

Product Data Sheet

SA EPDM Membrane

DESCRIPTION Jan 2024

Mule-Hide's SA EPDM Membrane offers excellent weather ability, hail resistance, and significant labor savings. This EPDM option also qualifies as a Low-VOC option with no solvent-related odors. SA EPDM Membrane is a nominal 60-mil non-reinforced EPDM membrane laminated to a 100%-solid pressure-sensitive adhesive and is available in 10' x 100' rolls. The release liner is silicon-coated on one side for consistent release from the adhesive. SA EPDM membrane is formulated with fire retardants to inhibit the spread of flame and can be incorporated in UL Class A systems.

FEATURES AND BENEFITS

- Industry-leading resistance to outdoor weathering
- 3" factory-applied In-Seam Tape and full line of Pressure-Sensitive accessories enhance workmanship quality
- Dark-colored EPDM is the smart choice in colder climates
 - Reduces heating costs, which are generally 3 to 5 times greater than air conditioning costs
 - Reduces carbon footprint by lowering heating costs
 - Reduces safety hazards from snow and ice accumulation
 - Reduces hazardous conditions from frost, dew, or ice that are difficult to see on white membranes
 - Reduces potential for condensation problems
- Life Cycle 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
- Numerous studies confirm that EPDM's elongation and weathering resistance result in superior hail damage resistance
- EPDM stays flexible even in very cold temperatures
- Extruded manufacturing technology produces seamless sheets that are UL-listed
- Eligible for up to 20-year warranties

PRODUCTIVITY BOOSTING FEATURES AND BENEFITS

- Up to 80% productivity increase compared to traditional bonding adhesive
- · Eliminates loading, stirring, application and disposal of bonding adhesive and containers
- Factory-applied In-Seam Tape saves time on the seaming process

FACTORY-APPLIED IN-SEAM TAPE TECHNOLOGY

With factory-applied In-Seam Tape technology, most of the labor to create seams between membrane panels is completed in a quality-controlled manufacturing facility. This process results in reliable seams with greater peel and shear strengths and with no entrapped air bubbles. Consistent placement of the factory-applied In-Seam Tape also maximizes the splice area and results in a high-quality seam.

INSTALLATION

SA EPDM membrane is approved for application to Poly-ISO 1 & 2, Poly-ISO1 HD, DensDeck® Prime, SECUROCK® Gypsum-Fiber Roof Board, and clean concrete. Cover boards or insulation are adhered or mechanically attached to the roof deck with Insulation Fasteners and Insulation Plates. Acceptable wall substrates include standard plywood, OSB, masonry block, and brick.

Vertical surfaces must be primed with either AeroWeb or Mule-Hide Bonding Adhesive. Each product must be allowed to flash-off prior to the application of the SA EPDM membrane.

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Minimum temperature requirements for SA EPDM Membrane installation are based on substrate and fastening method as outlined below:

- 20°F (-6.7°C) ambient and sheet temperature after relaxation for all approved substrates and fastening methods.
- Use a temperature gun to ensure the membrane is 20°F (-6.7°C) prior to installation.

The surface to which the membrane will be applied must be *very* clean and dry. Prior to membrane placement, the surface of the insulation or underlayment board must be cleaned of dust and other foreign matter using a fine push broom or blower. **Unroll membrane and allow to relax for 30 minutes.**

Option 1

- 1. Remove the release liner on one half of the sheet, starting from the split in the liner at the middle of the sheet. The liner should be removed at an angle to reduce splitting or tearing.
- 2. Roll the membrane onto the substrate at an angle, avoiding wrinkles. When installing SA EPDM membrane, it is recommended to maintain a large curve (radius) on the leading edge of the membrane. This will help eliminate creases and bubbles that cannot be removed after the sheet is in place.
- 3. Broom the membrane in place, starting from the middle of the 10'-wide sheet and working toward the outer edge.
- 4. Fold back the remaining half of the sheet and repeat the above process.

Option 2 (preferred method in cooler conditions)

- 1. Remove both release liners off simultaneously from underneath the membrane at a low angle, similarly to removing the release film from in-seam tape.
- 2. Push a broom lengthwise down the middle of the sheet to tack it in place. Continue brooming to push air out from the middle of the sheet towards the edges.

After brooming, roll the membrane with a segmented roller to ensure full contact with the substrate. Roller must be 3' wide and weigh at least 150 lbs.

To complete seams between two adjoining membrane panels, apply primer to prepare the splice area in conjunction with Mule-Hide's factory-applied In-Seam Tape. End laps of the sheet must be overlaid with 6" Cured Cover Tape per detail MHE-SA-118A. See details MHE-SA-120A, B, or C for perimeter securement options.

Review Mule-Hide specification supplement and details for complete installation information.

PRECAUTIONS

- Use proper stacking procedures to ensure sufficient stability of the materials.
- Exercise caution when walking on a wet membrane. Membranes are slippery when wet.
- SA EPDM membranes with factory-applied In-Seam Tape should not be exposed to prolonged jobsite storage temperatures in excess of 90°F (32°C), otherwise the shelf life of the tape may be affected.
- When SA EPDM membranes with factory-applied In-Seam Tape are used in warm, sunny weather, shade the tape end of the rolls until ready to use.
- Factory-applied In-Seam Tape has a shelf life of 1 year.
- SA EPDM membrane must be allowed to relax and expand reaching a temperature of 60°F (16°C) or above prior to installing.

Typical Properties and Characteristics		
Physical Property	Test Method	SPEC. (PASS)
Tolerance on Nominal Thickness, %	ASTM D412	±10
Weight, lbs/ft² (kg/m²) 60-mil	N/A	0.41 (2.00 Kg/m²)
Tensile Strength, min, psi (MPa)	ASTM D412	1305 (9)
Elongation, Ultimate, min, %	ASTM D412	300
Tear Strength, min, lbf/in (kN/m)	ASTM D624 (Die C)	150 (26.3)
Factory Seam Strength, min	Modified ASTM D816	Membrane Rupture
Resistance to Heat Aging* Properties after 28 days @ 240°F (116°C) Tensile Strength, min, psi (MPa) Elongation, Ultimate, min, % Tear Strength, min, lbf/in (kN/m) Linear Dimensional Change, max, %	ASTM D573 ASTM D412 ASTM D412 ASTM D624 ASTM D1204	1205 (8.3) 200 125 (21.9) ±1.0
Ozone Resistance* Condition after exposure to 100 pphm Ozone in air for 168 hours @ 104°F (40°C) Specimen is at 50% strain	ASTM D1149	No Cracks
Brittleness Temp., max, °F (°C)*	ASTM D746	-49 (-45)
Resistance to Water Absorption* After 7 days immersion @ 158°F (70°C) Change in mass, max, %	ASTM D471	+8, -2
Water Vapor Permeance* Max, perms	ASTM E 96 (Proc. B or BW)	0.10
Resistance to Outdoor (Ultraviolet) Weathering* Xenon-Arc, total radiant exposure at 0.70 W/m² irradiance, 80°C black panel temperature	ASTM G155	No Cracks No Crazing 7,560 kJ/m² 3,000 hrs
At 0.35 W/m² irradiance, 80°C black panel temperature	N/A	6,000 Hours

^{*}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.

Note: SA 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	9	

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.

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PROTECTION & SAFETY

Mule-Hide maintains Safety Data Sheets on all of its non-exempt products. Safety Data Sheets contain health and safety information for your development of appropriate product handling procedures to protect your employees and customers. Mule-Hide's Safety Data Sheets should be read and understood by all of your supervisory personnel and employees before using Mule-Hide products in your facilities.

ADDITIONAL INFORMATION

The information given on this PDS is subject to change without notice. Always check the Mule-Hide website at www.mulehide.com for the latest information, changes and updates or contact Mule-Hide Products Company at 800-786-1492.

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