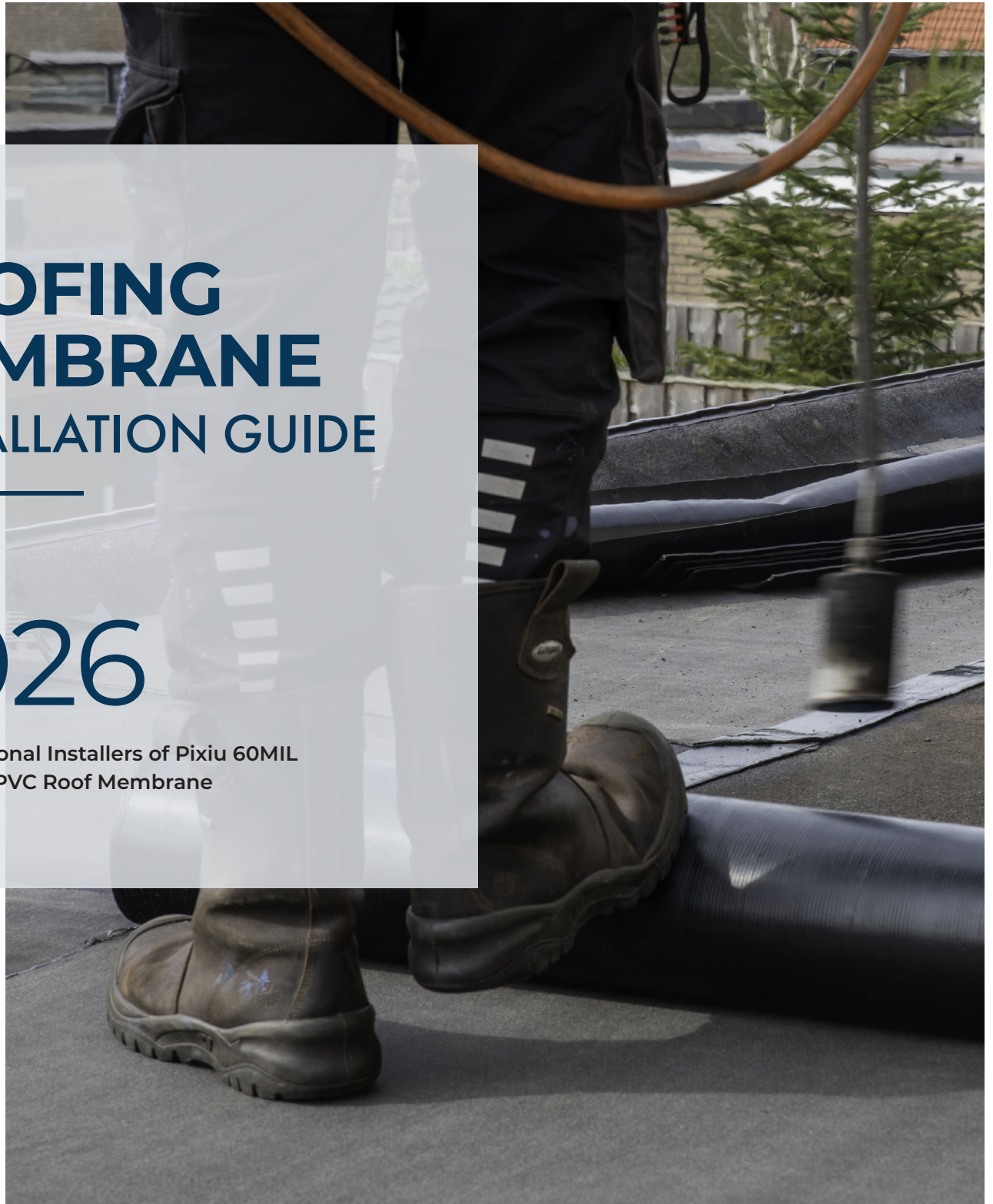




ROOFING MEMBRANE INSTALLATION GUIDE

2026

For Professional Installers of Pixiu 60MIL
Reinforced PVC Roof Membrane



INSTALLATION TOOLS

TOOLS

- Heavy-Duty Utility Knife
- Chalk Line
- Tape Measure
- Straightedge/ Steel Square
- 2" Heavy Silicone Hand Roller
- 75-100 lb Weighted Field Roller
- Hot-Air Hand Welder
- Welding Nozzles
- Seam Probe
- Drill/driver
- Chemical-Resistant Gloves
- Stiff-Bristle Push Broom

MATERIALS

- Pixiu Solutions URoof 60MIL Reinforced PVC Field Sheets*
- Substrate Degreaser/ Solvent Cleaner
- Clean Wiping Cloths
- Universal Single-Ply Caulk/ Termination Sealant
- Mechanical Termination Bars
- Heavy-Duty Fasteners & Anchors



* Pixiu Solutions URoof Membrane: 60-mil reinforced PVC field sheets, available in patch kits or full 36" x 50' commercial rolls with Integrated protective film (factory-applied to shield the MAT molecular adhesive layer prior to placement).

STEP 1 – PRE-INSTALLATION



Complete the following to ensure that the roof deck is structurally sound, clean, dry, and properly prepared before proceeding with installation.

Verify Compliance

Confirm that the roof deck complies with local building codes, structural load requirements, and accepted industry roofing standards.

Inspect the Deck

Inspect the roof substrate and repair all cracks, voids, and significant surface irregularities before proceeding with the installation.

Check Compatibility

Confirm that the existing roofing material and insulation boards are compatible with the reinforced PVC membrane and its adhesive layers.

Test Moisture Levels

Test the substrate for trapped moisture and ensure the surface is completely dry and free of morning condensation before application.

Manage Roof Drainage

Verify that all roof drains, scuppers, and perimeter drainage systems are clear and functioning properly to prevent water ponding.

Remove Old Materials

Completely remove any failing, loose, or deteriorated existing membrane layers before installing the new reinforced PVC system.

Repair Flashing & Metalwork

Replace or repair broken, corroded, or protruding edge metal, termination bars, and penetration flashings before laying the sheet.

Clean the Surface

Clean the entire roof deck to remove loose dirt, dust, grease, active oils, and other contaminants before installation.

STEP 2 – PREPARE THE SUBSTRATE



URoof membrane sheets must be properly relaxed, aligned, and accurately measured before proceeding with final adhesion.

Layout Sheets

Unroll URoof over the substrate working from the lowest slope upwards to ensure overlaps shed water with the roof flow.

Let It Relax

Allow unrolled sheets to acclimate for 15-30 minutes to eliminate factory core tensions and prevent wrinkling.

Measure

Measure layout lines carefully to maintain a minimum 3-4" overlap of all joints and patches.

Cut

Cut each membrane sheet to size using a heavy-duty utility knife with fresh blades, rounding corners to prevent wind lift.

Overlap Edges

Stagger the short end joints of adjacent membrane rolls by at least 12" to avoid creating weak multi-layer intersections.

Dry-Fit Panels

Align the panels within layout marks and temporarily secure them in place to ensure straight lines during unrolling.

STEP 3 – INSTALL UROOF

Confirm the URoof membrane is properly adhered, fully consolidated, and securely bonded to the substrate without air entrapment.

1. Peel The Liner

Peel back the protective release film from the adhesive, carefully unrolling the sheet into position.

2. Protect Adhesive Layer

Keep the exposed adhesive layer clear of the uncleaned roof deck to prevent dust or debris from ruining the bond.

3. Apply And Press

Press the membrane sheet into place by hand, working outward from the center to minimize trapped air pockets.

4. Bond Surface And Perimeters

Roll the entire surface with a heavy hand roller, paying close attention to edges and seams to lock the adhesive bond and ensure continuous edge contact.

5. Execute Vertical Flashing

Wrap the membrane securely up vertical wall transitions and parapets, applying high pressure to eliminate internal voids.

6. Secure Terminations

Install aluminum compression termination bars over the vertical flashings edges and fasten them into the structural wall.



STEP 4 – FINISH SEAMS & EDGES



Ensure all sheet overlaps are thermally fused, verified, and sealed to create a watertight monolithic seal.

Verify Overlap Margins

Confirm that adjacent sheets maintain a minimum three-inch overlap along all side and end seams before welding.

Calibrate Welding Equipment

Set the hot-air hand welder temperature between 650°F and 850°F based on current ambient weather conditions.

Preheat Membrane Faces

Insert the welder nozzle into the seam overlap briefly to preheat the PVC faces before applying pressure.

Fuse the Seams

Guide the hot-air nozzle smoothly along the seam while following immediately with a silicone hand roller.

Allow Cool Down

Let all welded seams cool completely to ambient temperature before subjecting the joints to mechanical stress.

Probe All Seams

Run a blunt-tipped metal seam probe along the entire welded edge to check for voids or cold welds.

Seal Exposed Scrim

Run a continuous bead of polyurethane lap sealant along all non-welded cut edges to protect the exposed scrim.

Quality Checks

Identify and patch any seam voids immediately to finalize the commercial-grade water-exclusion system.

UROOF PATCH & REPAIR SYSTEM



Cleaned surface must be completely dry and free of any trapped liquid chemical cleaner before applying the patch

1. Determine Repair Area

Measure the damaged area and mark a layout boundary that extends at least 3"-4" past the defect.

2. Clean Surface

Remove loose debris and scrub area using lint-free microfiber rags and industrial acetone or isopropyl alcohol.

3. Cut URoof Patch

Cut substrate to size using a utility knife, round corners to prevent edge peeling, then dry-fit to layout lines to confirm fit.

4. Peel & Press

Peel back the protective release film while smoothing the patch from the center outward to eliminate air pockets.

5. Bond

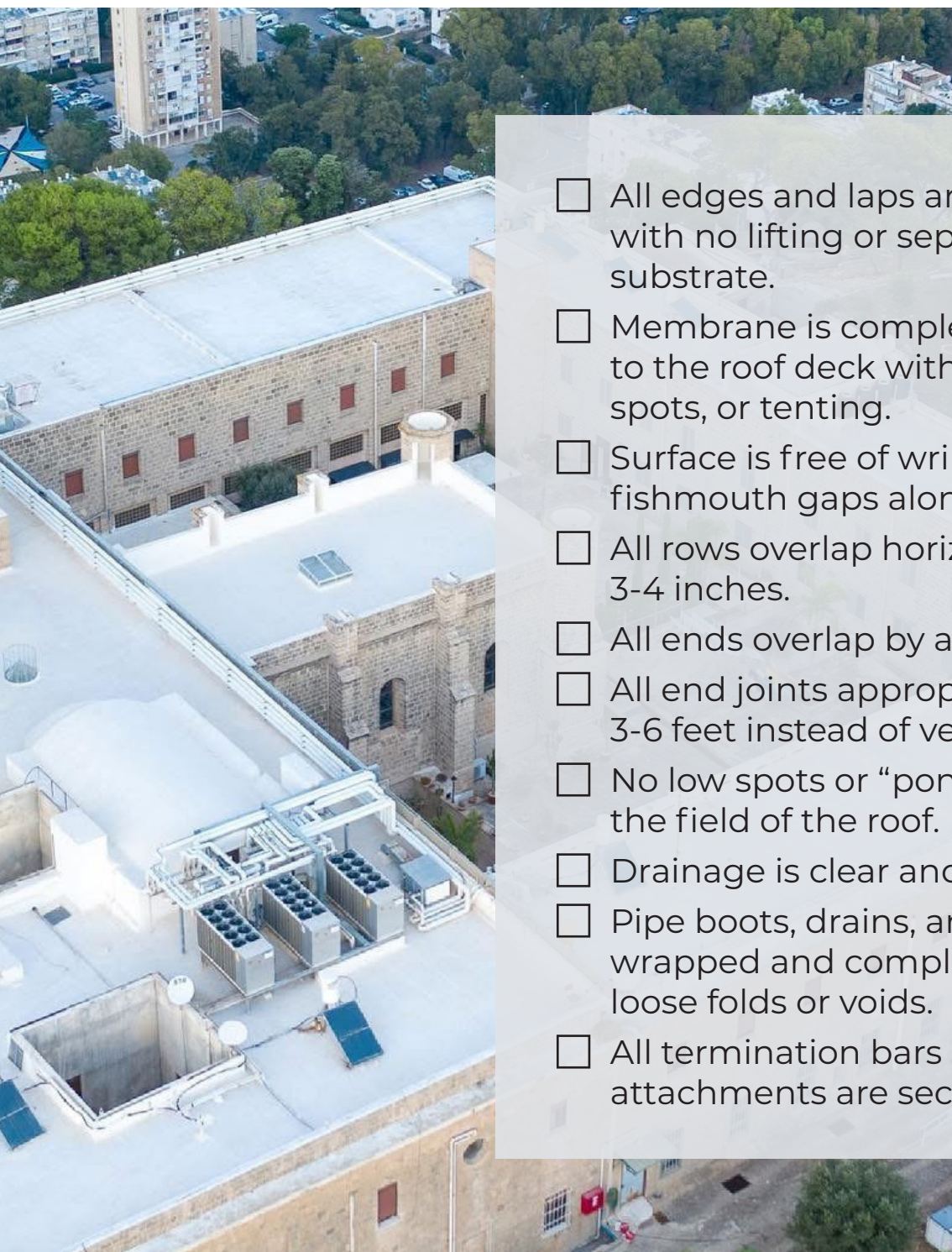
Compress the entire patch area and all perimeter margins with a heavy silicone hand roller to fully activate the adhesive.

6. Heat-Weld Edge

Use hot-air hand welder set at appropriate temperature to fuse the edges, then allow to cool completely.

STEP 7 – FINAL INSPECTION CHECKLIST

Complete a thorough post-installation on all completed roofing systems; the final opportunity to identify and correct installation issues.



- ☐ All edges and laps are uniformly bonded with no lifting or separation from the substrate.
- ☐ Membrane is completely flat and mated to the roof deck with no bubbles, hollow spots, or tenting.
- ☐ Surface is free of wrinkles, ripples, or fishmouth gaps along the edges.
- ☐ All rows overlap horizontally by at least 3-4 inches.
- ☐ All ends overlap by at least 6 inches.
- ☐ All end joints appropriately staggered by 3-6 feet instead of vertically aligned.
- ☐ No low spots or “ponding water” across the field of the roof.
- ☐ Drainage is clear and unobstructed.
- ☐ Pipe boots, drains, and vents are cleanly wrapped and completely sealed without loose folds or voids.
- ☐ All termination bars or flashing attachments are secured tightly.

TROUBLESHOOTING QUICK REFERENCE

The following guide identifies common installation issues, potential causes, and recommended corrective actions. Address any deficiencies before proceeding with subsequent installation steps.

INSTALLATION ISSUE	POSSIBLE CAUSE	CORRECTIVE ACTION
Poor Adhesion	Substrate dirty, wet, or too cold	Clean/dry deck, apply primer, and refer to suggested weather/temp guidelines for best installation results.
Wrinkles & Bubbles	Trapped air or uneven roll tension	Puncture or slit, press flat and apply appropriately sized patch.
Substrate Bumps	Loose sheathing screws or deck debris	Slice membrane, countersink screw, clear debris, and apply appropriately sized patch.
Seam Lifting	Insufficient pressure or dirt trapped under edge(s).	Clean the seam area and press firmly with weighted roller.