

Assembly Identification

Membrane Thickness
6 = 60 mil (1.51 mm)

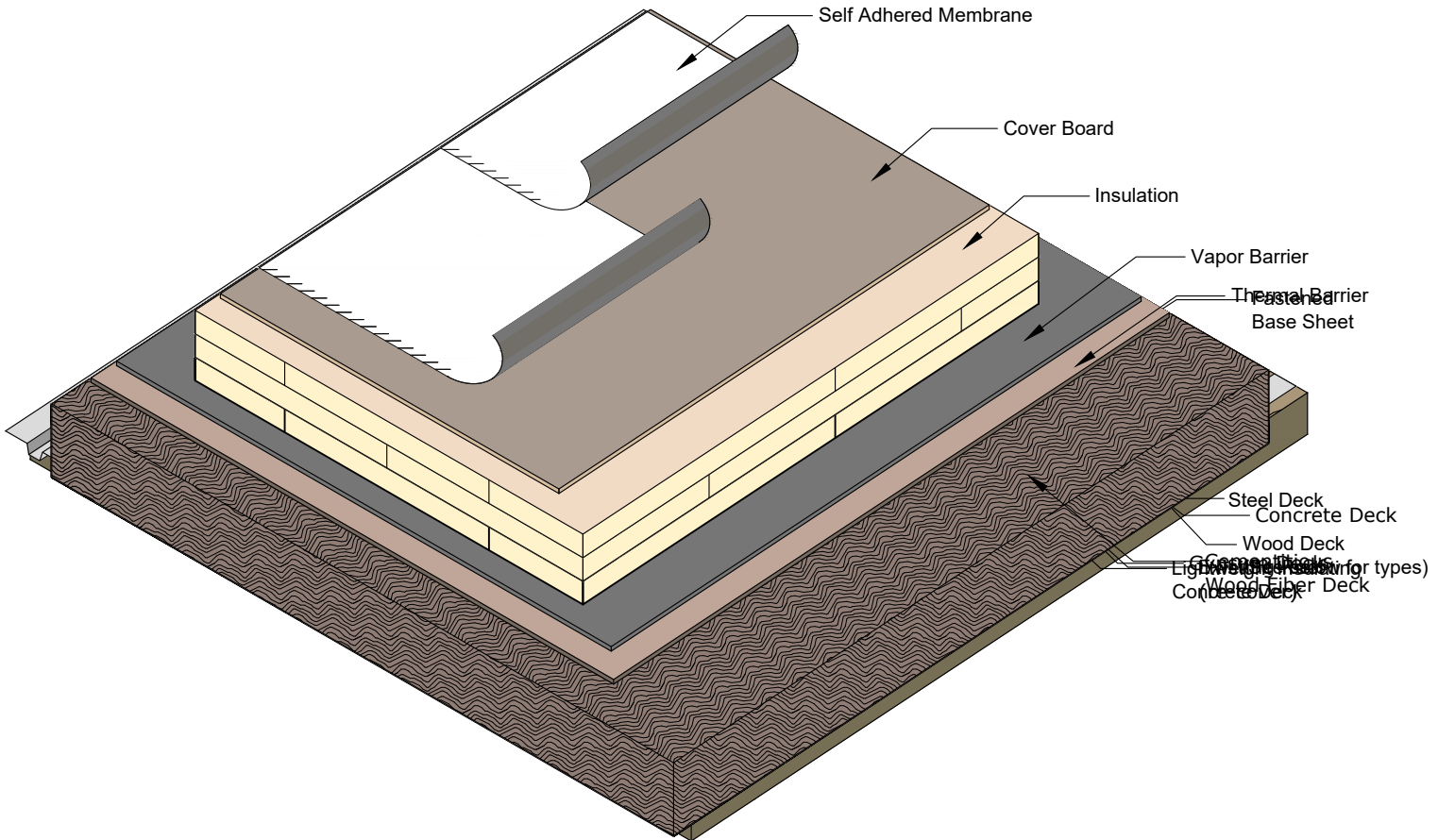
S = Single Ply

TPO Membrane

ST6RA

Attachment
A = Adhered

Membrane Type
R = Reinforced



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

TPO Membrane and Specification Number:
JM TPO SA-60 mil - ST6RA

Approved Cover Boards: (If Applicable)

- JM DEXCELL®
- FA Glass-Mat Roof Board
- JM SECUROCK®
- Gypsum-Fiber Roof Board
- JM DensDeck® Prime Roof Board
- ProtectoR™ HD Cover Board
- SeparatoR® CGF Recover Board
- Cover Board Thickness _____

Approved JM Insulations:

- ENRGY 3®
- (ENRGY 3 Options)
- CGF
- FR
- 20 PSI
- 25 PSI
- Tapered
- Layer 1 Thickness _____
- Layer 2 Thickness _____
- Layer 3 Thickness _____

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
- JM ProtectoR HD
- Thermal Barrier Thickness _____

Approved Vapor Barrier:
(If Applicable)

- DynaBase® (CA) (HA)
- DynaBase PR (CA) (HA)
- GlasPly® IV (HA)
- GlasPly Premier (HA)
- APPeX® 4S (HW)
- DynaWeld™ Base (HW)
- DynaBase HW (HW)
- DynaWeld 180 S (HW)
- JM APP™ Base Sheet (HW)
- DynaGrip® Base SD/SA (SA)
- JM BaseGrip™ SD/SA (SA)
- JM Vapor Barrier SA (SA)
- 6 or 10 mil poly
with taped seams

Approved Base Sheets:

- (If Applicable) Over Nailable Deck
- DynaBase®
- DynaBase PR
- DynaFast® 180 S
- DynaLastic® 180 S
- GlasBase™ Plus
- GlasTite® Flexible
- PermaPly® 28
- Ventulation® Felt

Deck Type:

- Existing Roof (re-cover)
- Steel (22 Ga. Min.)
- Structural Concrete
- Nailable Decks include:
- Cementitious Wood Fiber
- Gypsum
- Lightweight Insulating Concrete
- Wood (Plywood, Plank, OSB)



SELF ADHERED TPO ASSEMBLY PLATE

General

This specification is for use over any approved structural deck which is suitable to receive the above selected system. This specification is also for use over certain JM roof insulations which provide a suitable surface for the JM membrane. This specification can also be used in certain re-roofing applications.

Note:

Consider all general instructions contained in the current JM TPO Self Adhered 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), 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.

TPO SA - 60 mil Membrane Application

Before installation, unroll the JM TPO membrane and allow it to "relax". The laps of JM TPO SA membrane must be hot air welded. Clean all surfaces to be welded. Follow manufacturer's operating instructions for welding equipment. All heat welded laps must be a minimum of 1 1/2" (38 mm) in width.

TPO SA membrane can be installed when substrate and ambient temperatures are 20° F and rising.

Cold Weather applications require special measures to ensure proper performance of the roof system.

Refer to the JM TPO Self Adhered Application Guide for further information.

TPO Edge Sealant is required on all cut or non-encapsulated edges of reinforced membrane. This includes factory cut membrane. Refer to detail T-MS-01 for further information.

Flashings and Components

Install all membrane flashings at the same time as the roof membrane. Use only JM TPO SA, fully adhered or mechanically attached flashings or prefabricated flashings, depending on job circumstances.

Self adhering Membrane Flashings can be installed directly to smooth approved substrates when substrate temperatures are 40° and rising. The use of SA Primer or SA LVOC Primer is required for flashing applications when temperatures are between 20° F and 40° F.

Approved substrates include gypsum, concrete, fiber cement, and wood. For approved porous substrates with a rough surface always prime prior to installation of flashings with SA Primer or SA LVOC Primer.

Refer to the JM TPO Self Adhered Flashing Details T-FW-B9, T-FW-B10, T-FW-B11, T-FW-B12, T-FW-M3I, and T-MS-11 in the TPO Roofing Systems Application Tools. Refer to the JM TPO Accessories Schematic and the JM TPO Accessories Selector Guide for available System Components.

Cover Board Application

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 JM Cover Boards Selector Guide for JM Cover Boards product information. Refer to the Insulation Application section below for Cover Board Securement Information including Adhered and Fastened methods of attachment.

Insulation Application

A minimum offset of 6" (152 mm) is recommended from the previous layer of insulation. Loose laid insulations should be positioned with the long side of the boards running perpendicular to the TPO sheet orientation and continuous. End joints should be staggered at least 12" (305 mm) from the end joint in adjacent rows. A minimum offset of 6" (152 mm) is recommended from plywood joints. Refer to the Insulation Installation Instructions document for further information.

Appropriate JM Insulation Adhesives Include:

- JM One Step Foamable Adhesive
- JM Roofing System Urethane Adhesive (RSUA)
- JM Two-Part Urethane Insulation Adhesive (UIA)
- JM Green Two-Part Urethane Insulation Adhesive
- Hot Asphalt

Refer to JM drawing UA-12 INS for Adhesive Bead Patterns.

When installing a low rise urethane adhesive product for insulation boards, all surfaces must be clean, dry, smooth, compatible and free of dirt, debris, oil/grease. 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 installing 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, firmly set the insulation boards long joints continuous and short joints staggered, into a full width mopping of hot asphalt. 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:

- All Purpose Fasteners
- UltraFast Fasteners and Plates
- Structural Concrete Deck Fasteners and Plates
- Polymer Auger Fasteners

Install 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. Refer to the Fastening Patterns in the TPO Roofing Systems Application Tools.

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.

Refer to the JM TPO Adhered Membrane-Fastened Insulation FM Approvals document for Single Ply System Code and FM Global Approval information.

Refer to the JM TPO Adhered Membrane-Adhered Insulation FM Approvals document for Single Ply System Code and FM Global Approval information.

Vapor Barrier Application

All surfaces receiving vapor barrier must be clean and free from oil, grease, rust, scale, loose paint and dirt. The substrate may need to be cleaned according to JM Application Instructions, and any required primers installed. An adhesion test may need to be performed to determine if the substrate is adequate. Vapor Barrier attachment methods include Hot Asphalt, Cold Adhesive, Heat Welded, and Self Adhered. Refer to the JM Vapor Barrier SA Installation Guide, the Vapor Barrier Data Sheets, and the Vapor Retarders section in SBS Roofing Systems for further information.

Thermal Barrier Application

Apply the units of approved JM thermal barrier products with long joints continuous. End joints should be staggered so that they are offset at least 12" (305 mm) from the end joints in adjacent rows. Thermal barriers provide a fire resistive layer in the roof assembly directly above the deck.

Base Sheet Application

The bituminous base sheets for these systems are mechanically fastened. Refer to the "BM" Fastening Patterns section in SBS System Application Tools for Base Sheet fastening patterns and further information.

Primer Application

Surfaces must be free from oil, grease, rust, scale, loose paint and dirt, frost or any debris prior to the application to the top surface. Apply JM Primers between 40 degrees and 100 degrees F (4 degrees and 38 degrees C). Primers should be applied with no streaks or puddles and allowed to dry completely. Primer should be tacky but should not transfer to a dry finger.

Deck Preparation

Before roofing 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 Roof Decks document in System Considerations 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® Guarantees are available up to a 30 year term with approved components and assembly make-up. Refer to the JM Peak Advantage Charges and Requirements-Single Ply 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 requested guarantee. 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.