SECTION 07 18 16

VEHICULAR TRAFFIC COATINGS

PART 1 - GENERAL

1.01 DESCRIPTION

- A. This Section describes the requirements for furnishing and installing the following types of fluid-applied traffic coating:
 - Vehicular traffic coating at top floors of Parking Structure that are exposed to weather and as required to prevent water intrusion.

B. Related Sections:

- 1. Cast-in-place concrete is specified in Section 03 30 00.
- 2. Modified bituminous sheet waterproofing is specified in Section 07 13 52.
- 3. Elastomeric liquid waterproofing is specified in Section 07 14 16.
- 4. Crystalline waterproofing is specified in Section 07 16 16.
- 5. Bentonite waterproofing is specified in Section 07 17 00.

1.02 SUBMITTALS

- A. Samples: 12-inch square samples of fully cured exposed finish materials, in standard colors for the County's Representative's selection.
- B. Product Data: Traffic coating manufacturer's application specifications, maintenance instructions, and locations of 5 installations applied by factory-trained applicators.
- C. Warranty.

1.03 QUALITY ASSURANCE

- A. Design Criteria: Traffic coating shall be UL rated Class A, in conformance with ASTM E108, and approved by the California State Fire Marshal's Office.
- B. Manufacturer: Provide traffic coating produced by a single manufacturer with not less than 5-years prior production and installation of specified materials.
- C. Installer: Traffic coating materials shall be installed by an applicator approved and trained by the materials manufacturer.

1.04 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver and store materials in manufacturer's unopened containers and packaging, identified with manufacturer's name, and name and type of material. Containers shall contain UL label.
- B. Follow additional instructions of the manufacturer.

1.05 JOB CONDITIONS

- A. Proceed with work only after substrate construction and penetrating work have been completed.
- B. Weather Conditions: Proceed with installation when weather conditions are in compliance with manufacturer's recommended limitations.
- C. Pre-Installation Conference: Meet at Project site prior to commencement of work and review requirements for work and conditions which could interfere with successful performance. Where required for warranty, require manufacturer's technical representative to participate in conference.

1.06 WARRANTY

A. Furnish manufacturer's warranty signed by the applicator and authorized representative of manufacturer, warranting traffic coating materials for 3-years against failures resulting from normal exposure, excluding failures due to unusual weather, failure of substrate, or abuse. This warranty shall be in addition to and not a limitation of other rights the County may have against the Developer Design/Builder under the Contract Documents.

PART 2 - PRODUCTS

2.01 VEHICULAR TRAFFIC COATING

- A. Approved Manufacturer: Crossfield Products "Dex-O-Tex Auto-Dex" or approved equal.
- B. Traffic Coating Composition: Trowel-applied, 3-coat system.
 - 1. First Coat: Waterproof latex membrane with rot-resistant cloth fabric reinforcing.
 - 2. Second Coat: Latex portland-cement.
 - Third Coat: Two-component reacted resin surfacing with abrasive granules for wear and skid resistance.
- C. Finished traffic-bearing traffic coating shall conform to the following test standards and requirements:
 - 1. Slip Resistance (Coefficient of Static Friction):
 - a. Dry Rubber: 1.03.
 - b. Wet Rubber: .99.
 - c. Oily Rubber: 1.09.
 - 2. Membrane Elongation Characteristics, ASTM D1117.
 - a. Elongation Dry: 29-percent.
 - b. Breakload Dry: 79-lbs/in.
 - c. Elongation Wet: 31-percent.
 - d. Breakload Wet: 67-lbs/in.
 - Resistance to Oil, MIL-D-23003, Type II: No softening, deterioration, loss of adhesion, in 24-hrs immersion SAE 10W oil.
 - Saltwater Absorption Weight Gain (Concrete block coated and immered in 15-percent NaCl solution for 21-days): None.
 - Chloride Ion Penetration (Concrete block coated and immersed in 15-percent NaCl solution for 21days: None.
- D. Thickness: Approximately 1/8-inch,
- E. Leveling Underlayment: Crossfield Products Corp. "Dex-O-Tex G-26" Flooring Underlayment or as approved by traffic coating manufacturer.

PART 3 - EXECUTION

3.01 PREPARATION

- A. Comply with manufacturer's instructions for preparation of substrates to receive traffic coating.
- B. Clean substrate of dust, debris, and other substances detrimental to work.

- C. Verify that concrete slabs have a steel troweled finish producing a smooth, uniform surface free of depressions, blemishes and ridges and properly pitched for drainage.
- D. Verify that top flange of roof drains are set flush with the concrete surface.
- E. Test substrate for excessive moisture content, in manner recommended by manufacturer.
- F. Mask off adjoining surfaces not to receive traffic coating, and close off drains to prevent spillage and migration of liquid outside membrane area.

3.02 INSTALLATION

- A. Comply with manufacturer's installation instructions, including surface preparation, treatment, flashing, reinforcement, and surfacing.
- B. Begin installation of traffic coating only in presence of manufacturer's technical representative where terms of warranty require.
- C. Apply underlayment where required for a smooth substrate acceptable to the traffic coating manufacturer.
- D. Apply traffic coating materials in accordance with manufacturer's instructions.
- D. Finished traffic coating membrane shall be of thickness specified, smooth and uniform in color and texture.

3.03 CLEANUP AND PROTECTION

- A. Remove spilled and splattered materials immediately as work progresses.
- B. Protect installation as required to ensure that work will be without damage or deterioration at time of final acceptance and after completion of other construction work.

END OF SECTION