

## Below Grade Shotcrete Applications

This Technical Bulletin outlines recommended best practices, and detailing requirements for the installation of Mapeproof AL PRO in below-grade structural walls constructed using shotcrete.

### Shotcrete Design and Placement

Shotcrete is to be designed and placed per ACI 506.2 “*Specification for shotcrete*” and ACI 506R “*Guide to Shotcrete*”. The shotcrete installed against the Polyglass waterproofing system must be performed by an ACI Certified Shotcrete Nozzleman.

Polyglass strongly recommends incorporating ACI PRC-506.7, “*Shotcrete Preconstruction Mockup - TechNote*,” into the project requirements for all below-grade shotcrete waterproofing applications.

The waterproofing system adjacent to the shotcrete application that is not receiving shotcrete at the same time, must be protected from both trade damage and shotcrete overspray during application.

### Mapeproof AL PRO Detailing

In addition to the standard factory lap with SEALLap® technology, all side laps will require the addition of 4-inch Mapeproof AL Detail Tape.

Polyglass may elect to require injectable waterstops in lieu of hydrophilic waterstops in construction joints, or a combination thereof, depending on the project design criteria.

### Penetrations through the Polyglass Waterproofing System

The type, spacing, and installation method of reinforcement anchoring and support systems are all critical to the success of the waterproofing installation and can often be one of the leading sources of water intrusion without proper design and coordination between trades. The anchoring system and frequency must be accepted by all parties, including Polyglass prior to installation.

#### *Guide/Screed Wires*

Guide wires, screed wires, bracing systems, and temporary supports shall not penetrate, puncture, or damage the Polyglass waterproofing system.

#### *MEP Penetrations*

All MEP penetrations through the waterproofing system must be secured, adequately spaced, designed and detailed per Polyglass standard details. Refer to Technical Bulletin “*Penetrations Through Below Grade Waterproofing Systems*” for further information, requirements and best practices.

*This Technical Bulletin supplements, but does not replace, current Polyglass published product data sheets, installation guides, details, and project-specific recommendations. Where conflicts exist, project-specific Polyglass requirements shall govern.*