Assembly Identification

Substrate
I = Insulated

Number of Plies → 4BI-T8 ← Cap Sheet Thickness

Membrane Type
T = Thermoplastic

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

For JM Guarantee Requirements Contact JM Technical Services at (800) 922-5922 Option 3 or Refer to the JM Peak Advantage Charges and Requirements-Multi Ply document

Approved Cover Boards:
- 1/2" RetroFit™ Board
- Gypsum-Fiber Roof Board
- JM DensDeck Prime™ Roof Board
- Invinsa Foam™

Approved Thermal Barrier:
- JM SECUROCK®
- Gypsum-Fiber Roof Board
- Glass-Mat Roof Board
- JM DEXCELL®

Approved Base Sheets:
- (If Applicable) Over Nailable Deck
- JMDynabase™
- DynaBase PR
- DynaBase XT
- DynaFast™ 180 S
- DynaLast® 250 S
- GlasBase™ Plus
- GlasPly™ Premier
- GlasTite™ Flexible
- PermaPly® 28
- Ventsulation™ Felt

Intermediate Ply:
- (Option Based on Requirements)
  - DynaBase PR
  - DynaFast™ 180 S
  - GlasBase™ 500 Sh
  - PermaPly® 28

Base Ply (BSB PlyGrade™):
- DynaBase™ 150 S
- DynaFast™ 180 S
- DynaLast® 250 S
- DynaLastic™ 180 S
- DynaLastic™ 250 S

Approved JM Insulations:
- DuraFoam™
- ENRGY 3™ (ENERGY 3 Options)
- AGF
- CF
- FR
- 20 PSI
- 25 PSI
- Tapered
- Invinsa Foam™

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

Deck Type:
- Steel (22 Ga. Min.)
- Structural Concrete
- Nailable Decks include:
  - Cementitious Wood Fiber
  - Gypsum
  - Lightweight Insulating Concrete
  - Wood (Plywood, Plank, OSB)
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 insulations which are not nailable and which offer a suitable surface to receive the roof. Specific written approval is required for any roof insulation not manufactured or supplied by JM.

Note:
Consider all general instructions contained in the current JM 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 Manufacturers Association (ARMA), FM Global and local building codes can provide guidelines for the designer.

Deck Preparation
Before roof lifting work is started, the deck should be carefully inspected by the roofing contractor, the deck contractor, and the owners representative to determine that it will be able to receive the roofing system by some method which will hold the system securely, either by adhesion, ballast, or mechanical fasteners. Refer to the JM Cover Boards product information.

Vapor Barrier Application
All surfaces receiving vapor barrier must be clean and free of dirt, debris, oil/grease and gravel. Apply JM urethane adhesive directly to the substrate and allow it to rise and build body before placing board stock into the adhesive. 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 must 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 adhesives 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’ (1.22m x 1.22m). 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. Concrete decks must be primed with Asphalt Primer prior to application of hot asphalt. Refer to the Insulation Installation Instructions document 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 previous layers of insulation. No board widths less than 6” (152 mm) are allowed. Refer to the Invensys Roof Board Codes and Application Brochure for further information. Refer to the JM Cover Boards Selector Guide for JM Cover Boards product information.

Insulation Application
Roof insulation plays a key role in energy efficiency shown in codes and standards that have mandated increasingly higher minimum R-values in all U.S. climate zones. Local codes dictate the required R-values for commercial and industrial projects and the local jurisdiction should be consulted for this information.

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

BUR Application:
Starting with one of the base plies listed, install a 1/2 wide ply into a full mopping of hot asphalt, over that a 1/4 wide ply, then over both a full width ply with the remaining plies applied full width overlapping the preceding plies by 24” (627 mm) so that at least three plies cover the substrate at all locations.

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) weld. Before installation, unroll the JM TPO Fleece Backed membrane and allow it to relax. The laps of JM TPO Fleece Backed membrane must be hot air welded. Clean all surfaces to be welded. All laps must be a minimum of 1 1/2” (38 mm) in width.

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

SBS Application:
Starting with one of the base plies listed, install a 1/2 wide ply into a full mopping of hot asphalt, over that a 1/4 wide ply, then over both a full width ply with the remaining plies applied full width overlapping the preceding plies by 24” (627 mm) so that at least three plies cover the substrate at all locations.

BUR Application:
Starting with one of the base plies listed, install a 1/2 wide ply into a full mopping of hot asphalt, then over that a 1/4 wide ply, then over that a 1/4 wide ply, then over these three plies install a full width ply. The following plies are to be applied full width, overlapping the preceding plies by 27” (699 mm) so that at least four plies cover the substrate at all locations.

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) weld. Before installation, unroll the JM TPO Fleece Backed membrane and allow it to relax. The laps of JM TPO Fleece Backed membrane must be hot air welded. Clean all surfaces to be welded. All laps must be a minimum of 1 1/2” (38 mm) in width.

Jed TPO Fleece Backed membrane for hot asphalt application has a 8 oz. polyester fleece for staining protection against the asphalt. The membrane if furnished in 60 and 80 mil thickness and delivered in 12’ widths.

Base Sheet Application
The bituminous base sheets for these systems are either mechanically fastened or adhered with hot asphalt. Refer to the “BM” Fastening Patterns section in SBS System Application Tools for Base Sheet fastening patterns and further information.

Insulation Application
Roof insulation plays a key role in energy efficiency shown in codes and standards that have mandated increasingly higher minimum R-values in all U.S. climate zones. Local codes dictate the required R-values for commercial and industrial projects and the local jurisdiction should be consulted for this information.