

Utilize all applicable installation instructions from JM PVC and JM TPO Application Guides; addendums to Section 3: Installing JM PVC or JM TPO RhinoPlate Systems

Insulation Attachment

Insulation must be fastened to the roof deck in JM PVC or JM TPO RhinoPlate roof systems per the appropriate fastening patterns details depending on membrane type and uplift requirements. For specific requirements, contact the JM Technical Services (800) 922-5922. **NOTE: JM PVC RhinoPlates must be used in JM PVC systems and JM TPO RhinoPlates must be used in TPO systems; JM TPO and JM PVC are not interchangeable.**

Always cut insulation to fit closely around all roof penetrations. Around drains, 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 perpendicular 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 insulation so the edge of the board is about at the center of, and supported by, the flange. **NOTE: Do not overdrive fasteners.**

Installing Membranes

Unroll the JM PVC or JM TPO Membrane and position without stretching. Allow the membrane to relax at least 15 minutes when the temperature is above 60°F (16°C), or 30 minutes when the temperature is below 60°F (16°C), prior to installation. Inspect for any damaged membrane. Remove sections of the membrane that are creased or damaged. Install all roof deck materials (vapor retarders and insulation) in complete sections, and cover with the membrane immediately to produce weather-tight sections each day. **Phased construction is not permitted.**

For RhinoPlate systems on steel decks, the membrane sheets must also be applied perpendicular to the ribs (flutes) of the deck to help assure that fasteners do not align under the membrane seam. This method offers two advantages. First, most roofs are pitched to drain along the roof's length. Many roofs drain from each end to the middle. In this case, the installation is started at the wall edge - and the membrane is welded and sealed immediately against water. It also requires less work to seal the shorter edge of the roof with a water cut-off at the end of the work day; you may save money by removing and discarding less cut-off material.

Refer to the Induction Welder Owner's Manual for calibration and welding.

Bond the Membrane

- Perform Calibration and Set Up as detailed by the Induction Welder Owner's Manual
- Adjust the handle height, if desired, by releasing handle clamps and pulling or pushing handle to desired position.
- Center the Induction Welder over the first plate in pattern and activate the weld. **WARNING:** Induction Welder must be centered over the plate to create a 100% bond. If an error occurs during activation, refer to the induction welder owner's manual for corrective action.
- Place cooling clamp over the welded plate. **WARNING:** Keep clamp in place at least 45 seconds while the assembly cools.
- Repeat process for each plate.

NOTE: To increase the pace, work across the sheet, moving cooling clamps from one row to the next as you need them.

NOTE: To determine if a weld has been made, place the plunger next to a welded plate and create enough suction to lift the membrane. A weld will crease the membrane. If the assembly is not welded, the membrane will lift up from the plate. Mark any plates that are not welded as a reminder to complete the weld.

Safety Guidelines: Induction welding requires special safety precautions prior to, during and after installation. When working with welding equipment, contractors must use extra care and extreme caution to prevent accidents. Carelessness can lead to loss of life, injury and loss of property.