

**Fully Adhered PVC Single Ply Roofing System. For use over Johns Manville (JM) approved decks or appropriate JM insulation.**

**For Regions 1, 2 and 3**

**Materials per 100 ft<sup>2</sup> (9.29 m<sup>2</sup>) of roof area**

PVC Membrane .....	105 ft <sup>2</sup> (9.76 m <sup>2</sup> )
PVC Membrane Adhesive (Low VOC) .....	1.5 gal (5.7 l)
PVC Membrane Adhesive (Water Based).....	0.91 gal (3.44 l)
Approximate installed weight:.....	37.5 - 40 lb/100 ft <sup>2</sup> (17 - 18 kg/9.29 m <sup>2</sup> )

**General**

This specification is for use over any type of approved structural deck which is suitable to receive a fully adhered membrane.

This specification is also for use over certain Johns Manville roof insulations which provide a suitable surface for the PVC 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. Minor ponding is acceptable.**

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

**Flashings**

Refer to the JM PVC flashing details within the Systems Application section of this manual.

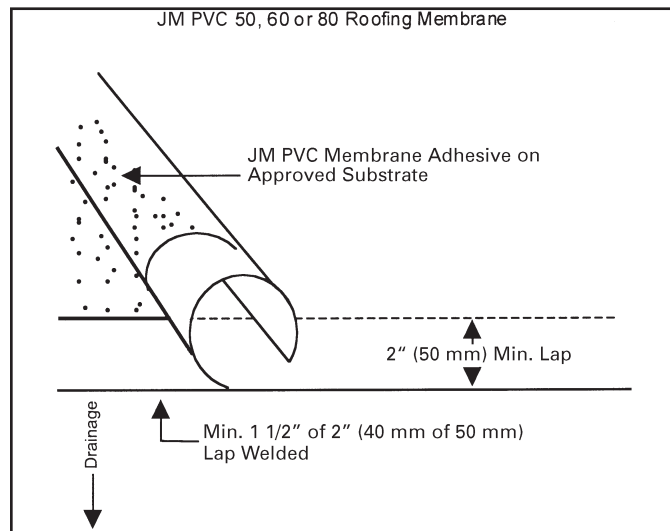
**Application**

Local wind uplift conditions and characteristics should be considered when designing, specifying, and installing any roofing system. Information from the Single Ply Roofing Industry (SPRI), FM Global® and local building codes can provide guidelines for the designer.

Follow directions for adhesive application, positioning and placement of the JM PVC membrane sheets provided in the PVC Application Guide which is available within the System Application Section in this book and on the Web at [www.jm.com/roofing](http://www.jm.com/roofing).

**Welding of Lap Areas**

**All laps shall be clean and dry. No adhesive shall be present in the lap areas.** Machines for hot air welding are available from several different sources. Each set of manufacturer's operating instructions shall be followed, as well as all local codes regarding electric grounding, supply and other related



functions. Since most automatic welding machines require 218 to 230 volts, the use of a portable generator on the roof is recommended for greater flexibility. Hand-held welding machines are also available to weld membrane. After the preheated nozzle tip is applied in the overlap area and the material starts to flow, immediately follow with a hand roller to press the heated membrane surfaces together with slow, even movements. Keep the roller within 1" (2.54 cm) of the nozzle tip. Angle the hot air tool so that the flowing air faces the roller. The temperature of the hot air tool shall be adjusted so that a minimum amount of smoke is developed and material from the bottom of the sheet begins to soften and flow from the seam. Seam strength may be tested when cool.

**Quality Control of Seams**

After heat welding, the seams are checked for integrity with a blunt-ended probe. Any openings or fishmouths must be repaired. Make a relief cut in the opening or fishmouth to allow membrane to lay flat. Using a hand-held hot air tool fitted with a narrow nozzle tip and a silicone roller, heat weld a reinforced membrane patch 3" (7.62 cm) past the cut edge in all directions. The patch should have rounded corners. The weld must be 1 1/2" (3.81 cm) wide around the entire area.

Each day, several sections of welded seams shall be pulled apart by the roofing contractor to test the quality of the welds. Should the welds be deficient, a more thorough examination of the work performed must be carried out and necessary repairs made.

**Perimeter Attachment**

Secure attachment of the PVC roofing membrane at the perimeter and at penetrations can be accomplished by mechanical fastening (using High Load Fasteners and Plates or APB Plates or other approved fasteners as appropriate for substrates).