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For more information concerning this and other fine BITEC products, call 1-800-535-8597. Ask for Manager, Technical Services.

DISTRIBUTED BY:

MANUFACTURERS OF ADVANCED TECHNOLOGY WATERPROOFING MEMBRANES
P.O. Box 497
No. 2 Industrial Park Drive
Morrilton, Arkansas 72110
Fax (501) 354-3019

PACKAGING

Baseline Containers include 20 rolls of APM-4.5T waterproofing membrane. Each unit is shrink-wrapped in a special polyethylene bag for stability. BITEC recommends that units of material be stack stacked.
If the membrane is loose laid, an area of 40" each side of the area fully adhered to the roof surface.

The membrane may not be installed in hot weather conditions or by the electrical trade, using tools or mechanical means.

BITEC APP, MEMBRANE AND ITS PRODUCTS ARE NOT TO BE USED OVER COLD TAR OR BITTEN-PAPER PAPER IS SEPARATED FROM THE MEMBRANE BY A THICK, MEDIUM-ATTACHED RECOVERY BOARD. BITEC does not recommend using this product with fitters with NPR 5A T STANDARD FOR THE STORING AND HANDLING OF LIQUIDATED GAS.

As with any roofing product, a fair and safe condition in workmanship and quality of installation is necessary. Additional specific and detail work in the construction of all projects.

To apply BITEC APP, waterproofing membrane, the only locally needed accessory, a puncture-resistant, high-quality, heat-weldable-repair, roof-underlay, a non-fibrous, high-quality, non-fibrous, high-quality, design, a fire-resistant roofing system. A product that is not commonly in fire codes, the application must be completed by a licensed and/or certified professional.

When working with the hot trowel, fire and safety considerations should be taken into consideration, as a fire hazard. It is recommended to consult the local fire codes and/or fire inspectors for guidance.

**APPLICATION**

**SPECIALTY**

**SPECIFICATION: APM-4.5T, ST 45**

If plans or specifications require installation of a modified bitumen membrane, the following is a non-applicable deck and this material requires a specific and detailed work in the construction of all projects.

Applying the system using the appropriate BITEC APP, baseflash, metal flashing or weld or using a sweeping motion, to ensure a horizontal transition is from the horizontal to the vertical surface, a non-combustible and of 4" from the perimeter.

**TOOL REQUIRED**

Applying the BITEC APP, baseflash, metal flashing or weld or using a sweeping motion, to ensure a horizontal transition is from the horizontal to the vertical surface, a non-combustible and of 4" from the perimeter.

**BEFORE USING THIS PRODUCT READ THE FOLLOWING INSTRUCTIONS CONCERNING THE SAFETY AND SAFETY GUIDELINES OF THE NATIONAL LP GAS ASSOCIATION AND THE APPLICATION OF MODIFIED BITUMEN AS A membranes must be fully adhered to the roof surface. All seams must be torched and a uniform, high-quality finish is necessary before issuance of the final inspection report.

**DRAINAGE**

Drainage outlets shall be installed below the surface to permit POSITIVE DRAINAGE of the roof deck and to prevent water ponding at the drain rim.

Bitec apply to the roof deck, followed with a 40" x 40" pattern to the deck, a 4" drain must be installed into the roof deck.

The collar must extend into and be fully adhered to the base ply. APM-4.5T field membrane.

The membrane should be full, the top ply, forcing the modified bitumen to flow out the insert.

Applying the system using the appropriate BITEC APP, baseflash, metal flashing or weld or using a sweeping motion, to ensure a horizontal transition is from the horizontal to the vertical surface, a non-combustible and of 4" from the perimeter.

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All side and end laps should be consistent and unin termined. This "flow out" of the membrane edge, which is preheat on a sweeping motion, main terrupted. Seams which are not membrane lap, then sweeping across the previously installed mem-
brane. To prevent water from entering the膜brane system, the roof surface. It is the contractor's respon-
tion.

The following are acceptable for use with APM-4.5T:
- PERLITE
- GLASS FIBER
- POLYISO/ISOCARBONATE
- WOOD FIBER
- CELLULAR GLASS

In order to obtain warranty, APM-4.5T field membrane. APS-4T collar should extend 4 inches beyond the lead or copper flash.

SEC. 8.00 PIPING
Where penetrations occur in the base sheet over the base sheet, the metal flange shall be fully adhered to the membrane. A metal flange extending a total of safety margin, it must be extended 3 3/4” from the membrane edge.

SEC. 4.00 FASTENS
Consult Factory Mutual Research Corporation, published, or the location of the explosion and gas and multi-

- POLYISO/ISOCARBONATE
- WOOD FIBER
- CELLULAR GLASS

SEC. 2.00 CANTS
For standard details, where the transition from the horizontal to the vertical surface, a non-
combustible cant strip must be used.

SEC. 3.00 BASE SHEET
A membrane of 1/4” thick glass TYPE G2 base sheet must be used over the insulation, or any other appropriate pub-
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SEC. 6.00 OUTLETS
Drainage outlets shall be installed below the roof surface, to permit POSITIVE DRAINAGE of the roof deck and to prevent water ponding at the drain rim. Base sheet should be applied to the drain rim by following, with a 40” x 40” grid, the size of the drain flange and the interior of the drain flange.

This collar must extend into and fully adhere to the roof system. This collar must be fully adhered to the base sheet extending a total of 4 inches beyond the lead or copper flash.

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This collar must extend into and fully adhere to the roof system. This collar must be fully adhered to the base sheet extending a total of 4 inches beyond the lead or copper flash.
If the membrane is loose, an area of 40" each side of the drain rim shall be fully bonded to the roof surface.

APPLICABILITY

Depending on the type of roof, the waterproofing system may be fully adhered, spot or partially adhered, or just laid. BITEC recommends that the selected waterproofing product should be chosen to be compatible with the selected roofing system. When applying the bitumen membrane over a hot-built or built-up roofing system, the hot-built or built-up roof must be allowed to cool to 80°F (27°C) before bonding can take place.

SPECIAL CONSIDERATIONS

If plans or specifications require installation of a modified bitumen membrane over a non-adhesive, non-adhesive deck, this section of the specification should be considered in conjunction with the waterproofing system selected.
APPARATUS

ROOF DRAIN DETAIL

VENT PIPE DETAIL

PARAPET WALL DETAIL

EDGE DETAIL

BITEC APM-4.5 is a torch applied, mineral surfaced, modified bitumen waterproofing membrane composed of carefully selected asphaltas (bitu- men) having superior modifying characteristics, blended with high quality bitumen, reinforced with spunbond polyester fabric. APM-4.5 waterproofing coating yields the following performance characteristics:

- Excellent workability
- Resistant to acids and most bases
- Excellent adhesion
- Low temp flexibility
- Impermeable to water
- High elongation
- Puncture resistant
- Excellent workability
- Longevity
- High flexibility
- Resistance to acids
- Excellent adhesion
- Mechanical strength
- Fatigue resistance
- Dimensional stability
- Low temp flexibility
- Excellent durability

The mineral surface protects the membrane from aging caused from heat and ultra violet radiation. Most mineral surfacings yield sufficiently high reflectivity to yield significant savings in energy usage, depending on building construction and use. Some heat absorp- tion values are given below, calculated on the basis of an ideal black surface as being 100%.

<table>
<thead>
<tr>
<th>Color</th>
<th>Heat Absorption</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Mineral</td>
<td>30%</td>
</tr>
<tr>
<td>Gray Mineral</td>
<td>85%</td>
</tr>
<tr>
<td>Ideal Black</td>
<td>100%</td>
</tr>
</tbody>
</table>

BITEC APM-4.5 incorporates a smooth and even coating of polyethylene film to prevent blocking of rolls and to provide a smooth, acceptable torching surface. Polyethylene burn-off film is contained on the torch- able side of the roll. Polyethylene burn-off film acts as a “stiff indicator” for the applicator in determining the proper flow needed to create adequate bonding of plies and seams.

For more information concerning this and other fine BITEC products, call 1-800-535-8597.

For technical assistance, call BITEC at (905) 771-1745.
All information is given in good faith, but normal tolerances of individual requirements of each contract may be exceeded, and any additional therma. Unless otherwise specified, all information is provided in accordance with ASTM D-412, MD = 60%. XMD = 70%. Normal tolerances of individual requirements of each contract may be exceeded, and any additional therma. Unless otherwise specified, all information is provided in accordance with ASTM D-412, MD = 60%. XMD = 70%.

The use of BITEC products is determined by local conditions and individual requirements of each contract. In consideration of the many factors involved, BITEC cannot be held responsible for the application of its products and for conditions beyond its control. All claims against BITEC warranties will be subject to the provisions set forth at the date of warranty issuance, and any additional therma. Unless otherwise specified, all information is provided in accordance with ASTM D-412, MD = 60%. XMD = 70%. Normal tolerances of individual requirements of each contract may be exceeded, and any additional therma. Unless otherwise specified, all information is provided in accordance with ASTM D-412, MD = 60%. XMD = 70%.

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