









EPDM Roofing Systems

Commercial Roofing Application Guide



JM EPDM Membrane Commercial Roofing Application Guide

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Disclaimer:

The EPDM Roofing Systems Commercial Roofing Application Guide is intended as a guide only; actual conditions encountered during installation may vary from jobsite to jobsite. By providing this guidance, Johns Manville assumes no responsibility for quality of installation, field workmanship, building code compliance, or job safety. Johns Manville Safety Data Sheets (MSDS) are available with specific product safety information. For information on other Johns Manville thermal insulations and systems, call (800) 922-5922 or visit JM.com.



Roof Insulation Application Guide, and Fastening Patterns



Roof Insulation Application Guide

Insulation Installation Considerations

It is important to know that all Johns Manville polyiso boards are printed with installation directions of "This side down". This installation method is required for adhered systems and recommended when used under mechanically attached membranes. Foam insulation products are combustible and should be properly protected from exposure to fire during storage, transit, and application.

Storage

JM roof insulations (polyiso, Invinsa®, and FESCO®) are shipped with plastic shrouds that are intended to temporarily protect the insulation while in transit. There are two packaging methods (plastic wrap or plastic bag) that are used depending upon the product and the manufacturing facility. No matter how packaged, JM insulation should not be stored in or around standing water. Since all packaging is 5-sided, the pallets should be elevated and stored on a finished surface rather than on dirt or grass. Exercise care during handling to prevent insulation damage; avoid pushing pallets off the truck, rolling pallets on the ground or roof, and removing the package support feet. No more insulation should be installed than can be completely covered with membrane on the same day.

• Plastic Wrap Packaging is shipped to the job site with tarps. At the job site this

packaging is adequate for outside storage without tarps provided the insulation arrives intact with the original undamaged weather-tight plastic wrap, for two weeks or less. For storage greater than two weeks, JM recommends slitting the plastic shrink wrap prior to covering the pallet with a breathable tarpaulin, to allow for



venting. For storage greater than one month, insulation should be stored indoors in a dry, well-ventilated warehouse.

 Plastic Bag Packaging is shipped to the job site without tarps as this packaging protects the insulation during shipment. For storage less than two weeks, the packaging is adequate for outside storage without tarps provided the insulation arrives intact with the original undamaged weathertight plastic bag. For storage greater



than two weeks, JM recommends slitting the plastic shrink bag prior to covering the pallet with a breathable tarpaulin, to allow for venting. For storage greater than one month, insulation should be stored indoors in a dry, well-ventilated warehouse.

Installation

Insulation must be independently fastened to the roof deck in mechanically attached and adhered systems. Adhering certain insulations in hot asphalt or cold adhesives is sometimes acceptable for adhered systems (only for 4'x4' boards). For specific requirements, contact the JM Technical Services Group.

Always cut insulation to fit closely around all roof penetrations. Around drains, and primary scuppers, taper insulation a minimum of $36"x\ 36"$ (91.44 cm x 91.44 cm) for proper drainage.

Apply rigid insulation directly over fluted steel decks to provide smooth, continuous membrane support. Insulation should be installed with long edges parallel to the direction of the deck and supported by the deck flange. When butting insulation layers, do not allow the edge of either board to overlap an open flute. Cut the



Roof Insulation Application Guide

insulation so the edge of the board is about at the center of, and supported by, the flange. Any gaps between insulation greater than 1/4" should be filled.

Double Insulation Layers.

Installing roof insulation in multiple layers provides the designer with improved thermal performance. It also contributes to the overall performance of the roof system for the following reasons:

- Recent studies indicate that as much as 8% of the thermal efficiency of the
 insulation can be lost through the insulation joints and exposed insulation
 fasteners of single layer installations. Insulation joints that are staggered in
 multiple layer installations block the flow of heat.
- Multiple layer insulation installation reduces the stress accumulation of a thick, single insulation joint and distributes the stress more evenly over the multiple, thinner insulation joints.
- The bottom side of the membrane is protected from physical damage from insulation plates and fasteners by the second layer of insulation if the top layer is adhered.
- Roof decks may be stiffened.



Asphalt Temperatures

JM endorses the guidelines established by the NRCA and ARMA for heating asphalt for proper insulation applications. Asphalt should be applied at the Equiviscous Temperature (EVT), \pm 25°F (\pm 14°C).

Cold Weather Application

Hot asphalt chills rapidly at 40°F (4°C). To avoid problems associated with "cold" asphalt application, insulation may be applied with mechanical fasteners. Another method when using hot asphalt may be the "mop and flop" method. The "mop and flop" method entails mopping the back of the insulation so that the asphalt retains its adhesive qualities for a longer period. When adhering insulation, including hot asphalt, board size shall not exceed 4′ x 4′ (1.22 m x 1.22 m). Care should be taken in any application below 40°F (4°C).

Mechanical Application to Steel Decks

Mechanical attachment of insulation to steel decks is the only acceptable attachment method. For current information regarding Factory Mutual requirements over insulated steel decks, please check with a JM Technical Services Specialist, or the current FM ApprovalsSM RoofNav®.

Adhesive Application

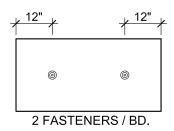
JM insulations may be installed in Insulation Adhesives:

- Two-Part Urethane Insulation Adhesive (2P-UIA) Bead Application Only
- One-Step Foamable Adhesive
- Roofing Systems Urethane Adhesive

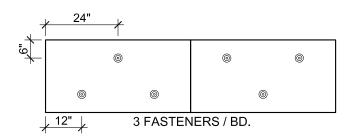
Board sizes shall not exceed $4' \times 4'$ (1.22 m x 1.22 m). Refer to product data sheets for adhesive coverage rates.

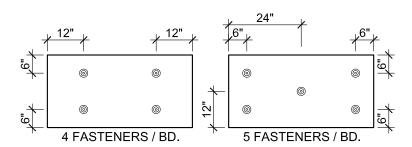


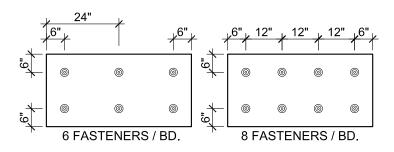
2' x 4' (.61 m x 1.22 m) Boards





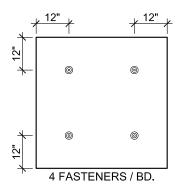


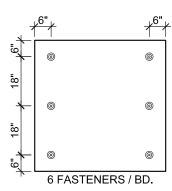


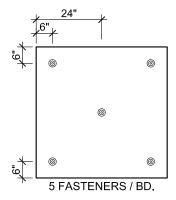


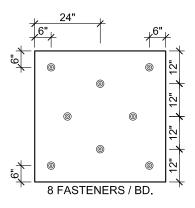


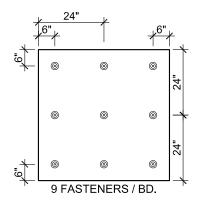
4' x 4' (1.22 m x 1.22 m) Boards





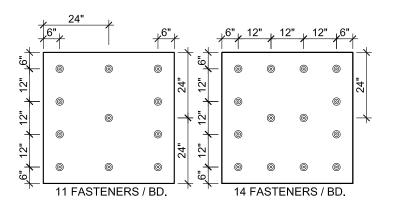


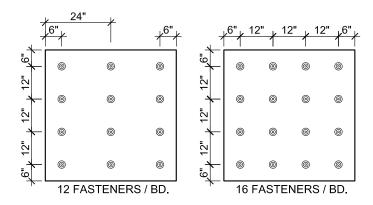


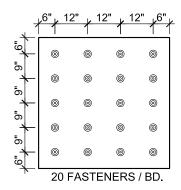




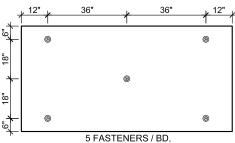
4' x 4' (1.22 m x 1.22 m) Boards

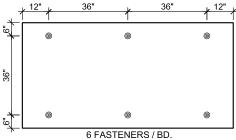


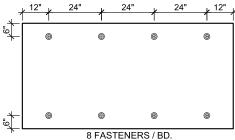


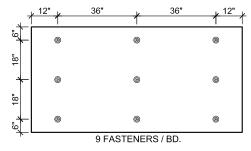


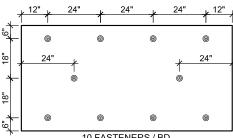






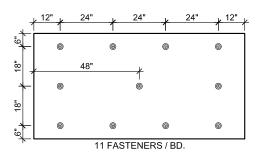


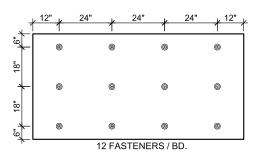


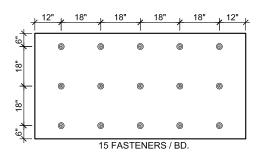


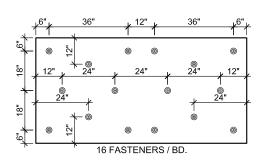
10 FASTENERS / BD.





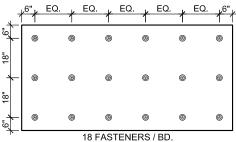


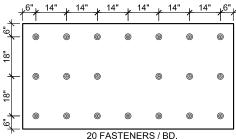


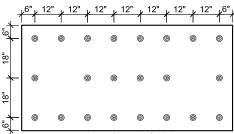




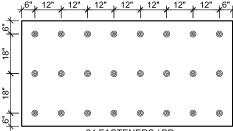




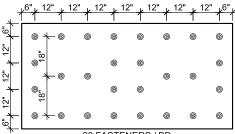




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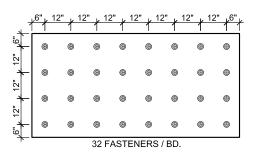


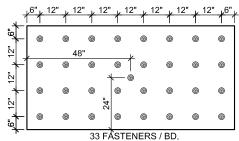
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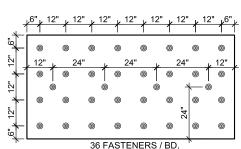


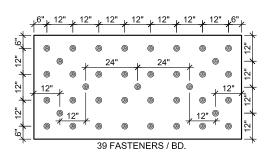
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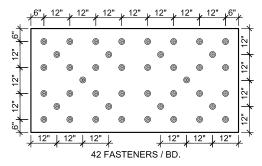










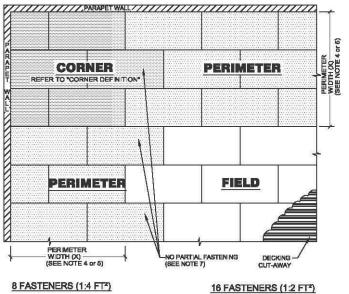


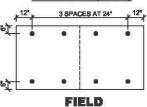
ONE



Insulation Fastening Patterns for Adhered Membrane AD-8

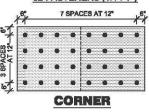
BOARD LAYOUT

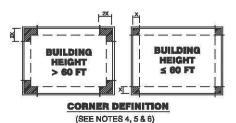




PERIMETER

32 FASTENERS (1:1 FT2)





NOTES

- 1. CALCULATE UPLIFT DESIGN PRESSURES IN ACCORDANCE WITH ASCE-7.
- 2. INSTALL INSULATION WITH LONG JOINTS IN A CONTINUOUS STRAIGHT LINE WITH END JOINTS STAGGERED.
- 3. ROOF HEIGHT ≤ 60 FT, THE PERIMETER (X) IS THE SMALLER DIMENSION OF: 10% OF THE SHORTEST SIDE (PLAN VIEW)
 - OR 40% OF THE ROOF HEIGHT,

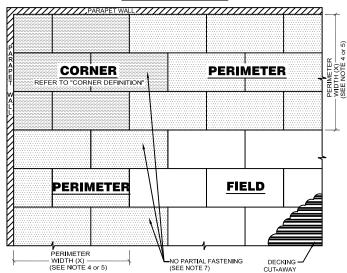
NOT LESS THAN 4% OF THE SHORTEST SIDE (PLAN VIEW) OR 3 FT.

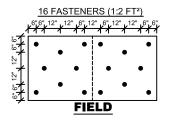
- 4. ROOF HEIGHT > 60 FT, THE PERIMETER (X) IS:
 - 10% OF THE SHORTEST SIDE (PLAN VIEW) BUT NOT LESS THAN 3 FT.
- 5. THE CORNERS MAY BE TREATED AS PERIMETERS IF THE PARAPET IS GREATER THAN OR EQUAL TO 3 FT ON ALL SIDES ACCORDING TO ASCE-7.
- 6. IF ANY PORTION OF THE BOARD LIES IN A PERIMETER OR CORNER ZONE, ENHANCE THE FASTENING OF ENTIRE BOARD.

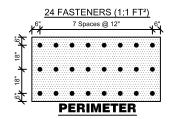


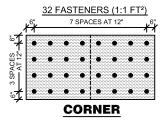
Insulation Fastening Patterns for Adhered Membrane AD-16

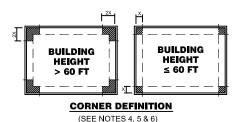
BOARD LAYOUT











NOTES

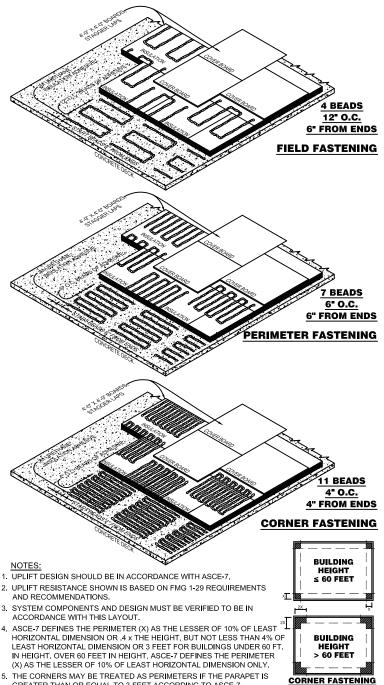
- 1. CALCULATE UPLIFT DESIGN PRESSURES IN ACCORDANCE WITH ASCE-7.
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- 3. ROOF HEIGHT ≤ 60 FT, THE PERIMETER (X) IS THE SMALLER DIMENSION OF:
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- 4. ROOF HEIGHT > 60 FT, THE PERIMETER (X) IS:
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- 5. THE CORNERS MAY BE TREATED AS PERIMETERS IF THE PARAPET IS GREATER THAN OR EQUAL TO 3 FT ON ALL SIDES ACCORDING TO ASCE-7.
- 6. IF ANY PORTION OF THE BOARD LIES IN A PERIMETER OR CORNER ZONE, ENHANCE THE FASTENING OF ENTIRE BOARD.



Insulation Adhered Patterns for Adhered Membrane UA-12

INSTALLATION NOTES:

- A. ALL INSULATION/COVER BOARDS SHOULD BE 4'-0" x 4'-0".
- B. WHEN APPLYING MULTIPLE LAYERS OF INSULATION, IT IS REQUIRED TO RUN THE BEADS PERPENDICULAR TO THE PRECEDING LAYER. IT IS OPTIONAL WHEN USING WITH JM 2-PART URETHANE ADHESIVE.

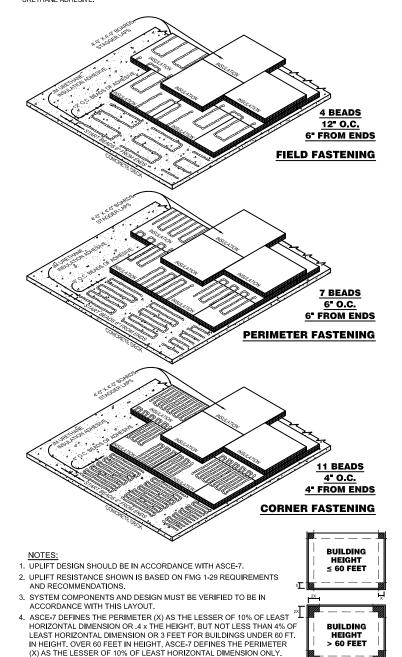


GREATER THAN OR EQUAL TO 3 FEET ACCORDING TO ASCE-7.

Insulation Adhered Patterns for Adhered Membrane UA-12 INS

INSTALLATION NOTES:

- A. ALL INSULATION/COVER BOARDS SHOULD BE 4'-0" x 4'-0".
- B. WHEN APPLYING MULTIPLE LAYERS OF INSULATION, IT IS REQUIRED TO RUN THE BEADS PERPENDICULAR TO THE PRECEDING LAYER WHEN USING 1-PART JM URETHANE ADHESIVE. IT IS OPTIONAL WITH JM 2-PART URETHANE ADHESIVE.



5. THE CORNERS MAY BE TREATED AS PERIMETERS IF THE PARAPET IS

GREATER THAN OR EQUAL TO 3 FEET ACCORDING TO ASCE-7.

CORNER FASTENING







Section Two Contents

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1.0 Introduction

This guide is designed for your convenience. These step-by-step instructions and illustrations will help answer your installation questions and help you maintain top-quality craftsmanship when applying a JM EPDM roofing system.

JM EPDM Membranes are manufactured to meet a wide range of roof construction requirements. These membranes are used for mechanically attached, adhered, and ballasted roofing systems.

Each membrane sheet is marked along the edge with lap lines. These lap lines indicate the minimum overlap required for mechanically fastened systems. All EPDM mechanically attached systems requires 6" tape for seaming.

Equipment

The following equipment may be needed to install JM EPDM roofing systems:

Power Equipment

- 10,000 12,000 Watt Generators
- 100' 120V or 240V Extension Cord
- Screw Guns

- Hammer Drill
- Electric Drill

Required Hand Tools and Equipment

- Brooms (Soft and Stiff)
- Gloves
- Measuring Tape
- Eve Protection
- Caulk Gun
- Scissors
- Silicone Rubber Roller
- Wire Brush
- Chalk Line

- Lawn Or Linoleum Roller
- Drill Bits (Carbide, Steel)
- Seam Probe
- First Aid Kit
- Utility Knives
- Rags
- · Writing/Marking Instruments
- · Rollers and Brushes
- Site Specific PPE

Misc Tools

- Rivet Gun
- Snips
- Hammer
- Pull-Out Tester
- Reciprocal and Circular Saw
- Hand Saw
- Metal Crimpers
- Vise-Grip Pliers
- Pliers
- Ladder

- · Screwdriver Set
- Aluminum Tape
- · Adhesive Applicator Gun or Cart
- T-Square
- Rubber Mallet
- · Stirring Sticks
- Paddle Mixer
- Silicone Rubber Roller
- Shovels
- Tongs



2.0 Roof Substrate Materials and Deck Preparation

The primary function of a roof deck is to provide structural support and restraint for the roofing system. The deck must have adequate strength and rigidity to support all anticipated live and dead loads, foot or construction traffic, wind, rain and snow loads. The deck must have adequate strength and rigidity to carry the weight of the roofers and their equipment during construction, without deflecting to the point where roofing components rupture, delaminate or are weakened. Some decks are designed to furnish inside appearance as well as sound control; however, JM's concern is for the roof deck as a base for the roofing system. To perform this function, the deck must be rigid. It must be smooth and free of large cracks, holes or sharp changes in elevation of the surface. It must be able to receive the roof system by some method which will hold the system securely, either by adhesion, ballast or mechanical fasteners. Before roofing work is started, the deck should be inspected carefully by the roofing contractor, the deck contractor and the owner's representative, to determine that it satisfies these conditions. The roofing contractor and JM are only concerned that the surface of the deck will accept the roofing system. Neither JM nor the roofing contractor have any responsibility regarding the adequacy of the deck from a structural standpoint. Surface preparation should include filling and smoothing all holes, depressions, irregularities, etc., before the roof is applied. Roof-mounted equipment should not rest on the deck or roofing system. It should be supported by the structural framing of the building. Leaks resulting from improperly mounted rooftop equipment are excluded from coverage under the JM Peak Advantage® Guarantee.

To be a satisfactory substrate for any roofing system, a roof deck must have:

- 1. Proper construction, following the deck manufacturer's instructions.
- Proper design to carry maximum anticipated live and dead loads which may be encountered during and after construction, without excessive deflection.
- 3. Positive drainage which will not allow water to pond. (See Roof Drainage paragraphs in this section.)
- Expansion joints to allow for movement of the structure without causing strain on the roofing membrane. To be effective, expansion joints must extend through all elements of the roof and structural system.
- A smooth, dry and properly cured surface to which the roofing system can be installed.
- 6. A solid, rigid assembly when using precast deck units. Units must be securely fastened to supporting members to prevent movement.
- 7. A continuous, uninterrupted surface. Installation of conduits on the top surface of a roof deck is not acceptable, unless the area between the conduits is filled with an acceptable roof insulation, properly secured, and a full thickness of roof insulation is installed over the conduits.
- 8. A clean surface. Before roofing application is started, the deck should be free of all dust, dirt, debris and foreign material. Only the roofer's tools & equipment should be allowed on the deck during roof application.
- 9. The proper resistance to wind uplift to prevent rupture of the roof membrane.
- Adequate means of membrane securement. Provisions for special attachment procedures must be made on steep-slope decks.
- 11. Appropriate termination details. Under certain conditions, consideration should be given to isolating the roof membrane from stresses caused by deck or structural movement. This can be accomplished by securing base flashing to curbs attached to the structural deck. (See System Application section for flashing details.)

Any decks or substrates not listed in the current JM Commercial Roofing Product Manual must be approved by a JM Technical Services Specialist in writing prior to the installation of a roof which is to receive a Peak Advantage® Guarantee. Such approval only indicates that JM accepts the deck surface to receive a JM roofing system. By such acceptance, JM accepts no responsibility of the structural adequacy or performance of the deck.

Vapor Retarders

Vapor retarders prevent moisture or condensation from entering the building or passing from the building into the roof system. To provide an effective shield against water vapor, seal off all vapor retarders at roof edges and penetrations.

Air Barriers

Air barriers should be considered on jobs where high internal air pressure exists, such as airport hangars or distribution warehouses with many outside openings (such as loading docks), outdoor amphitheaters, etc.

Insulation

Refer to Roof Insulation Application Guide in Section One for details.

Slip sheets

When a slipsheet is used under the membrane on a mechanically attached system, fasten with the sufficient amount of fasteners to keep all laps and edges secure. It should be neatly cut to fit closely against roof edges and around penetrations.

Roof Preparation (Re-Roofing)

Proper roof substrate preparation is essential to simplify installation and prevent future conditions that may lead to roof leaks. First, complete a moisture scan and ensure that any wet materials are removed. All existing materials are to be clean and dry. Provide protection of the adjacent roof areas. Carefully sweep all roof surfaces to remove all debris and dirt. Make sure the roofing area is completely smooth. Be sure to power wash the substrate prior to installation especially in adhered systems. Cut out large blisters on asphalt or coal tar pitch roofs. Repair holes or cracks in concrete, greater than 1/4" (6.35 mm) wide with non-shrink grout.

Membrane Application

It is essential that JM products be correctly installed in order for the completed roofing system to perform properly. The following procedures should be followed when installing a JM EPDM system:

Positioning the Roofing Membrane

Depending on the specific project, the installation may originate at the low or high point but care must be taken to ensure all the laps are shingled and do not buck water. Position the roll at the approximate application point, and unroll. If the membrane is wider than 16'8" (5.08 m), unfold the membrane to its fullest width. Move the membrane into place without stretching. The unfolding and movement of the membrane can be aided by waving the sheet in such a way as to pump a cushion of air under the sheet, creating a floating effect which simplifies movement of the sheet over the substrate.

Allow a minimum of 30 minutes before fastening or splicing so that the membrane can relax and release any tension induced by packaging and handling. Visually inspect the membrane for any flaws or damage that would interfere with the acceptable application or performance of the membrane. Creases from the fold points can be very stubborn to flatten out, especially in cooler temperatures. These creases can create a problem when making the seam or adhering the membrane.

ECTION



After unrolling the first sheet at the low point of the day's installation, position adjoining sheets in the same manner, lapping the edges a minimum of 3" (7.62 cm) for Field Fabricated 3" Seam Tape applications and 6" (15.24 cm) for 6" Seam Tape applications. For FIT installations, overlap the sheets a maximum of 4" (10.16 cm) for 4" FIT sheets and 6" for 6" (15.24 cm) FIT sheets.

FIT Seaming Note (Non-Reinforced products ONLY): On hotter days over 85 degrees F or in cases where the sheets are aligned while still cool but seaming will take place at a later time, overlap the sheets a maximum of 3" (7.62cm) for 4" FIT applications and 5" for 6"FIT applications on the upslope side where the seam tape faces up.

Consult JM Technical Services for lap width requirements on guarantees 20 vears or longer. Sheets should be laid out in an offset pattern, with a minimum of 3' (91.44 cm) between adjacent end laps. Laps should be constructed with the upslope sheet overlapping the adjoining sheet in a shingle manner to avoid any laps opposing natural drainage.

Unroll the JM EPDM Membrane and position without stretching. Allow the membrane to relax at least 30 minutes, prior to installation. Inspect for any damaged membrane. Remove sections of the membrane that are creased or damaged. Pay special attention to membrane creasing at temporary tie-ins as this will be permanent.

Install all roof deck materials (vapor retarders, insulation and slip-sheet) in complete sections, and cover with the membrane immediately to produce weather-tight sections each day. Phased construction is not permitted. For mechanically attached systems on steel decks, the membrane sheets must be applied **perpendicular** to the flutes of the deck.

Perimeter Areas

Refer to the local code requirements, project specifications, JM guarantee requirements, or FM Global Requirements when determining fastener rates. The requirements to calculate perimeter areas are as follows:

- 1. Roof Height < 60 ft., the perimeter is the smaller dimension of: 10% of the shortest side (plan view), or 40% of the roof height, but not less than 4% of the shortest side (plan view) or 3 feet.
- 2. Roof Height > 60 ft., the perimeter is: 10% of the shortest side (plan view) but not less than 3 feet.
- 3. For mechanically fastened systems, spacing between fastener rows should be no greater than 60% of the width of the field sheets in the perimeters, and no greater than 40% of the width in the corners.

Mechanically Fastened Perimeter Fasten the EPDM membrane to the structural deck using anchor discs or High Load plates 12" (30.48 cm) o.c. maximum, with appropriate fasteners.

Adhesive Fastened Perimeter Adhere the EPDM membrane to the JM Reinforced Termination Strip (RTS) with Tape using JM EPDM Tape Primer or Low VOC Single Ply Primer.

NOTE: Do not use JM Membrane bonding adhesive to attach the EPDM sheet to the RTS.

Corner Areas

All corners shall be the intersections of the perimeter areas. Refer to the local code requirements, project specifications or FM Global requirements when determining corner layouts for perimeter sheets. If parapets are greater than 36"continuous the corners may be treated as a perimeter. Typically, one of the following layouts is used in the corners:

- 1. The perimeter rolls should be fastened all the way into the corner. The other perimeter sheets are fastened up to the previously installed perimeter sheets and then the fastener rows are continued to the corner through the top of the previously installed sheets. Install a 6" EPDM Peel & Stick Sealing Strip extending 2" (5.08 cm) min. on each side over the fasteners for a watertight seal. This method is commonly referred to as "picture framing".
- 2. The perimeter rolls should be run perpendicular to the flutes in steel deck applications. Additional fasteners should be installed in rows that are no greater than 40% of the width of the field sheets. These fastener rows should then be stripped in with 6" (5.08 cm) min EPDM Peel & Stick Sealing Strip

General Suggestions to Avoid Problems in Cold Weather (Below 50°F [10°C])

- 1. Store all JM EPDM materials in warm $60^{\circ}F 80^{\circ}F$ ($16^{\circ}C 27^{\circ}C$), dry area away from sparks and open flames, to avoid condensation problems that could affect weld quality. Protect from freezing.
- Exercise caution when walking on dew, frost, ice or snow covered roofs, since the membrane may be extremely slippery.
- 3. Allow membrane to relax for a longer period of time.
- 4. Allow for extended adhesive flash off times.





3.0 Mechanically Fastened Systems

Assembly Identification Membrane Thickness Membrane Type 6 = 60 mil (1.51 mm) R = Reinforced 7 = 75 mil (1.90 mm)NR = Non-Reinforced S = Single Ply -E6RM∙ -Attachment M = Mechanically Attached **EPDM Membrane** Mechanically Attached Membane JM EPDM Single Ply Primer at membrane seams (Typ.) - 6" EPDM Seam Tape Plus Cover Board Vapor Barrlei Thermal Barrler Steel Deck



NOTE: For additional assembly plate variations, check out our interactive form online.

In mechanically attached systems, the sheet is attached to the substrate at regularly spaced intervals, via anchor disc or anchor bar systems. These systems employ a reinforced sheet as the membrane. Black 45 mil (.045" [1.1 mm]) thick, 60 mil (.060" [1.5 mm]) thick, and 75 mil (.075" [1.9 mm]) thick reinforced sheets are available for these systems. For mechanically attached systems on steel decks, the membrane sheets must be applied **perpendicular** to the flutes of the deck. To prevent wind uplift and secure the membrane on mechanically attached roofs, fasten the membrane to the roof deck with metal plates or batten bars and acceptable fasteners.



In-lap Mechanically Fastening-Field Fabricated Seams

- Roll out one roll of membrane over the acceptable substrate and let it relax 30
 minutes or as needed to compensate for any residual roll tension as described
 in the "Positioning the Roofing Membrane" Section above.
- Secure the plate along the edge of the membrane, maintaining at least a 1.5"
 (3.81 cm) distance from the edge of the plate to the outer edge of the roll.
 Fastener and plate spacing is per FM Global requirements and/or job specifications.
- 3. Tightly screw down the plates (do not overdrive the fastener) using an appropriate screw gun unit with adjustable clutch. Make certain to drive the fastener perpendicular to the surface of the substrate and to properly penetrate the deck surface. On steel decks, the screws must be fastened into the top flanges of the metal deck.
- 4. After securing the edge of the first membrane roll, roll out the next adjacent roll of membrane. Position this roll so that its common edge fully overlaps the row of plates and fasteners just installed. Maintain a minimum overlap of 6" (15.24 cm) to cover the plates, and leave the required 1.5" (3.81 cm) minimum for the peel and stick seam tape to bond with the membrane.

In-lap Mechanically Fastening- Tape to Tape Seams (R-FIT MF Product ONLY)

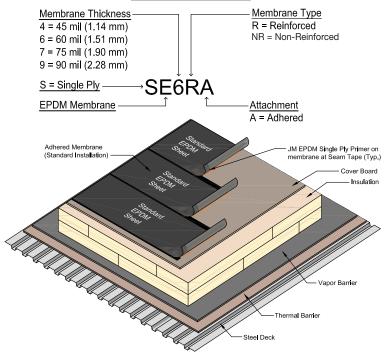
- 1. The perimeter rolls should be fastened all the way into the corner. The other perimeter sheets are fastened up to the previously installed perimeter sheets, and then the fastener rows are continued to the corner through the top of the previously installed sheets. Install a cover strip of reinforced membrane extending 2" (5.08 cm) on each side over the fasteners for a watertight seal. This method is commonly referred to as "picture framing".
- 2. The perimeter rolls should be run perpendicular to the flutes in steel deck applications. Additional fasteners should be installed in rows that are no greater than 40% of the width of the field sheets. These fastener rows should then be stripped in with reinforced JM EPDM Cover Tape Membrane or JM EPDM Cover Tape Reinforced Cover Strip. This method is commonly referred to as the "finger" method.
- 3. Allow membrane to relax for a longer period of time.





4.0 Adhered Systems

Assembly Identification





NOTE: For additional assembly plate variations, check out our interactive form online.

Adhered systems are totally attached to the substrate board by means of adhesive. All JM EPDM Membranes may be used in these assemblies.

Membrane formulations offer superior ozone resistance and remain elastic and flexible through wide temperature ranges. An EPDM single ply membrane is impervious to water entry and resistant to weathering and UV rays.

The product line includes flashing materials, adhesives, sealants, coatings and accessories, providing a single source systems approach to the roofing assembly. JM roofing systems are adaptable to many sizes and shapes of new or existing roofs. They are recommended for slopes not exceeding 2:12 for ballasted systems and not exceeding 6:12 for adhered and mechanically attached systems. All three systems are suitable for new construction, as well as re-roofing applications.

The JM EPDM single ply specifications are written as installation guidelines only. These documents are intended to assist the specifier in developing a comprehensive bid package, in a clear and concise format. The information is presented in an explanatory fashion rather than the authoritative, instructive manner commonly utilized in construction specifications. When experience, technical knowledge or established testing procedures support a policy or position, it is clearly identified (i.e., "JM requires" or "is not acceptable"). When the use of a particular product or practice is desirable, the reference is stated as an opinion rather than absolute fact, (i.e., "JM recommends" or "JM suggests").



Adhesive Use

All membranes and substrates to be adhered must be approved by Johns Manville. Both surfaces must be clean, smooth, dry, compatible and free of contaminants and grease/oil. All fasteners, if required, must be properly seated and plates flush, leaving an acceptable surface to receive adhesive.

Unroll the membrane and allow it to relax at least 30 minutes before applying adhesive, longer time is necessary in colder weather.

Position the membrane with an overlap appropriate for width of seam type being used. Fold membrane back along it's entire length so that the underside of half of the sheet is exposed.

Make sure adhesive container is sealed. Turn upside-down and wait a minimum of five minutes. Turn containers right side up. Carefully open and vigorously stir until adhesive is a uniform color and all solids are dispersed, with – NO SWIRLS.

Saturate roller by dipping into can. Roll adhesive onto substrate and membrane for smooth-backed membranes.

For solvent-based adhesives, the appearance of a spider web effect will occur with stringers off the roller when the roller needs to be redipped into the adhesive. It will also be hard to push the roller.

JM Adhesives (solvent and water-based) may be installed with a power roller. Other industrial spray equipment may be used to apply JM adhesives as recommended by the spray equipment manufacturer. Note that viscosity varies by adhesive, different adhesives may have different industrial spray recommendations. Back-roll all sprayed contact adhesives (two-sided) with 9" (228.6 mm) wide solvent resistant roller to insure 100% coverage of the adhesive on the substrate and membrane When adhesive is ready, carefully roll the membrane into the substrate, avoiding wrinkles. Apply even pressure with a lawn or linoleum roller (minimum 75 lb [34 ka])

Do not apply adhesive in the seam area; seams are to remain clean and dry. Avoid puddling of adhesive. With adhesives, more is not necessarily better. "Over-coating" adhesives will lead to poor adhesion.

Do not use in direct contact with polystyrene foam.

to ensure good contact between the membrane and substrate.

Adhesive coverage, open time and dry time rates can vary dramatically depending on the particular substrate and environmental conditions. Coverage rate charts, stated herein, are approximate only. If FM Global® or UL® approval is required, please consult the specific RoofNavSM or UL Certification Directory for specific application rates.

Substrate for Adhesive Membrane								
	Lightweight Concrete	Concrete	Invinsa ®	SECUROCK® Gypsum Fiber Roof Board	Wood Fiber	Dexcell	ENRGY 3®	Dens Deck Prime ®
JM EPDM	N/A	N/A	WB/SB	WB/SB	WB/SB	WB/SB	WB/SB	WB/SB
SB - Solven	Key: WB - Water Based SB - Solvent Based N/A - Not Applicable			Notes: • Water Based Adhesive Use the two-sided contact application method for all smooth-backed single ply membranes. • All glass faced gypsum is not suitable • One sided or two sided application for smooth EPDM membranes is approved.				



Cold Weather Application

Hot asphalt chills rapidly at $40^{\circ}F$ ($4^{\circ}C$). To avoid problems associated with "cold" asphalt application, insulation may be applied with mechanical fasteners. Another method when using hot asphalt may be the "mop and flop" method. The "mop and flop" method entails mopping the back of the insulation so that the asphalt retains its adhesive qualities for a longer period. When adhering insulation, including hot asphalt, board size shall not exceed 4' x 4' (1.22 m x 1.22 m). Care should be taken in any application below $40^{\circ}F$ ($4^{\circ}C$).

Solvent and Low VOC/Solvent-Based, Two-Sided Application

Apply solvent-based adhesive in a smooth, even, thin coat to both membrane and approved substrate at the rates listed on specific product data sheets. Most applications apply approximately half the listed rate to the membrane and the other half to the substrate. For porous substrates such as wood fiber, apply more adhesive on the substrate.

EPDM systems require adhesive to become tacky to the touch on both surfaces without stringers. Time will vary depending on the ambient temperature and humidity

Water-Based, One Sided Application (Horizontal Surfaces) For EPDM membranes on the horizontal roof surface, apply to the substrate only and install the membrane while the adhesive is still wet.

Water-Based Adhesive Cautions

- JM EPDM Water Based Adhesive is white; if product appears to have disappeared after application then adhesive is too dry and will need to be reapplied.
- Do not over apply. Use the coverage rate chart in this section; too much adhesive will result in curing issues.
- Prior to application and curing, water-based adhesive can NEVER be exposed or stored to temperatures below 40°F. Do not apply when ambient temperatures are expected to drop below 40°F within 48 hours after application

Use our Roof TechXpert app on your phone to get more accurate flash time estimates based on your current location.

	Suggested Cov	erage Rate F	Ranges		
Adhesive	Ft²/gal (gal/sq)				
Solvent-Based or Low VOC/Solvent Based	90 (1.11)	80 (1.25)	70 (1.43)	60 (1.67)	50 (2.0)
Water Based	130 (0.77)	120 (0.83)	100 (0.91)	100 (1.0)	90 (1.11)
Product	Less Adhesive / More Adhesive →				
	Invinsa/C	GF			
	G	ECUROCK ® ypsum Fiber Roof Board			
Insulation & Cover Boards		DexCell Prime			
Cover boards			ENRGY 3®		
				Wood Fil	per
				De	xCel [®]

Notes:

- · Listed rates are for finished roofing areas.
- Two-sided Application: Most applications apply approximately half the listed rate to the membrane
 and the other half to the substrate. For porous substrates such as wood and gypsum, apply more
 adhesive on the substrate.





JM All Season Sprayable Adhesive Installation Instructions

FOR INDUSTRIAL USE ONLY. CONSULT TECHNICAL INFORMATION & SAFETY DATA SHEET FOR THIS PRODUCT BEFORE USE OR HANDLING.

System Compatibility

Used to adhere membranes in TPO and EPDM Single Ply systems only. Not for use in Multi-Ply (Bituminous) Systems.

Installation Conditions & Jobsite Storage

Install when ambient temperature is 25 °F (-3.89 °C) and rising. Store adhesive in a well-ventilated area and keep canisters tightly closed. Store locked up and protected from sunlight. Canisters are pressurized. Canisters must be a minimum of 70 °F (21 °C) at the jobsite for proper installation and spraying conditions. When canisters are not in use they should be kept a minimum of 70 °F (21 °C) in a warming or conditioning area. Make appropriate accommodations on the jobsite to ensure the canisters can be installed at a minimum of 70 °F (21 °C).* When canister temperatures cool below 70 °F (21 °C) remove from the site and return to the warming area to condition to 70 °F (21 °C). DO NOT let canisters EXCEED 110 °F (43 °C).

Ensure that membrane and substrate are free and clear of debris and dry prior to installation. DO NOT install in contact with asphalt. See JM TPO Application Guide or JM EPDM Application Guide for list of approved substrates and more detailed application rates.

*Note that if maintaining proper canister temperature is difficult consider warming blankets.

Application Instructions

Retrieve the canisters from the jobsite storage/conditioning area and confirm they are a minimum of 70 °F (21 °C) F. Ensure the canister is tightly closed and then shake the canister with a rocking motion for a minimum of 30 seconds prior to use. Connect the hose to the spray applicator and turn the trigger lock to the closed position (such that the trigger cannot be engaged). Connect the hose to the adhesive canister. Once fully connected; open the valve slowly on the canister to check the hose and applicator fittings for leaks. When ready to spray, turn the trigger lock as far open as possible. During use keep the adhesive canister valve open to maintain the necessary pressure in the hose even when temporarily not in use. Turn the trigger lock all the way closed during periods of non-use to prevent accidental spray. After the canister valve has been opened for use, do not close the valve until the canister has been used in full and is completely empty or the proper cleaning action is taken for either long term or temporary storage. See Cleaning & Storage section for detailed instructions.

Prior to beginning application; test the desired spray pattern/fan on a disposable surface. Spray for up to 30 seconds to allow the fan to become even. If spray remains inconsistent or uneven, shake the canister for 30 seconds and wipe the tip. If still inconsistent change the tip. Note it is best to hold the applicator between 12-18 inches from the desired surface.

Begin installation application and coat both the substrate and the membrane to the desired pattern and application rate noted. Adhesive should be applied with a target of 50% overlap to achieve the desired adhesive strength and application rate and with the appropriate rate of speed to achieve the coverage rate. DO NOT BACKROLL THIS ADHESIVE. Do not allow the adhesive to puddle on horizontal surfaces and do not allow the adhesive to run on vertical surfaces. Both are indications of too heavy adhesive application. Wipe the tip with a cloth whenever

SECTION TWO



there is excessive buildup and agitate the canister every 5 minutes during use to maintain the highest application speed and fullest fan pattern.

Allow the adhesive to flash off the necessary amount of time per the ambient conditions. Adhesive is ready for installation when no residue transfers to the fingers or hand after touching. Limit application to the amount of square footage of both membrane and substrate that can be installed within 30 minutes. When the adhesive is ready for both the membrane and the substrate; roll the membrane carefully into the substrate avoiding wrinkles. For vertical surfaces roll in the material with wide hand roller(s). For horizontal surfaces the material can be broomed in and then should be rolled with a lawn or linoleum roller (minimum 75 lbs [34 kg]) to ensure good contact and adhesion.

When a canister is completely consumed; the canister valve should be closed tightly and the hose and applicator depressurized after the canister is closed. The hose and applicator should be detached from the canister and immediately attached to a new canister to avoid cleaning. Shake the new canister for 30 seconds and follow the same leak test before opening the canister valve fully. Open the trigger lock completely for application and spray for up to 30 seconds to allow the spray pattern to stabilize (change out the tip if spray pattern does not stabilize). Dispose of empty canister per the local regulations and requirements.

JM All Season Sprayable Bonding Adhesive is a contact adhesive and should be installed in a two-sided application. For optimal performance and installation please adhere to the quidelines noted here.

Storage and Cleaning

Short Term Storage and Cleaning of Applicator and Hoses

- Leave the adhesive canister valve open and under pressure but lock the applicator trigger so that it cannot be engaged.
- · Wipe any accumulated adhesive from the tip.
- First remove the tip by removing the retaining nut that holds it in place. Clean
 the tip and the retaining nut by soaking them in the Sprayable Bonding Adhesive Flush (LVOC).
- Keep a supply of new tips in case the old tip cannot be fully cleaned and unclogged.

Long Term Storage and Cleaning of Applicator and Hoses

- Prior to cleaning; move to a well-ventilated area and secure appropriate PPE.
- Close the valve on the canister and engage the trigger on the applicator to relieve all pressure in the hose and applicator system.
- Next disconnect the hose from the canister again after ensuring that the valve to the canister is firmly closed.
- Remove the tip for the applicator by removing the retaining nut which holds it in place.
- Wipe the tip, the applicator and the retaining nut (paying special attention to the threads) with a flush soaked rag.
- Soak the tip in the Sprayable Bonding Adhesive Flush (LVOC) following the instructions outlined above in the Short-term storage above.
- Connect the hose to the flushing outlet on the Sprayable Bonding Adhesive Flush (LVOC). Tighten the connection with a wretch using caution not to strip the threads.





- Open the Sprayable Bonding Adhesive Flush (LVOC) canister valve to full and engage the trigger of the spray applicator to allow flow to flush cleaner through the hose.
- Flush the hose and applicator until such time as it is running clear and collect the flushed cleaner and adhesive into a collection bucket/container.
- Once the hose and applicator are completely flushed, close the cleaner valve and then engage the trigger to relieve the pressure in the applicator and hose.
- Disconnect the hose and applicator after ensuring the flush valve is closed and the pressure in the hose is relieved.

Application Rates

Application Rates				
Membrane	Horizontal	Vertical		
TPO & EPDM	1000 ft²/canister	750 ft²/canister		

Approved Substrates

Long Term Storage & Shelf Life

Shelf Life	12 months from manufacture date.			
Storage Conditions	Clean, dry, indoor environment, in a well-ventilated area, and in an unopened container, tightly sealed.			
Temperature Range	40 °F - 100 °F (4.4 °C - 38 °C) - Do not let freeze and do not let exceed 110 °F (43 °C).			
Installation Conditioning	Bring the adhesive to a minimum 70 °F (21 °C) and maintain for installation and use.			



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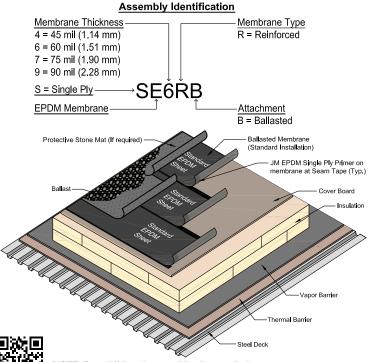


Health and Safety

JM develops and maintains Safety Data Sheets (SDS) and Safety Use Instructions (SUI) for all of its products. These SDS & SUI contain health and safety information for development of appropriate product handling procedures to protect the users of our products. These SDS & SUI are available on the JM Web site, www.jm.com/roofing and should be read and understood by all involved personnel prior to using and handling JM materials. In addition to the SDS & SUI, JM products have health and safety precautions printed on the product label or packaging. The user is strongly urged to become familiar with this information prior to using the product, and observe certain precautions during use.



5.0 Surfacings



NOTE: For additional assembly plate variations, check out our interactive form online.

Ballast Surfacing

The ballast should be of a suitable type, and of sufficient amount, to provide protection against wind uplift. Local wind conditions and characteristics should be taken into account when assessing the ballast requirements. The Single Ply Roofing Industry (SPRI) has issued guidelines to assist the designer, in its "Wind Design Guide for Ballasted Single Ply Roofing Systems" (ANSI/SPRI RP-4). Information can also be obtained from local building codes and from FM Global Property Loss Prevention Data Sheet 1-29 "Roof Deck Securement And Above-Deck Roof Components." The final decision on type and amount of ballast ultimately rests with the building owner or his or her technical representative, but should not be less than 10 lb/ft2 (1,000 lb/100 ft2 [49 kg/m2]). Note: This amount may not provide complete coverage of the JM EPDM single ply membrane.

JM does not supply ballast materials; however, the following materials are approved for use with ballasted Specifications SE4B, SE6B, SE9B, SE4RB, SE6RB, and SE7RB:

Nominal 1½" (3.81 cm) Aggregate: Clean, smooth river bottom stone consisting of ballast gradation Size #4 (or, alternatively, Size #3), as specified in ASTM D 448 "Standard Sizes of Coarse Aggregate". The ballast should consist of (#4) ¾" to 1½" (1.91 cm to 3.81 cm) or (#3) 1" to 2" (2.54 cm to 5.08 cm) washed river stone with a minimum of 85% retained on a ¾" (1.91 cm) screen (#4) or 1" (2.54 cm) screen (#3).

Nominal 2½" (6.35 cm) Aggregate: The proper application of roofing materials is as important to the satisfactory performance of the roof system as the materials themselves.

Pavers: Standard pavers (minimum 18 psf [88 kg/m2]), or interlocking lightweight pavers (minimum 10 psf [49 kg/m2), may be substituted for nominal 1½" (3.81 cm) stone. Interlocking, lightweight pavers with documented or demonstrated equivalent wind performance data, or 22 psf (107 kg/m2) standard pavers may be substituted for nominal 2½" (6.35 cm) stone.

When pavers are used as ballast, and these pavers do not incorporate integral drainage channels, the pavers must be placed on supports or pedestals. These supports or pedestals can either be commercially available products or 6" (15.24 cm) square pieces of JM EPDM Walkpad (to give an approximate ½" [1.27 cm] air space). These supports should be located at the intersection of the corners of the paver blocks. All four corners of adjacent pavers should rest on the same 6" (15.24 cm) square piece of JM EPDM Walkpad or pedestal. The approximate ½" (1.27 cm) air space between the pavers and the membrane will allow moisture vapor to vent to the atmosphere. When concrete pavers with drainage channels are installed directly over the roof, one layer of EPDM Protective Stone Mat or cured JM EPDM Membrane must be installed between the paver and the membrane. If crushed rock or ballast with sharp edges is used, a protective layer of EPDM Protective Stone Mat or other approved protection material must be used under the ballast. Gravel ballast must be clean and free of excessive fines, to avoid clogging the drains.

JM recommends that sufficient ballast be applied to the membrane surface as soon as areas are completed, to provide immediate protection against wind uplift.

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JM roofing systems do not require coating and must not be coated with any material not approved by JM. Bituminous based coatings will damage EPDM roofing system products and cannot be safely used for either coating or repairing EPDM roofing systems. JM recommends using TopGard 5000, a 100% acrylic elastomeric coating, for JM EPDM roofing membrane systems.

TopGard Coatings Application

When applying TopGard 5000, use a brush, roller or spray equipment. Make sure that all surfaces are clean, dry and free of any dirt, grease, oil or other debris that may interfere with proper adhesion.

It is recommended that coating be applied in two coats. The first coat should be completely dry (normally 4 to 12 hours) before applying the second coat. Temperatures must be 50°F (10°C) and rising during time of application. Do not apply TopGard 5000 within 24 hours of anticipated rain, dew or freezing temperatures. As with any coating, cooler temperatures and high humidity will slow the cure time.

6.0 Seaming, T-joints, Penetrations and Other Considerations

Seaming of Laps

Note: Surfaces to be spliced must be cleaned and primed prior to the application of seam tape. Store seam tapes and peel and stick products in the shade when rooftop temperature exceed 75°F (24°C).

JM EPDM Tape Primer

Thoroughly mix the JM EPDM Tape Primer prior to application to suspend solids contained in the mixture. Periodically stir during use (every 5 to 10 minutes) to keep the solids in suspension.

Fold back the top sheet, exposing the surfaces to be cleaned. Use JM EPDM Tape Primer to thoroughly clean talc, dirt, etc., from the surface of both sheets in the area to be joined. Using a scrubbing pad, apply JM EPDM Tape Primer to the cleaned area at the rate of 200 ft./gal (4.9 m2/l). Apply JM EPDM Tape Primer past the marked area and allow to dry thoroughly prior to application of tape products. **Do not dilute JM EPDM Tape Primer.**

JM Weathered Membrane Cleaner

JM Weathered Membrane Cleaner is an organic solvent mixture designed as a cleaning agent. Use to thoroughly clean dirt from JM EPDM membranes prior to applying primers if needed.

The splice area must be completely free of all dust and talc and surfaces must be maintained free from moisture, oil and other foreign contaminants until the splice has been completed. Areas with heavy accumulations of dirt or other contaminants should be washed with warm water and a low sudsing soap and allowed to completely dry before using JM EPDM Tape Primer.

EPDM Tape Primer

Turn the scrubbing pads every 100 feet and change them often to ensure that the release agent and dirt are completely removed from the sheet. Particular attention should be given to cleaning the factory splices in the membrane, since release agent tends to accumulate in this area during the manufacturing process. Scrub the JM EPDM Tape Primer into the factory splice in the direction of the factory splice to remove the release agent.

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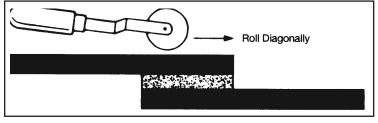


Seam Tape

Field Fabricated Seaming

The splice area must be completely free of all dust, debris and other contaminants. Fold back the top sheet and hold the membrane away from the seam area using the "tack back" primer method or other acceptable means. Using a scrub pad apply primer to both the folded EPDM membrane and bottom sheet in an area wider than the lap to ensure bonding to a primed surface. Allow the primer to flash off to a tacky state; utilize the push pull test technique to verify proper primer dryness.

Unroll approximately a 15" (38.1 cm) length of the tape and apply to the bottom sheet along the lap edge. Continue unrolling 15" (38.1 cm) lengths of EPDM Seam Tape and secure in place along the entire length of the seam. With the release liner still in place, roll the entire length of the seam with a 2" (50 mm) steel or silicone rubber roller to ensure good contact of the EPDM Seam Tape with the bottom EPDM sheet. Roll the top EPDM sheet back over the EPDM Seam Tape, with the release liner still in place, leaving approximately ¼" (6 mm) of tape exposed. The top EPDM sheet should fall freely onto the exposed EPDM Seam Tape surface. Remove the release liner from the EPDM Seam Tape by peeling it back parallel to the roof surface and away from the splice at a 45° angle.



Hand roll first diagonally across the entire splice toward the outside edge, and then along the length of the splice. Provide sufficient pressure to ensure a good seal but avoid excessive pressure that could stretch or deform the tape. Each membrane sheet is marked along the edge with lap lines. These lap lines indicate the minimum overlap required for mechanically fastened systems. All EPDM mechanically attached systems require 6" of seaming with tape.

Tape to Standard Sheet Seaming (Adhered and Ballasted)

This method is to be utilized when seaming JM FIT and R FIT rolls with standard sheets. The splice area must be completely free of all dust, debris and other contaminants. Fold back the top sheet and hold the membrane away from the seam area using the "tack back" primer method or other acceptable means. Using a scrub pad apply primer to the untaped EPDM membrane in an area wider than the lap to ensure bonding to a primed surface. Allow the primer to flash off to a tacky state; utilize the push pull test technique to verify proper primer dryness. Once dry, roll the top sheet back into place forming the lap. Starting at one end of the lap, remove the release liner from the EPDM Seam Tape by peeling it back parallel to the roof surface and away from the splice at a 45° angle. Hand roll using a 2" (50 mm) steel or silicone rubber roller first diagonally across the entire splice toward the outside edge, and then along the length of the splice. Provide sufficient pressure to ensure a good seal but avoid excessive pressure that could stretch or deform the tape. Each membrane sheet is marked along the edge with lap lines. These lap lines indicate the minimum overlap required for mechanically fastened systems.

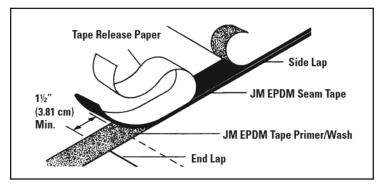
All EPDM mechanically attached systems requires 6" tape for seaming.



Tape to Tape Seaming

This method is to be utilized when seaming JM FIT and R FIT rolls to each other. Starting at one end of the lap simultaneously remove the plastic release liners on both the upper and lower JM EPDM FIT and R FIT panels by peeling them back parallel to the roof surface and away from the splice at a 45° angle. If preferred, remove the lower liner first followed by the top liner being careful not to exceed more than a 18" distance between the two. To ensure proper lap adhesion, hand roll with a 2" (5.08 cm) wide silicone rubber or steel roller, first diagonally across the entire splice toward the outside edge, and then along the length of the splice (for R - FIT (MF) application with polymer batten bar, ensure the tape is tight to the batten bar). Provide sufficient pressure to ensure a good seal but avoid excessive pressure that could stretch or deform the tape. EPDM Seam Tape splices must be overlapped a minimum of 2" (50 mm) to ensure a continuous tape surface.

Membrane end laps should be completed prior to making side laps. Special precautions must be taken at sheet end laps in order to minimize the impact of t-joints created with the side lap of the adjacent sheet. Approved slip sheet must be used between the JM EPDM Membrane and any polystyrene insulation product.



JM EPDM Peel & Stick Flashing

Clean and prime the area to be flashed with JM EPDM Tape Primer, or other approved cleaning method, as described in the "Seaming of Laps" section, to remove the talc and any dirt from the sheet, and to prime the surface for the tape application.

Unroll a manageable length of JM EPDM Peel & Stick Flashing and cut to length with scissors. Peel the release liner off the JM EPDM Peel & Stick Flashing. In certain details, i.e., corners, be sure to use the JM EPDM Peel & Stick Inside/Outside Corners with a split-back release film to prevent the flashing from sticking to itself. Press the exposed tape area firmly into place in the area to be flashed. Be careful to apply the JM EPDM Peel & Stick Flashing without over-stretching the material. Apply pressure to the installed flashing with a 2" (5.08 cm) wide silicone roller, first diagonally to the edge of the sheet, and then along the entire length of the flashing, to ensure proper adhesion.

Adjacent sheets of peel-and-stick flashing products must be lapped a minimum of 3" (7.62 cm) and primed with Tape Primer. Stitch the material tight in areas where the sheet makes elevation changes. Care should be taken during rolling to avoid scoring, gouging or thinning the product.

JM EPDM Peel & Stick T-Joint Patches

All t-joints in cured sheets and butt joints in field seams must be covered by a patch that extends a minimum of 3" (7.62 cm) beyond all seam edges. It is acceptable to use any uncured JM EPDM Peel & Stick Flashing product of the appropri-





JM EPDM Membrane Application Guide

ate size. The sheets are cleaned and primed as described previously. Remove the release liner and center the JM EPDM Peel & Stick Patch over the butt joint or t-joint and press it into place. Apply pressure to the installed patch with a 2" (5.08 cm) wide silicone roller to ensure proper adhesion. See flashing detail E-MS-02 for an illustration of a t-joint

JM EPDM Reinforced Termination Strip (RTS)

JM EPDM RTS has splice tape pre-applied along one edge of 6" (15.24 cm) reinforced JM EPDM Membrane. JM EPDM RTS with 3" Tape can be installed horizontally or vertically in the angle change with the pre-applied tape facing up and toward the field of the roof. See detail E-FW-B1 or E-FW-B2. Position seam fastening plates 1/8" (3.18 cm) to 1" (2.54 cm) from the angle change. 12" (30.48 cm) o.c. maximum spacing is required. Secure with an approved fastener. Do not fasten plates over the top of release film, as this will cause film to tear when removed. Roll the field membrane with a 3" wide primed area onto the exposed tape and apply hand pressure to the splice area.

Application of Water Cutoffs

Water cutoffs are used to temporarily adhere roofing membrane to the roofing system substrate or existing roof system at the end of each day's work, to prevent moisture from getting under the roofing system.

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Section Three: JM EPDM Mechanically Fastened Membrane Fastening Patterns

3

JM EPDM Mechanically Fastened Membrane Fastening Patterns

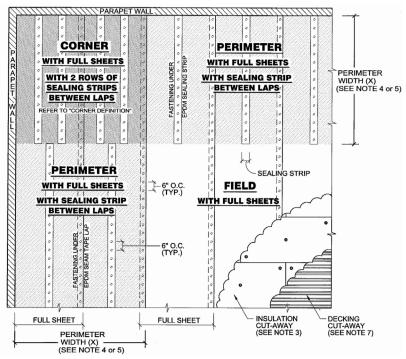


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Mechanically Attached JM Reinforced EPDM - 6" O.C. (Using 10" RPS)

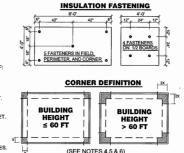


NOTES

- CALCULATE UPLIFT DESIGN PRESSURES IN ACCORDANCE WITH ASCE-7.
- FASTENING DIAGRAM IS BASED ON FM GLOBAL DATA SHEET 1-29.
- INSTALL INSULATION WITH LONG JOINTS IN A CONTINUOUS STRAIGHT LINE WITH END JOINTS STAGGERED.
- ROOF HEIGHT \$ 60 FT, THE PERIMETER (X) IS THE SMALLER DIMENSION OF: 10% OF THE SHORTEST SIDE (PLAN VIEW) OR 40% OF THE ROOF HEIGHT, BUT

NOT LESS THAN 4% OF THE SHORTEST SIDE (PLAN VIEW) OR 3 FEET.

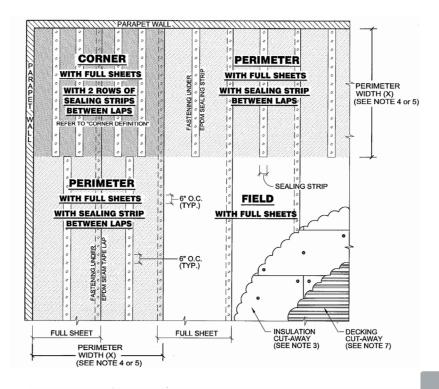
- ROOF HEIGHT > 60 FT, THE PERIMETER (X) IS: 10% OF THE SHORTEST SIDE (PLAN VIEW) BUT NOT LESS THAN 3 FEET.
- THE CORNERS MAY BE TREATED AS PERIMETERS IF THE PARAPET IS GREATER THAN OR EQUAL TO 3 FT ON ALL SIDES ACCORDING TO ASCE-7.
- MEMBRANE SIDE LAPS MUST RUN PERPENDICULAR TO METAL DECK FLUTES.



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Note: For the most current information on general guidelines, please refer to the System Considerations tab under Commercial Roofing Products on the JM Roofing Web site. For specifications, flashing details and general installation information please refer to the Application Tools tab.

Mechanically Attached JM EPDM - 6" O.C.



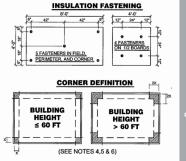
NOTES

- CALCULATE UPLIFT DESIGN PRESSURES IN ACCORDANCE WITH ASCE-7.
- FASTENING DIAGRAM IS BASED ON FM GLOBAL DATA SHEET 1-29.
- INSTALL INSULATION WITH LONG JOINTS IN A CONTINUOUS STRAIGHT LINE WITH END JOINTS STAGGERED.
- **ROOF HEIGHT \leq 60 FT**, THE PERIMETER (X) IS THE SMALLER DIMENSION OF: 10% OF THE SHORTEST SIDE (PLAN VIEW)

OR 40% OF THE ROOF HEIGHT, BUT

NOT LESS THAN 4% OF THE SHORTEST SIDE (PLAN VIEW) OR 3 FEET.

- ROOF HEIGHT > 60 FT, THE PERIMETER (X) IS: 10% OF THE SHORTEST SIDE (PLAN VIEW) BUT NOT LESS THAN 3 FEET.
- THE CORNERS MAY BE TREATED AS PERIMETERS IF THE PARAPET IS GREATER THAN OR EQUAL TO 3 FT ON ALL SIDES ACCORDING TO ASCE-7
- MEMBRANE SIDE LAPS MUST RUN PERPENDICULAR TO METAL DECK FLUTES.

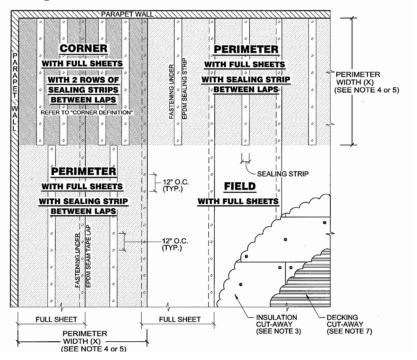


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Mechanically Fastened JM Reinforced EPDM - 12" O.C. (Using 10" RPS)



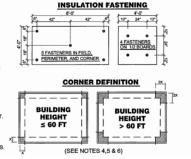
NOTES

- CALCULATE UPLIFT DESIGN PRESSURES IN ACCORDANCE WITH ASCE-7.
- 2. FASTENING DIAGRAM IS BASED ON FM GLOBAL DATA SHEET 1-29.
- INSTALL INSULATION WITH LONG JOINTS IN A CONTINUOUS STRAIGHT LINE WITH END JOINTS STAGGERED.
- ROOF HEIGHT ≤ 60 FT, THE PERIMETER (X) IS THE SMALLER DIMENSION OF: 10% OF THE SHORTEST SIDE (PLAN VIEW)

40% OF THE ROOF HEIGHT, BUT

NOT LESS THAN 4% OF THE SHORTEST SIDE (PLAN VIEW) OR 3 FEET.

- ROOF HEIGHT > 60 FT, THE PERIMETER (X) IS: 10% OF THE SHORTEST SIDE (PLAN VIEW) BUT NOT LESS THAN 3 FEET.
- THE CORNERS MAY BE TREATED AS PERIMETERS IF THE PARAPET IS GREATER THAN OR EQUAL TO 3 FT ON ALL SIDES ACCORDING TO ASCE-7
- MEMBRANE SIDE LAPS MUST RUN PERPENDICULAR TO METAL DECK FLUTES.

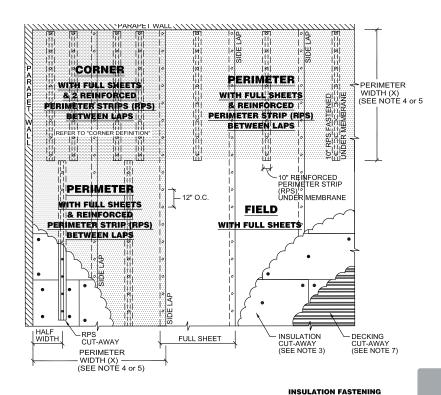


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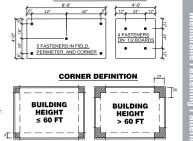


Mechanically Attached JM EPDM - 12" O.C.



NOTES

- CALCULATE UPLIFT DESIGN PRESSURES IN ACCORDANCE WITH ASCE-7.
- FASTENING DIAGRAM IS BASED ON FM GLOBAL DATA SHEET 1-29
- INSTALL INSULATION WITH LONG JOINTS IN A CONTINUOUS STRAIGHT LINE WITH END JOINTS STAGGERED.
- ROOF HEIGHT 5 60 FT. THE PERIMETER (X) IS THE SMALLER DIMENSION OF:
 10% OF THE SHORTEST SIDE (PLAN VIEW)
 OR
 40% OF THE ROOF HEIGHT,
 BUT
 NOT LESS THAN 4% OF THE SHORTEST SIDE (PLAN VIEW) OR 3 FEET.
- ROOF HEIGHT > 60 FT, THE PERIMETER (X) IS: 10% OF THE SHORTEST SIDE (PLAN VIEW) BUT NOT LESS THAN 3 FEET
- THE CORNERS MAY BE TREATED AS PERIMETERS IF THE PARAPET IS GREATER THAN OR EQUAL TO 3 FT ON ALL SIDES ACCORDING TO ASCE-7.
- MEMBRANE SIDE LAPS MUST RUN PERPENDICULAR TO METAL DECK FLUTES.



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4

JM EPDM Membrane Flashing Details



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Disclaimer:

The EPDM Roofing Systems Commercial Roofing Application Guide is intended as a guide only; actual conditions encountered during installation may vary from jobsite to jobsite. By providing this guidance, Johns Manville assumes no responsibility for quality of installation, field workmanship, building code compliance, or job safety. Johns Manville Safety Data Sheets (MSDS) are available with specific product safety information. For information on other Johns Manville thermal insulations and systems, call (800) 922-5922 or visit JM.com.





T = TPO

F-MS-08 New

Single Ply Roofing Systems Detail Specification

Isometric (Only Isometric Views of 2D Details End With "I"

Membrane Type -> E-FW-M1I
P = PVC

<u>Detail Type</u>
* FW = Flashing Wall

MS = Membrane Seaming
FC = Flashing Curb/Corner

P = Protection
FE = Flashing Edge

DV = Drains/Vents
FP = Flashing Penetration

TI = Tie In Flashing

EJ = Expansion Joint

__ <u>Detail Designation & Number</u>

B = Base

CM = Coted Metal

= Cover Tape= Intermediate

M = Master

* Flashing Wall (FW) Details have Master Details (M) in both 2D and Isometric that coordinate all the other Flashing Wall (FW) details

P = Pre-manufactured (Metal)

T = Top of Wall

V = Various (Miscellaneous)

New Detail Num.	Old Detail Num.	Attachment Method Detail Description	MF	FA	BALLASTED	Pg. No.
	LASHING WAL	L DETAILS				
MASTER I	<u>DETAILS</u>					
E-FW-M1	New	EPDM Base & Wall Flashing with Coping Master Detail	Χ	Χ	Χ	4-4
E-FW-M1I	New	EPDM Base & Wall Flashing with Coping Isometric View Master Detail	Χ	Χ	Χ	4-5
BASE TIE	-IN DETAILS					
E-FW-B1	EB-2T(CF)	Base Flashing with Horizontal Termination Strip (RTS)	Χ	Χ	Χ	4-6
E-FW-B2	EB-3T	Base Flashing with Vertical Termination Strip (RTS)	Χ	Χ	Χ	4-7
E-FW-B3	EB-18T(CF)	Base Tie-In - Fastener & Plate	Χ	Χ	Χ	4-8
E-FW-B4	EB-14T	Base Tie-In - Fastener & Plate On Wall	Χ	Χ	Χ	4-9
INTERME	DIATE TERMI	NATION DETAILS				
E-FW-I	EB-18T	EPDM Intermediate Termination with Counter Flashing & Cut-In Reglet	Χ	Χ	Χ	4-10
E-FW-I2	New	EPDM Intermediate Termination with Surface Mounted Counter Flashing	Χ	Χ	Χ	4-11
E-FW-I3	EB-18T	EPDM Intermediate Termination with Termination Bar	Χ	Χ	Χ	4-12
E-FW-14	New	EPDM Intermediate Termination with Through-Wall Counter Flashing	Χ	Χ	Χ	4-13
E-FW-I5	New	EPDM Intermediate Termination Below Wall Cladding	Χ	Χ	Χ	4-14
TOP OF V	VALL DETAILS					
E-FW-T1	New	Fabricated Metal Coping Over Adhered EPDM	Χ	Χ	Χ	4-15
E-FW-T2	EB-18T(COP)	Presto Lock Coping System Over EPDM	Χ	Χ	Χ	4-16
E-FW-T3	New	Presto-Tite Fascia System On Sloped Parapet	Χ	Χ	Χ	4-17
E-FW-T4	New	Perma-Tite Continuous Cleat Coping System Over EPDM	Χ	Χ	Χ	4-18
EPDM M	EMBRANE SE	AMING DETAILS				
E-MS-01	New	Reinforced EPDM Membrane Cut Edge Lap Caulk	Χ	Χ	Χ	4-19
E-MS-02	EL-14T-A	EPDM Membrane Side Lap & T-Joint		Χ	Χ	4-20
E-MS-03	New	EPDM Side Lap & T-Joint 30 Year		Χ		4-21
E-MS-04	EL-13T	EPDM Side Lap & T-Joint 30 Year		Χ		4-22
E-MS-05	EL-4T	In-Lap Fastening Method-Mechanically Attached	Χ			4-23
E-MS-06	New	In-Lap Fastening Method-Steel Deck	Χ			4-24
E-MS-07	New	In-Lap Fastening Method-Plywood Deck	Χ			4-25

In-Lap Fastening Method-Concrete Deck

4-26

Χ



JM EPDM Membrane Flashing Details

New Detail	Old Detail	Attachment				D.,.
	Number	Method Detail Description	MF	FA	BALLASTED	Pg. No.
E-MS-09	New	In-Lap Fastening Method-Wood Plank Deck	Χ			4-27
E-MS-10	New	Reinforced Perimeter Strip Fastening Method	Χ			4-28
E-MS-11	EL-18T	Continuous Strip Fastening Method	Χ			4-29
E-MS-12	New	Polymer Batten Strip Fastening Method	Χ	Χ	Χ	4-30
E-MS-13	New	Slope Transition-Valley	Χ	Χ	Χ	4-31
E-MS-14	New	Slope Transition-Ridge		Χ	Χ	4-32
E-MS-PT1	New	Tape/Standard Sheet Assembly - Pre-Taped		Χ	Χ	4-33
E-MS-PT2	New	Tape/Standard Sheet Side Lap & T-Joint - Pre-Taped		Χ	Χ	4-34
E-MS-PT3	New	Tape/Standard Sheet Side Lap & T-Joint 30 Year - Pre-	Taped	Χ	Χ	4-35
E-MS-PT4	New	Tape/Standard Sheet Side Lap & T-Joint 30 Year - Pre-	Taped	Χ	Χ	4-36
E-MS-PT5	New	Tape/Tape Assembly - Pre-Taped		Χ	Χ	4-37
E-MS-PT6	New	Tape/Tape Side Lap & T-Joint - Pre-Taped		Χ	Χ	4-38
E-MS-PT7	New	Tape/Tape Side Lape & T-Joint 30 Year - Pre-Taped		Χ	Χ	4-39
E-MS-PT8	New	Tape/Tape Side Lap & T-Joint 30 Year - Pre-Taped		Χ	Χ	4-40
E-MS-PT9	New	EPDM R-FIT Membrane Tape/Tape Side Lap with Batten Std	Χ			4-41
EPDM FL	ASHING CU	JRB & CORNER DETAILS				
E-FC-01	EB-31	Prefabricated Metal Curb Base Flashing	Χ	Χ	Χ	4-42
E-FC-02	EB-33T	Roof Hatch	Χ	Χ	Χ	4-43
E-FC-03	EM-3T	EPDM Inside Corner with RTS Strips	Χ	Χ	Χ	4-44
E-FC-04	New	EPDM Inside Corner with RTS Strips 30 Year	Χ	Χ		4-45
E-FC-05	New	EPDM Inside Corner with Seam Tape	Χ	Χ	Χ	4-46
E-FC-06	New	EPDM Inside Corner with Seam Tape 30 Year	Χ	Χ		4-47
E-FC-07	EM-2T	EPDM Outside Corner with RTS Strips	Χ	Χ	Χ	4-48
E-FC-08	New	EPDM Outside Corner with RTS Strips 30 Year	Χ	Χ		4-49
E-FC-09	New	EPDM Outside Corner with Seam Tape	Χ	Χ	Χ	4-50
E-FC-10	New	EPDM Outside Corner with Seam Tape 30 Year	Χ	Χ		4-51
E-FC-11	New	Prefabricated water tight metal Curb base flashing	Χ	Χ		4-52
E-FC-12	New	Wood Curb Base Flashing	Χ	Χ		4-53
EPDM PF	ROTECTION					
E-PT-01	New	Support-Light	Χ	Χ	Χ	4-54
E-PT-02	New	Support-Medium	Χ	Χ	Χ	4-55
E-PT-03	New	Support-Heavy	Χ	Χ	Χ	4-56
E-PT-04	New	Walkway-Concrete Paver	Χ	Χ	Χ	4-57
E-PT-05	New	EPDM Peel & Stick Walkpads Over EPDM Membrane	Χ	Χ	Χ	4-58
E-PT-06	New	Ballasted EPDM			Χ	4-59
E-PT-07	New	Lightning Rod-Wall Mount	Χ	Χ	Χ	4-60
E-PT-08	EM-11	Lightning Rod-Roof Mount	Χ	Χ	Χ	4-61
		OGE DETAILS				
		ED (METAL) DETAILS				
E-FE-P1	New	JM Presto Lock Fascia Over EPDM	Χ	Χ	Χ	4-62
E-FE-P2	EE-11T	JM Presto-Tite Fascia System For Single Ply Systems	Χ	Χ	Χ	4-63
E-FE-P3	New	Rail Fascia System For Single Ply Roofs	Χ	Χ	Χ	4-64
E-FE-P4	New	JM Metal Drip Edge with JM EPDM Seaing Strip	Χ	Χ		4-65
E-FE-P5	New	JM Gravel Stop with JM EPDM Sealing Strip	Χ	Χ	Χ	4-66
<u>VARIOUS</u>	(MISCELLA	ANEOUS) DETAILS				
E-FE-V1	New	Wood Nailer Attachement	Χ	Χ	Χ	4-67
E-FE-V2	EE-5T	Metal Drip Edge with EPDM Sealing Strip	Χ	Χ		4-68
E-FE-V3	New	Metal Drip Edge with EPDM Sealing Strip 30 Year	Χ	Χ		4-69
E-FE-V4	New	Gravel Stop with JM EPDM Sealing Strip	Χ	Χ	Χ	4-70
E-FE-V5	New	Gravel Stop with JM EPDM Sealing Strip 30 Year	Χ	Χ		4-71
E-FE-V6	EE-10T	Gutter & Metal Edge with EPDM Sealing Strip	Χ	Χ		4-72
E-FE-V7	EE-3T	Gutter & JM Drain Bar			Χ	4-73
E-FE-V8		Gutter & Term Bar	Χ	Χ		4-74



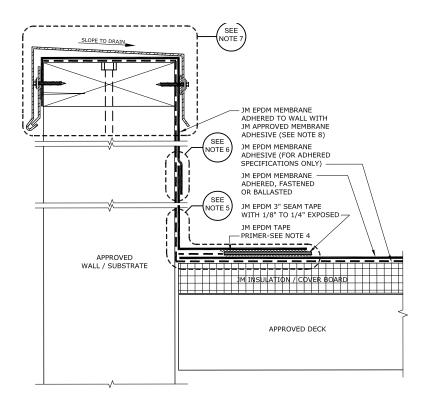
JM EPDM Membrane Flashing Details

New Detail Number	Old Detail Number	Attachment Method Detail Description	MF	FA	BALLASTED	Pg. No.
EPDM D	RAINS & VEN	NTS DETAILS				
E-DV-01	EP-7	Vent Pipe	Χ	Χ	Х	4-75
E-DV-02	New	Vent Pipe 30 Year	Χ	Χ		4-76
E-DV-03	EM-9	Through-Wall Scupper	Χ	Χ		4-77
E-DV-04	New	Through-Wall Scupper 30 Year	Χ	Χ		4-78
E-DV-04I	EM-8	Through-Wall Scupper	Χ	Χ		4-79
E-DV-05	ED-1	Primary Scupper with Tapered Drainage Sump	Χ	Χ		4-80
E-DV-06	ED-3	Low Wall Primary Scupper Flashing	Χ	Χ		4-81
E-DV-07	ED-8	Overflow Scupper	Χ	Χ	Χ	4-82
E-DV-08	ED-1	Primary Drain Sump-Low Slope-Less Than 3:12 Slope		Χ	Χ	4-83
E-DV-09	ED-2	Primary Drain Sump- Steep Slope Greater Than 3:12 Slope Mech. Attached	Χ			4-84
E-DV-10	ED-3	Primary Drain Sump- Steep Slope Greater Than 3:12 Slope Adhered		Χ	Χ	4-85
EPDM FL	ASHING PE	NETRATION DETAILS				
E-FP-01	EP-1T	JM Peel & Stick Pipe Boot	Χ	Χ	Χ	4-86
E-FP-02	EP-2T	Field Fabricated Vent Pipe	Χ	Χ	Χ	4-87
E-FP-03	New	Field Fabricated Vent Pipe 30 Year	Χ	Χ		4-88
E-FP-04	EP-5T	Metal Penetration Pocket Over EPDM	Χ	Χ	Χ	4-89
E-FP-05	New	Vent Pipe (Hot)	Χ	Χ	Χ	4-90
E-FP-06	EP-6	EPDM Pourable Sealer Pocket	Χ	Χ	Χ	4-91
E-FP-07	New	JM Peel & Stick Pipe Boot with Sealing Strip 30 Year	Χ	Χ	Χ	4-92
EPDM TI	E-IN FLASHI					
E-TI-01	EM-15T	EPDM Transition To Sloped Shingle Roof	Χ	Χ	Χ	4-93
E-TI-02	New	Curb Tie-In To Roof	Χ	Χ	Χ	4-94
E-TI-03	EM-6B	Tie-In- Bituminous To EPDM		Χ	Χ	4-94
		OINT DETAILS				
E-EJ-01	EJ-5T	Expansion Joint-Roof To Wall	Χ	Χ	Χ	4-95
E-EJ-02	EJ-6	Expansion Joint-Roof To Roof	Χ	Χ	X	4-96
E-EJ-03	New	Expand-O-Flash Curb To Wall Expansion Joint Cover Style CF/EJ	Χ	Χ	Χ	4-97
E-EJ-04	EJ-3T	Expand-0-Flash Roof To Roof Expansion Joint Cover Style EJ	Χ	Χ	Χ	4-98
E-EJ-05	EJ-4T	Expand-0-Flash Roof To Wall - Style EJ	Χ	Χ		4-100
E-EJ-06	EJ-1B	Expand-0-Flash Curb To Curb Expansion Joint Cover Style CF	Χ	Χ		4-101
E-EJ-07	EJ-2T	Expand-0-Flash Curb To Wall Expansion Joint Cover Style CF/EJ	X	X		4-102
E-EJ-08	EJWC-1B	Expand-O-Flash Curb To Curb Expansion Joint Cover Style EJ/WC	Χ	Χ		4-103
E-EJ-09 VAPOR F	New BARRIER SA	Expand-0-Flash Curb To Wall-Style EJ/WC	Χ	Χ	Χ	4-104
VB-1		(ALT) JM Vapor Barrier SA - Wall Base Detail - Alt	Χ	Χ	Х	4-105
VB-1		JM Vapor Barrier SA - Wall Base Detail	Χ	Χ		4-106
VB-2		JM Vapor Barrier SA - Pipe Penetration Detail	Χ	Х		4-107
VB-2 VB-3		•	X	Χ		
		JM Vapor Barrier SA - Drain Detail				4-108
VB-4		JM Vapor Barrier SA - Detail at Field Laps	X	X		4-109
VB-5		JM Vapor Barrier SA - Outside Curb Detail	X	X		4-110
VB-6		JM Vapor Barrier SA - Inside Curb Detail	Χ	Χ	Χ	4-111





EPDM Base & Wall Flashing with Coping Master Detail



- L. REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP-TO-DATE INFORMATION.
- PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.
- 3. ANY CARPENTRY OR METAL WORK SHOULD BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS AND/OR PROJECT SPECS. THESE COMPONENTS SHOULD BE REVIEWED AND APPROVED BY A LICENSED DESIGN PROFESSIONAL
- 4. OVERLAP ADJOINING EPDM MEMBRANES AT ALL LOCATIONS A MINIMUM OF 3" (76 mm) AND UP TO 6" (152 mm) DEPENDING ON SPECIFICATION/GUAKANTEE. EPDM SEAM TAPE IS USED TO SEAM EPDM MEMBRANE LAPS. JM EPDM TAPE PRIMER OR JM SINGLE PLY MEMBRANE PRIMER (LOW VOC) MUST BE APPLIED ON ALL SURFACES COMING INTO CONTACT WITH JM EPDM PEEL & STICK PRODUCTS.
- 5. FOR JM APPROVED BASE FLASHING FASTENING METHODS SEE E-FW-B DETAILS.
- 5. FOR JM APPROVED INTERMEDIATE FLASHING FASTENING METHODS SEE E-FW-I DETAILS. MINIMUM FLASHING TERMINATION HEIGHT IS 8" (203 mm) ABOVE ROOF SURFACE ON ANY JM APPROVED SUBSTRATE, IE. PLYWOOD, SECUROCK® GYPSUM-FIBER, AND DENSDECK®.
- 7. FOR JM APPROVED TOP OF WALL FLASHING METHODS SEE E-FW-T DETAILS.
- 3. JM APPROVED ADHESIVES FOR USE ON VERTICAL FLASHING APPLICATIONS INCLUDES JM LVOC MEMBRANE ADHESIVE (TPO & EPDM), AND JM MEMBRANE BONDING ADHESIVE (TPO & EPDM) ONLY.
- ON RE-ROOFING PROJECTS, AN APPROVED ASPHALT BARRIER MUST BE INSTALLED OVER THE EXISTING SUBSTRATE TO
 FULLY SEPARATE THE JM EPDM FLASHING MEMBRANE FROM ANY INCOMPATIBLE MATERIALS.

Maximum Guarantee Term: 30 Years

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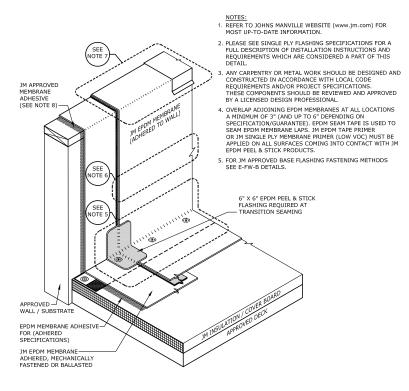
Note: For the most current information on general guidelines, please refer to the System Considerations tab under Commercial Roofing Products on the JM Roofing Web site. For specifications, flashing details and general installation information please refer to the Application Tools tab.



Detail No. E-FW-M1I (New Detail)



EPDM Base & Wall Flashing with Coping Isometric View Master Detail



NOTES CONTINUED:

- NOTES CONTINUED:

 A PPROVED INTERMEDIATE FLASHING FASTENING METHODS SEE E-FW-I DETAILS.

 MINIMUM FLASHING TERMINATION HEIGHT IS 8" (203 mm) ABOVE ROOF SURFACE ON ANY
 JM APPROVED SUBSTRATE, IE. PLYWOOD, SECUROCK® GYPSUM-FIBER, AND DENSDECK®.
- 7. FOR JM APPROVED TOP OF WALL FLASHING METHODS SEE E-FW-T DETAILS.
- JM APPROVED ADHESIVES FOR USE ON VERTICAL FLASHING APPLICATIONS INCLUDES JM LVOC
 MEMBRANE ADHESIVE (TPO & EPDM) AND JM MEMBRANE BONDING ADHESIVE (TPO & EPDM) ONLY.
- ON RE-ROOFING PROJECTS, AN APPROVED ASPHALT BARRIER MUST BE INSTALLED OVER THE EXISTING SUBSTRATE TO FULLY SEPARATE THE JM EPDM FLASHING MEMBRANE FROM ANY INCOMPATIBLE MATERIALS.

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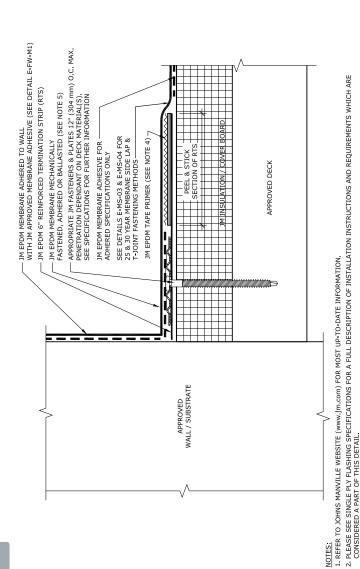
JM EPDM TAPE PRIMER OR JM SINGLE PLY MEMBRANE PRIMER (LOW VOC) MUST BE APPLIED ON ALL JM EPDM PEEL & STICK PRODUCTS.

THESE COMPONENTS SHOULD BE REVIEWED AND APPROVED BY A LICENSED DESIGN PROFESSIONAL

REINFORCED IM EPDM MEMBRANE IS REQUIRED FOR MECHANICALLY FASTENED INSTALLATIONS.

ROLL MEMBRANE WITH HAND ROLLER UNDER PRESSURE AT PEEL & STICK.

Base Flashing with Horizontal Termination Strip (RTS)



Maximum Guarantee Term: 30 Years

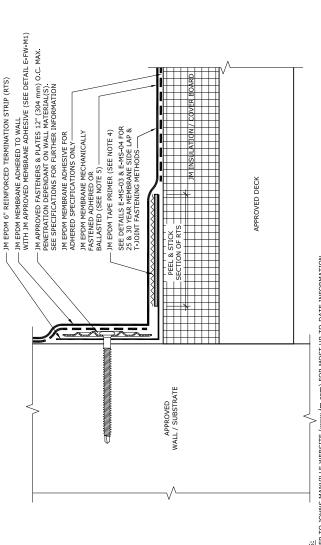
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Note: For the most current information on general guidelines, please refer to the System Considerations tab under Commercial Roofing Products on the JM Roofing Web site. For specifications, flashing details and general installation information please refer to the Application Tools tab.





Base Flashing with Vertical Termination Strip (RTS)



PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE REFER TO JOHNS MANVILLE WEBSITE (www.im.com) FOR MOST UP-TO-DATE INFORMATION. CONSIDERED A PART OF THIS DETAIL

ANY CARPENTRY OR METAL WORK SHOULD BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS AND/OR PROJECT SPECIFICATIONS. THESE COMPONENTS SHOULD BE REVIEWED AND APPROVED BY A LICENSED DESIGN PROFESSIONAL

JM EPDM TAPE PRIMER OR JM SINGLE PLY MEMBRANE PRIMER (LOW VOC) MUST BE APPLIED ON ALL JM EPDM PEEL & STICK PRODUCTS. REINFORCED JM EPDM MEMBRANE IS REOUIRED FOR MECHANICALLY FASTENED INSTALLATIONS. ROLL MEMBRANE WITH HAND ROLLER UNDER PRESSURE AT PEEL & STICK.

Maximum Guarantee Term: 30 Years

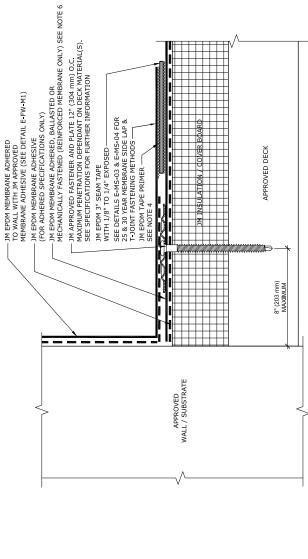
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Note: For the most current information on general guidelines, please refer to the System Considerations tab under Commercial Roofing Products on the JM Roofing Web site. For specifications, flashing details and general installation information please refer to the Application Tools tab.





Base Tie-In - Fastener & Plate



2. PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION REFER TO JOHNS MANVILLE WEBSITE (www.im.com) FOR MOST UP-TO-DATE INFORMATION.

INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.

ANY CARPENTRY OR METAL WORK SHOULD BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS AND/OR PROJECT SPECIFICATIONS. THESE COMPONENTS SHOULD BE REVIEWED AND APPROVED BY A LICENSED DESIGN PROFESSIONAL. JM EPDM TAPE PRIMER OR JM SINGLE PLY MEMBRANE PRIMER (LOW VOC) MUST BE APPLIED ON ALL SURFACES COMING INTO

CONTACT WITH JM EPDM PEEL & STICK PRODUCTS. ROLL MEMBRANE WITH HAND ROLLER UNDER PRESSURE AT SEAM. 5. 1/8" TO 1/4" OF EPDM SEAM TAPE MUST BE EXPOSED.

REINFORCED JM EPDM MEMBRANE IS REQUIRED FOR MECHANICALLY FASTENED INSTALLATIONS ONLY.

Maximum Guarantee Term: 20 Years

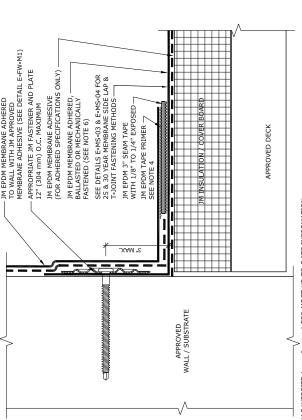
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Base Tie-In - Fastener & Plate On Wall





PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE REFER TO JOHNS MANVILLE WEBSITE (www im. com.) FOR MOST UP-TO-DATE INFORMATION.

CONSIDERED A PART OF THIS DETAIL.

3. ANY CARPENTRY OR METAL WORK SHOULD BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS AND/OR PROJECT SPECIFICATIONS. THESE COMPONENTS SHOULD BE REVIEWED AND APPROVED BY A LICENSED DESIGN PROFESSIONAL

JM EPDM TAPE PRIMER OR JM SINGLE PLY MEMBRANE PRIMER (LOW VOC) MUST BE APPLIED ON ALL SURFACES COMING INTO CONTACT WITH JM EPDM PEEL & STICK PRODUCTS. ROLL MEMBRANE WITH HAND ROLLER UNDER PRESSURE AT SEAM. 5. 1/8" TO 1/4" OF EPDM SEAM TAPE PLUS MUST BE EXPOSED.

5. 1/3 10 1/4 O L DE PER DESTRETAR EL COMO DE CALOSECE. 6. REINFORCED JM EPDM MEMBRANE IS REQUIRED FOR MECHANICALLY FASTENED INSTALLATIONS.

Maximum Guarantee Term: 20 Years

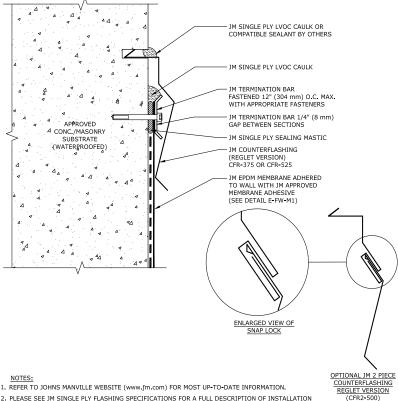
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EPDM Intermediate Termination with Counter Flashing & Cut-In Reglet



- PLEASE SEE JM SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.
- 3. ANY CARPENTRY OR METAL WORK SHOULD BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS AND/OR PROJECT SPECIFICATIONS. THESE COMPONENTS SHOULD BE REVIEWED AND APPROVED BY A LICENSED DESIGN PROFESSIONAL.
- ALL SEALANTS / CAULKING SHALL BE PERIODICALLY INSPECTED AND MAINTAINED BY THE BUILDING OWNER THROUGHOUT THE LIFE OF THE ROOF.
- TO ASSURE SURFACE MOUNTED TERMINATION PERFORM EFFECTIVELY, WATERPROOF AND MAINTAIN CONCRETE AND MASONRY SUBSTRATES.
- 6. MINIMUM FLASHING HEIGHT IS 8" (203 mm) ABOVE ROOF SURFACE.

Maximum Guarantee Term: 30 Years

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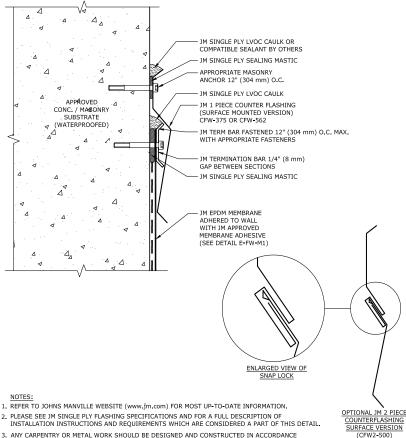
FOUR



Detail No. E-FW-I2 (New Detail)



EPDM Intermediate Termination with Surface Mounted Counter Flashing



- ANY CARPENTRY OR METAL WORK SHOULD BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS AND/OR PROJECT SPECIFICATIONS. THESE COMPONENTS SHOULD BE REVIEWED AND APPROVED BY A LICENSED DESIGN PROFESSIONAL.
- 4. ALL SEALANTS / CAULKING SHALL BE PERIODICALLY INSPECTED AND MAINTAINED BY THE BUILDING OWNER THROUGHOUT THE LIFE OF THE ROOF.
- 5. TO ASSURE SURFACE MOUNTED TERMINATIONS PERFORM EFFECTIVELY, WATERPROOF AND MAINTAIN CONCRETE AND MASONRY SUBSTRATES.
- 6. MINIMUM FLASHING HEIGHT IS 8" (203 mm) ABOVE ROOF SURFACE.

Maximum Guarantee Term: 30 Years

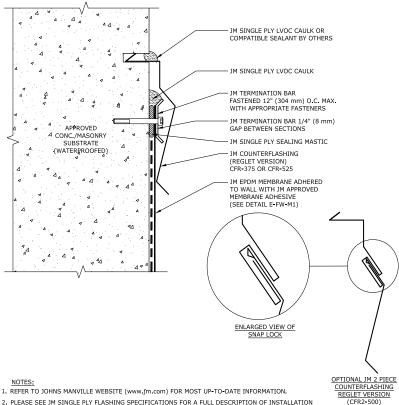
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EPDM Intermediate Termination with Termination Bar



- PLEASE SEE JM SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.
- 3. ANY CARPENTRY OR METAL WORK SHOULD BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS AND/OR PROJECT SPECIFICATIONS. THESE COMPONENTS SHOULD BE REVIEWED AND APPROVED BY A LICENSED DESIGN PROFESSIONAL.
- ALL SEALANTS / CAULKING SHALL BE PERIODICALLY INSPECTED AND MAINTAINED BY THE BUILDING OWNER THROUGHOUT THE LIFE OF THE ROOF.
- 5. TO ASSURE SURFACE MOUNTED TERMINATION PERFORM EFFECTIVELY, WATERPROOF AND MAINTAIN CONCRETE AND MASONRY SUBSTRATES.
- 6. MINIMUM FLASHING HEIGHT IS 8" (203 mm) ABOVE ROOF SURFACE.

Maximum Guarantee Term: 30 Years

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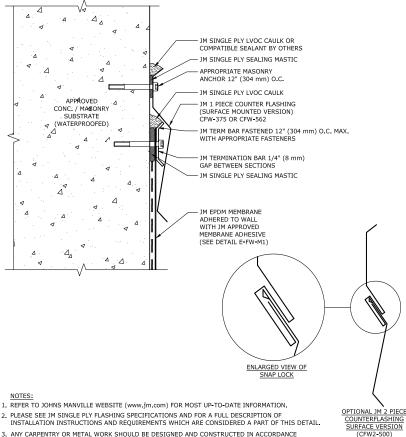
FOUR



Detail No. E-FW-I4 (New Detail)



EPDM Intermediate Termination with Through-Wall Counter Flashing



- ANY CARPENTRY OR METAL WORK SHOULD BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS AND/OR PROJECT SPECIFICATIONS. THESE COMPONENTS SHOULD BE REVIEWED AND APPROVED BY A LICENSED DESIGN PROFESSIONAL.
- 4. ALL SEALANTS / CAULKING SHALL BE PERIODICALLY INSPECTED AND MAINTAINED BY THE BUILDING OWNER THROUGHOUT THE LIFE OF THE ROOF.
- 5. TO ASSURE SURFACE MOUNTED TERMINATIONS PERFORM EFFECTIVELY, WATERPROOF AND MAINTAIN CONCRETE AND MASONRY SUBSTRATES.
- 6. MINIMUM FLASHING HEIGHT IS 8" (203 mm) ABOVE ROOF SURFACE.

Maximum Guarantee Term: 30 Years

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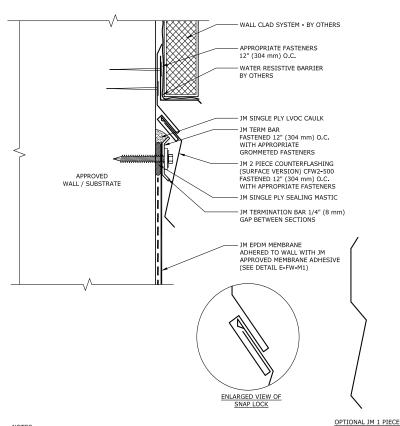
Detail No. E-FW-I5 (New Detail)



COUNTERFLASHING SURFACE VERSION

(CFW-375 & CFW-562)

EPDM Intermediate Termination Below Wall Cladding



NOTES:

- 1. REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP-TO-DATE INFORMATION.
- PLEASE SEE JM SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.
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- ALL SEALANTS / CAULKING SHALL BE PERIODICALLY INSPECTED AND MAINTAINED BY THE BUILDING OWNER THROUGHOUT THE LIFE OF THE ROOF.
- 5. MINIMUM FLASHING HEIGHT IS 8" (203 mm) ABOVE ROOF SURFACE.

Maximum Guarantee Term: 30 Years

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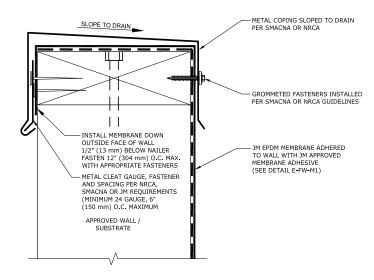
FOUR



Detail No. E-FW-T1 (New Detail)



Fabricated Metal Coping Over Adhered EPDM



NOTES:

- 1. REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP-TO-DATE INFORMATION.
- 2. PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.
- 3. ANY CARPENTRY OR METAL WORK SHOULD BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS AND/OR PROJECT SPECIFICATIONS. THESE COMPONENTS SHOULD BE REVIEWED AND APPROVED BY A LICENSED DESIGN PROFESSIONAL.

Maximum Guarantee Term: 20 Years

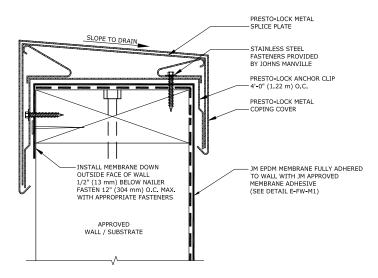
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Presto Lock Coping System Over EPDM



NOTES:

- 1. REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP-TO-DATE INFORMATION.
- 2. PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.
- ANY CARPENTRY OR METAL WORK SHOULD BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS AND/OR PROJECT SPECIFICATIONS. THESE COMPONENTS SHOULD BE REVIEWED AND APPROVED BY A LICENSED DESIGN PROFESSIONAL.
- 4. REFER TO JM PRESTO LOCK COPING INSTALLATION INSTRUCTIONS FOR PROPER FASTENING REQUIREMENTS.

Maximum Guarantee Term: 30 Years

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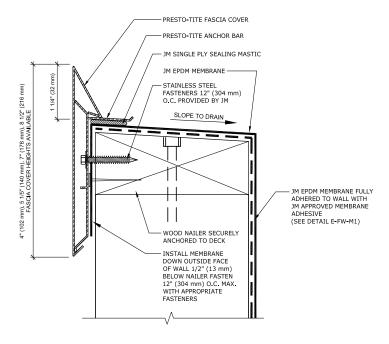
SECTION FOUR



Detail No. E-FW-T3 (New Detail)



Presto-Tite Fascia System On Sloped Parapet



THE PRESTO-TITE FASCIA SYSTEM SHOWN IS FOR SINGLE PLY ROOF SYSTEMS ONLY

NOTES:

- 1. REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP-TO-DATE INFORMATION.
- PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.
- 3. ANY CARPENTRY OR METAL WORK SHOULD BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS AND/OR PROJECT SPECIFICATIONS. THESE COMPONENTS SHOULD BE REVIEWED AND APPROVED BY A LICENSED DESIGN PROFESSIONAL.
- 4. REFER TO JM PRESTO TITE FASCIA INSTALLATION INSTRUCTIONS FOR PROPER FASTENING REQUIREMENTS.

Maximum Guarantee Term: 20 Years

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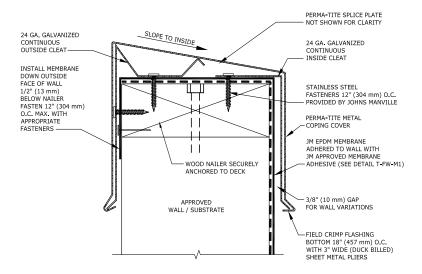
Note: For the most current information on general guidelines, please refer to the System Considerations tab under Commercial Roofing Products on the JM Roofing Web site. For specifications, flashing details and general installation information please refer to the Application Tools tab.



Detail No. E-FW-T4 (New Detail)



Perma-Tite Continuous Cleat Coping System Over EPDM



NOTES:

- 1. REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP-TO-DATE INFORMATION.
- 2. PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.
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- 4. REFER TO JM PERMA-TITE COPING INSTALLATION INSTRUCTIONS FOR PROPER FASTENING REQUIREMENTS.

Maximum Guarantee Term: 30 Years

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Note: For the most current information on general guidelines, please refer to the System Considerations tab under Commercial Roofing Products on the JM Roofing Web site. For specifications, flashing details and general installation information please refer to the Application Tools tab.

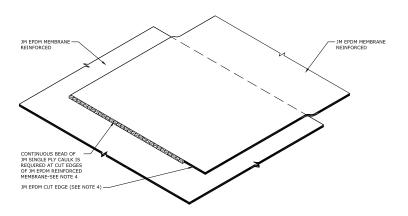




Detail No. E-MS-01 (New Detail)



Reinforced EPDM Membrane Cut Edge Lap Caulk



- NOTES:

 1. REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP-TO-DATE INFORMATION.
- 2. PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.

 3. ANY CARPENTY OR METAL WORK SHOULD BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS AND/OR PROJECT SPECIFICATIONS. THESE COMPONENTS SHOULD BE REVIEWED AND APPROVED BY A LICENSED DESIGN PROFESSIONAL.
- JM SINGLE PLY LVOC CAULK IS REQUIRED ON CUT OR NON ENCAPSULATED EDGES OF EPDM REINFORCED MEMBRANE.
 THIS INCLUDES FACTORY CUT MEMBRANE.

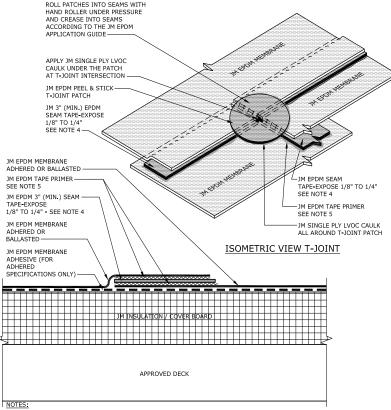
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EPDM Membrane Side Lap & T-Joint



- 1. REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP-TO-DATE INFORMATION.
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- 4. 1/8" TO 1/4" OF JM EPDM SEAM TAPE MUST BE EXPOSED ALONG ENTIRE LENGTH OF ALL SEAMS.
- 5. JM EPDM TAPE PRIMER OR JM SINGLE PLY MEMBRANE PRIMER (LOW VOC) MUST BE APPLIED ON ALL SURFACES COMING INTO CONTACT WITH JM EPDM PEEL & STICK PRODUCTS. ROLL MEMBRANE WITH HAND ROLLER UNDER PRESSURE AT SEAM IN ACCORDANCE WITH THE JM EPDM INSTALLATION GUIDE.
- 6. 6" SEAM TAPE REQUIRED FOR 25 YEAR GUARANTEE TERM.

Maximum Guarantee Term: 20 Years

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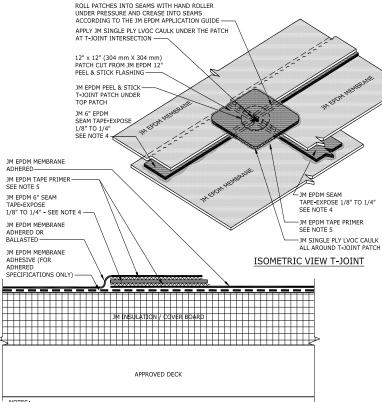
Note: For the most current information on general guidelines, please refer to the System Considerations tab under Commercial Roofing Products on the JM Roofing Web site. For specifications, flashing details and general installation information please refer to the Application Tools tab.



Detail No. E-MS-03 (New Detail)



EPDM Side Lap & T-Joint 30 Year



- NOTES:
- 1. REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP-TO-DATE INFORMATION.
- 2. PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.
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- 4. 1/8" TO 1/4" OF JM EPDM SEAM TAPE MUST BE EXPOSED ALONG ENTIRE LENGTH OF ALL SEAMS.
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- 6. 6" SEAM TAPE REQUIRED FOR 25 YEAR GUARANTEE TERM.

Maximum Guarantee Term: 30 Years

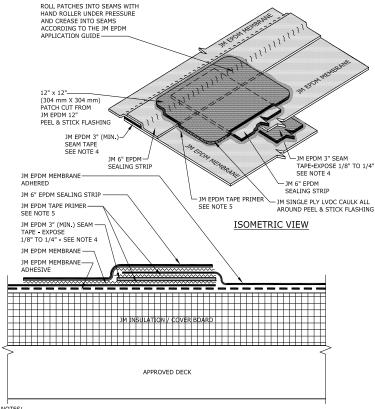
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Note: For the most current information on general guidelines, please refer to the System Considerations tab under Commercial Roofing Products on the JM Roofing Web site. For specifications, flashing details and general installation information please refer to the Application Tools tab.





EPDM Side Lap & T-Joint 30 Year



NOTES:

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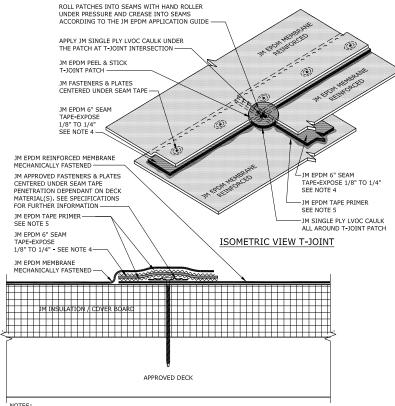
Note: For the most current information on general guidelines, please refer to the System Considerations tab under Commercial Roofing Products on the JM Roofing Web site. For specifications, flashing details and general installation information please refer to the Application Tools tab.



Detail No. E-MS-05 (Replaces EL-4T)



In-Lap Fastening Method-Mechanically Attached



- 1. REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP-TO-DATE INFORMATION.
- 2. PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.
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Maximum Guarantee Term: 20 Years

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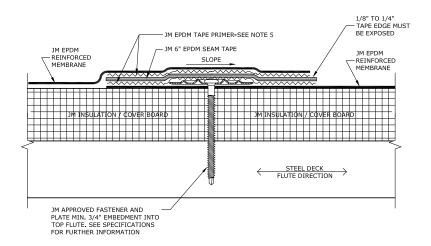
Note: For the most current information on general guidelines, please refer to the System Considerations tab under Commercial Roofing Products on the JM Roofing Web site. For specifications, flashing details and general installation information please refer to the Application Tools tab.



Detail No. E-MS-06 (New Detail)



In-Lap Fastening Method-Steel Deck



NOTES:

- REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP-TO-DATE INFORMATION.
- PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.
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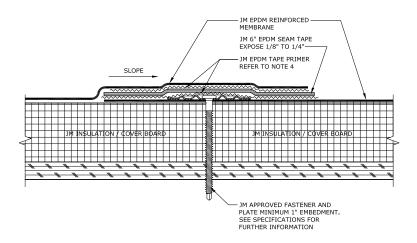
FOUR



Detail No. E-MS-07 (New Detail)



In-Lap Fastening Method-Plywood Deck



- 1. REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP-TO-DATE INFORMATION.
- 2. PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.
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- 4. JM EPDM TAPE PRIMER OR JM EPDM SINGLE PLY MEMBRANE PRIMER (LOW VOC) MUST BE APPLIED ON ALL SURFACES COMING INTO CONTACT WITH JM EPDM PEEL & STICK PRODUCTS.
 ROLL MEMBRANE WITH HAND ROLLER UNDER PRESSURE AT SEAM IN ACCORDANCE WITH THE JM EPDM INSTALLATION GUIDE.
- 5. 1/8" TO 1/4" OF JM EPDM SEAM TAPE MUST BE EXPOSED ALONG ENTIRE LENGTH OF ALL SEAMS.

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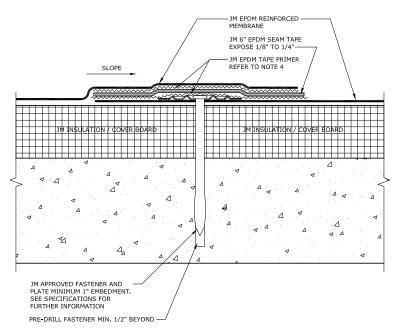
Note: For the most current information on general guidelines, please refer to the System Considerations tab under Commercial Roofing Products on the JM Roofing Web site. For specifications, flashing details and general installation information please refer to the Application Tools tab.



Detail No. E-MS-08 (New Detail)



In-Lap Fastening Method-Concrete Deck



NOTES:

- 1. REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP-TO-DATE INFORMATION.
- PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.
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 ROLL MEMBRANE WITH HAND ROLLER UNDER PRESSURE AT SEAM IN ACCORDANCE WITH THE JM EPDM INSTALLATION GUIDE.
- 5. 1/8" TO 1/4" OF JM EPDM SEAM TAPE MUST BE EXPOSED ALONG ENTIRE LENGTH OF ALL SEAMS.

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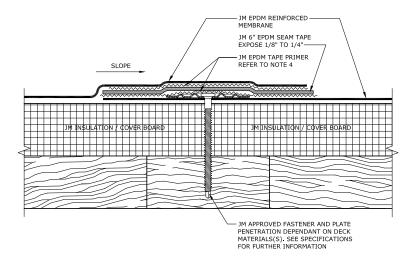




Detail No. E-MS-09 (New Detail)



In-Lap Fastening Method-Wood Plank Deck



- 1. REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP-TO-DATE INFORMATION.
- 2. PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.
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- 4. JM EPDM TAPE PRIMER OR JM SINGLE PLY MEMBRANE PRIMER (LOW VOC) MUST BE APPLIED ON ALL SURFACES COMING INTO CONTACT WITH JM EPDM PEEL & STICK PRODUCTS.
 ROLL MEMBRANE WITH HAND ROLLER UNDER PRESSURE AT SEAM IN ACCORDANCE WITH THE JM EPDM INSTALLATION GUIDE.
- 5. 1/8" TO 1/4" OF JM EPDM SEAM TAPE MUST BE EXPOSED ALONG ENTIRE LENGTH OF ALL SEAMS.

Maximum Guarantee Term: 20 Years

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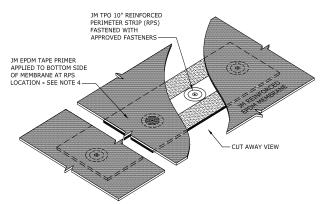
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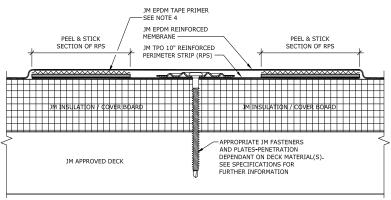
Detail No. E-MS-10 (New Detail)



Reinforced Perimeter Strip Fastening Method



ISOMETRIC VIEW



NOTES:

- REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP-TO-DATE INFORMATION.
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Maximum Guarantee Term: 20 Years

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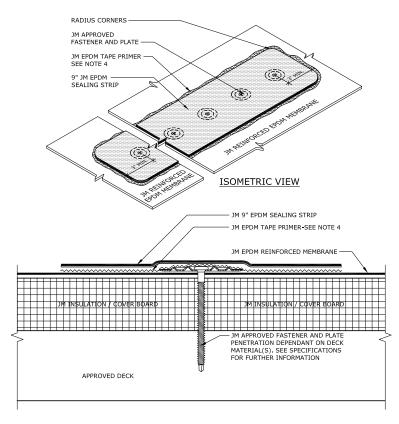




Detail No. E-MS-11 (Replaces EL-18T)



Continuous Strip Fastening Method



NOTES:

- 1. REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR THE MOST CURRENT INFORMATION.
- 2. REFER TO SINGLE PLY FLASHING SPECIFICATIONS FOR INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE PART OF THIS DETAIL.
- 3. ANY CARPENTRY, METAL WORK, OR MASONRY CONSTRUCTION SHOULD BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS AND/OR PROJECT SPECS. THESE COMPONENTS SHOULD BE REVIEWED AND APPROVED BY A LICENSED DESIGN PROFESSIONAL.
- 4. JM EPDM TAPE PRIMER OR JM SINGLE PLY MEMBRANE PRIMER (LOW VOC) MUST BE APPLIED ON ALL SURFACES COMING INTO CONTACT WITH MEPDM PELL & STICK PRODUCTS.
 ROLL MEMBRANE WITH HAND ROLLER UNDER PRESSURE AT SEAM.

Maximum Guarantee Term: 20 Years

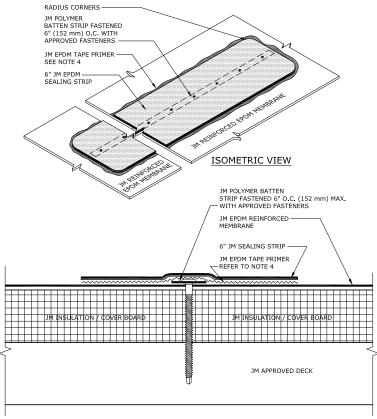
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Polymer Batten Strip Fastening Method



NOTES:

- 1. REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP-TO-DATE INFORMATION.
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Maximum Guarantee Term: 20 Years

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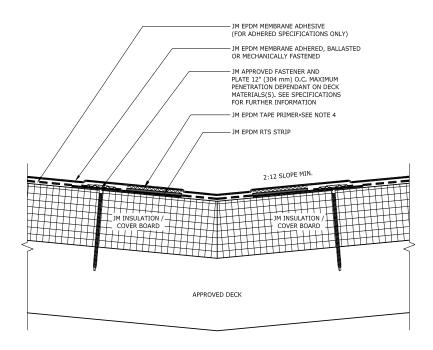




Detail No. E-MS-13 (New Detail)



Slope Transition-Valley



NOTES:

- 1. REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR THE MOST CURRENT INFORMATION.
- 2. REFER TO SINGLE PLY FLASHING SPECIFICATIONS FOR INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE
- 3. ANY CARPENTRY, METAL WORK, OR MASONRY CONSTRUCTION SHOULD BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS AND/OR PROJECT SPECS. THESE COMPONENTS SHOULD BE REVIEWED AND APPROVED BY A LICENSED DESIGN PROFESSIONAL.
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 - ROLL MEMBRANE WITH HAND ROLLER UNDER PRESSURE AT SEAM IN ACCORDANCE WITH THE JM EPDM INSTALLATION GUIDE.

Maximum Guarantee Term: 20 Years

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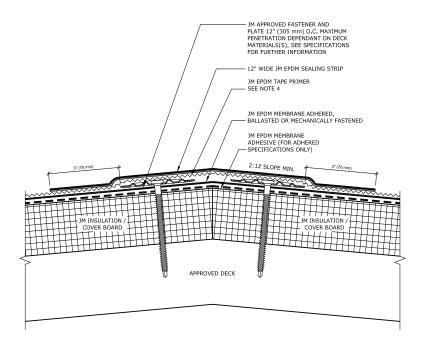
Note: For the most current information on general guidelines, please refer to the System Considerations tab under Commercial Roofing Products on the JM Roofing Web site. For specifications, flashing details and general installation information please refer to the Application Tools tab.



Detail No. E-MS-14 (New Detail)



Slope Transition-Ridge



NOTES:

- 1. REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR THE MOST CURRENT INFORMATION.
- REFER TO SINGLE PLY FLASHING SPECIFICATIONS FOR INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE PART OF THIS DETAIL.
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Maximum Guarantee Term: 20 Years

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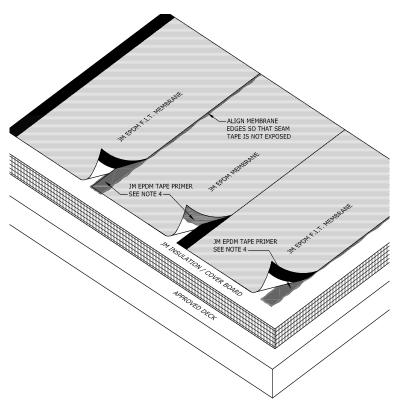
SECTION FOUR



Detail No. E-MS-PT1 (New Detail)



Tape/Standard Sheet Assembly - Pre-Taped



NOTES:

- 1. REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP-TO-DATE INFORMATION.
- 2. PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.
- 3. ANY CARPENTRY OR METAL WORK SHOULD BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS AND/OR PROJECT SPECIFICATIONS. THESE COMPONENTS SHOULD BE REVIEWED AND APPROVED BY A LICENSED DESIGN PROFESSIONAL.
- JM EPDM TAPE PRIMER OR JM SINGLE PLY MEMBRANE PRIMER (LOW VOC) MUST BE APPLIED ON ALL SURFACES
 COMING INTO CONTACT WITH JM EPDM PEEL & STICK PRODUCTS. ROLL MEMBRANE WITH HAND ROLLER UNDER PRESSURE AT SEAM IN ACCORDANCE WITH THE JM EPDM INSTALLATION GUIDE.
- 5. JM EPDM F.I.T. MEMBRANE IS AVAILABLE WITH EITHER 4" OR 6" IN-SEAM TAPE.

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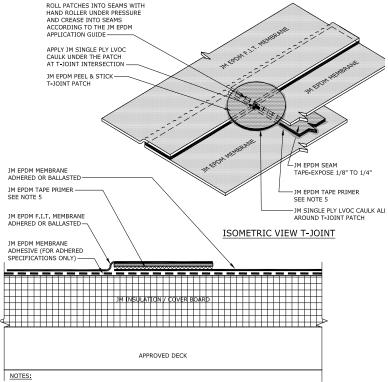
Note: For the most current information on general guidelines, please refer to the System Considerations tab under Commercial Roofing Products on the JM Roofing Web site. For specifications, flashing details and general installation information please refer to the Application Tools tab.



Detail No. E-MS-PT2 (New Detail)



Tape/Standard Sheet Side Lap & T-Joint - Pre-Taped



- 1. REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP-TO-DATE INFORMATION.
- PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.
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- 4. ON DAYS WITH TEMPERATURES GREATER THAN 85° WHERE SHEETS ARE ALIGNED PRIOR TO RELAXING, OVERLAP SHALL BE 5" FOR 6" SEAM TAPE AND 3" FOR 4" SEAM TAPE TO ALLOW FOR PROPER SEAM ENGAGEMENT.
- DVEKLAP SHALL BE 5 FOR 6 SEAM TAPE AND 3 FOR 4 SEAM TAPE TO ALLOW FOR PROPER SEAM ENGAGEMENT.

 JM EPDM TAPE PRIMER OR JM SINGLE PLY MEMBRANE PRIMER (LOW VOC) MUST BE APPLIED ON ALL SURFACES

 COMMING INTO CONTACT MUST AN APPLIED APPLIED APPLIED APPLIED ON ALL SURFACES.
- COMING INTO CONTACT WITH JM EPDM PEEL & STICK PRODUCTS.
 ROLL MEMBRANE WITH HAND ROLLER UNDER PRESSURE AT SEAM IN ACCORDANCE WITH THE JM EPDM INSTALLATION GUIDE.
- 6. 6" SEAM TAPE REQUIRED FOR 25 AND 30 YEAR GUARANTEE TERM.

Maximum Guarantee Term: 20 Years

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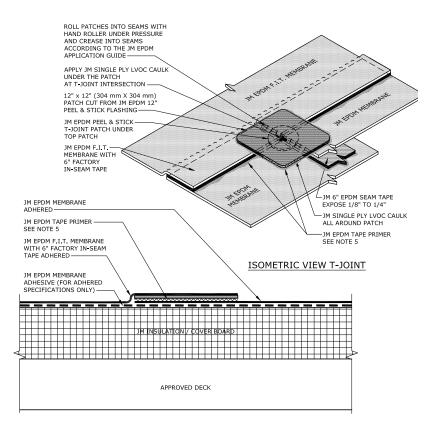
FOUR



Detail No. E-MS-PT3 (New Detail)



Tape/Standard Sheet Side Lap & T-Joint 30 Year - Pre-Taped



NOTES:

- 1. REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP-TO-DATE INFORMATION.
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- ON DAYS WITH TEMPERATURES GREATER THAN 85° WHERE SHEETS ARE ALIGNED PRIOR TO RELAXING, OVERLAP SHALL BE 5" FOR 6" SEAM TAPE TO ALLOW FOR PROPER SEAM ENGAGEMENT.
- 5. JM EPDM TAPE PRIMER OR JM SINGLE PLY MEMBRANE PRIMER (LOW VOC) MUST BE APPLIED ON ALL SURFACES COMING INTO CONTACT WITH JM EPDM PEEL & STICK PRODUCTS.
 ROLL MEMBRANE WITH HAND ROLLER UNDER PRESSURE AT SEAM IN ACCORDANCE WITH THE JM EPDM INSTALLATION GUIDE.

Maximum Guarantee Term: 30 Years

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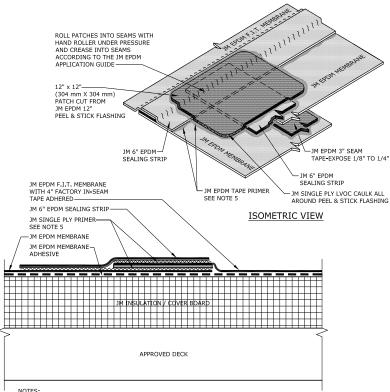
Note: For the most current information on general guidelines, please refer to the System Considerations tab under Commercial Roofing Products on the JM Roofing Web site. For specifications, flashing details and general installation information please refer to the Application Tools tab.



Detail No. E-MS-PT4 (New Detail)



Tape/Standard Sheet Side Lap & T-Joint 30 Year - Pre-Taped



- 1. REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP-TO-DATE INFORMATION.
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- ON DAYS WITH TEMPERATURES GREATER THAN 85° WHERE SHEETS ARE ALIGNED PRIOR TO RELAXING, OVERLAP SHALL BE 5" FOR 6" SEAM TAPE AND 3" FOR 4" SEAM TAPE TO ALLOW FOR PROPER SEAM ENGAGEMENT.
- JM EPDM TAPE PRIMER OR JM SINGLE PLY MEMBRANE PRIMER (LOW VOC) MUST BE APPLIED ON ALL SURFACES COMING INTO CONTACT WITH JM EPDM PEEL & STICK PRODUCTS.

 ROLL MEMBRANE WITH HAND ROLLER UNDER PRESSURE AT SEAM IN ACCORDANCE WITH THE JM EPDM INSTALLATION GUIDE.

Maximum Guarantee Term: 30 Years

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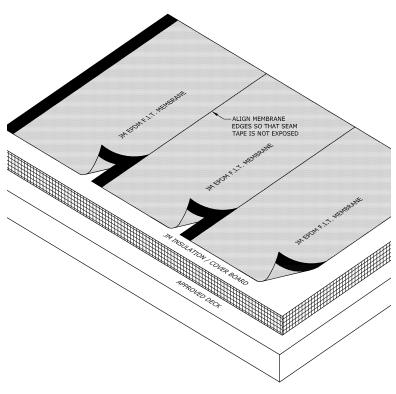




Detail No. E-MS-PT5 (New Detail)



Tape/Tape Assembly - Pre-Taped



NOTES:

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- 4. JM EPDM TAPE PRIMER OR JM SINGLE PLY MEMBRANE PRIMER (LOW VOC) MUST BE APPLIED ON ALL SURFACES COMING INTO CONTACT WITH JM EPDM PEEL & STICK PRODUCTS. ROLL MEMBRANE WITH HAND ROLLER UNDER PRESSURE AT SEAM IN ACCORDANCE WITH THE JM EPDM INSTALLATION GUIDE.
- 5. JM EPDM F.I.T. MEMBRANE IS AVAILABLE WITH EITHER 4" OR 6" IN-SEAM TAPE.

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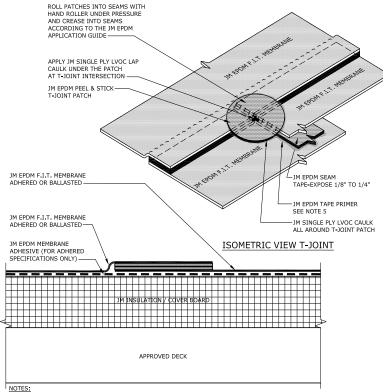
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Detail No. E-MS-PT6 (New Detail)



Tape/Tape Side Lap & T-Joint - Pre-Taped



- 1. REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP-TO-DATE INFORMATION.
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- 4. ON DAYS WITH TEMPERATURES GREATER THAN 85° WHERE SHEETS ARE ALIGNED PRIOR TO RELAXING, OVERLAP SHALL BE 5" FOR 6" SEAM TAPE AND 3" FOR 4" SEAM TAPE TO ALLOW FOR PROPER SEAM ENGAGEMENT.
- 5. JM EPDM TAPE PRIMER OR JM SINGLE PLY MEMBRANE PRIMER (LOW VOC) MUST BE APPLIED ON ALL SURFACES COMING INTO CONTACT WITH JM EPDM PEEL 8. STICK PRODUCTS. ROLL MEMBRANE WITH HAND ROLLER UNDER PRESSURE AT SEAM IN ACCORDANCE WITH THE JM EPDM INSTALLATION GUIDE.
- 6. 6" SEAM TAPE REQUIRED FOR 25 AND 30 YEAR GUARANTEE TERM.

Maximum Guarantee Term: 20 Years

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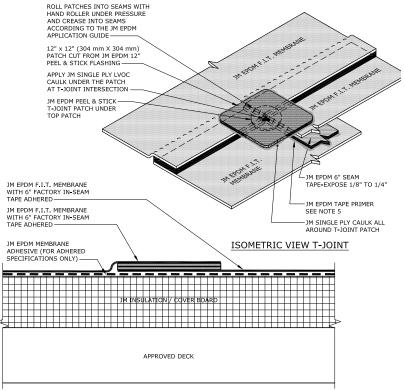
FOUR



Detail No. E-MS-PT7 (New Detail)



Tape/Tape Side Lape & T-Joint 30 Year - Pre-Taped



NOTES:

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- 4. ON DAYS WITH TEMPERATURES GREATER THAN 85° WHERE SHEETS ARE ALIGNED PRIOR TO RELAXING, OVERLAP SHALL BE 5" FOR 6" SEAM TAPE TO ALLOW FOR PROPER SEAM ENGAGEMENT.
- 5. JM EPDM TAPE PRIMER OR JM SINGLE PLY MEMBRANE PRIMER (LOW VOC) MUST BE APPLIED ON ALL SURFACES COMING INTO CONTACT WITH JM EPDM PEEL & STICK PRODUCTS.
 ROLL MEMBRANE WITH HAND ROLLER UNDER PRESSURE AT SEAM IN ACCORDANCE WITH THE JM EPDM INSTALLATION GUIDE.

Maximum Guarantee Term: 30 Years

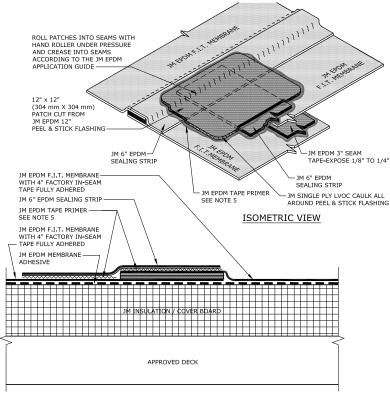
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Tape/Tape Side Lap & T-Joint 30 Year - Pre-Taped



NOTES:

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- 5. JM EPDM TAPE PRIMER OR JM SINGLE PLY MEMBRANE PRIMER (LOW VOC) MUST BE APPLIED ON ALL SURFACES COMING INTO CONTACT WITH JM EPDM PEEL & STICK PRODUCTS. ROLL MEMBRANE WITH HADD ROLLER UNDER PRESSURE AT SEAM IN ACCORDANCE WITH THE JM EPDM INSTALLATION GUIDE.

Maximum Guarantee Term: 30 Years

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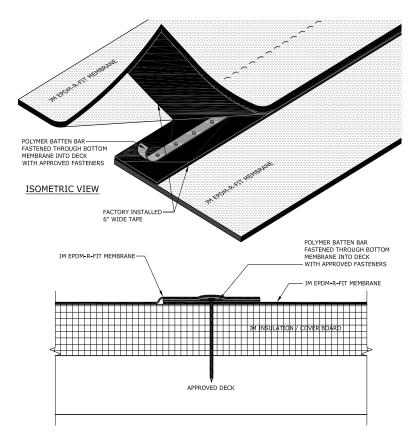
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Detail No. E-MS-PT9 (New Detail)



EPDM R-FIT Membrane Tape/Tape Side Lap with Batten Strip



- 1. REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP-TO-DATE INFORMATION.
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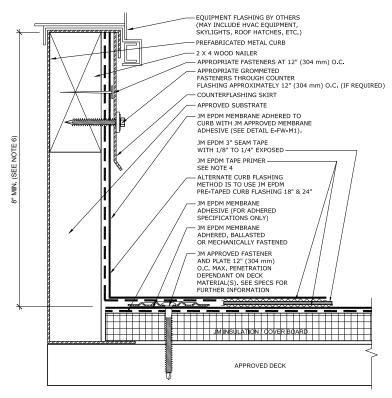
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Detail No. E-FC-01 (Replaces EB-31)



Prefabricated Metal Curb Base Flashing



NOTES:

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- 4. JM EPDM TAPE PRIMER OR JM SINGLE PLY MEMBRANE PRIME (LOW VOC) MUST BE APPLIED ON ALL SURFACES COMING INTO CONTACT WITH JM EPDM PEEL STICK PRODUCTS. ROLL MEMBRANE WITH HAND ROLLER UNDER PRESSURE AT SEAM IN ACCORDANCE WITH THE JM EPDM INSTALLATION GUIDE.
- 5. 1/8" TO 1/4" OF IM EPDM SEAM TAPE MUST BE EXPOSED ALONG ENTIRE LENGTH OF ALL SEAMS.
- 6. HEIGHT OF CURB TO BE ADJUSTED WITH NAILERS. IT IS PREFERRED TO RAISE CURB ONTO NAILERS TO EXTEND FLASHING HEIGHT.
- 7. SEE E-FW-B DETAILS FOR JM APPROVED BASE FLASHING TIE IN TERMINATION METHODS.
- 8. SEE E-FC-05 & E-FC-06 DETAILS FOR JM APPROVED OUTSIDE CORNER FLASHING METHODS.

Maximum Guarantee Term: 20 Years

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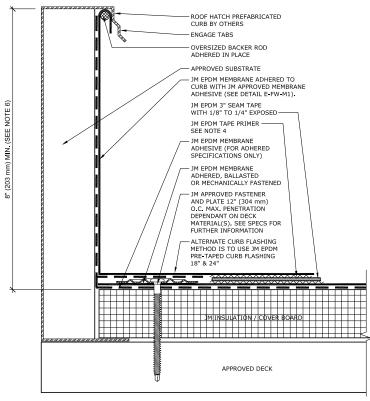




Detail No. E-FC-02 (Replaces EB-33T)



Roof Hatch



- 1. REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP-TO-DATE INFORMATION.
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- 4. JM EPDM TAPE PRIMER OR JM SINGLE PLY MEMBRANE PRIMER (LOW VOC) MUST BE APPLIED ON ALL SURFACES
- COMING INTO CONTACT WITH JM EPDM PEEL & STICK PRODUCTS.
 ROLL MEMBRANE WITH HAND ROLLER UNDER PRESSURE AT SEAM IN ACCORDANCE WITH THE JM EPDM INSTALLATION GUIDE.
- 5. 1/8" TO 1/4" OF JM EPDM SEAM TAPE MUST BE EXPOSED ALONG ENTIRE LENGTH OF ALL SEAMS.
- 6. HEIGHT OF CURB TO BE ADJUSTED WITH NAILERS. IT IS PREFERRED TO RAISE CURB ONTO NAILERS TO EXTEND FLASHING HEIGHT.
- 7 SEE F-EW-B DETAILS FOR IM APPROVED BASE FLASHING TIE IN TERMINATION METHODS

Maximum Guarantee Term: 20 Years

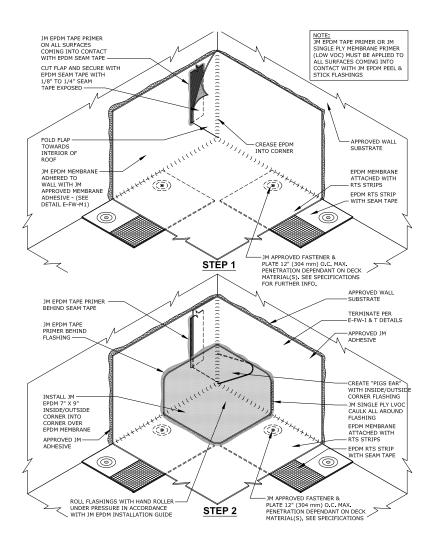
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EPDM Inside Corner with RTS Strips



Maximum Guarantee Term: 20 Years

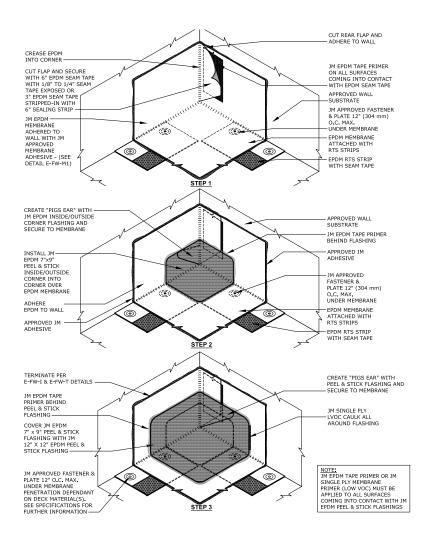
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EPDM Inside Corner with RTS Strips 30 Year



Maximum Guarantee Term: 30 Years

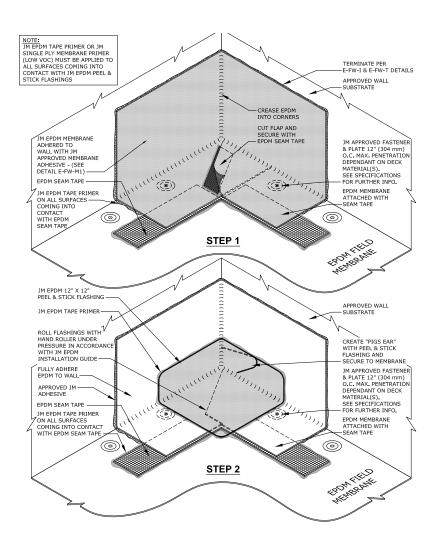
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EPDM Inside Corner with Seam Tape



Maximum Guarantee Term: 20 Years

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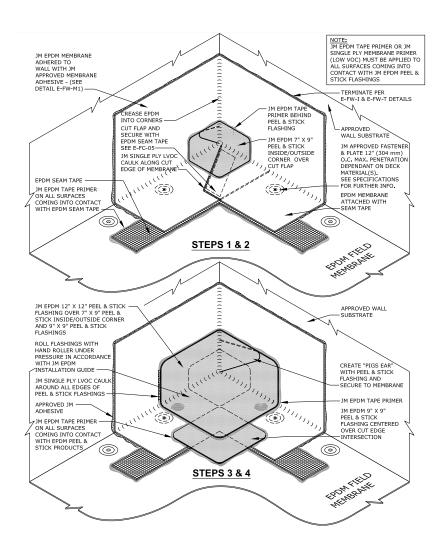
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Drawing No. E-FC-06 (New Detail)



EPDM Inside Corner with Seam Tape 30 Year



Maximum Guarantee Term: 30 Years

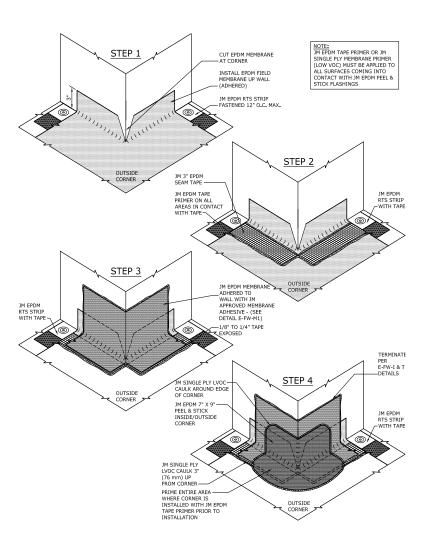
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EPDM Outside Corner with RTS Strips



Maximum Guarantee Term: 20 Years

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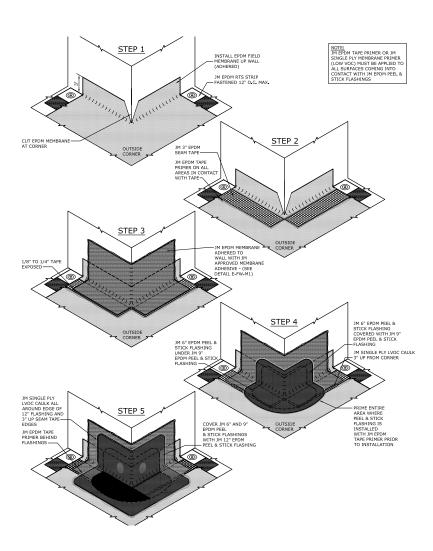
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EPDM Outside Corner with RTS Strips 30 Year



Maximum Guarantee Term: 30 Years

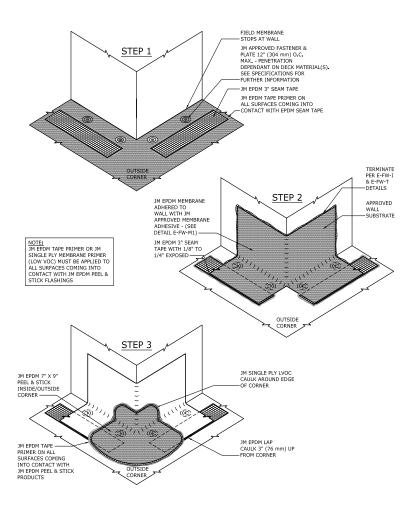
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EPDM Outside Corner with Seam Tape



Maximum Guarantee Term: 20 Years

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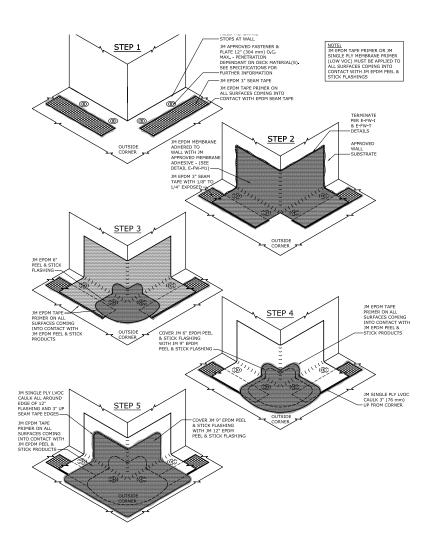
Note: For the most current information on general guidelines, please refer to the System Considerations tab under Commercial Roofing Products on the JM Roofing Web site. For specifications, flashing details and general installation information please refer to the Application Tools tab.



Detail No. E-FC-10 (New Detail)



EPDM Outside Corner with Seam Tape 30 Year



Maximum Guarantee Term: 30 Years

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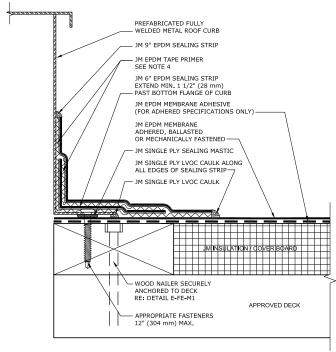
Note: For the most current information on general guidelines, please refer to the System Considerations tab under Commercial Roofing Products on the JM Roofing Web site. For specifications, flashing details and general installation information please refer to the Application Tools tab.



Detail No. E-FC-11 (New Detail)



Prefabricated Water Tight Metal Curb Base Flashing



NOTES:

- 1. REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP-TO-DATE INFORMATION.
- PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.
- ANY CARPENTRY OR METAL WORK SHOULD BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS AND/OR PROJECT SPECIFICATIONS. THESE COMPONENTS SHOULD BE REVIEWED AND APPROVED BY A LICENSED DESIGN PROFESSIONAL.
- 4. JM EPDM TAPE PRIMER OR JM SINGLE PLY MEMBRANE PRIMER (LOW VOC) MUST BE APPLIED ON ALL SURFACES COMING INTO CONTACT WITH JM EPDM PEEL & STICK PRODUCTS. ROLL MEMBRANE WITH HAND ROLLER UNDER PRESSURE AT SEAM IN ACCORDANCE WITH THE JM EPDM INSTALLATION GUIDE.
- 5. SEE E-FW-B DETAILS FOR JM APPROVED BASE FLASHING TIE IN TERMINATION METHODS.

Maximum Guarantee Term: 20 Years

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Note: For the most current information on general guidelines, please refer to the System Considerations tab under Commercial Roofing Products on the JM Roofing Web site. For specifications, flashing details and general installation information please refer to the Application Tools tab.



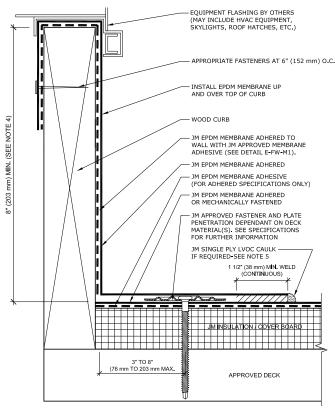
SECTION FOUR



Detail No. E-FC-12 (New Detail)



Wood Curb Base Flashing



NOTES:

- REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP-TO-DATE INFORMATION.
 PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.
- 3. ANY CARPENTRY OR METAL WORK SHOULD BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS AND/OR PROJECT SPECIFICATIONS. THESE COMPONENTS SHOULD BE REVIEWED AND APPROVED BY A LICENSED DESIGN PROFESSIONAL.
- 4 HEIGHT OF CURB TO BE ADJUSTED WITH NAILERS, IT IS PREFERRED TO RAISE CURB ONTO NAILERS TO EXTEND FLASHING HEIGHT
- HEIGHT OF CORE TO BE ADJUSTED WITH NALERS. IT IS PREFERRED TO RAISE CORE ONTO NALERS TO EXTEND FLAS
 THIS INGLE PLY LVOC CAULK IS REQUIRED ON ALL CUT AND NON ENCAPSULATED EDGES OF REINFORCED MEMBRANE.
 THIS INCLUDES FACTORY CUT MEMBRANE (SEE DETAIL E-MS-01).

 SEE E-FW-B DETAILS FOR JM APPROVED BASE FLASHING TIE IN TERMINATION METHODS.

Maximum Guarantee Term: 30 Years

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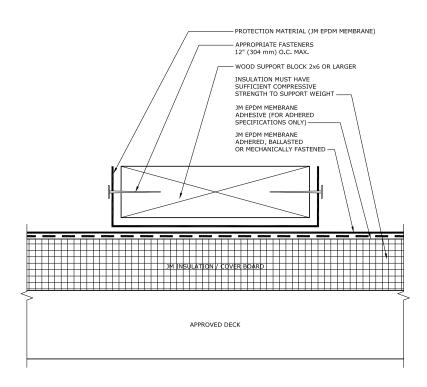
Note: For the most current information on general guidelines, please refer to the System Considerations tab under Commercial Roofing Products on the JM Roofing Web site. For specifications, flashing details and general installation information please refer to the Application Tools tab.



Detail No. E-PT-01 (New Detail)



Support-Light



NOTES:

- 1. REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP-TO-DATE INFORMATION.
- 2. PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.
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Maximum Guarantee Term: 20 Years

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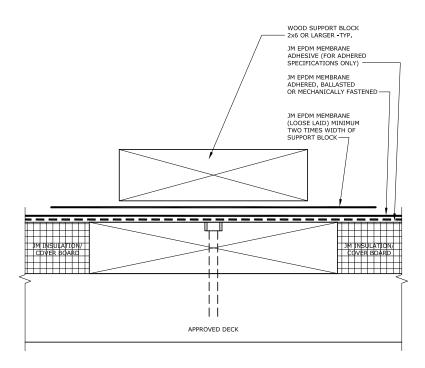




Detail No. E-PT-02 (New Detail)



Support-Medium



- $1. \ \mathsf{REFER} \ \mathsf{TO} \ \mathsf{JOHNS} \ \mathsf{MANVILLE} \ \mathsf{WEBSITE} \ (\mathsf{www.jm.com}) \ \mathsf{FOR} \ \mathsf{MOST} \ \mathsf{UP-TO-DATE} \ \mathsf{INFORMATION}.$
- PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.
- ANY CARPENTRY OR METAL WORK SHOULD BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS AND/OR PROJECT SPECIFICATIONS. THESE COMPONENTS SHOULD BE REVIEWED AND APPROVED BY A LICENSED DESIGN PROFESSIONAL

Maximum Guarantee Term: 20 Years

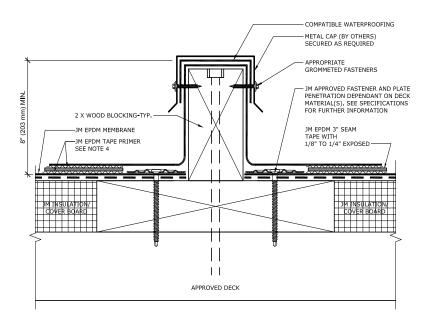
Johns Manville is a manufacturer of commercial roofing products and offers this general conceptual information to you as a courtesy. This complimentary assistance is not to be used or relied upon by anyone as a substitute for professional engineering design and documentation required by building code, contract, or applicable law. By accepting these comments you agree they do not constitute any representations, endorsements of, or an assumption by Johns Manville of any liability for either the adequacy of design of this building or any other material not supplied by Johns Manville.

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Support-Heavy



NOTES:

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- 3. ANY CARPENTRY OR METAL WORK SHOULD BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS AND/OR PROJECT SPECIFICATIONS, THESE COMPONENTS SHOULD BE REVIEWED AND APPROVED BY A LICENSED DESIGN PROFESSIONAL.
- 4. JM EPDM TAPE PRIMER OR JM SINGLE PLY MEMBRANE PRIMER (LOW VOC) MUST BE APPLIED ON ALL SURFACES COMING INTO CONTACT WITH JM EPDM PEEL & STICK PRODUCTS. ROLL MEMBRANE WITH HAND ROLLER MUDGER PRESSURE AT SEAM IN ACCORDANCE WITH THE JM EPDM INSTALLATION GUIDE.
- 5. 1/8" TO 1/4" OF JM EPDM SEAM TAPE MUST BE EXPOSED ALONG ENTIRE LENGTH OF ALL SEAMS.
- 6. HEIGHT OF CURB TO BE ADJUSTED WITH NAILERS. IT IS PREFERRED TO RAISE CURB ONTO NAILERS TO EXTEND FLASHING HEIGHT.

Maximum Guarantee Term: 20 Years

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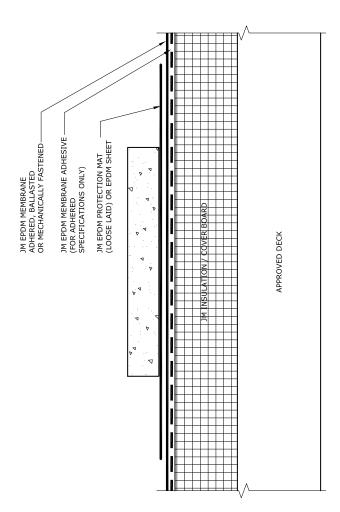
Note: For the most current information on general guidelines, please refer to the System Considerations tab under Commercial Roofing Products on the JM Roofing Web site. For specifications, flashing details and general installation information please refer to the Application Tools tab.



Detail No. E-PT-04 (New Detail)



Walkway-Concrete Paver



NOTES:

- 1. REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP-TO-DATE INFORMATION.
- 2. PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.
- ANY CARPENTRY OR METAL WORK SHOULD BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS AND/OR PROJECT SPECIFICATIONS. THESE COMPONENTS SHOULD BE REVIEWED AND APPROVED BY A LICENSED DESIGN PROFESSIONAL.
- ON MECHANICALLY FASTENED SYSTEMS AVOID INSTALLING WALKWAY PAVERS OVER FASTENER PLATES WHENEVER POSSIBLE.

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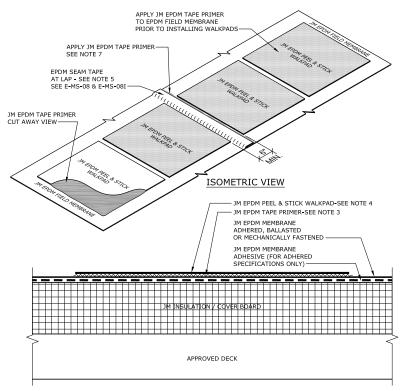
Note: For the most current information on general guidelines, please refer to the System Considerations tab under Commercial Roofing Products on the JM Roofing Web site. For specifications, flashing details and general installation information please refer to the Application Tools tab.



Detail No. E-PT-05 (New Detail)



EPDM Peel & Stick Walkpads Over EPDM Membrane



NOTES:

- REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST CURRENT INFORMATION.
- PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.
- 3. JM EPOM TAPE PRIMER OR JM SINGLE PLY MEMBRANE PRIMER (LOW VOC) MUST BE APPLIED ON ALL SURFACES COMING INTO CONTACT WITH JM EPOM PEEL & STICK PRODUCTS. ROLL MEMBRANE WITH A HAND ROLLER UNDER PRESSURE AT SEAM IN ACCORDANCE WITH THE JM INSTALLATION GUIDE. JM EPOM WALKPADS HAVE THREE ROWS OF FACTORY APPLIED TAPE.
- 4. ROLL OVER INSTALLED WALKPADS WITH A WEIGHTED ROLLER TO ENSURE PROPER ADHESION.
- 5. ON MECHANICALLY FASTENED SYSTEMS AVOID INSTALLING WALKPADS OVER FASTENER PLATES WHENEVER POSSIBLE.
- 6. 1/8" TO 1/4" OF JM EPDM SEAM TAPE MUST BE EXPOSED ALONG ENTIRE LENGTH OF ALL SEAMS.
- 8. DO NOT INSTALL WALKPADS OVER MEMBRANE SEAMS.

Maximum Guarantee Term: 30 Years

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Note: For the most current information on general guidelines, please refer to the System Considerations tab under Commercial Roofing Products on the JM Roofing Web site. For specifications, flashing details and general installation information please refer to the Application Tools tab.

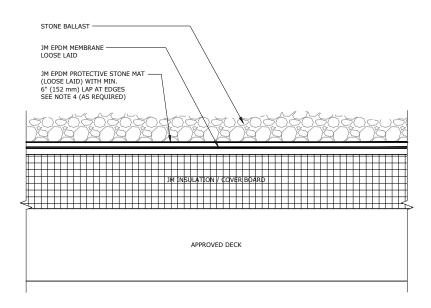




Detail No. E-PT-06 (New Detail)



Ballasted EPDM



NOTES

- 1. REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP-TO-DATE INFORMATION.
- 2. PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.
- 3. ANY CARPENTRY OR METAL WORK SHOULD BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS AND/OR PROJECT SPECIFICATIONS. THESE COMPONENTS SHOULD BE REVIEWED AND APPROVED BY A LICENSED DESIGN PROFESSIONAL.
- 4. JM EPDM PROTECTIVE STONE MAT SHOULD BE USED WHEN BALLAST WITH SHARP EDGES IS INSTALLED.

Maximum Guarantee Term: 20 Years

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Note: For the most current information on general guidelines, please refer to the System Considerations tab under Commercial Roofing Products on the JM Roofing Web site. For specifications, flashing details and general installation information please refer to the Application Tools tab.

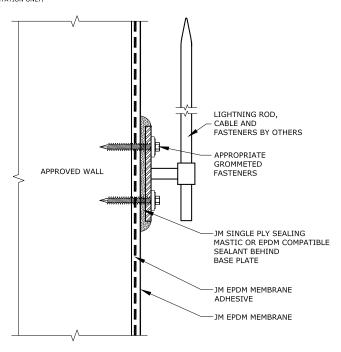


Detail No. E-PT-07 (New Detail)



Lightning Rod-Wall Mount

JM DOES NOT EVALUATE OR RECOMMEND ANY LIGHTNING PROTECTION MANUFACTURERS PRODUCTS. THE LIGHTNING PROTECTION DEVICES SHOWN ARE FOR GRAPHIC REPRESENTATION ONLY.



NOTES:

- REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP-TO-DATE INFORMATION.
- 2. PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.
- 3. ANY CAPPENTRY OR METAL WORK SHOULD BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS AND/OR PROJECT SPECIFICATIONS. THESE COMPONENTS SHOULD BE REVIEWED AND APPROVED BY A LICENSED DESIGN PROFESSIONAL. JM ASSUMES NO RESPONSIBILITY FOR THE INSTALLATION OF LIGHTNING RODS AND ASSOCIATED COMPONENTS OR FOR DAMAGE TO THE ROOF SYSTEM DUE TO FAULTY INSTALLATION OR DETACHMENT FROM SAID SYSTEM.
- 4. LIGHTNING ROD GROUND WIRE MUST NOT COME IN CONTACT WITH THE ROOFING MEMBRANE.

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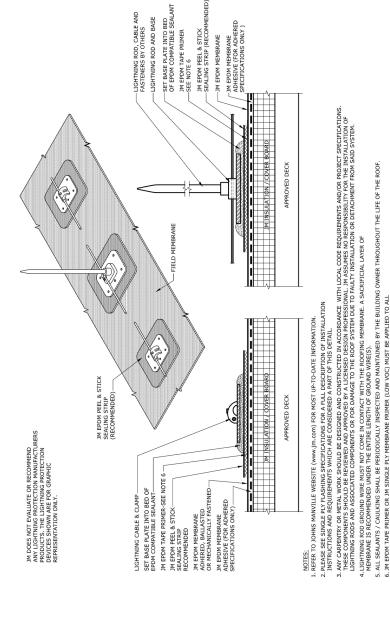
SURFACES COMING INTO CONTACT WITH JM EPDM PEEL & STICK PRODUCTS.



Detail No. E-PT-08 (Replaces EM-11)



Lightning Rod-Roof Mount



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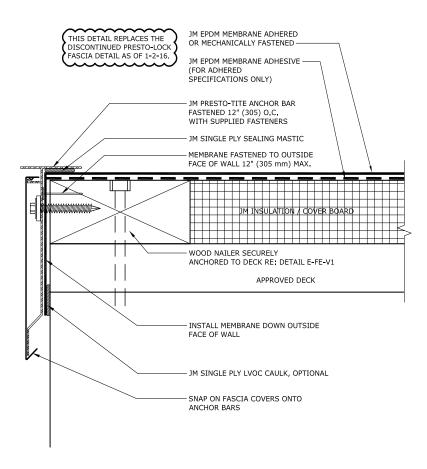
Note: For the most current information on general guidelines, please refer to the System Considerations tab under Commercial Roofing Products on the JM Roofing Web site. For specifications, flashing details and general installation information please refer to the Application Tools tab.



Detail No. E-FE-P1 (New Detail)



JM Presto Lock Fascia Over EPDM



NOTES:

- 1. REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP-TO-DATE INFORMATION.
- 2. PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.
- ANY CARPENTRY OR METAL WORK SHOULD BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS AND/OR PROJECT SPECIFICATIONS. THESE COMPONENTS SHOULD BE REVIEWED AND APPROVED BY A LICENSED DESIGN PROFESSIONAL.

Maximum Guarantee Term: 30 Years

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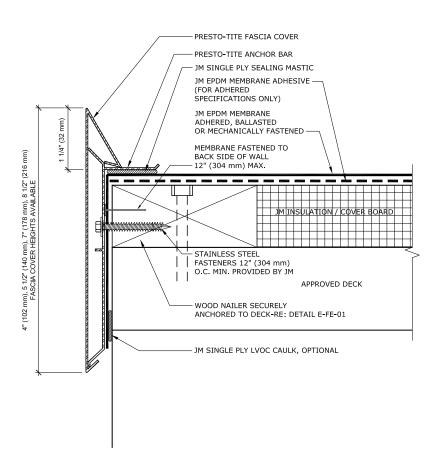
Note: For the most current information on general guidelines, please refer to the System Considerations tab under Commercial Roofing Products on the JM Roofing Web site. For specifications, flashing details and general installation information please refer to the Application Tools tab.



Detail No. E-FE-P2 (Replaces EE-11T)



JM Presto-Tite Fascia System For Single Ply Systems



NOTES:

- 1. REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP-TO-DATE INFORMATION.
- PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.
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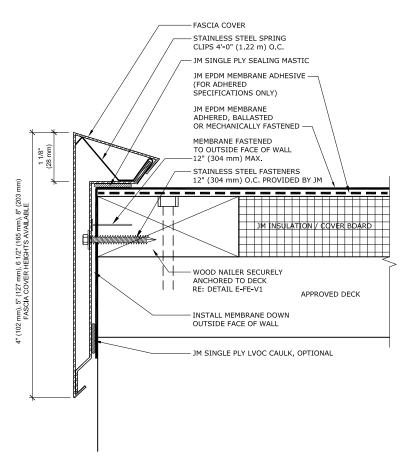
Note: For the most current information on general guidelines, please refer to the System Considerations tab under Commercial Roofing Products on the JM Roofing Web site. For specifications, flashing details and general installation information please refer to the Application Tools tab.



Detail No. E-FE-P3 (New Detail)



Presto-Tite Edge One



NOTES:

- 1. REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP-TO-DATE INFORMATION.
- 2. PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.
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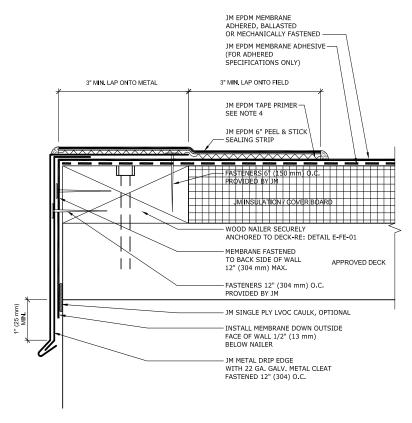
FOUR



Detail No. E-FE-P4 (New Detail)



JM Metal Drip Edge with JM EPDM Sealing Strip



NOTES:

- 1. REFER TO JOHNS MANVILLE WEBSITE (www.im.com) FOR MOST UP-TO-DATE INFORMATION.
- 2. PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.
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- 4. JM EPDM TAPE PRIMER OR JM SINGLE PLY MEMBRANE PRIMER (LOW VOC) MUST BE APPLIED ON ALL SURFACES COMING INTO CONTACT WITH JM EPDM PEEL & STICK PRODUCTS. ROLL MEMBRANE WITH HAND ROLLER UNDER PRESSURE AT SEAM.

Maximum Guarantee Term: 20 Years

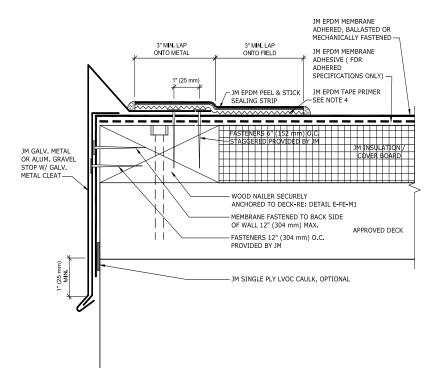
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JM Gravel Stop with JM EPDM Sealing Strip



NOTES:

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- 4. JM EPDM TAPE PRIMER OR JM SINGLE PLY MEMBRANE PRIMER (LOW VOC) MUST BE APPLIED ON ALL SURFACES COMING INTO CONTACT WITH JM EPDM PEEL & STICK PRODUCTS. ROLL MEMBRANE WITH HAND ROLLER UNDER PRESSURE AT SEAM.

Maximum Guarantee Term: 20 Years

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FOUR

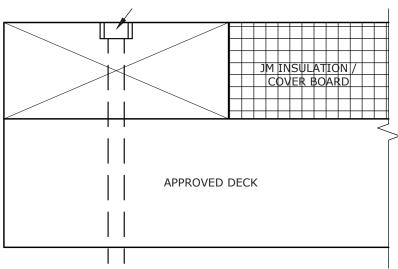


Detail No. E-FE-V1 (New Detail)



Wood Nailer Attachement

COUNTERSUNK FASTENERS TO RESIST THE FORCE OF 200 LBS./FT. (298 KGS/METER) MIN. IN ANY DIRECTION OR IN COMPLIANCE WITH LOCAL CODE



NOTES:

- 1. REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP-TO-DATE INFORMATION.
- 2. PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.
- 3. ANY CARPENTRY OR METAL WORK SHOULD BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS AND/OR PROJECT SPECIFICATIONS. THESE COMPONENTS SHOULD BE REVIEWED AND APPROVED BY A LICENSED DESIGN PROFESSIONAL.

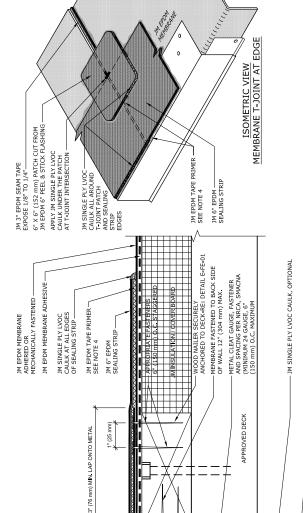
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Note: For the most current information on general guidelines, please refer to the System Considerations tab under Commercial Roofing Products on the JM Roofing Web site. For specifications, flashing details and general installation information please refer to the Application Tools tab.





Metal Drip Edge with EPDM Sealing Strip



PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION REFER TO JOHNS MANVILLE WEBSITE (www.lm.com) FOR MOST UP-TO-DATE INFORMATION.

METAL EDGE BY OTHERS

ANY CARPENTRY OR METAL WORK SHOULD BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL CODE REOUIREMENTS AND/OR PROJECT SPECIFICATIONS, THESE COMPONENTS INSTRUCTIONS AND REOUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL. SHOULD BE REVIEWED AND APPROVED BY A LICENSED DESIGN PROFESSIONAL.

JM EPDM TAPE PRIMER OR JM SINGLE PLY MEMBRANE PRIMER (LOW VOC) MUST BE APPLIED ON ALL SURFACES COMING INTO CONTACT WITH JM EPDM PEEL & STICK PRODUCTS. ROLL MEMBRANE WITH HAND ROLLER UNDER PRESSURE AT SEAM REFER TO DETAIL E-FE-V3 FOR 30 YEAR FLASHING METHOD.

Maximum Guarantee Term: 20 Years

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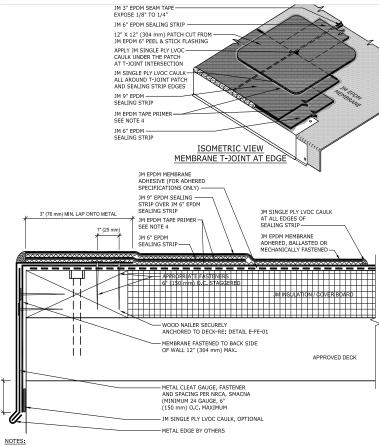
Note: For the most current information on general guidelines, please refer to the System Considerations tab under Commercial Roofing Products on the JM Roofing Web site. For specifications, flashing details and general installation information please refer to the Application Tools tab.



Detail No. E-FE-V3 (New Detail)



Metal Drip Edge with EPDM Sealing Strip 30 Year



- REFER TO JOHNS MANVILLE WEBSITE (www.im.com) FOR MOST UP-TO-DATE INFORMATION.
- 2. PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.
- 3. ANY CARPENTRY OR METAL WORK SHOULD BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS AND/OR PROJECT SPECIFICATIONS. THESE COMPONENTS SHOULD BE REVIEWED AND APPROVED BY A LICENSED DESIGN PROFESSIONAL.
- 4. JM EPDM TAPE PRIMER OR JM SINGLE PLY MEMBRANE PRIMER (LOW VOC) MUST BE APPLIED ON ALL SURFACES COMING INTO CONTACT WITH JM EPDM PEEL & STICK PRODUCTS. ROLL MEMBRANE WITH HAND ROLLER UNDER PRESSURE AT SE

Maximum Guarantee Term: 30 Years

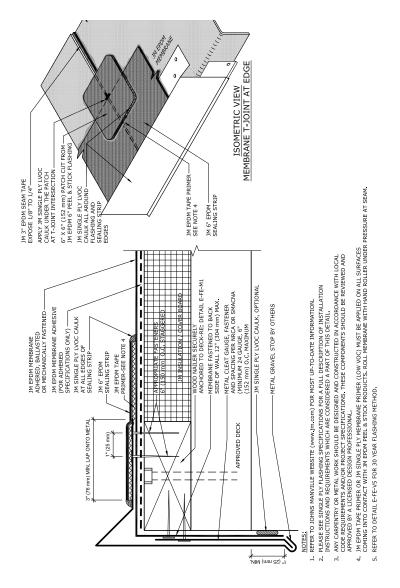
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Note: For the most current information on general guidelines, please refer to the System Considerations tab under Commercial Roofing Products on the JM Roofing Web site. For specifications, flashing details and general installation information please refer to the Application Tools tab.





Gravel Stop with JM EPDM Sealing Strip



Maximum Guarantee Term: 20 Years

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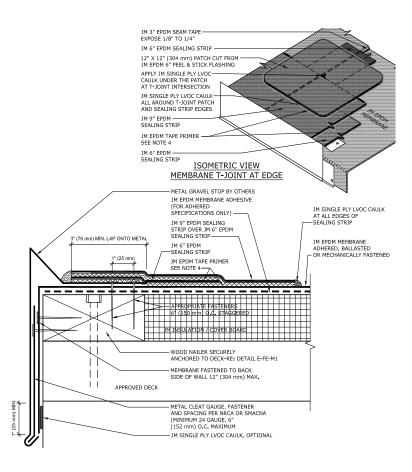
Note: For the most current information on general guidelines, please refer to the System Considerations tab under Commercial Roofing Products on the JM Roofing Web site. For specifications, flashing details and general installation information please refer to the Application Tools tab.



Detail No. E-FE-V5 (New Detail)



Gravel Stop with JM EPDM Sealing Strip 30 Year



- REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP-TO-DATE INFORMATION.
- PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.
- 3. ANY CARPENTRY OR METAL WORK SHOULD BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS AND/OR PROJECT SPECIFICATIONS. THESE COMPONENTS SHOULD BE REVIEWED AND APPROVED BY A LICENSED DESIGN PROFESSIONAL.
- JM EPDM TAPE PRIMER OR JM SINGLE PLY MEMBRANE PRIMER (LOW VOC) MUST BE APPLIED ON ALL SURFACES
 COMING INTO CONTACT WITH JM EPDM PEEL & STICK PRODUCTS. ROLL MEMBRANE WITH HAND ROLLER UNDER PRESSURE AT SEAM.

Maximum Guarantee Term: 30 Years

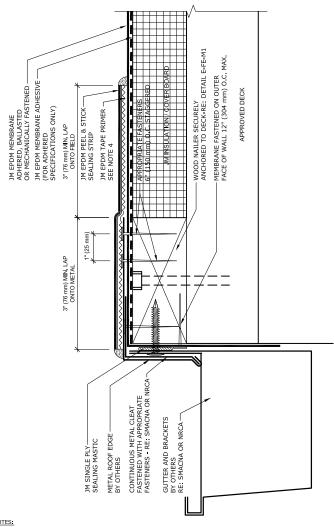
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Gutter & Metal Edge with EPDM Sealing Strip



- 1. REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP-TO-DATE INFORMATION.
- PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION
 INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.
 ANY CARPENTAY OR METAL WORK SHOULD BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS
 AND/OR PROJECT SPECIFICATIONS. THESE COMPONENTS SHOULD BE REVIEWED AND APPROVED BY A LICENSED DESIGN PROFESSIONAL.
 JM EPOM TAPE PRIMER OR AN SINGLE PLY MEMBRANE PRIMER (LOW VOC) MUST BE APPLIED ON ALL SURFACES COMING
 INTO CONTACT WITH JM EPDM PEEL & STICK PRODUCTS. ROLL MEMBRANE WITH HAND ROLLER UNDER PRESSURE AT SEAM.

Maximum Guarantee Term: 20 Years

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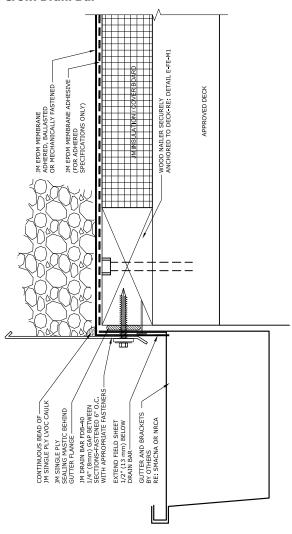
Note: For the most current information on general guidelines, please refer to the System Considerations tab under Commercial Roofing Products on the JM Roofing Web site. For specifications, flashing details and general installation information please refer to the Application Tools tab.



Detail No. E-FE-V7 (Replaces EE-3T)



Gutter & JM Drain Bar



NOTES:

- REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP-TO-DATE INFORMATION.
- 2. PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.
- ANY CARPENTRY OR METAL WORK SHOULD BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS
 AND/OR PROJECT SPECIFICATIONS. THESE COMPONENTS SHOULD BE REVIEWED AND APPROVED BY A LICENSED DESIGN PROFESSIONAL.

Maximum Guarantee Term: 20 Years

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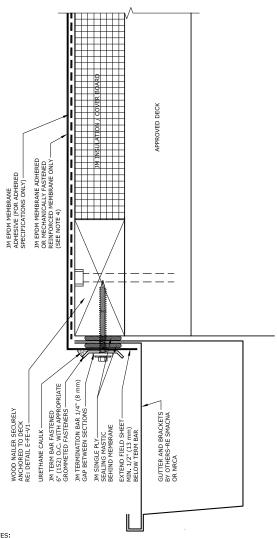
Note: For the most current information on general guidelines, please refer to the System Considerations tab under Commercial Roofing Products on the JM Roofing Web site. For specifications, flashing details and general installation information please refer to the Application Tools tab.



Detail No. E-FE-V8 (New Detail)



Gutter & Term Bar



NOTES:

- 1. REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP-TO-DATE INFORMATION.
- 2. PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.
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- FOR MECHANICALLY FASTENED REINFORCED MEMBRANE ONLY, INSTALL JM TPO 10" REINFORCED PERIMETER STRIP (RPS) 5' IN FROM PERIMETER EDGES.

Maximum Guarantee Term: 20 Years

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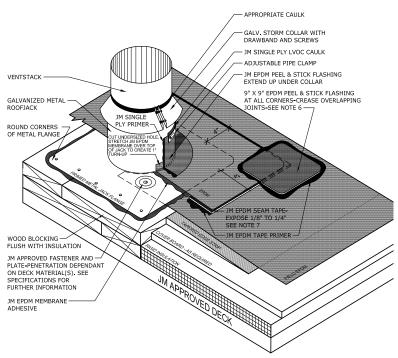
Note: For the most current information on general guidelines, please refer to the System Considerations tab under Commercial Roofing Products on the JM Roofing Web site. For specifications, flashing details and general installation information please refer to the Application Tools tab.



Detail No. E-DV-01 (Replaces EP-7)



Vent Pipe



NOTES:

- 1. REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP-TO-DATE INFORMATION.
- PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.
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- DETAILS TO BE USED IN CONJUNCTION WITH GUIDE SPECIFICATIONS CONTAINING REQUIREMENTS FOR NAILERS, INSULATION, ETC.
- 5. ON RE-ROOF OR RECOVER PROJECTS, VENT PIPES MUST BE CLEANED OF LARGE DEPOSITS OF ASPHALT. ALUMINUM TAPE IS WRAPPED AROUND THE PIPE AS A SEPARATION LAYER. NEW ASPHALT-COATED CAST IRON PIPES MUST BE WRAPPED WITH ALUMINUM TAPE.
- 6. JM EPDM TAPE PRIMER OR JM SINGLE PLY MEMBRANE PRIMER (LOW VOC) MUST BE APPLIED ON ALL SURFACES COMING INTO CONTACT WITH JM EPDM PEEL & STICK FLASHINGS. ROLL MEMBRANE WITH HAND ROLLER UNDER PRESSURE AT SEAM.
- 7. 1/8" TO 1/4" OF EPDM SEAM TAPE MUST BE EXPOSED ALONG ENTIRE LENGTH OF ALL SEAMS.
- 8. ALL SEALANTS / CAULKING SHALL BE PERIODICALLY INSPECTED AND MAINTAINED BY THE BUILDING OWNER THROUGHOUT THE LIFE OF THE ROOF.

Maximum Guarantee Term: 20 Years

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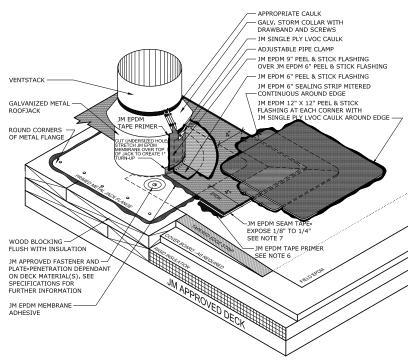
Note: For the most current information on general guidelines, please refer to the System Considerations tab under Commercial Roofing Products on the JM Roofing Web site. For specifications, flashing details and general installation information please refer to the Application Tools tab.



Detail No. E-DV-02 (New Detail)



Vent Pipe 30 Year



NOTES:

- 1. REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP-TO-DATE INFORMATION.
- PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.
- ANY CARPENTRY OR METAL WORK SHOULD BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS AND/OR PROJECT SPECIFICATIONS. THESE COMPONENTS SHOULD BE REVIEWED AND APPROVED BY A LICENSED DESIGN PROFESSIONAL.
- 4. ON RE-ROOF OR RECOVER PROJECTS, VENT PIPES MUST BE CLEANED OF LARGE DEPOSITS OF ASPHALT. ALUMINUM TAPE IS WRAPPED AROUND THE PIPE AS A SEPARATION LAYER. NEW ASPHALT-COATED CAST IRON PIPES MUST BE WRAPPED WITH ALUMINUM TAPE.
- 5. DETAILS TO BE USED IN CONJUNCTION WITH GUIDE SPECIFICATIONS CONTAINING REQUIREMENTS FOR NAILERS, INSULATION, ETC.
- 6. JM EPDM TAPE PRIMER OR JM SINGLE PLY MEMBRANE PRIMER (LOW VOC) MUST BE APPLIED ON ALL SURFACES COMING INTO CONTACT WITH JM EPDM PEEL & STICK FLASHINGS. ROLL MEMBRANE WITH HAND ROLLER UNDER PRESSURE AT SEAM.
- 7. 1/8" TO 1/4" OF EPDM SEAM TAPE MUST BE EXPOSED ALONG ENTIRE LENGTH OF ALL SEAMS.
- 8. ALL SEALANTS / CAULKING SHALL BE PERIODICALLY INSPECTED AND MAINTAINED BY THE BUILDING OWNER THROUGHOUT THE LIFE OF THE ROOF.

Maximum Guarantee Term: 30 Years

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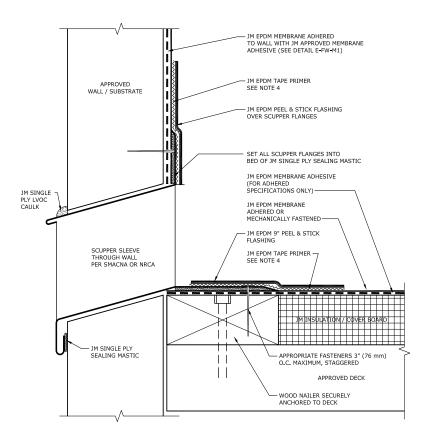




Detail No. E-DV-03 (Replaces EM-9)



Through-Wall Scupper



NOTES:

- 1. REFER TO JOHNS MANVILLE WEBSITE (www.im.com) FOR
- REFER TO JOHNS MANUFLE WEBSITE (WWW.)III.COIT) FOR MOST UP-TO-DATE INFORMATION.

 PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.

 DETAIL.
- 3. ANY CARPENTRY OR METAL WORK SHOULD BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS AND/OR PROJECT SPECIFICATIONS. THESE COMPONENTS SHOULD BE REVIEWED AND APPROVED BY A LICENSED DESIGN PROFESSIONAL.
- 4. JM EPDM TAPE PRIMER OR JM SINGLE PLY MEMBRANE JM EPDM IAPE PRIMER OR JM SINGLE PLY MEMBRANE PRIMER (LOW VOC) MUST BE APPLIED ON ALL SUFFACES COMING INTO CONTACT WITH JM EPDM PEEL & STICK FLASHING, ROLL MEMBRANE WITH HAND ROLLER UNDER PRESSURE AT SEAM.
- ALL SEALANTS / CAULKING SHALL BE PERIODICALLY INSPECTED AND MAINTAINED BY THE BUILDING OWNER THROUGHOUT THE LIFE OF THE ROOF.

Maximum Guarantee Term: 20 Years

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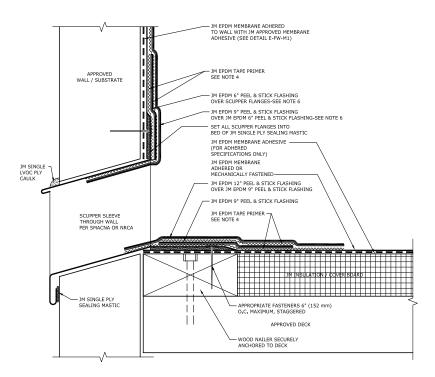
Note: For the most current information on general guidelines, please refer to the System Considerations tab under Commercial Roofing Products on the JM Roofing Web site. For specifications, flashing details and general installation information please refer to the Application Tools tab.



Detail No. E-DV-04 (New Detail)



Through-Wall Scupper 30 Year



NOTES:

- NOIES:

 I. REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP-TO-DATE INFORMATION.

 PLEASE SEE SINCLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.
- 3. ANY CARPENTRY OR METAL WORK SHOULD BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS AND/OR PROJECT SPECIFICATIONS, THESE COMPONENTS SHOULD BE REVUEWED AND APPROVED BY A LICENSED DESIGN PROFESSIONAL.
- JM EPDM TAPE PRIMER OR JM SINGLE PLY MEMBRANE PRIMER (LOW VOC) MUST BE APPLIED ON ALL SURFACES COMING INTO CONTACT WITH JM EPDM SEAM TAPE, ROLL MEMBRANE WITH HAND ROLLER UNDER PRESSURE AT SEAM.
- 5. ALL SEALANTS / CAULKING SHALL BE PERIODICALLY INSPECTED AND MAINTAINED BY THE BUILDING OWNER THROUGHOUT THE LIFE OF THE ROOF.
- FLASH ALL SCUPPERS (OVERFLOW, TAPERED SUMP, AND LOW WALL IN THE SAME MANNER AS DEPICTED HERE.

Maximum Guarantee Term: 30 Years

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Note: For the most current information on general guidelines, please refer to the System Considerations tab under Commercial Roofing Products on the JM Roofing Web site. For specifications, flashing details and general installation information please refer to the Application Tools tab.

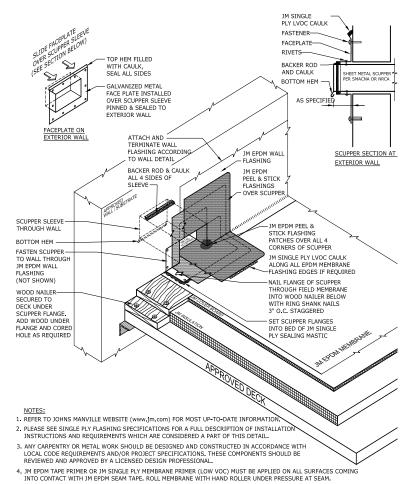




Detail No. E-DV-041 (Replaces EM-8)



Through-Wall Scupper



5. ALL SEALANTS / CAULKING SHALL BE PERIODICALLY INSPECTED AND MAINTAINED BY THE BUILDING OWNER THROUGHOUT THE LIFE OF THE ROOF.

Maximum Guarantee Term: 30 Years

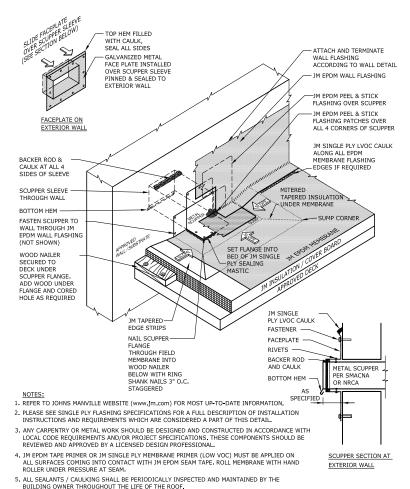
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Primary Scupper with Tapered Drainage Sump



Maximum Guarantee Term: 20 Years

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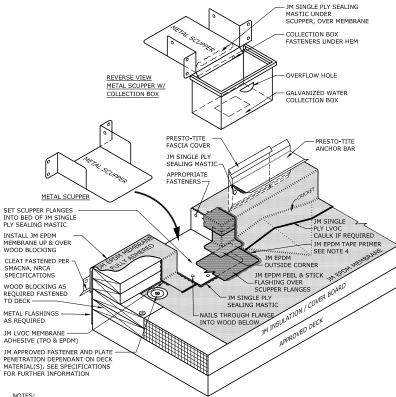




Detail No. E-DV-06 (New Detail)



Low Wall Primary Scupper Flashing



- 1. REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP-TO-DATE INFORMATION.
- PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.
- 3. ANY CARPENTRY OR METAL WORK SHOULD BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS AND/OR PROJECT SPECIFICATIONS. THESE COMPONENTS SHOULD BE REVIEWED AND APPROVED BY A LICENSED DESIGN PROFESSIONAL.
- 4. JM EPDM TAPE PRIMER OR JM SINGLE MEMBRANE PRIMER (LOW VOC) MUST BE APPLIED ON ALL SURFACES COMING INTO CONTACT WITH JM EPDM SEAM TAPE. ROLL MEMBRANE WITH HAND ROLLER UNDER PRESSURE AT SEAM.
- 5. ALL SEALANTS / CAULKING SHALL BE PERIODICALLY INSPECTED AND MAINTAINED BY THE BUILDING OWNER THROUGHOUT THE LIFE OF THE ROOF.

Maximum Guarantee Term: 20 Years

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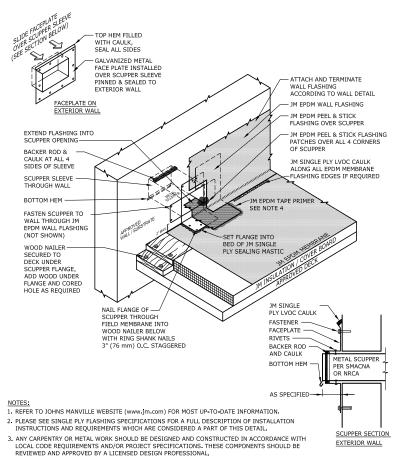
Note: For the most current information on general guidelines, please refer to the System Considerations tab under Commercial Roofing Products on the JM Roofing Web site. For specifications, flashing details and general installation information please refer to the Application Tools tab.



Detail No. E-DV-07 (Replaces EM-8)



Overflow Scupper



- M EPDM TAPE PRIMER OR JM SINGLE PLY MEMBRANE PRIMER (LOW VOC) MUST BE APPLIED ON ALL SURFACES COMING INTO CONTACT WITH JM EPDM SEAM TAPE. ROLL MEMBRANE WITH HAND ROLLER UNDER PRESSURE AT SEAM.
- 5. ALL SEALANTS / CAULKING SHALL BE PERIODICALLY INSPECTED AND MAINTAINED BY THE BUILDING OWNER THROUGHOUT THE LIFE OF THE ROOF.

Maximum Guarantee Term: 20 Years

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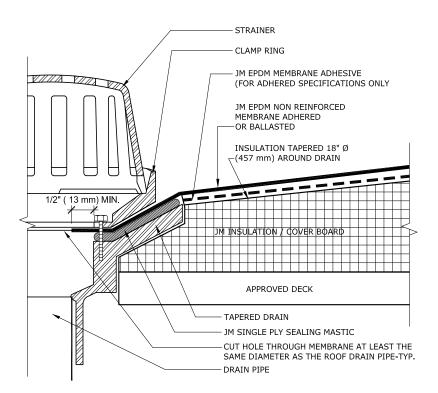




Detail No. E-DV-08 (Replaces ED-1)



Primary Drain Sump - Low Slope - Less Than 3:12 Slope



NOTES:

- 1. REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP-TO-DATE INFORMATION.
- PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.
- 3. ANY CARPENTRY OR METAL WORK SHOULD BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS AND/OR PROJECT SPECIFICATIONS. THESE COMPONENTS SHOULD BE REVIEWED AND APPROVED BY A LICENSED DESIGN PROFESSIONAL.
- 4. NO SEAMS OR FOLDS UNDER THE CLAMPING RING.

Maximum Guarantee Term: 30 Years

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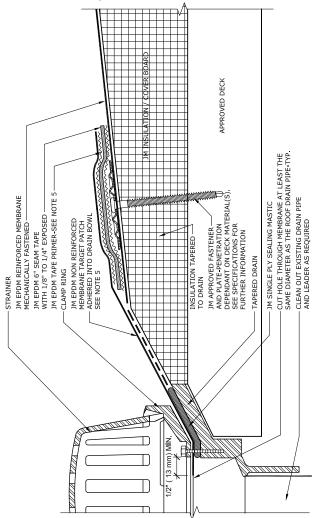
Note: For the most current information on general guidelines, please refer to the System Considerations tab under Commercial Roofing Products on the JM Roofing Web site. For specifications, flashing details and general installation information please refer to the Application Tools tab.



Detail No. E-DV-09 (Replaces ED-3)



Primary Drain Sump-Steep Slope Greater Than 3:12 Slope Mech. Attached



- NOTES;

 1. REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP-TO-DATE INFORMATION.

 2. PLEASE SES SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.

 3. ANY CARBENTY OR METAL WORK SHOULD BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS AND/OR PROPECT SPECIFICATIONS, THESE COMPONENTS SHOULD BE REVIEWED AND APPROVED BY A LICENSED DESIGN PROFESSIONAL.

 4. NO SEANS OR FOLDS IN THE TRACEP FACTH UNDER THE CLAMPING RING.

 5. 12" X 12" EPOM PEEL & STICK FLASHING AT ALL CORNERS OF TARGET FATCH, JM EPOM TAPE PRIMER OR JM SINGLE PLY MEMBRANE PRIMER (LOW VOC) MUST BE APPLIED ON ALL SURFACES COMING INTO CONTACT WITH JM EPOM PEEL & STICK FLASHINGS, ROLL MEMBRANE WITH HAND ROLLER UNDER PRESSURE AT SEAMS,

Maximum Guarantee Term: 20 Years

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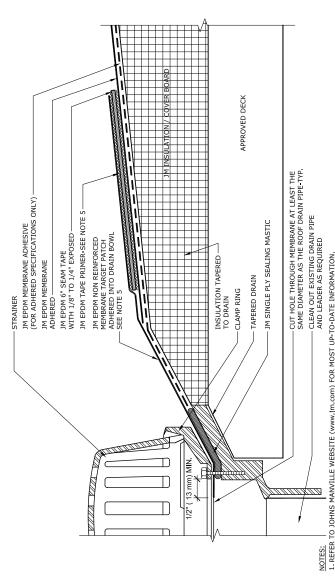




Detail No. E-DV-10 (Replaces ED-3)



Primary Drain Sump-Steep Slope Greater Than 3:12 Slope Adhered



ANY CARPENTRY OR METAL WORK SHOULD BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS AND/OR PROJECT SPECIFICATIONS. THESE COMPONENTS SHOULD BE REVIEWED AND APPROVED BY A LICENSED DESIGN PROFESSIONAL. PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.

12" X 12" EPDM PEEL & STICK FLASHING AT ALL CORNERS OF TARGET PATCH. JM EPDM TAPE PRIMER OR JM SINGLE PLY MEMBRANE . NO SEAMS OR FOLDS IN THE TARGET PATCH UNDER THE CLAMPING RING.

PRIMER (LOW VOC) MUST BE APPLIED ON ALL SURFACES COMING INTO CONTACT WITH JM EPDM PEEL & STICK FLASHINGS. ROLL MEMBRANE WITH HAND ROLLER UNDER PRESSURE AT SEAMS.

Maximum Guarantee Term: 20 Years

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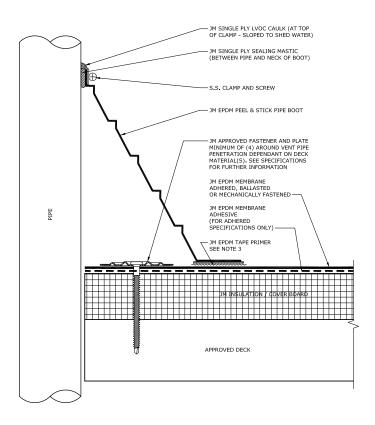
Note: For the most current information on general guidelines, please refer to the System Considerations tab under Commercial Roofing Products on the JM Roofing Web site. For specifications, flashing details and general installation information please refer to the Application Tools tab.



Detail No. E-FP-01 (Replaces EP-1T)



JM Peel & Stick Pipe Boot



- 1. REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR THE MOST CURRENT INFORMATION.
- 2. ANY CARPENTRY, METAL WORK, OR MASONRY CONSTRUCTION SHOULD BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS AND/OR PROJECT SPECIFICATIONS, THESE COMPONENTS SHOULD BE REVIEWED AND APPROVED BY A LICENSED DESIGN PROFESSIONAL.
- JM EPDM MEMBRANE MUST BE CLEANED, THEN PRIMED ON TOP OF MEMBRANE AT SEAM TAPE WITH JM EPDM TAPE PRIMER OR JM SINGLE PLY MEMBRANE PRIMER (LOW VOC). ROLL MEMBRANE WITH ROLLER UNDER PRESSURE AT PEEL & STICK SEAM TAPE OVER EPDM FLASHING.
- 4. PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.

Maximum Guarantee Term: 20 Years

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Note: For the most current information on general guidelines, please refer to the System Considerations tab under Commercial Roofing Products on the JM Roofing Web site. For specifications, flashing details and general installation information please refer to the Application Tools tab.

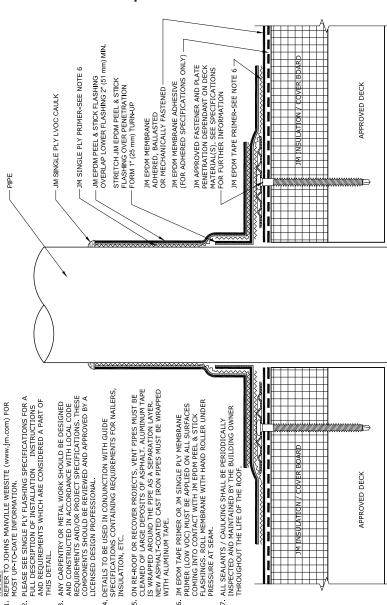
SECTION FOUR



Detail No. E-FP-02 (Replaces EP-2T)



Field Fabricated Vent Pipe



Maximum Guarantee Term: 20 Years

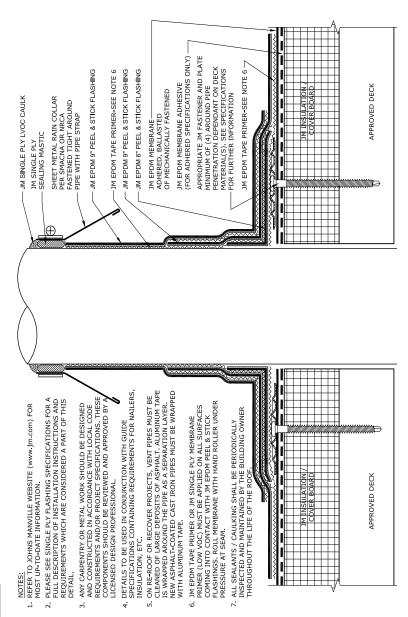
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Field Fabricated Vent Pipe 30 Year



Maximum Guarantee Term: 30 Years

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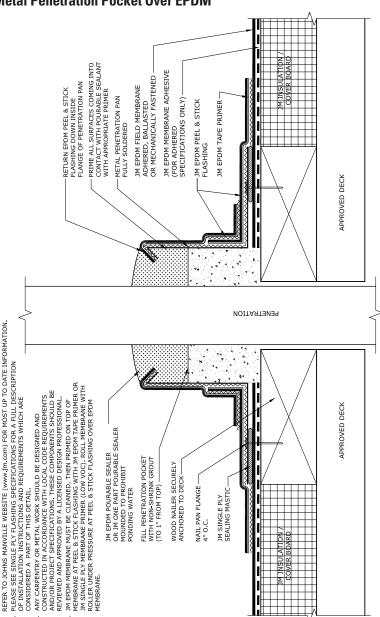
Note: For the most current information on general guidelines, please refer to the System Considerations tab under Commercial Roofing Products on the JM Roofing Web site. For specifications, flashing details and general installation information please refer to the Application Tools tab.



Detail No. E-FP-04 (Replaces EP-5T)



Metal Penetration Pocket Over EPDM



Maximum Guarantee Term: 20 Years

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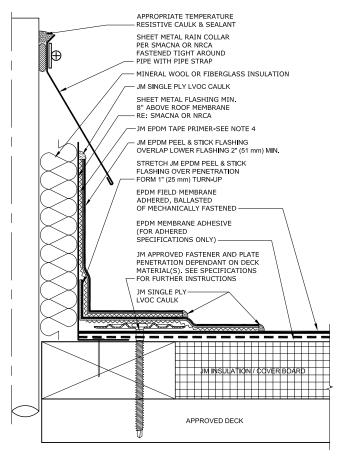
Note: For the most current information on general guidelines, please refer to the System Considerations tab under Commercial Roofing Products on the JM Roofing Web site. For specifications, flashing details and general installation information please refer to the Application Tools tab.



Detail No. E-FP-05 (New Detail)



Vent Pipe (Hot)



NOTES:

- REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP TO DATE INFORMATION.
- PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS
 WHICH ARE CONSIDERED A PART OF THIS DETAIL.
- ANY CARPENTRY OR METAL WORK SHOULD BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS
 AND/OR PROJECT SPECIFICATIONS. THESE COMPONENTS SHOULD BE REVIEWED AND APPROVED BY A LICENSED DESIGN PROFESSIONAL.
- 4. JM EPDM MEMBRANE MUST BE CLEANED, THEN PRIMED ON TOP OF MEMBRANE AND PEEL & STICK FLASHING WITH JM EPDM TAPE PRIMER OR JM SINGLE PLY MEMBRANE PRIMER (LOW VOC) ROLL MEMBRANE WITH ROLLER UNDER PRESSURE AT PEEL & STICK FLASHING OVER EPDM MEMBRANE.
- & STICK FLASHING OVER EPDM MEMBRANE.

 5. MAXIMUM 150 DEGREES FAHRENHEIT AT SURFACE OF OUTER SHEET METAL FLASHING.
- 6. SEE E-DV-01 FOR 20 YEAR FLASHING ISOMETRIC AND E-DV-02 FOR 30 YEAR FLASHING ISOMETRIC.

Maximum Guarantee Term: 20 Years

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Note: For the most current information on general guidelines, please refer to the System Considerations tab under Commercial Roofing Products on the JM Roofing Web site. For specifications, flashing details and general installation information please refer to the Application Tools tab.

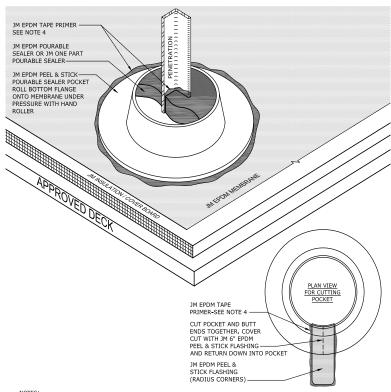




Detail No. E-FP-06 (Replaces EP-6)



EPDM Pourable Sealer Pocket



NOTES:

- 1. REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP TO DATE INFORMATION.
- PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS
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 AND/OR PROJECT SPECIFICATIONS. THESE COMPONENTS SHOULD BE REVIEWED AND APPROVED BY A LICENSED DESIGN PROFESSIONAL.
- 4. JM EPDM TAPE PRIMER OR JM SINGLE PLY MEMBRANE PRIMER (LOW VOC) MUST BE APPLIED ON ALL SURFACES COMING INTO CONTACT WITH JM EPDM PEEL & STICK FLASHINGS. ROLL MEMBRANE WITH HAND ROLLER UNDER PRESSURE AT SEAM.
- 5. ALL SEALANTS / CAULKING SHALL BE PERIODICALLY INSPECTED AND MAINTAINED BY THE BUILDING OWNER THROUGHOUT THE LIFE OF THE ROOF.
- 6. MAINTAIN 2" MIN. CLEARANCE FROM PENETRATION TO EDGE OF SEALER POCKET.
- 7. PRIME INSIDE OF SEALER POCKET WITH EPDM TAPE PRIMER OR JM SINGLE PLY MEMBRANE PRIMER (LOW VOC).
- 8. THIS DETAIL IS ALSO APPROVED FOR MULTIPLE PENETRATIONS PROVIDED THE 2" CLEARANCE IS MAINTAINED.

Maximum Guarantee Term: 20 Years

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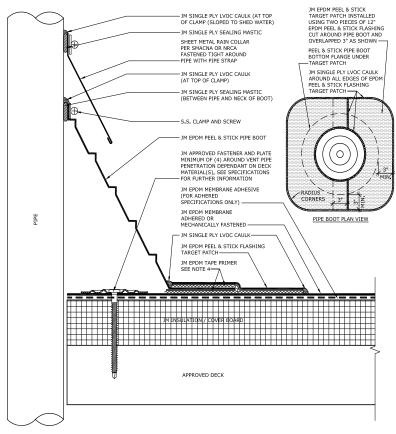
Note: For the most current information on general guidelines, please refer to the System Considerations tab under Commercial Roofing Products on the JM Roofing Web site. For specifications, flashing details and general installation information please refer to the Application Tools tab.



Detail No. E-FP-07 (New Detail)



JM Peel & Stick Pipe Boot with Sealing Strip 30 Year



- $\underline{\text{NOTES:}}$ 1. REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR THE MOST CURRENT INFORMATION.
- ANY CARPENTRY, METAL WORK, OR MASONRY CONSTRUCTION SHOULD BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS AND/OR PROJECT SPECIFICATIONS. THESE COMPONENTS SHOULD BE REVIEWED AND APPROVED BY A LICENSED DESIGN PROFESSIONAL.
- 3. JM EPDM MEMBRANE MUST BE CLEANED, THEN PRIMED ON TOP OF MEMBRANE AT SEAM TAPE WITH JM EPDM TAPE PRIMER. ROLL MEMBRANE WITH ROLLER UNDER PRESSURE AT PEEL & STICK SEAM TAPE OVER EPDM FLASHING.
- 4. JM EPDM TAPE PRIMER OR JM SINGLE PLY MEMBRANE PRIMER (LOW VOC) MUST BE APPLIED ON ALL SURFACES COMING INTO CONTACT WITH JM PEEL & STICK FLASHINGS. ROLL MEMBRANE WITH HAND ROLLER UNDER PRESSURE AT FLASHING.
- PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.

Maximum Guarantee Term: 30 Years

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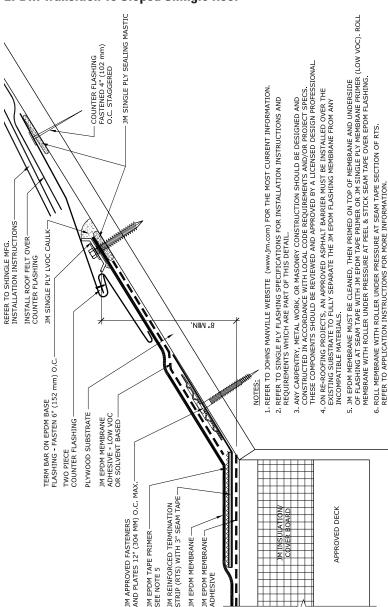




Detail No. E-TI-01 (Replaces EM-15T)



EPDM Transition To Sloped Shingle Roof



Maximum Guarantee Term: 20 Years

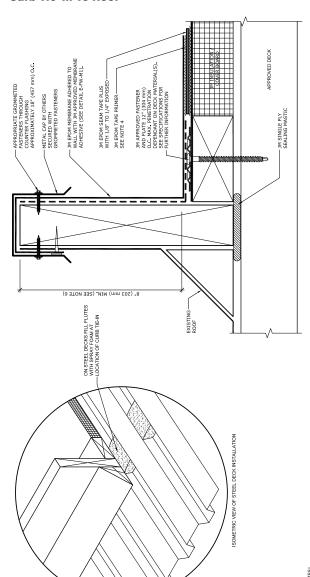
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Curb Tie-In To Roof



1. REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP-TO-DATE INFORMATION.

2. PLASE SEE SINGE PLA LACHING SPETICATIONS FOR A FILL DESCRIPTION OF INSTILATION IN INSTILATION IN INSTILATION IN INSTILATION SHAPE SHAPE

SHOULD BE REVIEWED AND APPOUNDED BY A LICHESE DESIGN ROFESSIONAL.

4. IN ERON TARE PRIVING DAIL PARKED BY A LICHESE DESIGN ROFESSIONAL.

5. IN ERON TARE PRIVING AND APPOUNDED BY A LICHESE DAILED ON ALL SURFACES COMING INTO CONTACT WITH M EPON SEAM TARE PLUS NO. LI MENBRANE WITH HAND ROLLER UNDER PRESSURE AT SEAM IN ACCORDANCE WITH THE 3M EPON INSTALLATION GLIDE.

5. LIEIGHT OF CLAB TO BE ADUSTED WITH AMILIES, IT IS PREFERRED TO RAISE CURBO ONTO MALLES TO BETREM HEIGHT.

7. SEE E-FW-B DETAILS FOR JM APPROVED BASE FLASHING TIE IN TERMINATION METHODS.

Maximum Guarantee Term: 20 Years

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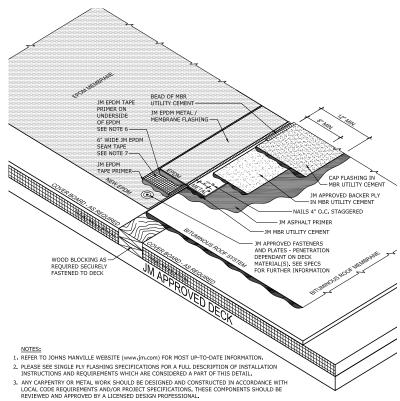
Note: For the most current information on general guidelines, please refer to the System Considerations tab under Commercial Roofing Products on the JM Roofing Web site. For specifications, flashing details and general installation information please refer to the Application Tools tab.



Detail No. E-TI-03 (Replaces EM-6B)



Tie-In-Bituminous To EPDM



- 4. DETAILS TO BE USED IN CONJUNCTION WITH GUIDE SPECIFICATIONS CONTAINING REQUIREMENTS FOR
- 5. ON RE-ROOF OR RECOVER PROJECTS, VENT PIPES MUST BE CLEANED OF LARGE DEPOSITS OF ASPHALT. ALUMINUM TAPE IS WRAPPED AROUND THE PIPE AS A SEPARATION LAYER. NEW ASPHALT-COATED CAST IRON PIPES MUST BE WRAPPED WITH ALUMINUM TAPE.
- 6. JM EPDM TAPE PRIMER OR JM SINGLE PLY MEMBRANE PRIMER (LOW VOC) MUST BE APPLIED ON ALI SURFACES COMING INTO CONTACT WITH JM EPDM PEEL & STICK FLASHINGS. ROLL MEMBRANE WITH HAND ROLLER UNDER PRESSURE AT SEAM.
- 7. 1/8" TO 1/4" OF EPDM SEAM TAPE MUST BE EXPOSED ALONG ENTIRE LENGTH OF ALL SEAMS.
- 8. ALL SEALANTS / CAULKING SHALL BE PERIODICALLY INSPECTED AND MAINTAINED BY THE BUILDING OWNER THROUGHOUT THE LIFE OF THE ROOF.

Maximum Guarantee Term: 20 Years

NAILERS, INSULATION, ETC.

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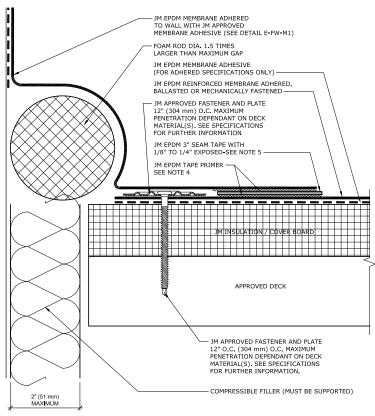
Note: For the most current information on general guidelines, please refer to the System Considerations tab under Commercial Roofing Products on the JM Roofing Web site. For specifications, flashing details and general installation information please refer to the Application Tools tab.



Detail No. E-EJ-01 (Replaces EJ-5T)



Expansion Joint-Roof To Wall



NOTES:

- 1. REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP-TO-DATE INFORMATION.
- PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.
- 3. ANY CARPENTRY OR METAL WORK SHOULD BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS AND/OR PROJECT SPECIFICATIONS. THESE COMPONENTS SHOULD BE REVIEWED AND APPROVED BY A LICENSED DESIGN PROFESSIONAL.
- 4. JM EPDM TAPE PRIMER OR JM SINGLE PLY MEMBRANE PRIMER (LOW VOC) MUST BE APPLIED ON ALL SURFACES COMING INTO CONTACT WITH JM EPDM SEAM TAPE. ROLL MEMBRANE WITH HAND ROLLER UNDER PRESSURE AT SEAM.
- 5. 1/8" TO 1/4" OF EPDM SEAM TAPE MUST BE EXPOSED.

Maximum Guarantee Term: 20 Years

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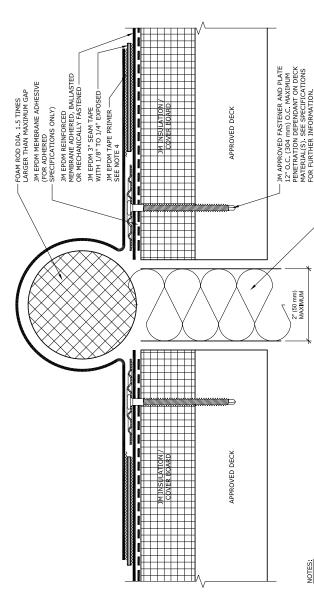




Detail No. E-EJ-02 (Replaces EJ-6T)



Expansion Joint-Roof To Roof



COMPRESSIBLE FILLER (MUST BE SUPPORTED) PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION 1. REFER TO JOHNS MANVILLE WEBSITE (www.im.com) FOR MOST UP-TO-DATE INFORMATION

. JM EPDM TAPE PRIMER OR JM SINGLE PLY MEMBRANE PRIMER (LOW VOC) MUST BE APPLIED ON ALL SURFACES COMING INTO CONTACT WITH JM EPDM SEAM TAPE. ROLL MEMBRANE WITH HAND ROLLER UNDER PRESSURE AT SEAM. ANY CARPENTRY OR METAL WORK SHOULD BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS AND/OR PROJECT SPECIFICATIONS. THESE COMPONENTS SHOULD BE REVIEWED AND APPROVED BY A LICENSED DESIGN PROFESSIONAL INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.

5. 1/8" TO 1/4" OF EPDM SEAM TAPE MUST BE EXPOSED.

Maximum Guarantee Term: 20 Years

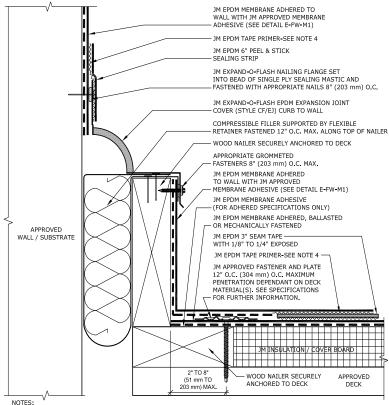
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Note: For the most current information on general guidelines, please refer to the System Considerations tab under Commercial Roofing Products on the JM Roofing Web site. For specifications, flashing details and general installation information please refer to the Application Tools tab.





Expand-O-Flash Curb To Wall Expansion Joint Cover-Style CF/EJ



- REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP-TO-DATE INFORMATION.
- PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.
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- 4. JM EPDM TAPE PRIMER OR JM SINGLE PLY MEMBRANE PRIMER (LOW VOC) MUST BE APPLIED ON ALL SURFACES COMING INTO CONTACT WITH JM EPDM SEAM TAPE. ROLL MEMBRANE WITH HAND ROLLER UNDER PRESSURE AT SEAM.
- 5. 1/8" TO 1/4" OF EPDM SEAM TAPE MUST BE EXPOSED.

Maximum Guarantee Term: 20 Years

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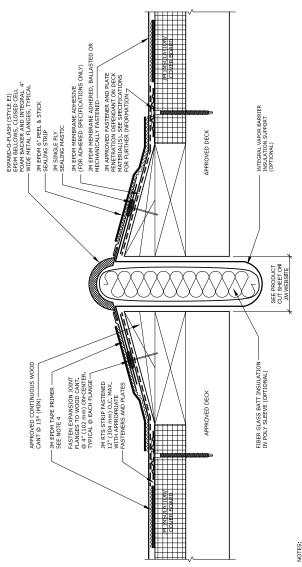




Detail No. E-EJ-04 (Replaces EJ-3T)



Expand-O-Flash Roof To Roof Expansion Joint Cover-Style EJ



NOTES:

1. REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP-TO-DATE INFORMATION AND INSTALLATION INSTRUCTIONS.

2. PLEASE SEE SINGLE BY TASHING SPECIFICATIONS FOR A PULL DESCRIPTION OF INSTALLATION

INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.

3. ANY CARPENTRY OR METAL WORK SHOULD BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL

APROVED BY A LICRINSED DESIGN PROFESSIONAL.

4. IN FEDNIE THE PRINTER OR IN SINGLE PLY MEMBRAINE RRIMER (LOW VOC) MUST BE APPLIED ON ALL SURFACES COMING INTO CONTACT WITH JAM PEDM PELL AND STICK PRODUCTS. ROLL MEMBRANE WITH HAND BOLLER UNDER PRESSURE AT SEAM.

CODE REQUIREMENTS AND/OR PROJECT SPECIFICATIONS. THESE COMPONENTS SHOULD BE REVIEWED AND

Maximum Guarantee Term: 10 Years

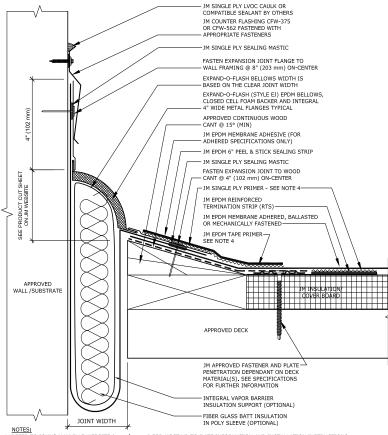
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Expand-O-Flash Roof To Wall - Style EJ



- REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP-TO-DATE INFORMATION AND INSTALLATION INSTRUCTIONS.
- PLEASE SEE SINGLE PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.
- 3. ANY CARPENTRY OR METAL WORK SHOULD BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS AND/OR PROJECT SPECIFICATIONS. THESE COMPONENTS SHOULD BE REVIEWED AND APPROVED BY A LICENSED DESIGN PROFESSIONAL.
- 4. JM EPDM TAPE PRIMER OR JM SINGLE PLY MEMBRANE PRIMER (LOW VOC) MUST BE APPLIED ON ALL SURFACES COMING INTO CONTACT WITH JM EPDM PEEL AND STICK PRODUCTS, ROLL MEMBRANE WITH HAND ROLLER UNDER PRESSURE AT SEAM.

Maximum Guarantee Term: 10 Years

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Detail No. E-EJ-06 (Replaces EJ-1B)

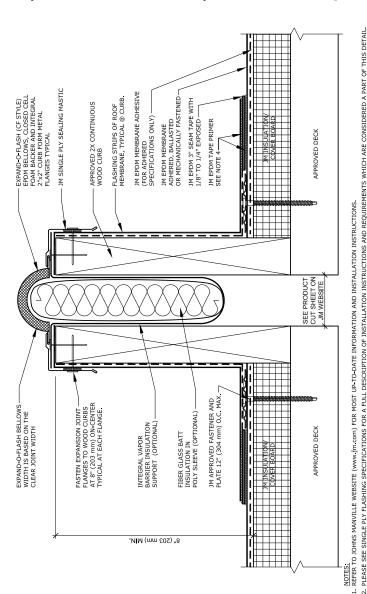


ANY CARPENTRY OR METAL WORK SHOULD BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS AND/OR PROJECT SPECIFICATIONS.

THESE COMPONENTS SHOULD BE REVIEWED AND APPROVED BY A LICENSED DESIGN PROFESSIONAL.

JM EPDM TAPE PRIMER OR JM SINGLE PLY MEMBRANE PRIMER (LOW VOC) MUST BE APPLIED ON ALL SURFACES COMING INTO CONTACT WITH JM EPDM SEAM TAPE. ROLL MEMBRANE WITH HAND ROLLER UNDER PRESSURE AT SEAM.

Expand-O-Flash Curb To Curb Expansion Joint Cover Style CF



Maximum Guarantee Term: 10 Years

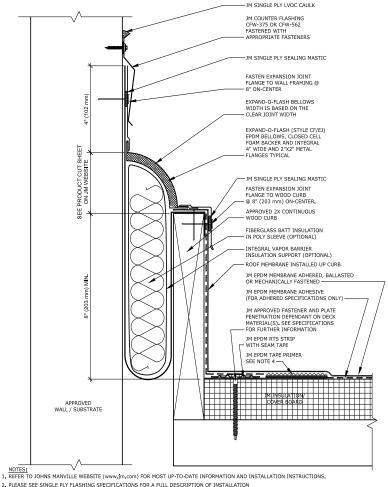
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Expand-O-Flash Curb To Wall Expansion Joint Cover Style CF/EJ



- INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.
- 3. ANY CARPENTRY OR METAL WORK SHOULD BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS AND/OR PROJECT SPECIFICATIONS. THESE COMPONENTS SHOULD BE REVIEWED AND APPROVED BY A LICENSED DESIGN PROFESSIONAL.
 4. JM EPDM TAPE PRIMER OR JM SINGLE PLY MEMBRANE PRIMER (LOW VOC) MUST BE APPLIED ON ALL SURFACES COMING INTO CONTACT WITH JM EPDM PEEL AND STICK PRODUCTS. ROLL MEMBRANE WITH HAND ROLLER UNDER PRESSURE AT SEAM.

Maximum Guarantee Term: 10 Years

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Detail No. E-EJ-08 (Replaces EJWC-1B)

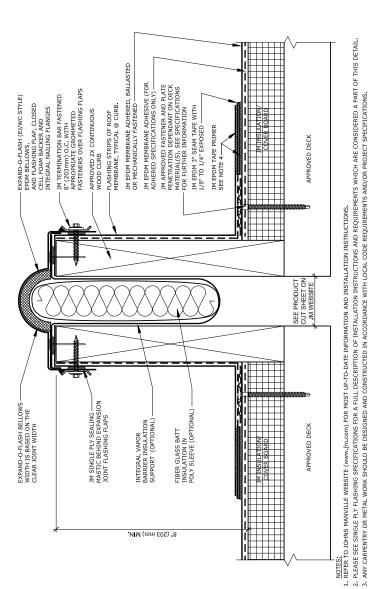


JM EPDM TAPE PRIMER OR JM SINGLE PLY MEMBRANE PRIMER (LOW VOC) MUST BE APPLIED ON ALL SURFACES COMING INTO CONTACT WITH JM EPDM PEEL AND STICK PRODUCTS.

THESE COMPONENTS SHOULD BE REVIEWED AND APPROVED BY A LICENSED DESIGN PROFESSIONAL.

ROLL MEMBRANE WITH HAND ROLLER UNDER PRESSURE AT SEAM.

Expand-O-Flash Curb To Curb Expansion Joint Cover-Style EJ/WC



Maximum Guarantee Term: 10 Years

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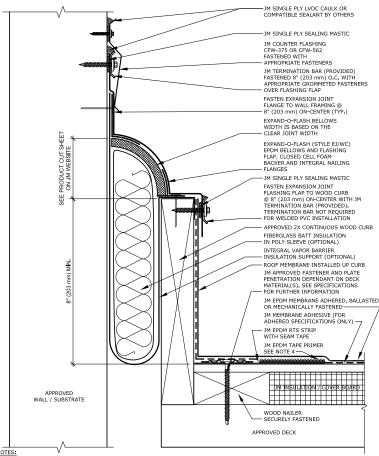
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Detail No. E-EJ-09 (New Detail)



Expand-O-Flash Curb To Wall-Style EJ/WC



- 1. REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP-TO-DATE INFORMATION AND INSTALLATION INSTRUCTIONS.
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- 4. JM EPDM TAPE PRIMER OR JM SINGLE PLY MEMBRANE PRIMER (LOW VOC) MUST BE APPLIED ON ALL SURFACES COMING INTO CONTACT WITH JM EPDM PEEL AND STICK PRODUCTS. ROLL MEMBRANE WITH HAND ROLLER UNDER PRESSURE AT SEAM.

Maximum Guarantee Term: 10 Years

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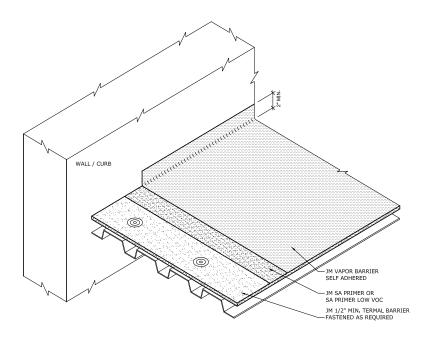
Note: For the most current information on general guidelines, please refer to the System Considerations tab under Commercial Roofing Products on the JM Roofing Web site. For specifications, flashing details and general installation information please refer to the Application Tools tab.







(ALT) JM Vapor Barrier SA - Wall Base Detail - Alt



NOTES

- 1. USE DETAIL IN CONJUNCTION WITH THE STANDARD CURB DETAIL FOR APPROVED ROOF SYSTEM.
- 2. REFER TO JM VAPOR BARRIER AND PRIMER INSTALLATION INSTRUCTIONS FOR GENERAL GUIDELINES REGARDING THESE SYSTEMS.
- 3. FOR STEEL DECK SYSTEMS IT IS REQUIRED TO HAVE A MINIMUM OF 1/2" THERMAL BARRIER FASTENED TO STEEL DECK BEFORE JM VAPOR BARRIER IS ADHERED.

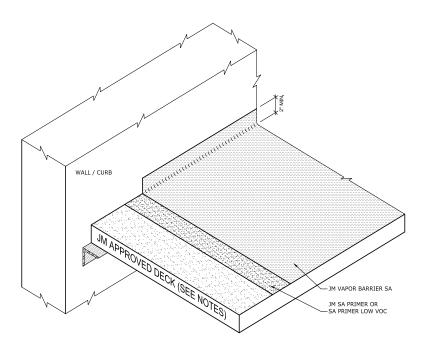
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JM Vapor Barrier SA - Wall Base Detail



NOTES

- 1. USE DETAIL IN CONJUNCTION WITH THE STANDARD CURB DETAIL FOR APPROVED ROOF SYSTEM.
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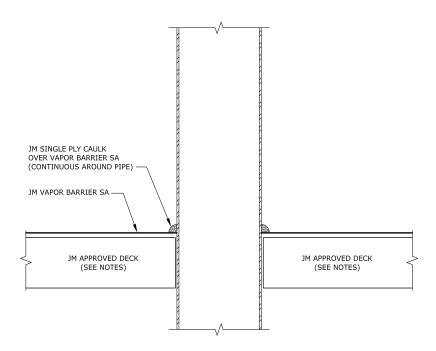
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JM Vapor Barrier SA - Pipe Penetration Detail



NOTES

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- 2. REFER TO JM VAPOR BARRIER AND PRIMER INSTALLATION INSTRUCTIONS FOR GENERAL GUIDELINES REGARDING THESE SYSTEMS.
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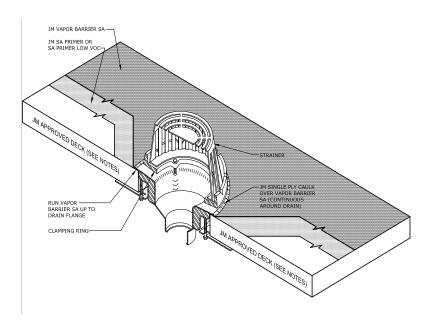
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JM Vapor Barrier SA - Drain Detail



NOTES

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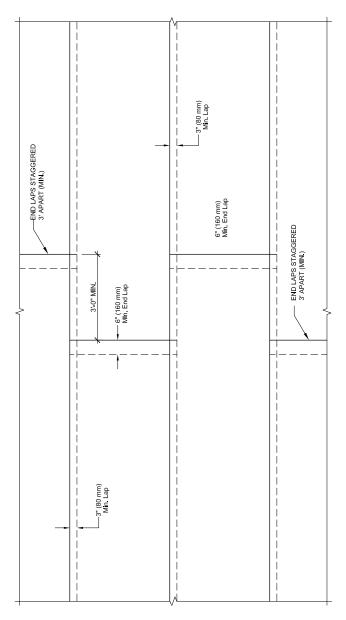
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JM Vapor Barrier SA - Detail at Field Laps



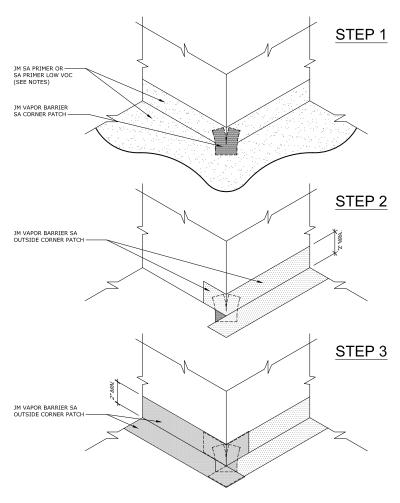
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JM Vapor Barrier SA - Outside Curb Detail



NOTES

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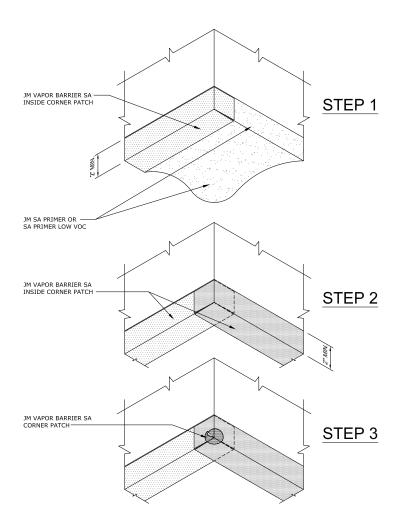
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JM Vapor Barrier SA - Inside Curb Detail



NOTES

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