**DIVISION 7 – THERMAL AND MOISTURE PROTECTION**
**SECTION 07 18 13 PEDESTRIAN TRAFFIC COATINGS**
**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. Specified elsewhere:
1. Section 07 24 00 Exterior Insulation and Finish Systems
2. Section 09 97 26 Cementitious Coatings
3. Section 07 01 10.81 Waterproofing Replacement
4. Section 07 10 00 Damproofing and Waterproofing
5. Section 07 14 00 Fluid Applied Waterproofing
6. Section 07 14 16 Cold Fluid Applied Waterproofing
7. Section 07 16 13 Polymer Modified Cement Waterproofing
8. Section 09 09 00 Finishes
9. Section 09 94 00 Decorative Finishing

1.03 REFERENCES

A. IAPMO – ER-517
B. California Building Code (2022 CBC) & Residential Code (2022 CRC)
C. City of Los Angeles Building Code (2023 LABC) & Residential Code (2023 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. Cited Standards for reference:

1. Water Vapor Transmission (ASTM E 96)
2. Bond Strength (ASTM C297)
3. Accelerated Aging (ASTM D756)
4. Abrasion Resistance (ASTM D1242)
5. Water Absorption (ASTM D570)
6. Impact Resistance (ASTM D3746)

7. Freeze-Thaw (ASTM C67)
8. Surface Burning (ASTM E84)
9. Chemical Resistance (ASTM D2299)
10. Fire Tests of Roof Coverings (ASTM E108)
11. One-Hour Fire Test (ASTM E119)
12. Static Coefficient of Friction (ASTM C1028-96)
13. Compressive Strength (ASTM C109)
14. Tensile Strength (ASTM C190)
15. Chemical Resistance (ASTM D2299)
16. Fire-Test-Response of Deck Structures to Burning Brand (ASTM 2726-12a)
17. Under-Deck Fire Test Response of Deck Materials (ASTM E2632)

B. All materials used in the pedestrian traffic system shall be manufactured and provided by a single manufacturer to ensure compatibility and proper bonding.
C. 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.
D. 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.
E. 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, color, 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 contaminates. Protect work areas from moisture and excessive airborne contaminates 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. Website: www.westcoat.com.

### 2.02 MATERIALS

A. As basis of design Westcoat Shur Deck Pro System (no substitutions will be accepted): Waterproof walking deck system that is reinforced with Metal or Glass Lath and installed with a series of polymer-modified cementitious applications, and sealed with acrylic topcoat.

### 2.03 COMPONENTS

A. Shur Deck Pro System: Waterproof walking deck system for use over plywood substrates, IAPMO # 517.
   1. Sheet Membrane: WP-40 Sheet Membrane 6 inch by 75 feet for plywood seams, or 36 inch by 75 feet for complete plywood coverage.
   2. Lath: WP-30 Westcoat Glass lath or WP-25 Metal Lath 2.5 pounds per square yard hot dipped galvanized.
   3. Staples: Minimum 1 inch crown by $^{5}/_{8}$ inch long, 16 gauge non-corrosive WP-10 Staples.
   4. Base Coat: Combine one 50lb bag of TC-11 Dry Polymer Basecoat Cement with 1 gallon of water. Apply by trowel at a rate of 30 $ft^2$ per batch when using WP-30 or 40 $ft^2$ per batch when using WP-25.
   5. Shur Deck Membrane with Fabric Reinforcement (Flashing): Apply a thick coat of WP-95 Waterproofing Membrane onto the vertical and adjacent horizontal surface using a brush or roller at a rate of 100-150 $ft^2$ per gallon. While the material is still wet, place the WP-45 Waterproofing Fabric fuzzy side down into the wet WP-95, overlapping successive runs of fabric edges and ends a minimum of 2 inches.
   6. Shur Deck Membrane with Fabric Reinforcement (Deck): Install the WP-48 Tri-Directional Fiberlath to the horizontal surfaces. Pour the WP-95 Waterproofing Membrane onto the WP-48, smooth trowel and back roll at 65 $ft^2$ per gallon to completely cover the WP-48. Apply an additional coat of the WP-95 over the entire surface at a rate of 150 $ft^2$ per gallon by trowel or roller.
   7. Body Coat : The Body Coat is a two coat application. Combine 1 gallon of water to one 50 lb bag of TC-11 Dry Polymer Basecoat Cement. Trowel the material over the dry membrane surface at a rate of 80-90 $ft^2$ per mix. Allow the first coat to dry for a minimum of 2 hours before applying the second coat. Repeat the process for the 2nd coat as mentioned above.
   8. (Optional Texture Coat): An optional Texture Coat can be applied over the Body Coat. Combine 1 gallon of water to one 50 lb bag of TC-11 Dry Polymer Basecoat Cement. Trowel the material over the Body Coat at a rate of 100-150 $ft^2$ per mix. Allow the Texture Coat to dry for a minimum of 2 hours before applying the Topcoat.
   9. Topcoat: Apply desired color of the SC-10 Topcoat in two coats. Apply first coat at the rate of 300-350 $ft^2$ per gallon. Allow to dry for 2 hours at 70°F, 50 percent relative humidity. The 2nd coat must be applied neat. Apply the second coat of the SC-10 perpendicular to the first at the rate of 300-350 $ft^2$ per gallon.

### 2.04 ACCESSORIES

A. Supplemental Materials:
   1. Flashing shall be minimum 26 gauge bonderized sheet metal, 4 inch by 6 inch at wall to deck juncture and 4 inch by 2 inch drip edge at outside perimeter of deck.
   2. Drains shall be WP-35 ALX Deck Drain available through Westcoat or

Thunderbird Products. (www.thunderbirdproducts.com)
3. Sealant shall be Westcoat WP-53 Hybrid Sealant.
4. WP-40 36 inch Sheet Membrane can also be installed to the entire deck when maximum protection is required and when a Class I Vapor Retarder is required.
5. WP-43 Sheet Membrane is recommended for maximum adhesion.
6. Westcoat Slope Technique may be used when additional sloping is required. Slope Technique should be applied after the Base Coat, prior to the Shur Deck Membrane Coat.
7. Optional Smooth Finish: TC-12 Shur Deck Fine Cement can be used in lieu of the TC-11 at 150-200 square feet per batch, depending on the desired texture and finish.
8. CA-29 Mini Safe Grip, CA-30 Small Safe Grip or CA-31 Large Safe Grip can be added to the SC-10 Acrylic Topcoat for added skid resistance.

## 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 ¼ 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 5/8 inch CDX exterior grade plywood.
   2. Plywood shall have a maximum joist span of 16 inches.
   3. Deflection should be less than L/360.

### 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.

### 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.*