20-Year Warranty Design Enhancements

"The name trusted in roofing since 1906"

EPDM - Fully Adhered

Revision Date: May 3, 2019

All products specified for this roofing system must be manufactured or approved by Mule-Hide Products Co. This criteria is limited to buildings of 100' in height or less.

Membrane / Adhesive Type / Other

- 1. 0.060" thick Mule-Hide EPDM: Standard Black, White-on-Black, or Reinforced Black Membranes.
- 2. Mule-Hide Bonding Adhesive, Low-VOC Bonding Adhesive, Low-VOC Bonding Adhesive 1168 (California only), EPDM X-23, AeroWEB, Acrylic Water Base Bonding Adhesive, or Aqua Base 120 Bonding Adhesive.
- 3. Field seams:
 - 6" In-Seam Tape & Primer
 - 3" Pre-Taped EPDM & Primer end laps must be 6" In-Seam Tape & Primer
 - 3" In-Seam Tape & Primer with 6" Cured Cover Tape
- 3. RMS and Tape Primer must be used at base of all parapet walls
- 4. All 'T' joints overlaid with T-Joint covers or EPDM uncured flashing tape.
- 5. Inside and outside corners:
 - Mule-Hide Pre-Cut Inside/Outside corners
 - Mule-Hide EPDM uncured flashing tape minimum 9" x 9"

Deck Type / Typical Fastener - Refer to Specifications for minimum pullout criteria.

Standard Roof Deck (4)	Insulation Fastener (1)	Insulation Plate		
Steel (22 gauge or heavier)	Mule-Hide DP (#12)	Mule-Hide 3" Metal Stress Plates		
Structural Concrete (3,000 psi)	Mule-Hide HDP (#14) (2)	Mule-Hide 3" Metal Stress Plates		
Plywood (Min 15/32" thick)	Mule-Hide DP (#12)	Mule-Hide 3" Metal Stress Plates		
Wood Plank (Min 1-1/2" thick)	Mule-Hide DP (#12)	Mule-Hide 3" Metal Stress Plates		
Fibrous Cement & Gypsum (2)(3)	TL Fasteners by Tru-Fast	3" Galvalume Insulation Plate by Tru-Fast		

NOTES:

- 1. Heavier gauge fasteners may be required for Factory Mutual, code, or wind warranties.
- 2. Other fasteners may be considered, submit request to Mule-Hide prior to bidding.
- 3. Pullout testing is required, must exceed 360 pounds with TL Fastener.
- 4. Contact Mule-Hide Technical Department for non-standard roof decks.
- 5. 2.4" Seam Plates are NOT approved for use to fasten insulation

Slope Requirement/Drainage

- 1. Positive drainage required (no ponding 48 hours after a rain)
- 2. 1/4" per horizontal foot preferred
- 3. 1/8" slope with sufficient number of drains and crickets/saddles may be considered

Construction Type

- 1. New Construction
- 2. Reroof Full tear off of existing roofing down to deck
- 3. Recover Over existing roofing system or existing insulation (all wet materials removed and verification by a Independent 3rd party moisture scan)

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Insulation/Overlayment - Mechanical Attachment*

Insulation Type or Overlay		Fasteners per 4' x 8' board		
		Perimeter	Corner	
Approved Polyisocyanurate - Min 2" thick (top layer)	8	12	16	
Approved Polyisocyanurate - Min 1.5" up to 2" thick4	12	18	24	
1/2" HD Poly-Iso - Installed over Approved Insulation	16	24	32	
HD Fiberboard - Min 1/2" thick- Installed over Approved Insulation	16	24	32	
Dens Deck Prime or Securock - Min 1/4" thick - Installed over Approved Insulation	12	18	24	
OSB - Min 7/16" thick - Installed over Approved Insulation	17	25	32	
Approved OSB/Polyisocyanurate Composite - Min 2" thick		25	32	

*NOTES:

- 1. Thicknesses stated are for single or top layer of material.
- 2. Gypsum board or suitable base sheet may be approved as needed to meet required fire code.
- 3. Consult Specification Manual for list of approved insulations for use under overlayment.
- 4. Contact Mule-Hide Technical Department for Polyisocyanurate less than 1.5" in thickness.
- 5. Certain codes may require additional fastening requirements.
- 6. System warranties require the use of Mule-Hide labeled components, products supplied by Mule-Hide or approved in writing by Mule-Hide prior to the start of the project.

Insulation/Overlayment - Adhesive Attachment

1. **Mule-Hide Helix® Low-Rise Adhesive**. Refer to the specifications and Helix Max Product Data Sheet for acceptable insulations, substrates, and bead spacing.

Metal Accessories

- 1. All Metal copings, gravel stops, fascia, and drip aprons must be installed according to Mule-Hide approved details.
- 2. Conventional metal edge details that require flanges to be 'stripped in' must use Cured Cover Tape.
- 3. All Metal Scuppers must have welded (soldered) seams.
- 4. Metal accessories provided by Mule-Hide will be included in System warranties.

Other Requirements

- 1. No 'As-Built' projects. All projects are to be reviewed and approved prior to installation.
- 2. Shop drawings must include all pertinent details.
- 3. Contact Mule-Hide Technical Department for specific code requirements such as Factory Mutual (FM) or Underwriters Laboratory (UL).

Warranty Wind Speed (Maximum Peak Gusts)

Wind speed coverage for a specific project will vary depending on a variety of factors, including the deck type, fastening density, location, height of the roof, and edge details.

Contact Mule-Hide Technical Department for specific requirements.

NOTES:

- These are enhancements to the Mule-Hide EPDM Fully Adhered System Specification, as written in the Mule-Hide EPDM Specification Manual. Refer to Mule-Hide EPDM Specification Manual for complete specification and details.
- 2. The information contained in this document is general information. Requirements may be different for each specific job based on the conditions of each building. Always contact Mule-Hide Technical Department to review the specific job conditions prior to bidding.