TL-0007 — Waterproofing Concrete Block Walls Technical Letter

Below grade waterproofing CMU walls is critical since most CMU is porous and therefore susceptible to moisture and water infiltration. Standard application procedures for BITUTHENE® and PROCOR® should be followed and particular attention should be placed on the following:

- The CMU surface should be smooth and free from projections. Trowel mortar joints full and flush to the face of the CMU. Fill all voids and holes. If these conditions are not met, cover CMU with a parge coat (typically one part cement to three parts sand) finished to a smooth steel trowel surface.
- Tightly grout around all penetrations prior to installing the waterproofing.
- The CMU must be thoroughly dry before installing the waterproofing. Because of the porosity of the CMU, water can wick through much of the wall. Moisture in the block wall is usually detectable due to a discoloration of the CMU. If the CMU cores are grouted, allow 3 days of drying prior to installing the waterproofing. Use BITUTHENE® Adhesive Primer B2 LVC if the block is damp for BITUTHENE® application. PROCOR® is damp and green concrete tolerant and does not require a primer.
- Immediately roll BITUTHENE® completely and firmly with a hand roller upon application. Press the top termination of membrane firmly to the wall with a blunt tool such as the handle of a hammer or secure the membrane into a reglet.
- Use a termination bar to terminate BITUTHENE® on CMU walls. Use a 1/8 in. x 1 in. x 10 ft (3 mm x 25 mm x 3.05 m) max aluminum bar. Fasten 12 in. (305 mm) O.C. or as necessary to ensure continuous compression and 1/4 in. (25 mm) in from end of all sections. Separate adjoining bars by 6 mm. Seal top of bar and penetration heads with BITUTHENE® Liquid Membrane.
- For PROCOR® applications on highly porous CMU, a scratch coat of PROCOR® (15-30 mils) can be applied prior to the standard PROCOR® application.
- When necessary, provide temporary weather protection, such as plastic or tarpaulin, over the top of the wall to prevent precipitation from accumulating in the core of the CMU, or against the interior face during concrete floor pours.

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