

2. Bitec SPM-4.5T, SPM-3.5H, and SPS-3H are styrene-butadiene-styrene modified bitumen roofing membranes and reinforced with polyester fabric. Membrane SPS-3H is smooth surfaced. SPM-4.5T is installed by heat welding. SPM-3.5H and SPS-3H are installed in hot roofing asphalt.

Bitec SFM-3.5H is a styrene-butadiene-styrene modified bitumen roofing membrane reinforced with a high strength fiberglass mat. SFM-3.5H is installed in hot roofing asphalt or with a Bitec elastomeric cold process adhesive.

Bitec SFM-3.5H-FR is a styrene-butadiene-styrene modified bitumen roofing membrane reinforced with a high strength fiberglass mat. The membrane is surfaced with roofing granules. The membrane requires no additional surfacing to achieve UL Class "A" fire rating over non-combustible roof assemblies. SFM-3.5H-FR is installed in hot roofing asphalt.

3. Bitec Compabase FS-2H, PS-2H and FA-2T modified bitumen base sheets are used with hot asphalt applications, BiTec elastomeric cold process adhesive, or are mechanically attached. All of the Compabase sheets are modified bitumens. FS-2H is reinforced with fiberglass, and PS-2H which is reinforced with polyester fabric. Bitec Compabase FA-2T base sheet is for heat fused application or a mechanically attached membrane.
4. Bitec Beta Base I is an oxidized bitumen base sheet reinforced with fiberglass. It is designed for use where a UL listed Type G2 base sheet is required.

TABLE I

SBS WATERPROOFING MEMBRANES
Styrene-Butadiene-Styrene modified bitumen
Composed of SBS polymer blended with distilled asphalt.

	Poly Fabric Reinforced	High Strength Fiberglass Mat, Reinforced	Smooth Surface	Roofing Granule Surfaced	Install by Heat Welding	Install with Hot Roofing Asphalt or Cold Adhesive	Used as Base Sheet Plies in Roofing Systems	Used as Based Sheet	Used as Base Sheet in BUR Ply Systems	UL Class A Fire Rating over Combustible and Noncombustible Roof Deck Assemblies
SPM-4.5T	X			X	X					X
SPM-3.5H	X			X		X				X
SPS-3H	X		X			X	X			X
SFM-3.5		X		X		X				X
SFM-3.5H-FR		X		X		X				X
FS-2H		X	X			X	X	X		X
PS-2H	X		X			X	X	X		X

TABLE II

APP WATERPROOFING MEMBRANES

Atactic Polypropylene modified bitumen

Composed of amorphous polypropylene blended with distilled asphalt.

	Polyester Fabric Reinforced	Install by Heat Welding	Roofing Granule Surfaced	High Strength Fiberglass Mat Reinforcing	Use as Base Sheet Plies in Roof Systems	Smooth Surfaced
APS-4T	X	X				X
APM-4.5T	X	X	X			
APM-4T	X	X	X			
FA-2T		X		X	X	X

INSTALLATION:

1. General

The Bitec roofing systems shall be installed by roofing contractors approved or licensed by Bitec, Inc., and installation shall be in accordance with Bitec Roofing Materials Specifications.

2. Roofing System

Mechanically fastened roofing systems shall be designed to resist wind uplift forces as determined in the Wind Design Guide for Mechanically Fastened Single-Ply Roofing Systems published by the Single Ply Roofing Institute (SPRI).

Ballasted roofing systems shall be designed in accordance with the Wind Design Guide for Ballasted Single-Ply Roofing Systems published by SPRI.

3. Substrate Preparation

Preparation of the substrate shall comply with Bitec installation instructions. Design of the roof deck is the responsibility of the owner or his architect/engineer.

4. Insulation

Insulation or underlayment shall be approved in writing by Bitec, Inc., as to thickness and type. Insulation is to be installed in accordance with insulation manufacturer's recommendations and Bitec Roofing Materials Specification and Details.

5. Membrane Installation

Membrane installation, including placing, bond lap splicing, perimeters attachment, flashing, construction closure, walkways and other work to provide watertight roofing systems shall comply with appropriate Bitec Roofing Material Specifications.

MANUFACTURING LOCATION:

The product covered under this MR will be produced at the following plant:

Bitec, Inc.
P. O. Box 497
No, 2 Industrial Park Drive
Morrilton, AR 72110
Contacts: Joel Shealey, President
Alan Tatum, Technical Representative
PH: 1-800-535-8597 or 501-354-8585

INSPECTION:

A designated representative of Bitec, Inc., shall make inspections of the installation at the following intervals: (1) prior to delivery of materials—to accept or reject the roof deck to which the roofing system is to be applied; (2) during the installation—to inspect and approve the installation techniques and methods; and (3) upon completion—to give final approval to the installation.

WARRANTY:

A ten-year warranty shall be given to the owner by Bitec, Inc., to read as follows:

Bitec, Inc., hereby warrants to the owner of its roofing system, installed by an applicator approved by Bitec, that the system will remain in a watertight condition and will retain at least 80% of its specified aged thermal resistance value, if applicable, for a period of ten years from the date of installation.

In the event of failure of the aforesaid system to function as warranted above, whether on account of defective materials, faulty installation, or on account of normal processes of wear and aging, Bitec will make or cause to be made such repairs and maintenance necessary to enable the system to perform as warranted above.

Bitec's obligations to repair or maintain the system under this warranty shall not be in force or effect unless: (1) Bitec is notified of any failure of the system covered by the warranty within thirty (30) days following such failures; (2) the system installed by an applicator approved by Bitec; and (3) no alterations or repairs to the system are made without the prior written approval of Bitec as to the extent, methods and materials used.

Bitec assumes no liability for any failure of the systems resulting from winds, which exceed the design wind speed, Acts of God, including without limitation, lightning or earthquake; nor for any failure of the systems resulting from fire of any origin or cause; nor for any failure of the product caused by structural defects of the buildings on which the system is applied; nor from deliberate misuse of the product; nor for any failure of the systems caused by leakage or any other cause from an adjacent structure.

MANUFACTURER'S RESPONSIBILITIES:

Issuance of this Materials Release (MR) commits the manufacturer to fulfill, as a minimum, the following:

1. Produce, label and certify the material, product or system in strict accordance with the terms of this MR.
2. Provide necessary corrective action in a timely manner for all cases of justified complaint, poor performance or failure reported by HUD.
3. When requested, provide the Office of Manufactured Housing Programs, HUD Headquarters, with a representative list of properties, in which the material, product or system has been used, including complete addresses or descriptions of locations and dates of installation.
4. Inform HUD in advance of changes in production facilities, methods, design of the product, company name, ownership or mailing address.

EVALUATION:

This Materials Release shall be valid for a period of three years from the date of initial issuance or most recent renewal or revision, whichever is later. The holder of this Materials Release shall apply for renewal or revision 90 days prior to the Review Date printed on this Materials Release. Submittals for renewal or revisions must be sent electronically to HSGmps@hud.gov.

Appropriate user fee(s) for the TSP program can be submitted through the Pay.gov website at <https://pay.gov/public/form/start/73881741>.

The holder of this Materials Release may apply for revision at any time prior to the Review Date. Minor revisions may be in the form of a supplement to the Materials Release.

If the Department determines that a proposed renewal or supplement constitutes a revision, the appropriate user fee for a revision will need to be submitted in accordance with 24 CFR § 200.934 User fee system for the technical suitability of products program, and the current user fee schedule.

CANCELLATION:

Failure to apply for a renewal or revision shall constitute a basis for cancellation of the MR. HUD will notify the manufacturer that the MR may be canceled when:

1. Conditions under which the document was issued have changed so as to affect production of, or to compromise the integrity of the accepted material, product, or system;
2. The manufacturer has changed its organizational form, ownership, name, address, or production facilities, without notifying HUD; or,
3. The manufacturer has not complied with responsibilities it assumed as a condition of HUD's acceptance.

However, before cancellation, HUD will give the manufacturer a written notice of the specific reasons for cancellation and the opportunity to present views on why the MR should not be canceled. No refund of fees will be made on a canceled document.

This Materials Release is issued solely for the captioned firm and is not transferable to any person or successor entity.

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