

**PRODUCT DATA SHEET**

**MULE-HIDE SA-APP CAP SHEET (FR)**

**PRODUCT DESCRIPTION**

Mule-Hide's SA-APP Cap Sheet (FR) is a premium polyester reinforced, fire retardant modified bitumen membrane manufactured to meet the toughest industry and code requirements. The Mule-Hide SA-APP Cap Sheet (FR) is manufactured via **Adeso™** dual-compound technology, whereby the membrane consists of an Atactic Polypropylene (APP) modified asphalt compound on top and a pressure sensitive adhesive compound on the bottom. The adhesive is covered with a split release liner. Mule-Hide SA-APP Cap Sheet (FR) is finished with granules on the top surface, except for the selvedge edge and end lap, which are granular free. SA-APP Cap Sheet (FR) is also used as a flashing membrane in all applicable specifications. Meets ASTM D-6222 Type 1, Grade G (granular) / ASTM D-1970.

**BASIC USES**

SA-APP Cap Sheet (FR) membranes are specially designed for applications where the use of hot asphalt, cold process adhesive, or a propane torch is undesirable. Applications include new roofing, recover (retrofit) and BUR repairs. This system must be installed over an acceptable base sheet, roof insulation, or other suitable substrate. Do not apply to shingles, shakes or other residential roofing material. 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)
<b>SA-APP Cap Sheet (FR)</b>	3.3	95	32'10"x3'3-3/8" (10mx1m)	20	100 ft <sup>2</sup>

TEST METHOD	TECHNICAL DESCRIPTION	VALUES Grade G
ASTM D5147 Sec 5	Thickness, nominal, mils (mm)	132 (3.3)*
ASTM D228 Sec 7	Net mass/unit area, min, lbs/100 ft <sup>2</sup> (g/m <sup>2</sup> )	85 (41.5)
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)	50 (8.8)
ASTM D5147 Sec 6	Elongation at 0 ± 3.6°F (-18 ± 2°C), MD & XMD, min, at maximum load, before and after heat conditioning, %	23
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)	60 (10.5)
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, %	10
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, %	30
ASTM D5147 Sec 7	Tear strength at 73.4 ± 3.6°F (23 ± 2°C), min, lbf (N)	70 (311)
ASTM D5147 Sec 11	Low temperature flexibility, max, before and after heat conditioning, °F (°C)	+32 (0)
ASTM D5147 Sec 10	Dimensional stability, max, %	1
ASTM D5147 Sec 15	High temperature stability, °F (°C) min	230(110)
ASTM D5147 Sec 14	Granule embedment, max, g	2
ASTM D5147 Sec 9	Water absorption, % max	3.2
ASTM D5147 Sec 8	Moisture content, % min	1.0
ASTM D5636	Low temperature unrolling, °F (°C) max	41 (5)
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 SA-APP CAP SHEET (FR)

### SYSTEM BENEFITS

1. Pre-applied adhesive on the back of the sheet.
2. Lightweight roll sizes.
3. Durable - high performance reinforcement mat.
4. No hot asphalt, fumes or flames required for installation.
5. UL Class A and FM 1-90 assemblies available.
6. 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.

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