



MULE-HIDE PRODUCTS CO., INC
20-Year Premium Warranty Design Enhancements
For Mechanically Attached TPO
Roofing System Specification

TPO Systems

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" or 0.080" thick Mule-Hide TPO Reinforced Membranes.
2. Mule-Hide TPO Bonding Adhesive (solvent based)
3. All 'T' joints overlaid with TPO Non-Reinforced Flashing Membrane with heat welded seams.
4. All field seams must be heat welded.

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.	10'	12" OC	HD-14	2.4"
Wood Plank - Min 2x or Plywood - Min 23/32"	10' 8'	6" OC 12" OC	HD-14 HD-14	2.4" 2.4"
Plywood - Min 15/32" or Min 1x Wood Plank	8'	6" OC	HD-14	2.4"
Structural Concrete - Min 3,000 psi	10'	12" OC	HD-14 (2)	2.4"

Notes:

1. Heavier fasteners and/or plates 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. Contact Mule-Hide Technical Department for other roof decks and non-standard roof decks.

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 - with full tear-off
3. Recover - all wet materials removed and verification by a Independent 3rd party moisture scan

Insulation/Overlayment - Mechanical Attachment*

Insulation Type or Overlay	Board Size	
	4' x 4'	4' x 8'
Mule-Hide Polyisocyanurate - Min 1.5" thick (top layer) - Min 20 psi	4	6
HD Fiberboard - Min 1/2" thick- Installed over Mule-Hide Polyisocyanurate	4	8
Dens Deck Prime - Min 1/4" - Installed over Mule-Hide Polyisocyanurate	4	8

***NOTES:**

1. Gypsum board or suitable base sheet may be approved as needed to meet required fire code.
2. Premium Warranty requires the use of Mule-Hide Polyisocyanurate insulation.
3. Contact Mule-Hide Technical Department for Polyisocyanurate less than 1.5" in thickness.
4. Certain codes may require additional fastening requirements.

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Metal Accessories

1. All Metal copings, gravel stops, fascia, and drip aprons must be either pre-manufactured by Metal-Era, or constructed as per approved details.
2. Mule-Hide All Purpose Bar is required when a compression bar termination is specified and must be utilized in conjunction with counterflashing by others.
3. Certain Metal accessories by others may be permitted upon Mule-Hide acceptance prior to construction.
4. The Metal-Era Anchor-Tite System must be used when the sheet metal is to be included under the warranty.
5. All metal scuppers must have welded (soldered) seams.

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).

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.

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

Wind Speed	Perimeter Sheets
55-MPH	Minimum of two (2) perimeter sheets
72-MPH	Minimum of three (3) perimeter sheets

NOTES:

1. **These are enhancements to the Mule-Hide TPO Mechanically Attached System Specification, as written in the Mule-Hide TPO Specification Manual. Refer to the Mule-Hide TPO 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 the project.**