Note: This drawing is for your records. Contractors should complete repairs by the end of each work day.

When the roof has multiple levels, inspect one level at a time. For larger roof levels, break into smaller sections to eliminate confusion.

NOTE: USE TPO PRIMER OR LOW VOC PRIMER WITH ALL PRESSURE-SENSITIVE (PS) PRODUCTS INCLUDING WHITE EPDM PEEL & STICK ACCESSORIES THAT ARE APPROVED FOR USE ON TPO SYSTEMS.

Heat Welding Procedures:

Temperature settings for automatic welder:

TPO = Recommended starting temperature and speed setting is 104°F at 12.5' / minute for all membrane thicknesses. Adjustments may have to be made depending on test weld results.

All welds must be a minimum of 1½” wide, regardless of warranty duration. Minimum requirements for test welds: Perform a test weld at the start of work each morning and afternoon by using like material over the same substrate. Weatherbond does not require the use of destructive testing.

Once cooled, peel the test sample apart to examine delamination of the membrane from the scrim reinforcement.

Welding Troubleshooting Checklist:

- Temperature and/or speed of welder
- Outside temperature (humidity and time of day)
- Heat transfer over insulation plates
- Cold welds/voids can be found where seams cross over plates
- Cord size and distance from power source
- Generator size and wattage
- Minimum 6500-watt generator for 1 automatic welder
- Minimum 3000-watt generator for 2 hand welders
- Regular service/maintenance for welder
- Cleanliness of membrane
- Proper cleaning materials/rags
- Weathered Membrane Cleaner for TPO membrane
- Cleanliness of automatic welder/hand welder nozzle
- Check all start and stop points thoroughly

Seams and detail work must be cooled to ambient temperature prior to probing. All probing should be completed each work day allowing time for voids to be marked and repaired by the end of the day. This ensures all the seams and detail work has been probed prior to inspection.

Please consult Weatherbond’s Specification Supplement (section T-01-11) for more information about welding procedures, generator usage, and general troubleshooting.

Guide for Inspecting Your System

Quick Reference

Important Information:

If you need assistance, it’s only one call away.

Sales Representative phone number:

Distributor phone number(s):

As a reminder, this guide is meant to help with details commonly seen in the field. Not all details are included in this guide. WeatherBond contractors are encouraged to call with any questions.

For assistance, please call 1-866-471-5125 and ask for the Technical Department.

Step 1: Inspect the perimeter.

Update the roof plan to show the location of all curbs, penetrations, drains, etc. Focus on securement and termination. Mark deficiencies on the roof plan as they are found.

Step 2: Inspect all seams on the roof level.

Focus on plate placement and proper seaming.

Step 3: Inspect all curbs, penetrations, drains, etc.

Focus on one detail at a time, confirming proper securement, termination, and flashing minimums.

Step 4: Finally, walk across the roof, update areas in need of repair, and perform a general check of the system.
**Common Details**

**WBPC-1.1 Drip Edge Fascia**
1. Is wood nailer wider than metal flange?
2. Is wood nailer flush with insulation?
3. A continuous cleat and the metal must be fastened 6" OC using ring shank nails.
   - Installed according to SMACNA FS-1 requirements.
4. Deck flange must be completely covered by TPO PS Cover Strip with a minimum of 2" coverage past nail heads.
   - Apply TPO PS Cover Strip using TPO Primer or Low-VOC Primer.
   - Wood nailer must be securely anchored.
   - When using metal by others, the metal flange must be fastened so it does not bow prior to covering.

**WBPC-2.0/AC-2.2 Membrane Splice**
1. Are all seams proved? Are all welds a minimum of 1½" wide?
2. If reinforced edging is exposed, is 1/8" bead of TPO Cut-Edge Sealant present?
3. For 60-mil and thicker membranes, are TPO T-Joint Covers present at field splice?
4. Is Universal Single-Ply Sealant/sealant by others present at top of Termination Bar?
5. Is Water Cut-Off Mastic present at top of Termination Bar?

**WBPC-3.1 Curb Flashing**
1. Are appropriate fastening rates for required warranty? No more than 12" OC.
2. Fastening of bar shall never exceed 12" OC and must always be sufficiently fastened to keep constant compression on Water Cut-Off Mastic.
3. Hot Tie-in – multiple layers of felt and asphalt must be used. See WBPC-13.1 and WBPC-13.2 Details.
5. Reduced fastening patterns are approved on 22-gauge or heavier steel, concrete, minimum 1½" wood, and ¾" plywood decks only.

**WBPC-3.2/5.1 Insulation Fastening**
1. Is insulation fastening in accordance with current specifications and details?
2. Has proper fastening penetration been achieved?
3. Reduced fastening patterns are approved on 22-gauge or heavier steel, concrete, minimum 1½" wood, and 1½" plywood decks only.

**WBPC-4.1 Molded Sealant Pockets**
1. Is membrane securement present at angle change?
2. Are plates and fasteners 6" - 9" away from Inside/Outside Corner?
3. Are plates and fasteners minimum 12" OC? Note: 6" OC must be used when warranty wind speed is greater than 50 mph. See WBPC-12.0 Details.
4. Are slip sheets present underneath to prevent damage to new membrane?
5. Check usage of Walkway Rolls.

**WBPC-5.1 Molded Sealant Pocket**
1. Are slip sheets present underneath to prevent damage to new membrane?
2. Check usage of Walkway Rolls.

**WBPC-6.1 Molded Sealant Pockets**
1. Is securement present at angle change?
2. Are plates and fasteners 6" - 9" away from Inside/Outside Corner?
3. Are plates and fasteners minimum 12" OC? Note: 6" OC must be used when warranty wind speed is greater than 50 mph. See WBPC-12.0 Details.
4. Are slip sheets present underneath to prevent damage to new membrane?
5. Check usage of Walkway Rolls.

**WBPC-6.1 Molded Sealant Pockets**
1. For use on multiple hard-to-flatten penetrations, Pipe clusters must have a minimum of 1" clearance between penetrations.
2. Entire area inside Molded Sealant Pocket, as well as all penetrations, must be primed using TPO Primer or Low-VOC Primer.
3. One-Part Pousable Sealer must be used; filter by others is not allowed. Is Pousable Sealer at least 2" deep?
4. TPO weld present on deck flange?
5. Securement is required on mechanically fastened systems: Not required on fully adhered systems.
6. In fully adhered systems, pockets larger than 18" in diameter must have plates and fasteners.

**WBPC-8.1 Club Flashing**
1. Is it on a flat surface (flanges cannot be overlapped)?
2. How is membrane terminated?
3. Does Cut-Edge Sealant present at all fixed access points, HVAC units that are regularly serviced, and hydro-seamed roofs?
4. Is Water Cut-Off Mastic and clamping ring present at top of boot?
5. Is cut in pipe boot above rib?

**WBPC-13.1 Inside/Outside Corner With or Without PS Russ**
1. Is membrane securement present at angle change?
2. Are plates and fasteners 6" - 9" away from Inside/Outside Corner?
3. Are plates and fasteners minimum 12" OC? Note: 6" OC must be used when warranty wind speed is greater than 50 mph. See WBPC-12.0 Details.
4. For built-up roof tie-in:
   - Cold Tie-in – Peel & Stick Vincro Flashing used with Two-Part Pousable Sealer.
   - Hot Tie-in – multiple layers of felt and asphalt must be used. See WBPC-13.3 and WBPC-13.2 Details.
5. Shingle type tie-in: Detailed WBPC-13.6 (extends above anticipated shingle line).
6. Top wrap overlaps base wrap 1" with a 1½" minimum splice on the vertical overlap?
7. Bottom wrap goes on pipe ½" minimum?
8. How is patching made?
9. Is securement present? Note: TPO Primer is required to mate membrane to PS RUSS, bonding adhesive is not acceptable.
   - Appropriate fastening rate for required warranty? No more than 12" OC.
   - 6" OC for warranty wind speeds greater than 50 mph.
   - Verify all flashings are properly adhered.
   - When seams are present at angle change, there must be a TPO Non-Reinforced Flashing with a minimum 1½" splice in all directions around the splice.
   - How is membrane terminated?

**WBPC-15.1 Molded Sealant Pockets**
1. Is securement present at angle change?
2. Are plates and fasteners 6" - 9" away from Inside/Outside Corner?
3. Are plates and fasteners minimum 12" OC? Note: 6" OC must be used when warranty wind speed is greater than 50 mph. See WBPC-12.0 Details.
4. Are slip sheets present underneath to prevent damage to new membrane?
5. Check usage of Walkway Rolls.