
Resistance to Water Absorption* After 7 days immersion @ 158°F(70°C), Change in mass, max, %	ASTM D 471	+8, -2**	2.0**	2.0**
Resistance to Outdoor (Ultraviolet) Weathering* Xenon-Arc, 4000 hrs Exposure, 176°F (80°C) black panel temperature	ASTM D 4637 Conditions	No Cracks No Cracking	No Cracks No Cracking	No Cracks No Cracking
*Not a Quality Control test due to the time required for the test of the complexity of the test. However, all tests run on a statistical basis to ensure overall long-term performance of the sheeting.				
**Specimens to be prepared from coating rubber compound, vulcanized in a similar method to the reinforced product.				

## Ecology Roof Systems®

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To the best of our knowledge, all technical data contained herein is true and accurate as of the date of issuance and subject to change without prior notice. User must contact Ecology Roof Systems to verify correctness before specifying or ordering. We guarantee our products to conform to the quality control standards established by Ecology Roof Systems. We assume no responsibility for coverage, performance or injuries resulting from use. Liability, if any is limited to replacement of the product. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY ECOLOGY ROOF SYSTEMS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW, OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.