



SECTION 071816

VEHICULAR TRAFFIC COATINGS

PART 1 GENERAL

1.01 SUMMARY

- A. Section includes: Acrylic modified cementitious waterproof system for concrete that meets the requirements for specific use indicated in the contract documents. Include applicable substrate testing, surface preparation, and detail work.

1.02 RELATED SECTIONS

- 1. Section 03 30 00 – Cast-in-Place Concrete
- 2. Section 03 35 00 – Concrete Finishing
- 3. Section 03 39 00 – Concrete Curing
- 4. Section 07 92 00 – Joint Sealants

1.03 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.

1.04 QUALITY ASSURANCE

- A. Materials used in the vehicular traffic system must 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 have at least of 3 years experience installing vehicular traffic coatings of this type which is required for this project and who is acceptable to the manufacturer.
 - 1. Contractor is responsible to designate a single individual as project foreman who will 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.

1.05 DELIVERY, STORAGE & HANDLING

- A. Delivery: Deliver materials to the job site in sealed, undamaged containers. Each container must be clearly marked with manufacturer's label showing type of material, color, and lot number.
- B. Storage: Store 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 labels and Material Safety Data Sheets prior to use.

1.06 PROJECT SITE CONDITIONS

- A. Maintain environmental conditions (temperature and weather) within the limits recommended by the manufacturer.
- B. Test concrete for moisture before applying a seamless coating. If moisture emissions exceed 5 lbs/1000 square feet (ASTM F1869) or if the relative humidity (RH) exceeds 75 percent (ASTM F2170), see EC-15 Moisture Vapor Barrier product specification.
- C. Concrete must be at least 2500 psi.
- D. Concrete must be at least 2 inches thick
- E. Cure concrete for at least 28 days before coating is applied.
- F. Schedule coating work to avoid rain and excessive dust and airborne contaminants. Protect work areas from moisture and excessive airborne contaminants during coating application.
- G. Examine surfaces for deficiencies. Should any deficiencies exist, the architect, owner or general contractor must be notified in writing and any corrections necessary be made.

1.07 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.

2.02 MATERIALS

- A. As basis of design Westcoat MACoat Vehicular Traffic System (no substitutions will be approved): Waterproof vehicular traffic system reinforced with fiberlath and installed with a series of polymer-modified cementitious applications, and sealed with polyurethane topcoat.

2.03 COMPONENTS

- A. MACoat Vehicular Traffic System: Vehicular traffic system for use over concrete or existing coating.
 1. Fiberlath: Place WP-47 Fiberlath over entire deck overlapping seams 2 inches.
 2. Base Coat: Combine one 50 pound bag of TC-1 Base Coat Cement and 5 gallons of WP-90 Waterproofing Resin. Apply by trowel at 220-260 square feet per batch.

3. Feather Patch: Combine one 50 pound bag of TC-1 Base Coat Cement and 5 gallons of WP-90 Waterproofing Resin. Apply by paintbrush or trowel to smooth seams or imperfections where fiberlath is not laminated flat, or where seams and overlaps are visible.
4. Slurry Coat: Combine one 50 pound bag of TC-1 Base Coat Cement, 5 gallons of WP-90 Waterproofing Resin, and up to one quart of water. Apply by trowel at 250-320 square feet per batch.
5. Orange Peel Texture Coat: Combine one 50 pound bag of TC-3 Medium Texture Cement, one gallon of WP-81 Cement Modifier (and up to ½ gallon of water. Apply by acoustical hopper gun at 150 to 200 square feet per batch.
6. Topcoat: Apply desired color of EC-95G Gloss Polyurethane Topcoat in two thin applications at 300-400 square feet per gallon.

2.04 ACCESSORIES

- A. Supplemental Materials:
 1. When applicable, flashing should be 26 gauge bonderized sheet metal. 4 inch by 4 inch at wall to deck juncture and 2 inch by 4 inch drip edge at outside perimeter of deck.
 2. Drains must be one piece deck drains with flange such as, by Thunderbird Products.
 3. Use Westcoat WP-51 Polyurethane Sealant when a sealant is required.
 4. Use EC-72 Epoxy Patch Gel as needed for patching.
 5. Use TC-23 Mortar Mix as needed for concrete repairs.
 6. Use Westcoat Slope Technique when additional sloping is required.
 7. Use Westcoat WP Wrap to provide additional waterproofing with reinforcement, along the perimeter of decks, over flashing and other challenging areas.
 8. Use EC-102 Polyaspartic when tire staining is a concern.
 9. 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 surfaces to receive the vehicular traffic system. Verify surfaces are dry, clean, and free of contaminants that would prevent coating system from properly adhering to the surface.
 2. Verify 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.
- C. Concrete substrate:
 1. Create a surface profile by grinding, water blasting, or shot blasting to achieve a surface profile equal to CSP 3 as specified by ICRI.
 2. Rout and clean cracks and static joints: fill with manufacturer's recommended flexible epoxy filler material.
 3. Honor moving and expansion joints. Seal with manufacturer's recommended joint sealant.
 4. Repair any non-moving surface deviations with manufacturer's recommended patching material.

3.03 INSTALLATION

- A. Install coatings in accordance with manufacturer's instructions.
- B. Mix 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 limitations, instructions, and cautions for vehicular 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 will 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 debris upon completion of work. Dispose of empty containers properly according to current Local, State and Federal regulations.
- E. Prohibit traffic on floor for 48 hours after installation. Avoid heavy abrasion and chemical exposure for 5 days. Allow 72 hours minimum for vehicular traffic.

3.06 MAINTENANCE

- A. The Contractor is responsible to provide the owner with 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.

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.