### Assembly Identification

**Substrate**  
I = Insulated  

**Number of Plies → 4 BID BW CR**  

**Surfacing**  
D = SBS Cap Sheet (Granule Surface)  
CR = Mineral Suraced Cool Roof Sheet  

**Cap Sheet Application Method**  
CA = Cold Adhesive  
HA = Hot Asphalt  
HW = Heat Welded  
SA = Self Adhered

### Cap Sheet
- C = Composite  
- F = Fiberglass  
- P = Polyester  

### Intermediate Sheet - Cold Adhesive
- Cold Adhesive
- Heat Welded

### Intermediate Sheet - Hot Asphalt
- Hot Asphalt

### Intermediate Sheet - Heat Welded
- Heat Welded

### Base Ply (Cold Applied):
- DynaBase 200 P/SA
- DynaBase 250 P/SA
- DynaBase XT P/SA
- DynaPly T1 HW
- DynaPly T1 FR
- DynaPly T1 CR
- DynaPly T1 HW CR
- DynaPly T1 CR G
- DynaGlas FR XT CR
- DynaGlas FR XT G
- DynaGlas FR CR G
- DynaWeld Base XT
- DynaMax FR
- DynaMax CR G
- DynaMax 180 HW S
- DynaMax 180 SF
- DynaMax 180 S
- DynaBase 180 S
- DynaFast 180 S
- DynaBase PR 3.0 P/P
- DynaMax PR 3.0 P/P
- DynaMax PR 4.5 P/P
- DynaWeld PR 3.0 P/P
- DynaGrip Base SA/SA
- DynaGrip Base CR G
- DynaGrip Base FR CR G
- DynaGrip Base FR CR
- DynaGrip Base FR CR G
- PermaPly 28
- 1/2" Retrofit™ Board (HA)
- Duraboard™ (CA) (HW)
- Froso Board (HA)
- Froso Board HD (HA)
- Tapered Froso Board (HA)
- Invisia™ Roof Board (CA) (SA)
- JM DEXCELL
- JM DEXCELL
- FA Glass-Mat Roof Board (CA) (FA) (HW)
- JM SECURROCK
- JM SECURROCK
- Gypsum-Fiber Roof Board (CA) (FA) (FA) (HW)
- JM DensDeck Prime (CA) (FA) (FA) (HW)
- RetroPlus™ Roof Board (CA) (FA) (FA) (HW)

### Approved Insulations:
- DuraFoam™
- ENRGY3 (ENRGY3 Options)
- AGF
- CGF
- FR
- 20 PSI
- 25 PSI
- Tapered
- Invisia Foam™

### Approved Thermal Barrier:
- (If Applicable)
- JM SECURROCK
- Gypsum-Fiber Roof Board
- Glass-Mat Roof Board
- JM DEXCELL
- JM DEXCELL
- JM DensDeck Prime
- Duraboard

### Approved Cover Boards:
- (If Applicable)
- 1/2" Retrofit™ Board (HA)
- Duraboard™ (CA) (HW)
- Froso Board (HA)
- Froso Board HD (HA)
- Tapered Froso Board (HA)
- Invisia™ Roof Board (CA) (SA)
- JM DEXCELL
- FA Glass-Mat Roof Board (CA) (FA) (HW)
- JM SECURROCK
- JM SECURROCK
- Gypsum-Fiber Roof Board (CA) (FA) (FA) (HW)
- JM DensDeck Prime (CA) (FA) (FA) (HW)
- RetroPlus™ Roof Board (CA) (FA) (FA) (HW)

### Approved Vapor Barrier:
- (If Applicable)
- JM CleanBond Base Sheet (SA)
- JM CleanBond Base Sheet (SA)
- JM CleanBond Base Sheet (SA)

### Approved Vapor Barrier:
- (If Applicable)
- Over Nailable Deck
- DuraBase
- DuraBase PR
- DuraBase XT
- DuraFast 180 S
- DynaLastic 180 S
- GlassBase™ Plus
- GlassPly™ Premier
- GlasRel™ Flexible

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

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

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**Project Name:**

**Project Location:**

**Project Number:**

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**Cover Board Membrane Compatibility and Application Key:**
- (CA) Cold Applied
- (HA) Hot Asphalt
- (HW) Heat Welded
- (SA) Self Adhered
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 insulations which are not nailable and which offer a suitable surface to receive the roof. Specific written approval is required for roof insulation not manufactured or supplied by JM.

Note:
Consider all general instructions contained in the current 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 (SPI), 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 to remove water substantially within 48 hours of a rain event.

Membrane Substrate
The surface on which the SBS modified bitumen membrane is to be applied should be a approved structural substrate. The surface must be clean, smooth, flat and dry. SBS modified bitumen should not be applied directly to foam plastic insulations.

Insulation Application
Roof insulation plays a key role in energy efficiency shown in codes and standards that have mandated increasingly higher 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.

A minimum offset of 6" (152 mm) is recommended from the previous layer of insulation prior to application of any adhesives or fasteners should be positioned with the long side of the boards running perpendicular to the SBS sheet orientation and continuous. End joints should be staggered at least 12" (305 mm) from the end joints of adjacent rows. A minimum offset of 6" (152 mm) is recommended from plywood joints. Refer to the insulation installation instructions document for further information.

When using a low rise urethane adhesive product for insulation boards, all surfaces must be clean, dry, smooth, compatible 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 for specific application rates and special application information.

When adhering insulation boards using hot asphalt, board size must be no greater than 4' x 4' (1.22 m x 1.22 m). If insulation is being installed 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.

Appropriate JM Insulation Fasteners Include:
- 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 previous layers of insulation. No board widths less than 6" (152 mm) are allowed. Refer to the cover board installation instructions document for further information.

Asphalt Application
Asphalt should meet the requirements of ASTM D 312. JM guarantees the use of Trumbull® asphalt or another JM approved asphalt. The grade asphalt as well as the climate governs the grade of asphalt to be used.

JM endorses the guidelines established by the NRCA and ARMA for hot asphalt for properly adhered. 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 may 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.

Roll a 3/8" width piece of one of the intermediate sheets listed over the installed adhered base sheet into a full mopping of hot asphalt. The remaining sheets are to be applied full width, in the same manner, with 4" (102 mm) side and 4" (102 mm) end laps over the preceding sheets. Apply a full width sheet of one of the cap sheets listed into a full mopping of asphalt. The remaining sheets are to be applied in the same manner with 4" (102 mm) side laps and 6" (152 mm) end laps over the preceding sheets. Apply all sheets so that they are firmly and uniformly set, without voids. Maintain a 3" (75 mm) to 10" (254 mm) bleed out beyond all laps. Refer to the JM SBS Application Guide for further information.

Modified Bitumen Sheet Application - Heat Welded
Heat Weld a 3/8" width piece of one of the intermediate sheets listed over the installed adhered base sheet. The remaining sheets are to be applied full width, in the same manner, with 4" (102 mm) side and 4" (102 mm) end laps over the preceding sheets.

Starting at the low point of the roof, heat weld a full width piece of one of the Cap Sheets listed over the installed intermediate ply. Remaining sheets are to be applied in the same manner, with 4" (102 mm) side laps and 6" (152 mm) end laps over the preceding sheets. Apply all sheets so that they are firmly and uniformly set, without voids. Maintain a 3" (75 mm) to 10" (254 mm) bleed out beyond all laps. Refer to the JM SBS Application Guide for further information.

Modified Bitumen Sheet Application - Self Adhered
Starting at the low point of the roof, install a 3/8" width piece of self adhered membrane for inspection, testing, components and other valuable information pertaining to re-roofing projects.

JM Guarantee Requirements
JM Peak Advantage® Guarantees are available up to a 30 year term with approved components and assembly make-up. Refer to the JM Peak Advantage Guarantees and Requirements—Adhered Bitumen Systems document for additional guarantee information.

Re-Roofing
A large percentage of all commercial and industrial roofing pertains to re-roofing of existing buildings. Refer to the Preventative Maintenance Brochure for roof and building maintenance guidelines.

Roof Coatings
Topgard 4000 and Topgard 5000 are one part acrylic elastomeric roof coatings. When used over a modified bitumen roof, Topgard Base Coat must be applied as a base coat prior to application of Topgard 4000. It is recommended that Topgard Base Coat be used with all installations of Topgard 4000 and Topgard 5000. Drying time between coats is normally between 4 and 12 hours, depending on weather conditions. Apply when temperature is 50°F (10°C) and rising using a brush, roller or spray equipment. Topgard 5000 is ideal for cold weather climates. Refer to the Topgard 4000 and Topgard 5000 data sheets for further information.

Steeple 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.