



Thermoplastic Single Ply and Multi-Ply Roofing Systems

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ROOF REPAIR PROCEDURE

Temporary or Emergency Repair

In the event that the Flex Roofing System becomes damaged the Building Owner may be required to make temporary repairs to the roof system, which will not affect the warranty coverage.

Materials

- 1) Flex one component gun grade moisture curing polyurethane sealant.
- 2) Flex Thermoplastic Reinforced Elvaloy® or PVC MF/R Flashing Membrane any standard membrane thickness.
- 3) A detergent cleaner such as Flex orange power cleaner or trisodium phosphate to remove residual dirt.
- 4) Final cleaning is achieved with a solvent cleaner such as acetone or MEK.
- 5) Scotch Brite Pads, clean white cotton rags.

Procedure

- 1) Locate the damaged area.
- 2) Prepare the surface by removing debris, contaminants and ballast from the area of the membrane or flashing to be repaired. The area should extend beyond the perimeter of the patch to provide an ample-sized clean work area.
- 3) Scrub the repair area clean with an approved cleaner
- 4) Dry the repair area with a rubber squeegee and clean, absorbent, lint-free cloths.
- 5) Cut a patch from a piece of Flex MF/R flashing membrane. The patch should extend past any part of the damaged area by a minimum of 4". Round off the corners of the patch.
- 6) Wipe the area of the existing membrane to receive the patch and the underside of the patch material with a clean, absorbent, lint-free cloth dampened with a solvent such as MEK or acetone. Do not pour the solvent directly on the membrane. Wipe the repair area clean and allow the area to air dry.
- 7) Fill the damaged area with Flex gun grade sealant.
- 8) Apply Flex gun grade sealant to the back of the Flex MFR Flashing Membrane patch.
- 9) Press the Flex patch into place over the damaged area and roll firmly with the rubber faced hand roller.
- 10) Caulk the outside edges of the patch with a bead of the Flex sealant.

Note: This procedure is considered a temporary repair. A permanent hot air welded patch can be installed at a later date, by an approved applicator, directly over the existing temporary patch.

Permanent Repair

Flex requires that this repair be performed by a Flex Approved Applicator. This repair is required to be completed in accordance with current Flex Details and Specifications. Flex Elvaloy Roof Systems require repair with Flex MF/R Elvaloy Membrane and Flex PVC Roof Systems require repair with Flex PVC MF/R Membrane. As a general rule the repair material should be the same thickness as the original membrane that has been damaged.

Materials

- 1) Flex Thermoplastic Reinforced Elvaloy® or PVC 45 mil, 50 mil, 60 mil, or 80 mil MF/R Flashing Membrane.
- 2) A detergent cleaner such as Flex orange power cleaner or trisodium phosphate to remove residual dirt.
- 3) Final cleaning is achieved with a solvent cleaner such as acetone or MEK.
- 4) Scotch Brite Pads, clean white cotton rags.

Procedure To Repair Holes or Tears

- 1) Locate the damaged area.
- 2) Prepare the surface by removing debris, contaminants and ballast from the area of the membrane or flashing to be repaired. The area should extend beyond the perimeter of the patch to provide an ample-sized clean work area.
- 3) Dampen a Scotch Brite Pad and scrub the repair area clean with an approved cleaner to loosen and remove heavy residual dirt.
- 4) Dampen a clean white cotton rag and clean the repair area with an approved cleaner a second time.
- 5) Dry the repair area with a rubber squeegee and clean, white, cotton cloths.
- 6) Cut a patch from a piece of Flex MF/R flashing membrane. The patch should extend past any part of the damaged area by a minimum of 4". Round off the corners of the patch.
- 7) Wipe the area of the existing membrane to receive the patch and the underside of the patch material with a clean, absorbent, lint-free cloth dampened with a solvent such as MEK or acetone. Do not pour the solvent directly on the membrane. Wipe the repair area clean and allow the area to air dry.
- 8) Lay the patch over the area and tack weld to the existing membrane with the hand held hot air welder and rubber faced hand roller.
- 9) Pre-weld the patch by inserting the hot air nozzle under the patch and forming a continuous pre-weld approximately 2 inches from the outer edge of the patch.
- 10) Finish weld the outer 2 inches of the patch pressing firmly with the rubber faced hand roller. In the case of mechanically fastened or loose laid systems it is often possible to weld the patch to the underside of the existing membrane.
- 11) Allow the welded area to cool to ambient temperature and check the welded edge for voids using a seam probe.
- 11) If voids are found re-weld with the hot air welder, and recheck with the seam probe.

Procedure to Repair Voids in Hot Air Welded Seams

- 1) Prepare the surface by removing debris, contaminants and ballast from the area of the membrane or flashing to be repaired. The area should extend beyond the perimeter of the void to provide an ample-sized clean work area.
- 2) Check all hot air welded seams for voids with a Flex seam probe. When a void is found open the seam until a fully welded seam area is determined.
- 3) Scrub the repair area clean with an approved cleaner being sure to clean both the upper and lower surfaces of the seam.
- 4) Dry the repair area with a rubber squeegee and clean, absorbent, lint-free cloths.
- 5) Wipe the area of the bottom membrane and the underside of the upper selvedge edge membrane with a clean, absorbent, lint-free cloth dampened with a solvent such as MEK or acetone. Do not pour the solvent directly on the membrane. Wipe the repair area clean and allow the area to air dry.
- 6) Pre-weld the seam by inserting the hot air nozzle into the seam and forming a continuous pre-weld approximately 2 inches from the outer edge of the selvedge edge.
- 7) Finish weld the outer 2 inches of the seam pressing firmly with the rubber faced hand roller.
- 8) Allow the welded area to cool to ambient temperature and check the welded seam for voids using a seam probe.
- 9) If voids are found re-weld with the hot air welder, and recheck with the seam probe.

Record the Repair

- 1) Flex's warranty requires that all leaks be reported to Flex in writing within 30 days of the occurrence.
- 2) Flex will authorize an Approved Applicator to perform repairs covered under the terms and conditions of the roof warranty.
- 3) The Building Owner is responsible for reasonable roof maintenance and any repairs that are not covered under the terms and conditions of the roof warranty.
- 4) Flex's warranty requires that all repairs be reported to Flex in writing.
- 5) The information required will be the number of and location of the repaired areas. The cause of the leak must also be reported. (e.g. Damage by others, protruding fastener, cold weld)