**USAGE:** *metalflex* SBS is used as a cap or flashing membrane in projects requiring the aesthetics and the energy savings of a metal embossed surface.

**STORAGE:** Material should be stored on end, in a dry location. Assure that materials are kept clean and away from excessive heat or cold; do not remove labels or tear off protective covering until ready for application; store in an enclosed area where temperatures are above 50° F and below 90° F. Material shall not be stored more than one high without protective bracing.

**DISCLAIMER:** This sheet is meant only to highlight MBTechnology's products and specifications. Information is subject to change without notice. MBTechnology takes responsibility for furnishing quality materials, which meet MBTechnology's published product specifications. As neither MBTechnology itself nor its representatives practice architecture, MBTechnology offers no opinion on, and expressly disclaims any responsibility for the soundness of any structure on which its products may be applied. If questions arise as to the soundness of a structure, or its ability to support a planned installation properly, the Owner should obtain opinions of competent structural engineers before proceeding. MBTechnology accepts no liability for any structural failure or for resultant damages, and no MBTechnology Representative is authorized to vary this disclaimer.

**DESCRIPTION:** Metalflex SBS membranes are manufactured with a top surface of embossed aluminum foil that is laminated during production. Metalflex SBS utilizes the time-proven waterproofing characteristics of SBS-modified asphalt and the protective qualities and reflectivity of aluminum foil. The aluminum surface offers exceptional reflectivity (initial 89% ASTM C-1549) and also qualifies the assembly for a Class A fire rating with no slope restriction. This makes it ideal for projects with a barrel roof or for areas with slopes greater than 2:12.

The majority of single-ply and modified asphalt systems have a fire rating limited to a slope of 2:12.

**APPLICATION:** Roof decks shall provide positive drainage, and sloped to prevent ponding water. A minimum slope of 1/4" per foot is recommended by ARMA (Asphalt Roofing Manufacturers Association) and UBC (Uniform Building Code, Section 3207.A). Drains and outlets should be installed to remove water completely from the roof surface.

All decks must be firm, solid and free of sharp edges or depressions, free of moisture or effects of freezing, free of dust or debris and capable of supporting all anticipated deck loads.

**GUIDELINES-HOT ASPHALT APPLICATION**

All flashings using *metalflex* SBS must be torch applied even though the field layers may be applied with hot asphalt (up to ½" 12). Hot asphalt application is not recommended when ambient temperature is below 50° F, as asphalt temperature can quickly drop below the minimum point-of-application membrane 425° F.

Residual moisture in substrate and roofing materials can be trapped in the system and cause blistering. Do not apply roofing during precipitation, or when decks are wet from water, snow or frost. Do not kick out rolls into hot asphalt. Keep application rate of hot asphalt to a nominal rate of 25 lb. per square.

**SLOPE REQUIREMENTS**

For slopes greater than ¼” per foot; run all membranes parallel to the incline. Fasten the cap membrane on the leading edge, using a staggered pattern 6” on center; side laps fastened 2” from edge 12” o.c. All fasteners should be mopped.
over with asphalt and lapped by the next cap sheet. Cut the membrane to length as follows:

\[
\begin{align*}
\text{½” – 2” per ft slope} & \quad 11’ \\
\text{2” – 3” per ft slope} & \quad 11’
\end{align*}
\]

Unroll the membrane and allow to relax a few minutes prior to application. Brooming of membrane is required to eliminate voids or air pockets. It is highly recommended that all seams be torch applied since the application will provide a clean appearance. A 1/8” extrusion of asphalt is required on all laps. Top surface of the membrane must not be melted. Also avoid troweling of all laps. All bitumen outflow should be covered with aluminum powder.

**GUIDELINES- TORCH APPLICATION**

Torch application to field layers is the preferred method of application of *metalflex* SBS. All flashing using *metalflex* SBS must however be torch applied. Torch application is not approved when ambient temperature is below 50° F. Residual moisture in substrate and roofing materials can be trapped in the system and cause blistering. Do not apply roofing during precipitation, or when decks are wet from water, snow or frost.

SBS modified bitumen membranes are much more flexible than APP membranes. Overheating of the underside of the membrane will cause excessive softness on the topside. In all applications the membrane should be fully bonded to the interplay (*metalflex* systems require interplay layer unless applied over insulation).

Stop torch approximately 8” from the edge of the roll to be lapped. With a roofing knife, slightly score a line through the aluminum ¼” from the termination point of the end lap. Fold the flap back so that the edge remains curved, evenly soften the back side of the flap. Care should be taken not to overheat the flap. Apply even heat to the aluminum surface of the head lap. Keep torch flame directed away from the fold in the flap. When hot, peel off the aluminum surface and heat the membrane to be lapped. Apply pressure on the lap to ensure proper sealing.

**WOOD, PLYWOOD, LIGHTWEIGHT CONCRETE, Poured Concrete & Insulation**

Starting at low point on the roof, torch the modified SBS cap sheet perpendicular to the slope in a shingle fashion over applied base sheet, with a minimum 3” side laps and 6” end laps. A flow of about 1/8” bitumen must be obtained around all seams. Offset end laps a minimum of 36”. For slopes of 1”-2” per lineal foot apply material parallel to the slope; back nail head laps 2” from the edge, 6” o.c., and side laps 8” o.c., All side laps must be staggered 18” between successive plies.

**TECHNICAL SERVICES**

Latest copy of MBTechnology’s specification manual must be referenced prior to any application. A comprehensive Specification Manual with isometric flashing details, and a torch application manual is available through your approved distributor or calling toll free at 1-800-621-9281

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**Technical Information – *metalflex* SBS**

<table>
<thead>
<tr>
<th>Product Name</th>
<th>MF160WAL (UL-FM-WH-MD-FS)</th>
<th>MF160WAL Color**** (UL-FM-WH-MD-FS)</th>
<th>MF160WSS**** (UL)</th>
<th>MF160WCU **** (UL-FM-MD)</th>
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<tbody>
<tr>
<td>Modifier</td>
<td>SBS</td>
<td>SBS</td>
<td>SBS</td>
<td>SBS</td>
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<tr>
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<td>Cap Membrane</td>
<td>Cap Membrane</td>
<td>Cap Membrane</td>
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<tr>
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**** Special run non-stock item.

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[188 South Teilman • Fresno, CA 93706-1334](http://www.mbtotechnology.com)  
(800) 621-9281 • [FAX (559) 233-4607](mailto:info@mbtechnology.com)

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