

Insulation Attachment

Insulation must be fastened to the roof deck in JM PVC or JM TPO RhinoPlate roof systems per the appropriate fastening pattern details, depending on membrane type and uplift requirements. For specific requirements, contact the JM Technical Services team at (800) 922-5922. **NOTE: JM PVC RhinoPlates must be used in JM PVC systems and JM TPO RhinoPlates must be used in JM TPO systems; JM TPO and JM PVC RhinoPlates 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) to ensure 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. Do not allow the edge of either board to overlap on an open flute when butting insulation layers. Cut the insulation so the edge of the board is at the center of, and supported by, the flange.

NOTE: Do not overdrive the plate and fasteners, as this will lead to poor bonding adhesion to the membrane when applied.

NOTE: Take caution to ensure there is **no moisture on the board or membrane** prior to application. Any water or dew will decrease the bonded welding circumference.

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. 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.**

Bond the Membrane

- Perform calibration and set up as detailed by the induction welder's owner's manual. Refer to the induction welder's owner's manual for calibration and welding.
- 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 the pattern and activate the weld. **WARNING:** The 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.
- Immediately place a cooling clamp over the welded plate. **WARNING:** Keep clamp in place for at least 45 seconds while the assembly cools.
- Repeat this process for each plate.

NOTE: To increase the pace, work across the sheet, moving cooling clamps from one row to the next as needed. It is best to work in the direction of the aligned rows.

NOTE: To eliminate damage to the membrane, keep the magnets and surface of membrane clean and free from debris or contamination both prior and during the induction welding process. Always wipe the magnet clean when moving to the next plate. When removing the magnet do not twist it off, as it may damage the membrane.

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. If welded, you will see a complete round outline of the plate. 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.

NOTE: RhinoPlates are only approved for PVC and TPO membranes that are 60 mil thick and greater.

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.