



Single Ply Roofing Systems (EPDM) Specification SE6M-(T)/SE9M-(T)

Mechanically Attached EPDM Single Ply Roofing System

For use over Johns Manville (JM) insulation or approved decks on inclines up to 6:12

For Regions 1, 2 and 3

Materials per 100 sq. ft. (9.3 sq. meters) of roof Area

JM EPDM Membrane 105 sq. ft. (9.8 sq. meters)

Materials per 100 lin. ft. (30.5 m) of Lap Area (3 in. [80 mm]) lap (If Spliced)

JM EPDM Tape Primer/Wash 0.15 gal. (0.57 liters)

JM EPDM Seam Tape 100 lin. ft. (30.5 m)

Materials per 100 lin. ft. (30.5 m) of Anchor Bar

JM EPDM Anchor Bar 100 lin. ft. (30.5 in)

JM EPDM Anchors 100 pcs.

JM EPDM Peel & Stick Sealing Strip 100 lin. ft. (30.5 m)

JM EPDM Tape Primer/Wash 0.25 gal. (0.95 liters)

Approximate installed weight: 37.5 - 45 lbs. (17 - 20.4 kgs.)/sq.

General

This specification is for use over any type of approved structural deck which provides a suitable surface to receive the membrane and which can adequately retain the required mechanical fasteners.

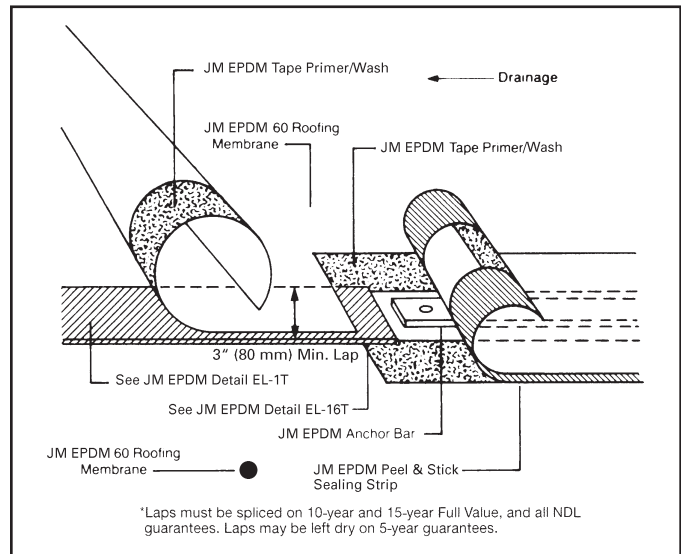
This specification is also for use over JM roof insulations which provide a suitable surface for the EPDM membrane. Insulation should be installed in accordance with the appropriate JM Insulation Specification detailed in the current JM Single Ply Roofing Systems Manual. This specification can also be used in certain reroofing applications.

Design and installation of the deck and/or roof substrate must result in the roof draining freely, to outlets numerous enough and so located as to remove water promptly and completely. Areas where water ponds for more than 48 hours are unacceptable and will fall in will not be eligible for a JM Roofing System Guarantee.

Note: All general instructions contained in the current JM Single Ply Roofing Systems Manual shall be considered part of this specification.

Flashings

Flashing details can be found in **Section 17** of the current JM Single Ply Roofing Systems Manual.



Application

Unroll and unfold the membrane to its fullest width. Move the membrane into place without stretching. When possible, begin the installation at the highest point of the project area, working to the lowest point and making sure the seams do not buck water. 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 which would interfere with the acceptable application or performance of the JM EPDM membrane. Apply the adjoining sheets in the same manner, lapping the edges a minimum of 6" (150 mm). Sheets should be laid out in an offset pattern, with a minimum of 3 feet (0.9 m) between adjacent end laps. Laps should be constructed with the uphill sheet overlapping the adjoining sheet in a shingle manner to avoid any laps opposing natural drainage.

Whenever possible, the JM EPDM roofing membrane shall be installed so that the long dimension of the sheet is parallel to the roof slope. On steel decks, the sheets must be installed with the side seams perpendicular to the top flanges of the deck. The ends of adjacent membrane sheets should be offset approximately 3 feet (0.9 m).

Laps on Specification SE6M may be spliced or may be left dry. Laps must be spliced on 10 and 15-year guarantees. Laps may be left dry on 5-year guarantees.



Anchor Bar Placement

The placement and spacing of anchor bars should be determined by local wind uplift conditions and characteristics. When anticipated uplift forces are higher than normal, consideration can be given to spacing the anchor bars closer together. The Single Ply Roofing Industry (SPRI) has issued guidelines to assist the designer in its "WIND LOAD DESIGN GUIDE FOR LOW SLOPED FLEXIBLE MEMBRANE ROOFING SYSTEMS." Information can also be obtained from local building codes and from FM Global Loss Prevention Data Sheet 1-29, "ROOF DECK SECUREMENT AND ABOVE-DECK ROOF COMPONENTS."

In any case, anchor bar spacing in the field of the roof shall be a maximum of 6'-0" (1.83 m) center to center. The anchor bars shall run parallel to the roof slope and shall not dam water. An additional anchor bar is required around the entire roof perimeter and must be placed within 3' (0.92 m) of the roof edge or parapet.

On most membrane sheets, the anchor bar placement will fall in the body of the sheet and will not necessarily coincide with a membrane lap. It is required, however, that every sheet side lap be secured with an anchor bar.

Anchor Bar Application

Place the JM EPDM Anchor Bars at the appropriate locations on the JM EPDM membrane. When the Anchor Bar is located at a lap, it should be placed 1/2" to 1" (15 mm to 25 mm) from the edge of the top sheet. Do not apply an Anchor Bar over an end lap in the sheet pattern; cut the Anchor Bar 3" to 3 1/2" (80 mm to 90 mm) short of the end lap seam on both sides of the end lap (refer to Flashing Detail EL-11T). The space between the ends of Anchor Bars should be not less than 9" (225 mm), nor more than 11" (275 mm). Drive the appropriate JM fasteners through the pre-punched holes in the Anchor Bar, at 12" (300 mm) o.c. Do not overdrive or underdrive the fasteners.

Installing Cover Strips

Apply EPDM Peel & Stick Sealing Strips over the Anchor Bars.

Sealing Strips must not cross over end laps in the membrane sheets. They must terminate on the membrane, between the end of the Anchor Bar and the end lap (see Flashing Detail L-11T). Lap splices of Sealing Strips that are made over the Anchor Bar are unacceptable. All Sealing Strip splices must be made on the membrane (see Flashing Details EL-11T). All "T" joints and end laps of Sealing Strips must be covered with a minimum 12" x 15" (300 mm x 380 mm) piece of EPDM Peel & Stick Flashing (see Flashing Detail EL-11T).

Perimeter Attachment

Secure attachment of the JM EPDM roofing membrane at the perimeter and at penetrations can be accomplished by either mechanical fastening (using JM EPDM Anchor Discs or JM EPDM Termination Bars) or adhesive fastening (using JM EPDM Reinforced Termination Strips). In addition, to secure perimeter attachment, increased fastener density is required at the corners and perimeters of the building. The size and increased fastener density is the responsibility of the designer. Refer to the EPDM Flashing Details for further information.

Surfacing

Coating of the JM EPDM membrane with Specification SE6M-(T) is **not** recommended. The radical movement that the sheet may undergo during wind loading can cause repeated stressing and stretching of the sheet, which can jeopardize the adhesion of the coating.

