PRODUCT DESCRIPTION

SA-SBS Cap Sheet is a premium self-adhering polyester reinforced modified bitumen membrane manufactured to meet the toughest industry and code requirements. SA-SBS Cap Sheet is manufactured using Adeso® dual-compound technology, whereby the membrane consists of a Styrene Butadiene Styrene (SBS) modified asphalt compound on top and a pressure sensitive adhesive compound on the bottom. The adhesive is covered with a split release liner. SA-SBS Cap Sheet is finished with granules on the top surface and features SEALap® ULTRA side lap with self-adhesive compound for an instant bond, tested stronger than all other application methods and FASTLap®, granule free end lap. Each of these patented features provide for greater ease of application as well as improved long-term performance. SA-SBS Cap Sheet is also used as a flashing membrane in all applicable specifications. Meets ASTM D6164 Type 1, Grade G (granular) / ASTM D1970.

BASIC USES

SA-SBS Cap Sheet membrane is 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. See the Mule-Hide Self-Adhered Modified Bitumen Application Guidelines for complete specifications and details.

SPECIFICATIONS AND PACKAGING

<table>
<thead>
<tr>
<th>Thickness</th>
<th>Approx. Weight</th>
<th>Roll Size</th>
<th>Rolls/Pallet</th>
<th>Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.5 mm (140)mil</td>
<td>84 lb./roll</td>
<td>32'10&quot;x39 3/8&quot; (10mx1m)</td>
<td>20</td>
<td>100 ft²</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Physical Property</th>
<th>Test Method</th>
<th>ASTM Values</th>
<th>Typical Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peak Load at 0°F (-18°C)</td>
<td>ASTM D5147</td>
<td>70 lbf/in. (12.3) kN/m</td>
<td>138 lbf/in (24.2 kN/m) -MD 88 lbf/in (15.4 kN/m) -XMD</td>
</tr>
<tr>
<td>Elongation at Peak Load at 0°F (-18°C)</td>
<td>ASTM D5147</td>
<td>20%</td>
<td>52% MD, 64% XMD</td>
</tr>
<tr>
<td>Peak Load at 73°F (23°C)</td>
<td>ASTM D5147</td>
<td>50 lbf/in. (8.8) kN/m</td>
<td>80 lbf/in (14.0 kN/m) -MD 56 lbf/in (9.8 kN/m) -XMD</td>
</tr>
<tr>
<td>Elongation at Peak Load at 73°F (23°C)</td>
<td>ASTM D5147</td>
<td>35%</td>
<td>52% MD, 64% XMD</td>
</tr>
<tr>
<td>Ultimate Elongation at 73°F (23°C)</td>
<td>ASTM D5147</td>
<td>38%</td>
<td>84% MD, 93% XMD</td>
</tr>
<tr>
<td>Tear Strength at 73°F (23°C)</td>
<td>ASTM D5147</td>
<td>55 lbf (246) N</td>
<td>129 lbf (574 N) - MD 83 lbf (369 N) -XMD</td>
</tr>
<tr>
<td>Dimensional Stability (Maximum)</td>
<td>ASTM D1547</td>
<td>1%</td>
<td>0.3% MD, 0.6% XMD</td>
</tr>
<tr>
<td>Low Temperature Flexibility, max, F° (C°)</td>
<td>ASTM D5147</td>
<td>0°F (-18°C)</td>
<td>Pass</td>
</tr>
<tr>
<td>Compound Stability (maximum)</td>
<td>ASTM D5147</td>
<td>215°F (102°C)</td>
<td>Pass</td>
</tr>
<tr>
<td>Granule Embedment (maximum loss)</td>
<td>ASTM D5147</td>
<td>2g</td>
<td>1.5g</td>
</tr>
<tr>
<td>Adhesion to Plywood @ 40°F (4.4°C)</td>
<td>ASTM D1970</td>
<td>2.0 lbf/ft</td>
<td>4.7 lbf/ft</td>
</tr>
<tr>
<td>Adhesion to Plywood @ 75°F (24°C)</td>
<td>ASTM D1970</td>
<td>12.0 lbf/ft</td>
<td>31.0 lbf/ft</td>
</tr>
</tbody>
</table>

Colors Available: Black, Buff, Chestnut, Grey Slate, Oak, White, Red Blend, Pine Green, Heather Blend, Weatherwood

Typical properties and characteristics are based on samples tested and are not guaranteed for all samples of this product. This data and information is intended as a guide and does not reflect the specification or specification range for any particular property of this product.

PRODUCT BENEFITS

1. Pre-applied adhesive on the back of the sheet.
2. Durable - high performance reinforcement mat.
3. No hot asphalt, fumes or flames required for installation.
4. Excellent long term adhesion to multiple substrates and to base plies.
SA-SBS Cap Sheet

5. Offers low-temp flexibility, puncture and tear resistance.
6. FASTLAP granule free end lap provides faster, stronger seams.
7. SEAL Lap Ultra granule free selvage edge now with self-adhesive compound for an immediate, long-term monolithic seam.

**CODE APPROVALS**

Various code approvals are available including: Factory Mutual, Underwriters Laboratories, Miami-Dade, Florida Product Approval, ICC-ESR and Texas Department of Insurance. Contact Mule-Hide Technical Department for specific ratings.

**APPLICATION GUIDELINES**

Apply SA-SBS Cap Sheet only in dry weather and when air and surface temperatures are 40°F (5°C) and rising.
- Apply over clean, dry, dust and debris-free substrates.
- Mule-Hide 121 Asphalt Primer or High-Tack Primer (water based) may be used where a primer is required. Contact Mule-Hide for appropriate uses and further information.
- All substrates shall be designed with proper expansion devices.
- Wood decks shall have all joints cross blocked and/or properly supported.
- Installation of SA-SBS Cap Sheet should not adversely affect the ventilation of existing construction.
- Do not apply directly to existing shingles, shakes or other unacceptable roof coverings.

**INSTALLATION INSTRUCTIONS**

SA-SBS Cap Sheet is intended to be used as a cap sheet or top layer in new or re-roofing applications, and is required to complete the roofing system.

1. Nail Base or an approved insulation shall be mechanically attached to a suitable substrate. SA-SBS Cap Sheet may be adhered directly to a suitable substrate.
2. Starting at the low point of the roof, unroll the SA-SBS Cap Sheet and allow it to relax.
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-SBS Cap Sheet adheres to the Nail Base Sheet, SA-Base Sheet, or approved substrate.
5. When completing end laps stagger end laps approximately three feet apart. 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 Mod Bit Sealant along both cut edges. Remember to remove the release film from the FASTLap and SEAL Lap Ultra edges prior to adhering the lower half of the SA-SBS Cap Sheet.
6. Repeat procedure to adhere remaining half of the sheet.
7. After the sheet is adhered, it is required to be rolled with a 75 lb. roller, roll across the 3’ width first, then the length of the roll can be rolled.
8. 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).

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

**PROTECTION & SAFETY**

Mule-Hide maintains Safety Data Sheets on all of its non-exempt products. Safety Data Sheets contain health and safety information for your development of appropriate product handling procedures to protect your employees and customers. Mule-Hide's Safety Data Sheets should be read and understood by all of your supervisory personnel and employees before using Mule-Hide products in your facilities.
ADDITIONAL INFORMATION

The information given on this PDS is subject to change without notice. Always check the Mule-Hide website at www.mulehide.com for the latest information, changes and updates or contact Mule-Hide Products Company at 800-786-1492.

DISCLAIMER

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