

**MULE-HIDE NAIL BASE**

**PRODUCT DESCRIPTION**

Mule-Hide's Nail Base is a premium polyester reinforced, fire retardant modified bitumen membrane manufactured to meet the toughest industry and code requirements. The Mule-Hide Nail Base is manufactured with a Styrene Butadiene Styrene (SBS) modified asphalt compound that exhibits exceptional waterproofing and weathering properties. Mule-Hide Nail Base is finished with a polyolefin film with printed lay lines on the top surface. Meets ASTM D-6163 Type 1, Grade S.

**BASIC USES**

Nail Base membranes are specially designed for mechanical attachment. Applications include new roofing, recover (retrofit) and BUR repairs. This system must be installed over an acceptable roof deck, roof insulation, or other suitable substrate. See the Mule-Hide Self-Adhered Modified Bitumen Application Guidelines for complete specifications and details.

**SPECIFICATIONS**

PRODUCT NAME	THICKNESS mm (mils)	APPROXWEIGHT lb/roll	ROLL SIZE	ROLLS/PALLET	COVERAGE (sq)
Nail Base	2.0	100	65'8" x 3'3-3/8" (10mx1m)	20	200 ft <sup>2</sup>

TEST METHOD	TECHNICAL DESCRIPTION	VALUES Grade G
ASTM D5147 Sec 5	Thickness, nominal, mils (mm)	80 (2.0)*
ASTM D228 Sec 7	Net mass/unit area, min, lbs/100 ft <sup>2</sup> (g/m <sup>2</sup> )	45 (2197)
ASTM D5147 Sec 16	Bottom coating thickness, min, mils (mm)	16 (0.4)
ASTM D5147 Sec 6	Maximum load at 0 ± 3.6°F (-18 ± 2°C), MD & XMD, min, before and after heat conditioning, lbf/in. (kN/m)	70 (123)
ASTM D5147 Sec 6	Elongation at 0 ± 3.6°F (-18 ± 2°C), MD & XMD, min, at maximum load, before and after heat conditioning, %	1
ASTM D5147 Sec 6	Maximum load at 73.4 ± 3.6°F (23 ± 2°C), MD & XMD, min, before and after heat conditioning, lbf/in. (kN/m)	30 (5.3)
ASTM D5147 Sec 6	Elongation at 73.4 ± 3.6°F (23 ± 2°C), MD & XMD, min, at maximum load, before and after heat conditioning, %	2
ASTM D5147 Sec 6	Elongation at 5% of maximum load 73.4 ± 3.6°F (23 ± 2°C), MD & XMD, min, before and after heat conditioning, %	3
ASTM D5147 Sec 7	Tear strength at 73.4 ± 3.6°F (23 ± 2°C), min, lbf (N)	35 (156)
ASTM D5147 Sec 11	Low temperature flexibility, max, before and after heat conditioning, °F (C)	0 (-18)
ASTM D5147 Sec 10	Dimensional stability, max, %	<0.5
ASTM D5147 Sec 15	Compound stability at 215°F	No Failures
ASTM D1970 Sec 7.10	Waterproof integrity of lap seam	Pass
ASTM D1970 Sec 7.4	Adhesion to substrate at 23.9 ± 1.1°C (75 ± 2°F), lbs/ft width, minimum	12.0 lbf/ft width
ASTM D1970 Sec 7.4	Adhesion to substrate at 4.4 ± 1.1°C (40 ± 2°F), lbs/ft width, minimum	2.0 lbf/ft width

*The properties in this table are "as manufactured" unless otherwise noted.*

*\* Meets minimum thickness requirements of applicable ASTM standard.*

## MULE-HIDE NAIL BASE

### SYSTEM BENEFITS

1. Lightweight roll sizes.
2. Durable - high performance reinforcement mat.
3. No hot asphalt, fumes or flames required for installation.
4. UL Class A and FM 1-90 assemblies available.
5. Meets or exceeds the same ASTM standards as traditional Modified Bitumen products.

### CODE APPROVALS

FM Class 1-90 and UL Class A rated systems are available.

### INSTALLATION INSTRUCTIONS (See complete application instructions)

1. Mule-Hide Nail Base or an approved insulation shall be mechanically attached to a suitable substrate.
- 1a. Mule-Hide SA Base Sheet may be adhered directly to a suitable substrate.
2. Starting at the low point of the roof, install Mule-Hide SA Cap Sheet as follows: Unroll the SA Cap Sheet and cut-off approximately 12" from the bottom of the sheet (this will off-set the sheet so that the side laps do not align, the end laps must be off-set as well).
3. After positioning the sheet, fold the top half of the sheet back lengthwise, remove the release liner and roll the material back into place, taking care to avoid wrinkles and trapped air, and maintaining proper sheet alignment.
4. Firmly hand press sheet from the center out avoiding wrinkles and trapped air as the SA Cap Sheet adheres to the SA Base Sheet.
5. Repeat procedure to adhere remaining half of the sheet.
6. After the sheet is adhered, it is required to be rolled with a 75 lb. roller.
7. Position subsequent sheets to overlap the previous courses by the width of the selvage edge (overlap in a shingle fashion ensuring that laps are water shedding).
8. Repeat procedures 2 thru 5 above. Remember to remove the release film from the **FASTLap®** and **SEALLap®** edges prior to adhering the lower half of the SA cap Sheet. **Note:** When completing end laps, cut the top corner of the top sheet on a 45-degree angle (start the cut 3" in from the top edge and finish down 3" from the top edge) and the bottom corner of the bottom sheet on a 45-degree angle (start the cut 3" in from the bottom edge and finish 3" up from the bottom edge). Apply a solid bead of Mule-Hide Mod Bit Sealant along both cut edges. Roll entire sheet into place using a 75 lb. roller. Stagger end laps approximately three feet apart.

This is only a brief summary and NOT the complete specification. The Mule-Hide Self-Adhered Modified Bitumen Application Guidelines, Specifications, Details, Technical Bulletins, associated documents should be thoroughly reviewed prior to starting any project.

### TECHNICAL SERVICE

Contact Mule-Hide Products Company at 608/365-3111 for technical service information.

### DISCLAIMER

The statements provided concerning the material shown are intended as a guide for material usage and are believed to be true and accurate. No statement made by anyone may supersede this information, except when done in writing by Mule-Hide Products Co., Inc. Since the manner of use is beyond our control, Mule-Hide does not make nor does it authorize anyone to make any warranty of merchantability or fitness for any purpose or any other warranty, guarantee or representation, expressed or implied, concerning this material except that it conforms to Mule-Hide's physical properties. Buyer and user accept the product under these conditions and assume the risk of any failure, any injury of person or property (including that of the user), loss or liability resulting from the handling, storage or use of the product whether or not it is handled, stored or used in accordance with the directions or specifications. Mule-Hide must be notified in writing of any claims and be given the opportunity to inspect the complaint or failure before repairs are made.