# 20-Year Warranty Design Enhancements

"The name trusted in roofing since 1906"



## **EPDM - Mechanically Attached**

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 50' in height and does not include buildings within 20 miles of hurricane coastlines.

## Membrane / Adhesive Type / Other

- 1. 0.060" thick Mule-Hide EPDM Reinforced Membrane
- 2. Field seams: 6" In-Seam Tape & Primer
- 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 (3)	Max Sheet Width	Max Fastener Spacing	Fastener (1)	Seam Plate (1)
Steel - Min 22 ga. or Wood Deck - Min 1"	8'	12" OC	HDP (#14)	2.4"
	10'	6" OC		2.4"
Plywood - Min 15/32"	8'	6" OC	HDP (#14)	2.4"
Structural Concrete - Min 3,000 psi	10'	6" OC	HDP(#14) (2)	2.4"

### Notes:

- 1. Heavier gauge fasteners may be required to meet Factory Mutual or code requirements.
- 2. Other fasteners may be considered, submit request to Mule-Hide prior to bidding.
- 3. Mechanically attached systems are not allowed over Oriented Strand Board (OSB) decks without prior approval by the Mule-Hide Technical Department. Mule-Hide will not issue system warranties on "As-Built" projects where Mule-Hide did not grant approval prior to job start.
- 4. Contact Mule-Hide Technical Department for other roof decks or non-standard roof decks.
- 5. 3" Insulation Plates are NOT approved for use to fasten membrane.

#### 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)

Insulation/Overlayment - Mechanical Attachment\*

Inquistion Type or Overlay		Board Size	
Insulation Type or Overlay	4' x 4'	4' x 8'	
Mule-Hide Polyisocyanurate - Min 2" thick (top layer) - Min 20 psi	4	5	
Mule-Hide Polyisocyanurate - Min 1.0" thick (top layer) - Min 20 psi	4	6	
InsulFoam R-Tech Expanded Polystyrene 4'x8' – Min 1.25 lb density, min. 1"	4	6	
Insulfoam R-Tech Fan-Fold Expanded Polystyrene – Min 1.25 lb density, min. 1" See Note		Note 6	

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## **EPDM – MECHANICALLY ATTACHED**

#### \*NOTES:

- 1. Gypsum board or suitable base sheet may be approved as needed to meet required fire code.
- 2. Consult Specification Manual for list of approved insulations for use under overlayment.
- 3. Contact Mule-Hide Technical Department for Polyisocyanurate less than 1.5" in thickness.
- 4. Certain codes may require additional fastening requirements.
- 5. 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.
- 6. See Technical Bulletin 1003 for attachment of fan-fold insulations.

#### **Insulation/Overlayment - Adhesive Attachment**

1. **Mule-Hide Helix® Max Low-Rise Adhesive**. Refer to the specifications and appropriate 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.
- 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'. 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).

## Perimeter Enhancement Widths - Number Required

Building Height	Perimeter Sheets
0 to 34 feet	Minimum of one (1) perimeter enhancement width
35 to 69 feet	Minimum of two (2) perimeter enhancement widths
Over 70 feet	Contact Mule-Hide Technical Department

#### **Perimeter Half Sheets**

Width of Field Sheet	Width of Perimeter Sheets
8'	4'
10'	5'

### **Warranty Wind Speed (Maximum Peak Gusts)**

Wind speed coverage for a specific project will vary depending on the deck type, fastening density, location and height of the roof. Certain codes may require additional fastening requirements.

<u>Contact Mule-Hide Technical Department for specific requirements such as sheet width and fastener spacing.</u>

## **NOTES:**

- 1. These are enhancements to the Mule-Hide EPDM Mechanically Attached System Specification, as written in the Mule-Hide EPDM Specification Manual. Refer to Mule-Hide EPDM Specification Manual for complete specification and details.
- 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 the project.