



**DIVISION 7 – THERMAL AND MOISTURE PROTECTION  
07 16 13 POLYMER MODIFIED CEMENT WATERPROOFING  
PLYWOOD SURFACE(S)**

**PART 1 GENERAL**

**1.01 SUMMARY**

- A. Section includes: Provide a complete acrylic modified cementitious waterproof system for plywood surfaces that meet the requirements for specific use indicated in the contract documents. Include all applicable substrate testing, surface preparation, and detail work.

**1.02 RELATED SECTIONS**

- A. Section 030000 – Concrete
- B. Section 050000 – Metals
- C. Section 060000 – Wood, Plastic, and Composites
- D. Section 071313 - Bituminous Sheet Waterproofing
- D. Section 080000 – Openings
- E. Section 090000 – Finishes
- F. Section 220000 – Plumbing

**1.03 REFERENCES**

- A. IAPMO – ER-587
- B. California Building Code (2019 CBC) & Residential Code (2019 CRC)
- C. City of Los Angeles Building Code (2020 LABC) & Residential Code (2020 LARC)
- D. Class I Vapor Retarder (ASTM E96)

**1.04 SUBMITTALS**

- A. Submit under provisions of Section 013300.
- B. Product Data: Submit manufacturer's product data sheets on each product and system to be used including:
  - 1. Preparation instructions and recommendations.
  - 2. Storage and handling requirements.
  - 3. Installation methods.
  - 4. Maintenance requirements.
- C. Selection Samples: For each system specified, provide two sets of samples and color charts representing manufacturer's full range of colors and patterns.

**1.05 QUALITY ASSURANCE**

- A. All materials used in the pedestrian traffic system shall be manufactured and provided by a single manufacturer to ensure compatibility and proper bonding.
- B. Use adequate numbers of skilled workmen thoroughly trained and experienced in the necessary crafts and completely familiar with the specified requirements and methods needed for proper performance of the work of this section.
- C. Contractor shall have a minimum of 3 years experience installing pedestrian traffic coatings of this type which is required for this project and who is acceptable to the manufacturer.
  - 1. Applicator shall designate a single individual as project foreman who shall be on site at all times during installation.

2. Contractor must show and have QCA Qualified Contractor/Applicator paperwork from the manufacturer of the coating system, as required to obtain a long-term jobsite specific warranty.
- D. Convene a pre-application meeting before the start of application of coating system. Require attendance of parties directly affecting work of this section, including: Architect, contractor, applicator, and authorized representative of the coating system manufacturer and interfacing trades. Review the following:
  1. Drawings and specifications affecting work of this section.
  2. Protection of adjacent surfaces.
  3. Surface preparation and substrate conditions.
  4. Application.
  5. Field quality control.
  6. Protection of coating system.
  7. Repair of coating system.
  8. Coordination with other work.

#### 1.06 DELIVERY, STORAGE & HANDLING

- A. Delivery: Materials shall be delivered to the job site in sealed, undamaged containers. Each container shall be clearly marked with manufacturer's label showing type of material, and lot number.
- B. Storage: Store all materials in a clean, dry place with a temperature range in accordance with manufacturer's instructions.
- C. Handling: Handle products carefully to avoid damage to the containers. Read all labels and Material Safety Data Sheets prior to use.

#### 1.07 PROJECT SITE CONDITIONS

- A. Maintain environmental conditions (temperature and weather) within the limits recommended by the manufacturer.
- B. Schedule coating work to avoid rain and excessive dust and airborne contaminants. Protect work areas from moisture and excessive airborne contaminants during coating application.
- C. Before any work is started, the applicator shall examine all surfaces for any deficiencies. Should any deficiencies exist, the architect, owner or general contractor shall be notified in writing and any corrections necessary shall be made.

#### 1.08 WARRANTY

- A. Upon completion of the work in this section provide a written warranty from the manufacturer against defect of materials for a period of 5 (five) years. To obtain project specific warranty the coating system applicator must be a Westcoat Qualified Contractor/ Applicator and apply for warranty.

### **PART 2 PRODUCTS**

#### 2.01 MANUFACTURERS

- A. Acceptable manufacturer: Westcoat Specialty Coatings; 4007 Lockridge Street, San Diego, CA 92102, Telephone 800-250-4519. Fax 619-255-7187. Website: [www.westcoat.com](http://www.westcoat.com).

#### 2.02 MATERIALS

- A. As basis of design Westcoat ALX Pro Waterproofing Underlayment System (no substitutions will be accepted): Waterproofing system for plywood decks to receive tile, stone, or concrete. A metal lath reinforced system installed with a series of two separate polymer-modified cementitious applications. ALX Pro Waterproofing Underlayment incorporates WP-40 Sheet Membrane under the lath to create a waterproof membrane and provide reinforcement for plywood seams.

#### 2.03 COMPONENTS

- A. ALX Pro Waterproofing Underlayment System: Waterproof walking deck system for use over plywood substrates to receive tile, stone, or concrete, IAPMO ER-587
  - 1. Sheet Membrane: WP-40 Sheet Membrane 36 inch by 75 feet for complete plywood coverage.
  - 2. Metal Lath: WP-25 Metal Lath 2.5 pounds per square yard hot dipped galvanized.
  - 3. Staples: Minimum 1 inch crown by  $\frac{5}{8}$  inch long, 16 gauge non-corrosive Senco P10 or equal.
  - 4. Base Coat: Combine one 50 pound bag of TC-1 Base Coat Cement,  $1\frac{1}{4}$  gallons of WP-81 Cement Modifier, and up to 1 quart of water. Apply by trowel at 40 square feet per batch.
  - 5. Fiberlath Resin Membrane: WP-47 Fiberlath applied over the entire deck. Combine one bag of TC-1 Basecoat Coat Cement with five gallons of WP-90 Waterproofing Resin. Pour the mixture into the WP- 47, trowel thin and smooth at the coverage rate of approximately 250 square feet per batch
  - 6. Slurry Coat: Combine one 50 pound bag of TC-1 Base Coat Cement, 1 gallon of WP-81 Cement Modifier, and up to  $\frac{1}{2}$  gallon of water. Apply by trowel at 100-150 square feet per batch.

## 2.04 ACCESSORIES

- A. Supplemental Materials:
  - 1. Flashing shall be minimum 26 gauge bonderized sheet metal. 6 inch by 4 inch at wall to deck juncture and 2 inch by 4 inch drip edge at outside perimeter of deck.
  - 2. Sealant shall be Westcoat WP-51 Polyurethane Sealant.
  - 3. Westcoat Slope Technique may be used when additional sloping is required. Slope Technique should be applied after the Base Coat, prior to the Slurry Coat.
  - 4. Westcoat WP Wrap can be used to provide additional waterproofing with reinforcement, along the perimeter of decks, over flashing and other challenging areas.
  - 5. WP-43 Sheet Membrane Primer may be used increased adhesion of the WP-40 Sheet Membrane is required.
  - 6. WP-82 Cement Modifier Low Odor can be used in lieu of WP-81, when a lower odor option is required.

## PART 3 EXECUTION

### 3.01 EXAMINATION

- A. Verification of conditions.
  - 1. Inspect all surfaces to receive the pedestrian traffic system. Verify that surfaces are dry, clean, and free of contaminates that would prevent coating system from properly adhering to the surface.
  - 2. Verify that substrates have  $\frac{1}{4}$  inch slope per linear foot.
  - 3. Before starting work, report in writing to the owner any unsatisfactory conditions.

### 3.02 SURFACE PREPARATION

- A. General:
  - 1. Prepare surfaces using methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
- B. Plywood substrate:
  - 1. Provide minimum 1 inch CDX exterior grade plywood.
  - 2. Plywood shall have a maximum joist span of 12 inches.
  - 3. Deflection should be less than L/480 for under tile applications.

### 3.03 INSTALLATION

- A. Install coatings in accordance with manufacturer's instructions.
- B. Mix all materials in accordance with manufacturer's instructions.
- C. Use application equipment, tools, and techniques in accordance with manufacturer's instructions.

- D. Uniformly apply coatings at spread rates and in number of coats to achieve specified coverage.
- E. Adhere to all limitations, instructions, and cautions for pedestrian coatings as stated in the manufacturer's published literature.

#### 3.04 FIELD QUALITY CONTROL

- A. Verify coatings and other materials are as specified.
- B. Verify coverages and finish of the system as work progresses.
- C. Manufacturer's representative shall provide technical assistance and guidance for surface preparation and application of coating systems.
- D. Perform flood test with a minimum of 1 inch and a maximum of 3 inches of water for 24 hours. Drains shall be plugged and barriers placed to contain water.

#### 3.05 PROTECTION AND CLEAN-UP

- A. Installation areas must be kept free from traffic and other trades during the application procedure and cure time.
- B. Protect finished surfaces of coating system from damage during construction.
- C. Touch-up, repair or replace damaged coating system after substantial completion.
- D. Clean area and remove all debris upon completion of work. Dispose of empty containers properly according to current Local, State and Federal regulations.
- E. Allow material to cure 4 to 6 hours before light pedestrian traffic is permitted, 24 hours before heavy traffic and an additional 48 hours before heavy objects are placed on the surface.

#### 3.06 MAINTENANCE

- A. Contractor shall provide to owner, maintenance and cleaning instructions for the waterproof decking system upon completion of work. Owner is required to clean and maintain the surfaces to maintain manufacturer's warranty.

### END OF SECTION

*This guide specification has been prepared by Westcoat Specialty Coating Systems to assist design professionals in developing a project specific specification. This guide is a template that must be reviewed and adapted by specifiers to comply with project requirements. This guide specification is not to be copied directly into a project specification manual without review.*