

DIVISION 07 – THERMAL AND MOISTURE PROTECTION

07 16 00 – CEMENTITIOUS AND REACTIVE WATERPROOFING

07 16 16 – CRYSTALLINE WATERPROOFING

PENETRATING
WATERPROOFING SOLUTION

PART 1 GENERAL

1.1 SUMMARY

- A. Scope
 - 1. Apply Deep Penetrating waterproofing solution to concrete surfaces to provide a complete installation as specified.
- B. Related Work Specified In Other Sections
 - 1. Cast-In-Place Concrete - Division 3.

1.2 QUALITY ASSURANCE

- A. Installers' Qualification
 - 1. The Work of this Section shall be carried out by an approved installer and having performed satisfactorily Work of this type, size and scope.
 - 2. Employ craftsmen who are thoroughly skilled and completely familiar with the specified requirements. Provide the services of a competent foreman or supervisor who shall be available at all times during the progress of the work of this Section.
 - 3. The Owner's Representative reserves the right to reject materials or workmanship not conforming to the Specifications at any time before final acceptance. Acceptance of materials or workmanship by the Owner's Representative shall not prevent its subsequent rejection if defects are discovered later. The Contractor shall remove installed materials that are rejected by the Owner's Representative and replace them at no additional cost to the Owner.

1.3 SUBMITTALS

- A. Furnish submittals for items that are identified in this Section by a different typeface and a bracketed code (e.g., *Item [L]*). Refer to Division 1 General Requirements for definition of codes, types of submittals and the administrative requirements governing submittal procedure. Additional submittal requirements pertaining to this Section are specified under this Article.
- B. Guarantee: Furnish to the Owner, a written guarantee warranting that the waterproofing system will remain free from defects of workmanship and materials and will provide a watertight barrier for a period of five years from date of final acceptance of the project. Include in the guarantee the provision that defective work will be repaired or replaced without delay, and at no cost to the Owner, during the guarantee period, including removal and replacement of other work required to repair or replace the defective waterproofing.

1.4 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Deliver packaged materials to the project site in their original unopened containers, packages, and bundles, bearing labels identifying manufacturer's name, brand name, and grade or type.
- B. Store packaged materials off the ground and protect from moisture, deterioration and contamination.
- C. Remove broken containers and their contents from the project site. Dispose of in a legal manner and replace with new materials at no additional cost to the Owner.

1.5 PROJECT CONDITIONS

- A. Environmental Requirements
 - 1. Apply waterproofing solution when concrete has set and is able to be walked upon without leaving marks or, as soon as the forms have been pulled and form release agents removed.
 - 2. Ambient temperature and humidity conditions shall be compatible to proper workability of materials specified and to a successfully completed installation. Commencement of work shall constitute acceptance of the surfaces to be waterproofed and the conditions at the site under which this work is to be done.
 - 3. If work must be done under adverse weather conditions, furnish temporary heat and enclosures to bring surfaces and areas to proper conditions to ensure proper bond of materials to surfaces. Provide ventilation or other protective measures for workmen, if waterproofing work is to be done in a confined space.
 - 4. Follow manufacturers' printed instructions for maintaining proper environmental conditions.
- B. Protection
 - 1. Provide and maintain temporary protections to prevent damage to adjacent surfaces due to application of waterproofing. Provide and maintain temporary protection to prevent damage to waterproofing systems during installation and until subsequent construction operations are commenced.

PART 2 PRODUCTS

2.1 MATERIALS

- A. *Waterproofing Solutions*: Provide factory formulated and packaged product to the project site for application. Product to be delivered ready for application.
- B. Manufacturers
 - 1. Creto Worldwide Inc: Deep Penetrating Sealer (DPS)

PART 3 EXECUTION

3.1 GENERAL

A. Coordination

1. Coordinate the Work of this Section with the work of other trades doing adjacent or concurrent work so as to insure proper, timely, and adequate interface.

B. Inspection

1. If any part of the Contractor's work depends for proper execution or results upon the prior work of any other Contractor, the Contractor shall, prior to proceeding with the work, promptly report to the Owner's Representative any apparent discrepancies or defects that render it unsuitable for proper execution and results. Failure of the Contractor to report such discrepancies or defects shall constitute acceptance of the prior work as fit and proper to receive his work, except as to defects in work by others which may subsequently become apparent.

C. Surface Preparation

1. Examine surfaces to receive waterproofing. Remove laitance, projections, oil, grease, dirt, grime, dust or other conditions that would prevent obtaining a thorough penetration of the substrate, or that would be detrimental to the proper performance of the waterproofing.
2. Prepare surfaces as necessary to ensure proper penetration of waterproofing to the surfaces. Cut out defective areas and joints. Fill cut out areas, joints and holes with plugging and patching compounds compatible with the waterproofing. Cut out around items piercing the waterproofing plane to create a recess and fill the recess with sealant and flashings.
3. Wet the surfaces to be waterproofed. Remove any visible standing water leaving surfaces damp.

3.2 INSTALLATION

A. Install in accordance with manufacturer's recommendations unless otherwise noted.

B. Apply the waterproofing solution to concrete surfaces, where indicated, when concrete has taken its initial set but is still green.

C. Apply waterproofing solution at rate recommended by the manufacturer using recommended tools and application techniques.

3.3 TESTING

A. Prior to start of subsequent construction operations on the waterproofed surface, test the waterproofed surface with a calcium chloride test and reapply waterproof solution as needed to provide a continuous waterproofing plane.

END OF SECTION