

Specification – Coating System for Concrete Substrates

Part 1: General

1. System Description

This system specification incorporates a total treatment and solution for a long-lasting concrete coating. It includes a compatible cleaner, coating, and sealer that is specifically designed to work in unison to create a durable protective coating for new and existing concrete structures. Furthermore, this complete system is 100% water based and low VOC, making it an ideal product for use in sensitive environments. Coatings that are solvent-based will not be accepted.

This specified system not only has restorative properties, but has the capability of protecting concrete structures from future corrosion due to exposure. The coating is able to be tinted to any color that is chosen by the client.

This system is able to be “spot-treated” and repaired on an as-required basis with minimal preparation.

The system is quick-drying so the structure can be returned or placed into service within 48 hours of the final application.

2. Submittals

- A. MSDS
Most current copy of manufacturer’s Material Safety Data Sheet must be present and readily available at all times.
- B. Product Data Sheets
Current edition of manufacturer’s product data sheet pertaining to products employed which includes physical data, surface preparation and application instructions.
- C. Samples and Color Compliance
A sample of the coating in the specified color and applied to a substrate sample consistent with the application shall be supplied prior to starting the project.
- D. Warranty Information
 - 1. Standard manufacturer’s warranty
 - 2. Applicator’s standard warranty
- E. Applicator’s Qualification Assurance: Submit list of a minimum of 3 completed projects of similar size and complexity of work. Include for each project:
 - 1. Project Name and Location
 - 2. Name of Owner
 - 3. Name of contractor
 - 4. Name of architect
 - 5. Name of coating manufacturer
 - 6. Approximate area of coating applied
 - 7. Date of completion
- F. All materials specified herein are manufactured by Encore Coatings, LLC, Cartersville, GA (770)330-7260 Direct, (706) 268-1491 Fax, encorecoatings@gmail.com.

3. Quality Control

- A. Qualifications
 - 1. Applicator shall have a minimum of 3 years experience in the preparation and application of single or multi-component coatings to concrete, wood, or metal substrates.
- B. Pre-Estimate Conference
 - 1. Applicators, Architect and Manufacturer's Representative shall conduct a conference prior to estimate to review all aspects of the application, including, but not limited to: surface preparation, application and clean-up.
- C. Packaging and Shipping
 - 1. All materials are to be delivered intact to the job site in the manufacturer's original packaging with labels or other items clearly identifying:
 - a. Coating or material name.
 - b. Manufacturer.
 - c. MSDS
- D. Storage and Protection
 - 1. All non-mixed material is to be stored in a cool dry place away from direct sunlight
 - 2. All material is to be kept sealed until ready for use.
 - 3. All mixed material shall be tightly re-sealed in the original container and stored in a cool dry place.
 - 4. All material must be kept from freezing temperatures.

4. Work Conditions

- A. Environmental Requirements
 - 1. Product can be applied with air temperatures between 45° - 85° F.
 - 2. Maintain proper ventilation through fans and/or venting systems within the work environment.
 - 3. Maintain adequate lighting throughout the work environment.
 - 4. Take every precaution to prevent overspray or roller slag from harming the environment by placing a tarp or other protective material under work product.
 - 5. Properly dispose of any waste in accordance with applicable regulations.
- B. Safety Requirements
 - 1. Applicators should thoroughly review all pertinent technical data and MSDS sheets prior to application.
 - 2. Caution or work zone notices/tape shall be placed on the perimeter of work zone prior to work commencing.
 - 3. Applicators shall be required to wear eye and basic respiratory protection when mixing materials.
 - 4. Applicators shall maintain a container (large enough to immerse their application tools) of clean water on sight in order to respond to a cleanup quickly.
 - 5. Only work related staff shall be allowed to enter the work area.

Part 2: Products

2.01 Products

- A. Manufacturer: Encore Coatings, LLC, Cartersville, GA, 770-330-7260, www.encorecoatings.com
- B. Encore SealBack. A water-based acrylic seal coat that is designed to seal the Encore coating while filling in holidays or gaps in the coating. Encore SealBack is applied using a pump-up hand-held sprayer.
- C. Encore Composite Coating. A water-based plural component system that combines to produce a durable coating for concrete structures. Encore is packaged in a partially-filled 5-gallon pail. Encore can be tinted to any desired color by adding one gallon of acrylic paint (in the desired color) to the 2.5 gallon kit. One kit of Encore produces 3.5 gallons and covers 400 square feet with one coat. Two coats required on all applications.
- D. Encore TripleCrown. An environmentally-friendly concrete cleaner that removes dirt, oil, free lime and alkali from new or old concrete. Applied with a pump sprayer.

(See Section 3.03 Application for specific procedure)

Part 3: Execution

1. Inspection

- A. General
 - 1. Examine the project area and take note of any conditions detrimental to the proper and timely completion of the work. Do not proceed with the work until unsatisfactory conditions have been corrected by the contractor in a manner acceptable to the architect.

2. Preparation

- A. Protection of Surfaces not scheduled to be coated
 - 1. Protect surrounding areas and surfaces not scheduled to be coated from damage during surface preparation and application of coatings.
- B. Planning and Substrate Preparation
 - 1. Do not commence work until it has been determined that rainfall is not in the local 24 hour forecast either before, during or following the scheduled start and finish dates.
 - 2. The contractor shall have weatherproof tarps on-hand to protect the prepared or newly coated surfaces from unexpected weather. Inspection: Prior to start of application, inspect existing conditions to insure surfaces are suitable for installation including the following:
 - 3. Concrete has cured for a minimum of 28 days prior to application of coating.
 - 4. Surface is completely free of sealers, oils, dirt, paint, penetrating sealers and foreign materials that would prevent the overlay from bonding to the concrete surface.
 - 5. Repair damaged and deteriorated concrete.
 - 6. Fill cracks, holes, spalls and low areas.
 - 7. Concrete has been cleaned per manufacture requirements.

3. Application

A. General

1. The Encore system shall be installed in the order annotated below:
 - a. Substrate Inspection and Preparation – replacement of structurally unfit parts,
 - b. Protection of surrounding environment.
 - c. Application of TripleCrown Concrete Cleaner and Prep.
 - d. Application of Encore Composite Coating Repair Coat.
 - e. Inspection of Repair Coat. Touchup.
 - f. Verify minimum of 4-6 mil thickness.
 - g. Application of Encore Composite Coating Finish Coat.
 - h. Inspection of Finish Coat. Touchup.
 - i. Verify minimum of 8 mils total thickness.
 - j. Application of Encore SealBack
 - k. Clean up.

B. Inspection of Prepared Surface

1. Before the application of TripleCrown or Encore Composite Coating, the substrate must be clean, free from rust or previous coating, free from any bond inhibiting agents, and completely dry. All structurally unfit beams, fasteners, or other components must be replaced according to guidelines provided herein.

C. Mixing

1. The handling and mixture of materials shall be in strict accordance with guidelines provided by the manufacturer.

D. Application of Materials

Note: Ambient temperature and humidity effects drying time. The coating will cure faster in warmer, drier weather.

1. Using pump-sprayer, apply TripleCrown to concrete. Allow to penetrate and work for a minimum of 2-4 hours. Rinse thoroughly and allow to dry.
2. Apply initial coat of Encore in a 0 degree (or parallel) direction. It is the heavier of the two coats that are applied. Allow to dry for at least 30 minutes. Inspect for holidays and repair.
3. Apply the second coat once the first coat is dry. Apply the second coat in a 90 degree (or horizontal) direction, to create a cross-hatch application.
4. Using pump-sprayer, apply two coats of SealBack, allowing time between coats for drying.

E. Clean Up

1. Immediately seal the pail containing any unused coating or other material.
2. Clean tools with water.
3. Remove tape or other materials that were used to protect surrounding surfaces.
4. Dispose of job materials according to applicable regulations.

4. Project Completion and Quality Control

A. Return to Service

1. Project shall not be allowed to return to full service prior to a full 48hours from completion of final topcoat.
2. The following tests and records shall be performed and recorded by the applicator during the application and submitted to the Architect:

- a. Mil thickness measurements - average 1/10 sq. ft.
- b. Daily Air Temperature measured at mid-day
- c. Substrate Temperature measured at start and stop times
- d. Dew Point measured at mid-day

END OF SPECIFICATION