Oak Ridge™
Foam & Coating Systems, Inc.

APRIL 2017

APPLICATION SPECIFICATION

Section 07575
ORGANIC ZERO VOC ELASTOMERIC WEARING TRAFFIC DECK AND RAMP MEMBRANE SYSTEM

PART 1 – GENERAL

1.1 SUMMARY

A. This section describes the requirements for furnishing and installing Oak Ridge's durable and waterproof surface membrane consisting of a 100% Volume of solids organic pure elastomer coating system for concrete Vehicular traffic decks and ramps. This specification is not intended for use over on - grade concrete without an installed vapor barrier system. This system is a fast-cured, multi-build pass, high pressure/high temperature installed system involving a pre-polymerized Isocyanate "A" side component and a terminated amine polyol resin "B" side in a 1:1 mix ratio requiring a plural component porportioner dispensing unit of a PMC PH 40 or equivalent and associated equipment. It contains no solvent fumes as it is a chemically cured product. It provides for a high build and possesses excellent toughness and elongation.

1.2 RELATED SECTIONS

A. Cast-in-concrete: Section 03300
B. Flashing and sheet metal: Section 07600
C. Drains, vents and penetrations: Section 07700

1.3 SUBMITTALS

A. Product data: Submit manufacturers submittal package: specification, installation instructions, general information and requested warranty standards and procedure.

B. Applicator qualifications: submit current written approval status of the contractor from the Manufacturer.

1.4 JOB REQUIREMENTS

A. Products including membrane system shall be provided be a single manufacturer. Any secondary products or materials shall be as recommended by the manufacturer. The manufacturer shall have a minimum of Ten Years' experience in the manufacture of materials of this type.

B. Applicator contractor shall have a minimum of five years' experience in the applications of type of organic elastomeric membrane coating system specified herein. Applicator shall be in good standing with the specified manufacturer listed and approved for this installation application in order to provide the required warranty requested.

C. Pre-job construction walk-thru with manufacturer representative, contractor and owner's selected representative or other parties affected by this section shall coordinate to conduct this jobsite walk-thru. This job walk shall establish contractor staging area, jobsite requirements and owner's site requirements. Any pre-job treatments, changes as offered in specification details shall be brought to the attention of the owner's representative for discussion, resolution and possible added costs associated with this installation.

1.5 DELIVERY, STORAGE AND HANDLING

A. Store all materials in the original unopened containers at a minimum temperature of 70°F until ready for use.

B. All involved in handling, storage and delivery of materials shall have successfully completed online safety certified course, (ACC – American Chemistry Council) pertaining to chemicals associated with this installation http://spraypolyurethane.org/highpressureSPFHealthandSafety, requirements of the manufacturer for climatic conditions, i.e., Cold, hot and humid weather related events.

C. Safety: Refer to all applicable data including, but not limited to Emergency Exit Plan**, PPE (personnel Protection Equipment**), Safety Data Sheets, Product Data Sheets, Product labels, OSHA requirements and other specific requirements.

1.7 WARRANTY

A. A three or five-year warranty is available, jointly between the manufacturer and the contractor. Exceptions to this are at the discretion of the manufacturer. The contractor of record must be eligible for, submit and have written prior approval prior to the start of specified work as noted herein for warranty consideration.

PART 2 – PRODUCTS

2.1 MANUFACTURERS

A. Acceptable Manufacturers

1. Oak Ridge Foam and Coating Systems, Inc.

2. Approved equal

2.2 MATERIALS

A. Oak Ridge Foam and Coating Systems, Inc. or an approved equal of a primer/sealer pre-application treatment consisting of a two-component 100% epoxy concrete primer/sealer.

B. Zero VOC, 100% solids, fast-acting, two-component Organic Elastomeric Coating system Oak Ridge's ORWPM.

C. Flashing and joint Reinforcing fabric: as supplied by Oak Ridge Foam and Coating Systems, Inc. This could incorporate for poly spun fabric, neoprene sheet flashing and related materials required for flashing drains, base angles, etc.

D. Zero VOC, 100% solids, extended cure, two-component Organic Elastomeric Coating system Oak Ridge's OR90WPM.

E. Aluminum Oxide: 16 mesh natural or bleached.

F. Miscellaneous: Accessories: All items incorporated into this system shall be compatible with and approved by the coating manufacturer.

NOTE: THE CONTRACTOR IS RESPONSIBLE FOR ADDITIONAL MATERIALS FOR ROUGH OR IRREGULAR SURFACES AND LOSS DURING APPLICATION.

PART 3 – EXECUTION

3.1 EXAMINATION

A. Verify substrate preparedness for commencement of work. Surfaces shall be clean, dry and stable and free of contaminants that could affect cohesive bond.

B. If new concrete, do not begin installation until concrete has cured for a minimum of 28 days.

C. Verify that existing concrete meets requirements of the coating manufacturer.

D. Verify that all work preparing the existing substrate has been completed and accepted by the Owner's Architect, Engineer or Representative prior to commencement of work.

3.2 PREPARATION

A. Provide for a clean, dry and stable substrate.

B. Mask off and protect any areas that are not to receive specified system.
C. Provide a staging area as directed and approved by all parties.

3.3 INSTALLATION

A. The installation of this specified system shall be monitored by the manufacturer's technical representative as requested and/or mandated by the manufacturer.

B. Concrete Prime/Seal: Apply one coat of Oak Ridge's epoxy wash primer **OR E-41** to The clean, dry and stable substrates in two applications in opposite directions at a Minimum rate of 200 sq. ft. per gallon and allow to cure a maximum of 6 hours
. Conduct a scratch test to verify cure.

C. Detail work: install any required flashing treatment, caulking, applicable joint treatment and associated drain detail treatment.

D. Apply Oak Ridge's **OR90WPM** base coat over the primed and prepared surfaces stripe coating all detail treatment initially before applying the general field applications. Stripe coat shall be installed a minimum of 16 dry mils or one gallon per 100 sq. ft. The overall field base coat shall be a minimum of 1.25 gallons per 100 sq. ft. or 20 dry mils. Detail stripe coat shall extend up vertical surfaces a minimum of six inches.

E. Apply Oak Ridge's extended cure Organic elastomeric coating **OR90 wpm / S** and into the wet applied coating, broadcast aluminum oxide wear course 16 mesh granule at a minimum rate of 15lbs per 100 sq. ft. This wear coat application shall be a minimum of 1.25 gallons per 100 sq. ft. or 20 dry mils.

F. Remove any and all loose granule from wear membrane. Install an additional fast set ORWPM coat encapsulating the installed granule system at a minimum rate of one gallon per 100 sq. ft.

G. Install an additional wear course application at entrances and exits of the parking facility as noted in 3.3, sec. E.

H. Install Oak Ridge's protective topcoat organic elastomeric system **OR90WPM** at a minimum of one gallon per 100 sq. ft. or 16 dry mils minimum in designated topcoat color.

NOTE: COMPLETE ONLY THAT AMOUNT OF SUBSTRATE AREA THAT CAN BE FULLY COMPLETED IN THE SAME DAY. ANY TIE IN FROM THE PREVIIOUS DAYS INSTALLATION SHALL BE MECHANICALY ROUGHED AT THE EDGE OF THE NEWLY INSTALLED A MINIMUM OF THREE INCHES AND PRIMED USING OAK RIDGE'S RECOMMENDED PRIMER BEFORE CONTINUATION OF MEMBRANE SYSTEM INSTALLATION.