Steel Deck
Concrete Deck
Cementitious Wood Fiber Deck
Gypsum Deck
Wood Deck
Vapor Barrier
Insulation
Cover Board
Thermal Barrier

Deck Type:
- Steel (22 Ga. Min.)
- Structural Concrete
- Nailable Decks include:
  - Cementitious Decks
  - Gypsum
  - Lightweight Insulating Concrete
  - Wood (Plywood, Plank, OSB)

Assembly Identification

Substrate
- I = Insulated

Number of Plies
- 2B1T-8

Cap Sheet Thickness
- P = PVC

Type of Base Sheet
- C = SBS Composite
- F = SBS Fiberglass
- P = SBS Polyester
- G = BUR Fiber Glass

Fleece Backed Membrane adhered with JM Approved Hot Asphalt

Cap Sheet Options:
- PVC FB - 60 MIL/60 MIL MIN
- PVC FB - 80 MIL - (Hot Asphalt)

Base Ply Options:
- DynaBase™
- GlasPly™ 180 S
- DynaLast™ 280 S
- DynaLast™ 250 S

Approved Cover Boards:
- (If Applicable)
  - 1/2" RetroFit™ Board
  - Fesco® Board
  - Fesco Board HD
  - Tapered Fesco Board
  - JM SECUROCK
  - Gypsum-Fiber Roof Board
  - JM DensDeck™ Prime Roof Board
  - RetroPlus™ Roof Board

Approved Thermal Barrier:
- (If Applicable)
  - JM SECUROCK
  - Gypsum-Fiber Roof Board
  - Glass-Mat Roof Board
  - JM DEXCELL
  - FA Glass-Mat Roof Board
  - Glass-Mat Roof Board
  - JM DensDeck™ Roof Board
  - JM DensDeck Prime Roof Board

Approved Base Sheets:
- (If Applicable) Over Nailable Deck
  - DynaBase™
  - DynaBase PR
  - DynaBase XT
  - DynaFast™ 180 S
  - DynaLast™ 280 S
  - GlasBase™ Plus
  - GlasPly™ Premier
  - GlasTite™ Flexible
  - PermaPly™ 28
  - Ventsulation™ Felt

Approved JM Insulations:
- DuraFoam™
- ENRGY 3™ (ENRGY 3 Options)
- AGF
- CGF
- FR
- 20 PSI
- 35 PSI
- Tapered
- Invinsa Foam™

Approved Vapor Barrier:
- (If Applicable)
  - DynaBase™
  - DynaBase®
  - GlasPly™ IV
  - GlasPly Premier
  - 6 or 10 mil poly with taped seams

For JM Guarantee Requirements Contact JM Technical Services at (800) 922-5922 Option 3 or Refer to the JM Peak Advantage Charges and Requirements—Single Ply document.
General
This specification is for use over any approved structural deck that provides a suitable surface to receive the roof. This specification can also be used in certain re-roofing applications. Poured and precast concrete decks require priming prior to application of hot asphalt.

This specification is also for use over JM insulations or other rigid insulation products which are not nailable and which offer a suitable surface to receive the roof. This approval is required for any roof insulation not manufactured or supplied by JM.

Note:
Consider all general instructions contained in the current JM Thermoplastic Membrane with Redundant Bituminous Ply Systems Installation Guide and the JM SBS Application Guide as part of this specification.

Design
Consider local conditions and characteristics when designing, specifying, and installing any roofing system. Information from the Single Ply Roofing Industry (SPRI), Asphalt Roofing Manufacturers Association (ARMA), FM Global, and local building codes can provide guidelines for the designer.

Design and installation of the deck and/or roof substrate must result in the roof draining freely to outlets numerous enough and so located as to remove water substantially within 48 hours of a rain event.

Membrane Substrate
The surface on which the built up, SBS modified bitumen or thermoplastic fleece backed membrane is to be applied shall be such that it is rigid, nailable and which offers a suitable surface to receive the roof. This specification can also be used in certain re-roofing applications. Pre-cast concrete panels also require a layer of approved roof insulation prior to installing a roof membrane. The thermoplastic fleece backed membrane must be firmly and uniformly placed into a full mopping of hot asphalt without voids. Asphalt shall not be applied to the selvage edge of the thermoplastic fleece backed membrane to allow a minimum of 1.5” (38 mm) width. No board stock attachment requires the board stock to be walked in to ensure positive contact between the board stock, adhesive and substrate. When using JM One-Step Foamable Adhesive, insulation boards shall be set into the adhesive immediately and walked in due to the rapid curing time of the adhesive. Refer to the specific JM product data sheets of JM insulation adheres listed above for coverage rates and specific application information.

When adhering insulation boards using hot asphalt, board size must be no greater than 4’ x 4’ (1.22 x 1.22 m) if installing over an existing layer of insulation or in multiple layers, all joints must be offset a minimum of 6” (152 mm) between layers. Porous substrates may require greater amounts of asphalt. Concretes decks must be primed with Asphalt Primer prior to application of hot asphalt. Refer to the Insulation Installation Instructions document for further information.

Appropriate JM Insulation Fasteners Include:
- All Purpose Fasteners
- UltraFast Fasteners and Plates
- Structural Concrete Deck Fasteners and Plates
- Polymer Auger Fasteners

Install JM insulation Fasteners and Plates at an appropriate rate determined by building code, specification, and/or JM Guarantee requirements. Refer to the JM Minimum Insulation Fastening Requirements-Adhered Membrane bulletin for further information.

Cover Board Application
Cover boards may be installed using asphalt, mechanical fasteners, or adhesives. A minimum offset of 6” (152 mm) is recommended from the previous layer of insulation. No board widths less than 6” (152 mm) are allowed. Refer to the Insulation Installation Instructions document for further information. Refer to the JM Cover Boards Selector Guide for JM Cover Boards product information.

Asphalt Application
JM BUR. SBS modified bitumen and thermoplastic fleece back products are designed to be installed with hot asphalt. Perma mop, coal tar pitch and coal tar asphalt are not permitted.

JM requires the use of approved asphalt within systems which require a JM Peak Advantage Guarantee. Asphalt should meet the requirements of ASTM D 312. JM guarantees require the use of approved asphalt. The slope of the roof as well as the climate governs the grade of asphalt to be used.

JM endorses the guidelines established by the NRCA and ARMA for heating asphalt for proper applications. Asphalt should be applied at the Equiviscous Temperature (EVT) +/- 25°F (+/- 4°C).

Modified Bitumen Sheet Application - Hot Asphalt
On roof decks with slopes up to 1/2” per foot (41 mm/m), the roof felts should be installed either perpendicular or parallel to the roof incline. Install each felt so that it is firmly and uniformly set, without voids into the hot asphalt just before the felt at the proper nominal recommended rates. All sheet edges should be well sealed.

SBS and BUR Applications: Starting with one of the base plies listed, install a full width ply into a full mopping of hot asphalt, the remaining plies are to be applied full width in the same manner, with 3” (76 mm) side laps and 4” (102 mm) end laps over the preceding plies.

Thermoplastic Membrane with Redundant Bituminous Systems Over Non-Nailable Decks.
These specifications are for use over any type of deck which is not nailable and which offers a suitable surface to receive the roof. Concrete decks require coating with JM Asphalt Primer prior to the application of hot asphalt. Pre-cast concrete panels also require a layer of approved roof insulation prior to installing a roof membrane. The thermoplastic fleece backed membrane must be firmly and uniformly placed into a full mopping of hot asphalt without voids. Asphalt must not be applied to the selvage edge of the thermoplastic fleece backed membrane to allow a minimum of 1.5” (38 mm) width. Before installation, unload the JM PVC Fleece Backed membrane and allow it to relax. The laps of PVC Fleece Backed membrane must be hot air welded. Clean all surfaces to be welded. All laps must be a minimum of 1” (25 mm) in width. JM PVC Fleece Backed membrane for hot asphalt application has a 3.8 oz. polyester fleece for stabilizing protection against the asphalt. The membrane if furnished in 60 and 80 mil thickness and delivered in 6’3” and 12’ widths. Only the 6’3” width is recommended for installation using hot asphalt.

Steep Slope Requirements
Special procedures are required on inclines over 1/2” per foot (41 mm/m). Refer to the SBS Application Guide for further information.

Re-Roofing
A large percentage of all commercial and industrial roofing pertains to re-roofing of existing buildings. Refer to the JM Re-Roofing document for inspection, testing, components and other valuable information pertaining to re-roofing projects.

JM Guarantee Requirements
JM Peak Advantage Guarantee are available up to a 25 year term with approved components and assembly make-up. Refer to the JM Peak Advantage Charges and Requirements- Bituminous Systems document for additional guarantee information.

Refer to the JM Peak Advantage Guarantee Information document for additional guarantee information and guidelines.

Refer to the JM Peak Advantage Guarantee Specimen document to see a JM Peak Advantage Guarantee sample.

All guaranteed installations must follow the guidelines for the recommended asphalt in the SBS Modified Bitumen Specifications document. Not all JM specifications are eligible for all JM Peak Advantage Guarantee terms or enhanced coverage. Please contact JM Guarantee Services at (800) 922-5922 Option 3 for specific requirements.

All projects requiring a guarantee from JM must be applied for a minimum 14 days in advance of job start.

Refer to the Preventative Maintenance Brochure for roof and building maintenance guidelines.