

# 10 or 15 Year Warranty Design Summary

"The name trusted in roofing since 1906"



## TPO – Ballasted

**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, located in urban or suburban exposure areas. Not applicable for coastal or high wind areas.**

1. 0.045" or 0.060" or 0.080" thick Mule-Hide Reinforced TPO
2. On 0.045" thick membrane, all 'T' joints must be creased with a roller while still hot as shown in Detail MHT-UN-105A.
3. On 0.060" or 0.080" thick membrane, all "T" joints must be overlaid with TPO Non-Reinforced Flashing Membrane with heat welded seams as shown in Detail MHT-UN-105B.
4. All Field/Wall seam transitions on all membrane thicknesses must be overlaid with TPO Non-Reinforced Flashing Membrane with heat welded seams as shown in Detail MHT-UN-105C.
5. All field seams must be heat welded.

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

1. Any roof deck capable of supporting the weight of a Ballasted System may be used.
2. The determination that the roof deck can support the required additional loads shall be the responsibility of the building owner/owner's representative.

### 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
4. Maximum slope of 2:12

### 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)

### Insulation/Overlayment\*

Insulation Type or Overlay
Approved Polyisocyanurate - Min 1" thick - Min 18 psi
Approved Extruded Polystyrene - Min 3/4" - Min 15 psi
Approved Expanded Polystyrene - Min 1" - Min 1 lbs density
HD Fiberboard - Min 1/2" thick- Installed over Approved Insulation

### \*NOTES:

1. Thicknesses stated are for single layer of material.
2. Consult Specification Manual for list of approved insulations for use under overlayment.
3. Insulation must be loose-laid over an approved substrate.
4. Mechanical attachment of insulation is not permitted.
5. Roof insulation may be spot attached with an approved insulation adhesive to facilitate installation. Requires prior approval from Mule-Hide.
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.

# 10 or 15 Year Warranty Design Summary

## TPO – BALLASTED

---

### Ballast Requirements

Building Height	Ballast Requirements
Up to 25'	#2 Stone @ 13#/SF for 10' wide perimeter #4 Stone @ 10#/SF for field of roof
26' to 50'	#2 Stone @ 13#/SF for 20' corners #2 Stone @ 13#/SF for 10' wide perimeter #4 Stone @ 10#/SF for field of roof
Over 50'	Mule-Hide recommends the use of a interlocking ballast paver system

### Concrete Pavers

1. Minimum Size: 2' x 2' x 2"
2. Minimum Weight: 22 pounds per square foot
3. Membrane Protection: Rubber or plastic pedestals, 4" x 4" sections of Mule-Hide Walkway Pads, or HP Protection Mat.
4. Paver type must be submitted to Mule-Hide for approval prior to bid.

### 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' may use TPO Cover Tape or White EPDM Cured Cover Tape (Mate-Line 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 Florida NOA, Factory Mutual (FM) or Underwriters Laboratory (UL).

### NOTES:

1. **This is a summary of the Mule-Hide TPO Ballasted System Specification, as written in the Mule-Hide TPO Specification Manual. Refer to 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.**