

Installation Guide – PG 650 WATERPROOFING MEMBRANE VERTICAL CONCRETE WALLS

1) PREPARE SUBSTRATE

- a. Substrate must be clean, smooth and dry. Remove all dust, dirt, and debris.
- b. Address rough areas/honeycomb voids by patching with mortar, grout, or approved sealant to smooth the wall surface.
- c. Remove fins and form match lines by grinding areas smooth.

2) PRETREAT ALL DETAILS

- a. Apply 3/4" fillet at all inside corners and penetrations with Detail Sealant or Liquid Membrane, allow to skin over before proceeding to next step.
- b. Apply 12" pre-cut membrane strips centered on bottom of footers/inside corners/outside corners (follow detail # WP 3)
- c. Apply 12" pie-cut membrane squares around any penetrations through vertical walls (follow detail # WP 14)
- d. All control joints/construction joints/cracks/expansion joints should have appropriate expansion joint material as specified to provide the primary waterproofing seal. PG waterproofing shall be the back-up waterproofing (follow detail # WP 11).

3) APPLY LIQUID ADHESIVE/PRIMER

- a. Use correct water based or VOC liquid adhesive for the project requirements. **Polyguard 650 LT Liquid Adhesive (CA Sealant in some states)** @ a rate of 300 sf per gal or **650 WB Water Based Liquid Adhesive** @ a rate of 450 sf per gal. Apply to the substrate via a roller or paint brush.
- b. Allow to dry or tack (approximately 15-20 minutes @ 70F and low RH).
- c. Concrete is ready when fingers are touched to liquid adhesive, and nothing transfers back to fingers.

4) VERTICAL APPLICATION

- a. Apply **650 Membrane** in lengths up to 8' high. Apply in two or more sections on higher walls, overlapping the sheet by a minimum of 2.5".
- b. Precut **650 Membrane** in desired lengths.
- c. Peel back 1-2' of the release liner, starting at top of wall adhere section and pull release liner downward and keep pressing into place.
- d. Roll membrane thoroughly to ensure full contact to wall and no air bubbles are present. Each additional sheet shall be overlapped following the dotted hash lines on the membrane, covering them completely.
- e. Terminate top of wall with Detail Sealant/Liquid Membrane at the end of each day. Metal termination bar (by others) is highly recommended to prevent membrane from gathering moisture behind.

5) VISUAL WORK INSPECTION

- a. Review all work. Patch damaged areas or inadequately lapped seams with extra membrane extending a min of 6" around all sides of damage, and seal with Detail Sealant/Liquid Membrane around all sides (follow detail # WP 1).

6) APPLY DRAINAGE COMPOSITE or PROTECTION as required

- a. For vertical applications choose one of the following:
 - i. **Polyguard Polyflow 15P** drainage and protection in one, each roll is 200 sf (4' x 50') sides shall be butted and not overlapped, each side has additional felt to lap onto the next side piece.
 - ii. Asphaltic hardboards 1/4" thick (6 mm) or two layers of 1/8" thick.
 - iii. Rigid insulation boards, minimum of 1" thick extruded polystyrene or similar
- b. A variety of adhesives can be used to keep the protection boards in place against the waterproofing:
 - i. Leftover liquid adhesives from the waterproofing
 - ii. Liquid nails or similar sealants
 - iii. Spray adhesives (cans or cylinder types)
 - iv. Double sided tapes

7) BACKFILL IMMEDIATELY or within 15 days – waterproofing and protection boards cannot be permanently exposed to UV and should be covered ASAP.

- a. Backfill should be performed in small 6" lifts to prevent tugging on the waterproofing.