

Pipe Penetration



Prior to Membrane Installation, Review the Preprufe[®] Data Sheet

Surface Prep

All surfaces must be sound and solid to eliminate movement during the concrete pour. Substrate must be regular and smooth with no gaps or voids greater than 15 mm. The surface should also be free from loose aggregate and sharp protrusions as outlined in the Preprufe[®] Data Sheet section on Surface Preparation.

Detailing

- 1. All penetrations must be firmly secured and stable. Grout around all penetrations that are not stable. For compacted earth, extend grout a minimum of 75 mm in all directions. Clean loose dust or dirt from the penetration surface using a clean, dry cloth or brush.
- 2. Cut the field membrane tight to the penetration and remove release liner. If membrane is not within 15 mm of penetration and not more than 50 mm from penetration, apply Preprufe Tape to cover the gap. Roll firmly into place and remove release liner. If the membrane is greater than 50 mm from penetration, install more Preprufe Membrane to cover the gap repeating these instructions until Preprufe Membrane/ Tape is within 15 mm.
- 3. Mix and apply Bituthene Liquid Membrane around the penetration. Liquid Membrane should be placed to form a minimum 25 mm continuous fillet between the Preprufe Membrane/ Tape and the base of the penetration. Cut "star" within trace of penetration to allow for patch to slide over penetration.
- 4. Cut a patch of Preprufe Membrane that is a minimum of 300 mm larger than the diameter or width of the penetration so that the patch extends 150 mm beyond the penetration in all directions. Remove the release liner and centre the patch over penetration and trace/draw the penetration profile onto the patch. Using sheers or utility knife, make relief cuts through the membrane. Refer to relief cut profile on associated detail. Triangles formed by making a relief cut are not to exceed 50 mm in height when placed over penetration, i.e. penetration diameters or widths greater than 100 mm triangles will need to be trimmed. Remove and discard release liner.
- 5. Slide the patch over penetration and press into the partially cured Liquid Membrane. Ensure that the patch is pressed firmly into the Liquid Membrane and is positioned directly onto the Preprufe Field Membrane/ Tape below. Using a trowel, smooth out any Liquid Membrane that has flowed out of the relief cut.
- 6. Apply Preprufe Tape centred over the edges of the patch and roll firmly to form a tight seal to the Preprufe Field Membrane. Remove release liner from tape and discard.
- 7. Wrap the penetration with Preprufe Tape, positioning the tape at the base of the patch. Remove enough release liner to overlap Attach Tape onto itself and roll/press firmly into place. Remove remaining release liner and discard. Repair small fishmouths by pressing firmly against penetration and repair large fishmouths by patching with Preprufe Tape.

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Special Notes

Preprufe membranes should not be used in areas where they will be permanently exposed to sunlight, weather or traffic. Protect membrane from sunlight as quickly as possible after installation.

Ensure Adcor[®] waterstop is encapsulated with a minimum 75 mm of concrete cover. Apply Adcor[®] waterstop according to the installation instructions found on the data sheet.

Allnex may require an alternative GCP waterstop based on design conditions, at Allnex's discretion.