

## SECTION 071813 – PEDESTRIAN TRAFFIC COATINGS

### 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 080000 – Openings
- E. Section 090000 – Finishes
- F. Section 220000 – Plumbing

#### 1.03 REFERENCES

- A. ICC ESR- 2701 – AL Flex over plywood, is an approved ICC evaluation for Class A fire rating, durability, and wind resistance.
- B. AL Flex over plywood, approved ASTM E108, Class A Fire Rating.
- C. AL Flex System over plywood meets ASTM E119 for 1-hour fire test.

#### 1.04 SUBMITTALS

- A. Submit under provision of Section 013300.
- B. Product Data: Submit manufacture’s product data sheets on each product and systems 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, two samples 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 must be an approved and trained by the manufacturer to obtain specific job site warranties.
- 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.
- E. Applicator shall designate a single individual as project foreman who shall be on site at all times during installation.
- F. 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. Cleaning.
  - 7. Protection of coating system.
  - 8. Repair of coating system.
  - 9. 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 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 manufacture against defect of materials for a period of 10 (ten) years. "Five plus five" year warranty, see manufacture for details.
- B. B. Upon completion of work in this section provide a written warranty from the applicator against defects of workmanship for a period of 5 (five) years.

## PART 2 PRODUCTS

### 2.01 MANUFACTURERS

- A. Acceptable manufacturer: Life Specialty Coatings; 12927 Sunshine Avenue, Santa Fe Springs, California, 90670. Telephone 800-400-0516. Fax 562-946-5921.  
Web Site: [lifespecialtycoatings.com](http://lifespecialtycoatings.com)

### 2.02 MATERIALS

- A. Life Specialty Coatings AL Flex Systems ICC ESR 2701 (no substitutions will be accepted) for use over plywood substrates.

### 2.03 COMPONENTS

- A. AL Standard Finish System: Waterproofing walking deck system for use over plywood substrates, ICC ESR-2701.

1. Life Specialty Coatings Metal Lath: 2.5 pounds per square yards hot dipped galvanized.
2. Staples: minimum 1-inch crown by 5/8-inch-long, 16-gauge non-corrosive Senco P10 or equal.
3. Base Coat: Combine one 50-pound bag of LD1 Cement with 1 1/4 gallons of LD81 Cement Modifier, and up to one quart of water. Apply by trowel at 40 square feet per batch.
4. Flex Coat: Fray all outside edges of the fiberglass to insure penetration of the 1589 acrylic waterproofing resin. Position fiberglass over the entire area to be covered butting the seams together. Pour the 1589 AL Acrylic resin on top of the fiberglass, completely saturating it using pressure from a pool trowel or 3/4" nap roller. Coverage is at 45 square feet per gallon. After saturating fiberglass, immediately roll entire area with an aluminum fiberglass roller to eliminate air bubbles and wrinkles. All existing air bubbles must be removed before Texture Coat is applied. Air bubbles can also be removed by cutting the air bubbles open and applying 1589 waterproofing acrylic resin to adhere the loose fiberglass mat to the substrate.
5. Texture Coat: Combine bag of Life Specialty Coatings LD-3 cement with one gallon of Life Deck LD-81 acrylic and mix thoroughly with a low rpm drill motor. Using an acoustical hopper gun, spray the texture onto the deck with a circular motion to achieve approximately 80% coverage at a rate of about 150 square feet per batch.
6. Top Coat: Apply Life Specialty Coatings 10 Series or 28 Series heat reflective finish coat at a coverage rate of 125 square feet per gallon.

- B. Optional Finishes.

1. LD Custom finish may be used instead of knock down finish for the Life Specialty Coatings AL Flex System.
2. Life Specialty Coatings AL Flex UT (Acrylic Lathe Under Tile) may be used as a waterproof systems for plywood substrates that will receive tile, stone or concrete.

## 2.04 ACCESSORIES

### A. Supplemental Materials:

1. Flashing shall be minimum 26 gauge bonderized sheet metal. 4 inch by 4 inch at wall to deck juncture and 4 inch by 2 inch drip edge at outside perimeter of deck.
2. Drains shall be one-piece deck drains with flange such as, by Thunderbird Products
3. Sealant shall be Life Specialty Coatings – RB900, RB500, Sika 1A or approved by manufacture.
4. LD10 slope material may be used when additional sloping is required for applicable building codes.
5. Life Specialty Coatings seal guard may be used for additional waterproofing reinforcement along perimeter of decks, under flashing, seams and other challenging areas.

### Optional Topcoat:

6. 2110 Gloss/2112 Satin: 2K Water Based Chemical Resistant Urethane may be used OVER the 10 or 28 series topcoat to provide additional superior resistance to chemicals, scratching and stain protection.
7. 2114 Gloss/2116 Satin: 1K Water Based Chemical Resistant Urethane may be used OVER the 10 or 28 series topcoat to provide additional excellent resistance to chemicals, scratching and stain protection.
8. 4001 Gloss/4002 Satin: 1K Water Based Acrylic/ Urethane Hybrid may be used OVER the 10 or 28 series topcoat to provide additional very good resistance to chemicals, scratching and stain protection.

## 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 lineal 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 Exterior Floor Grade OSB stamped PS-1 or PS-2
2. Plywood shall have a minimum joist span of 16 inches.
3. Deflection should be less than L/360, 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 manufacturers 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 coverage's 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 floor system upon completion of work. Owner is required to clean and maintain the surfaces to maintain manufacturer's warranty.

071813-5

### **END OF SECTION**

This guide specification has been prepared by Life Specialty Coatings to assist design professionals in developing a project specification. This guide is a template that must be reviewed and adapted by specifiers to comply with project requirements. Please manually review before submitting.