

Product Evaluation

RC368 | 0819

Engineering Services Program

The following product has been evaluated for compliance with the wind loads specified in the International Residential Code (IRC) and the International Building Code (IBC).

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

For more information, contact TDI Engineering Services Program at (800) 248-6032.

Evaluation ID: RC-368

Effective Date: August 1, 2019

Re-evaluation Date: August 2023

Product Name: Mule-Hide TPO-c and Mule-Hide PVC Roofing Systems

Manufacturer: Mule-Hide Products., Inc.
P.O. Box 1057
Beloit, WI 53512
(800) 786-1492

General Description:

Mule-Hide TPO-c roof membranes are nominal 0.045" thick or thicker flexible TPO (thermoplastic olefin) sheets. Mule-Hide PVC roof membranes are nominal 0.050" thick or thicker flexible PVC (polyvinyl chloride) sheets.

Limitations and Installation:

General:

All IRC and IBC requirements must be satisfied, and the manufacturer's installation instructions followed, unless otherwise specified by this product evaluation. The roof-framing members must be spaced a maximum of 24" on center.

Roof Slope: The roof must have a minimum slope of 1/4:12.

TPO Assembly No. 1

Design Wind Pressure: -67.5 psf

Roof Deck: The roof deck must consist of minimum nominal 19/32" thick plywood.

Insulation: A minimum of 1.5" thick polyisocyanurate roof insulation. Secure with four (4) No. 12 insulation fasteners and 3" steel plates per every 4' x 8" board.

Membrane: One ply of Mule-Hide TPO-c membrane, 6'-0" wide sheet. Secure the membrane to the roof deck with Mule-Hide EHD fasteners and 2.4" seam plates spaced 6" on center along the seams of the membrane. Seal the overlapping membrane edge with a 1-1/2" wide heat weld.

TPO Assembly No. 2

Design Wind Pressure: -52.5 psf

Roof Deck: The roof deck must consist of minimum nominal 19/32" thick plywood.

Insulation: A minimum of 1.5" thick polyisocyanurate roof insulation. Secure the roof insulation with four (4) No. 12 insulation fasteners and 3" steel plates per every 4' x 8" board.

Membrane: One ply of Mule-Hide TPO-c membrane, 8'-0" wide sheet. Secure the membrane to the roof deck with Mule-Hide EHD fasteners and 2.4" seam plates spaced 6" on center along the seams of the membrane. Seal the overlapping membrane edge with a 1-1/2" wide heat weld.

PVC Assembly No. 1

Design Wind Pressure: -60 psf

Roof Deck: The roof deck must consist of minimum nominal 19/32" thick plywood.

Insulation: A minimum of 1.5" thick polyisocyanurate roof insulation. Secure the roof insulation with four (4) No. 12 insulation fasteners and 3" steel plates per every 4' x 8" board.

Membrane: One ply of Mule-Hide PVC membrane, 81" wide sheet. Secure the membrane to the roof deck with Mule-Hide EHD fasteners and 2.4" seam plates spaced 6" on center along the seams of the membrane. Seal the overlapping membrane edge with a 1-1/2" wide heat weld.

Note: Keep the manufacturer's installation instructions available on the job site during the installation. Use corrosion resistant fasteners as specified in the IRC, the IBC, and the Texas Revisions.