

EPDM Membrane

Overview

Henry EPDM Membrane is available in 60-mil (1.52 mm) thickness. Ideal for new single-ply roof construction and re-roofing applications.

Features and Benefits

- Industry-leading weathering resistance (41,580 kJ/m² total radiant exposure without cracking or crazing).
- A full line of Henry peel and stick flashing accessories greatly enhance workmanship quality.
- EPDM Membrane is the smart choice in colder climates:
 - Reduces heating costs, which are generally 3-5 times greater than air conditioning costs
 - Reduces carbon footprint by lowering heating costs
 - Reduces safety hazard from snow and ice accumulation
 - Reduces potential condensation problems
- Lifecycle Assessment using EPA's TRACI model analyzed EPDM, TPO, PVC and Modified-Bitumen.
 - EPDM had the lowest Global Warming Potential
 - EPDM had the lowest Acid Rain impact
 - EPDM had the lowest contribution to smog
- EPDM is the most dimensionally stable heat-resistant membrane and stays flexible even in extremely cold conditions, down to -40°F (See Flexibility/Torsion DMA data).
- 465% elongation and weathering resistance result in superior hail damage resistance.
- Extruded manufacturing technology results in seamless sheets.
- Henry offers all the major components of a single-ply roofing system including membrane, flashings, tapes, adhesives, sealants, insulations and insulating cover boards.

Sizes

- 10' x 25' (3 m x 7.6 m) roll
- 10' x 50' (3 m x 15.24 m) roll

Installation

EPDM Membrane is utilized in Henry single-ply fully adhered roofing systems.

Fully Adhered EPDM Roofing System: Insulation is mechanically attached to the roof deck. The substrate and EPDM Membrane are coated with Henry EPDM Bonding Adhesive. Once Henry EPDM Bonding Adhesive will no longer string to the touch but is still tacky, EPDM Membrane is rolled into place and broomed to achieve 100% contact. To complete seams between two adjoining EPDM Membrane panels, apply Henry Low VOC Primer to the splice area. Once Henry Low-VOC Primer will no longer string to a dry finger touch but is still tacky, apply Henry EPDM Seam Tape, close EPDM Membrane and roll with a 2" wide steel hand roller.

For cold weather splicing below 40°F (5°C), these steps must be followed:

- Heat the primed area of EPDM Membrane with a hot-air gun as Henry EPDM Seam Tape is applied and pressed into place.
- Prior to rolling the splice area with a 2"-wide steel hand roller, apply heat to the top side of EPDM Membrane with a hot-air gun. The heated membrane should be hot to the touch. Be careful not to burn or blister the membrane.

Precautions

1. Use proper stacking procedures to ensure sufficient stability of the materials.
2. Exercise caution when walking on wet EPDM Membrane as it is slippery when wet.

Typical Properties and Characteristics

| Property | Test Method | Results | Typical |
|---|------------------------------|--|---|
| Tolerance on nominal thickness, % | ASTM D412 | 10 | 10 |
| Weight, lbs/ft ² (kg/m ²) .060 | | | 0.39 (1.91) |
| Tensile Strength, min, psi (Mpa) | ASTM D412 | 1305 (9) | 1600 (11.0) |
| Elongation, Ultimate, min, % | ASTM D412 | 300 | 465 |
| Tear Strength, min, lbf/in (kN/m) | ASTM D624 (Die C) | 150 (26.3) | 200 (35.0) |
| Factory Seam Strength, min | Modified ASTM D816 | Membrane rupture | Membrane rupture |
| Resistance to Heat Aging* Properties after 28 days @ 240°F (116°C) | ASTM D573 | | |
| Tensile Strength, min, psi (MPa) | ASTM D412 | 1205 (8.3) | 1450 (10.0) |
| Elongation, Ultimate, min, % | ASTM D412 | 200 | 280 |
| Tear Strength, min, lbf/in (kN/m) | ASTM D624 | 125 (21.9) | 215 (37.6) |
| Linear Dimensional Change, max, % | ASTM D1204 | 1.0 | -0.5 |
| Ozone Resistance* Condition after exposure to 100 ppm Ozone in air for 168 hours @ 104°F (40°C) Specimen is at 50% strain | ASTM D1149 | No cracks | No cracks |
| Brittleness Temp., max, °F (°C)* | ASTM D746 | -49 (-45) | -49 (-45) |
| Resistance to Water Absorption* After 7 days immersion @ 158°F (70°C) Change in mass, max, % | ASTM D471 | +8, -2 | +2.0 |
| Water Vapor Permeance* Max, perms | ASTM E 96 (Proc. B or BW) | 0.10 | 0.03 |
| Fungi Resistance | ASTM G21 | N/A | 0 (No growth) |
| Flexibility/Torsion DMA | ASTM D5279-08 | N/A | 225 MPa @ -40°F |
| Resistance to Outdoor (Ultraviolet) Weathering* Xenon-Arc, total radiant exposure at 0.70 W/m ² irradiance, 80°C black panel temp. | ASTM G155 | No cracks No crazing 10,080 kJ/m ² 4,000 hrs | No cracks No crazing 41,580 kJ/m ² 16,500 hrs |
| At 0.35 W/m ² irradiance, 80°C black panel temperature | | 8,000 hrs | 33,000 hrs |

* Not a Quality Control Test due to the time required for the test or the complexity of the test. However, all tests are run on a statistical basis to ensure overall long-term performance of the sheeting.

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.

Note: Henry EPDM Membrane meets or exceeds the minimum requirements set forth by ASTM D4637 for Type I non-reinforced EPDM single-ply roofing membranes.

LEED® Information

| | |
|---------------------------------|--------------|
| Pre-consumer Recycled Content | 5% |
| Post-consumer Recycled Content | 0% |
| Manufacturing Location | Carlisle, PA |
| Solar Reflectance Index (SRI) | 9 |
| Corporate Sustainability Report | Yes |

For more information, visit www.henry.com or for technical assistance call us at 800-486-1278. Refer to the Safety Data Sheet prior to using this product. The Safety Data Sheet is available at www.henry.com or by emailing Henry Product Support at productsupport@henry.com or by calling 800-486-1278.

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