

Specification – Encore Coating for Wood
Proprietary Water-Based Composite Coating

Part 1: General

1.01 System Description

A two-part water-based composite coating that is designed specifically for modifying and repairing existing wood walkways. The coating must have restorative properties and the capability of modifying the substrate with a skid-resistant feature. The coating must be tintable to any color that is chosen by the client. Repairs to the coating must be achievable by applying a maintenance coat of the same coating to the repair area.

The coating must be quick-drying so the area can be returned to service within 24 hours of the final application.

The coating must comply with ASTM D2394-05, ASTM D 3359-90, and ASTM 4060-07 as evidenced by independent third-party test results provided by the manufacturer.

1.02 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. **Testing**
A copy of required ASTM test data shall be provided. All testing must be performed by an ISO 9001 facility and data shall be provided on such facility's letterhead. See Section 2.02 herein for required test methods.
- E. **Warranty Information**
 - 1. Standard manufacturer's warranty
 - 2. Applicator's standard warranty
- F. **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

- G. All materials specified herein are manufactured by Encore Coatings, LLC, Cartersville, GA (770)330-7260 Direct, (770)334-8838 Fax, encorecoatings@gmail.com.
- H. Equivalent Materials of Other Manufacturers: None

1.03 Quality Control

- A. Qualifications
 - 1. Applicator shall have a minimum of 3 years experience in the preparation and application of fluid coatings to wood and/or concrete floors and be properly trained or advised by the manufacturer.
- 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.

1.04 Work Conditions

- A. Environmental Requirements
 - 1. Product can be applied with air temperatures between 38° - 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. Encoretm Pretreattm is a water-based adhesive primer that is designed to create dimensional stability and added adhesion to the substrate to which it is applied. Pretreat is applied using a pump-up hand-held sprayer.
- C. Encore Composite Coating for Wood is a water-based plural component system that combines to produce a durable, skid-resistant surface on existing wood walking surfaces. Encore is available in a 2.5 gallon quantity, but is packaged in a standard 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.

Encore has excellent outdoor properties and is highly resistant to UV rays, color change, loss of gloss, adhesion and wear, mechanical impact, staining, and commercial and household cleaners.

Encore is intended to be a multi-coat (2) system. The initial coat is a “repair” coat, that must fill in check or splits in the wood substrate. Apply the Encore repair coat perpendicular to the grain to produce the best repair.

Once dry, the second coat, or “finish” coat is applied. The finish coat is applied in the direction of the grain.

(See Section 3.03 Application for specific procedure)

As a stand-alone system, Encore achieves a high level of abrasion resistance and in most cases does not require the use of a sealer.

2.02 Specification Properties

- A. Encore Composite Coating for Wood

1. Anti-slip, Skid-resistance Test Results:

The tests performed are to be conducted in accordance with ASTM D2394-05, Standard Test Method for determining Coefficient of Friction. These tests are to be conducted on samples that were produced to simulate conditions that are consistent with typical field conditions

Static Coefficient of Friction	1.33
Dynamic (Kinetic) Coefficient of Friction	0.62

2. Adhesion Tests:

The adhesion test must be conducted in accordance with ASTM D 3359-09. This test is to be conducted on samples that were produced to simulate conditions that are consistent with typical field conditions. The sample is to be coated with one coat of the test material and allowed to dry. Thereafter, a second coat is applied, producing a total dry mil thickness of 8-10 mils.

Result: Minimum rating of 5B (0% adhesion lost).

3. Abrasion Testing

The abrasion test must be conducted in accordance with ASTM 4060-07 Taber Wheel Abrasion Test. The test must be conducted on a sample that was produced to simulate conditions that are consistent with typical field conditions.

Final Wear Point (Average) 1,250 cycles/mil

4. Dry Mil Finish

The finished dry mil thickness shall be no less than .0080. Thickness shall be verified through the use of a control sample that is coated simultaneously with the first and second coat procedures.

Part 3: Execution

3.01 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.

3.02 Preparation

A. Protection of Surfaces not scheduled to be coated

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.
3. Protect surrounding areas and surfaces not scheduled to be coated from damage during surface preparation and application of coatings.
4. Insure that in a case where an above-ground surface is to be coated, that surface areas under the substrate (example: lower decks or patios) are adequately covered and protected.

B. Substrate Preparation

1. A general inspection of the entire project is required in order to identify boards and/or beams that are structurally unfit for continued use. Material that, in the professional opinion of the applicator, is not fit for use must be removed and replaced with new material of matching type and size.

2. Prior to application, all surfaces scheduled to be coated must be thoroughly cleaned and all loose materials removed using whatever means required.
3. Replacement boards must be inspected to insure that their surfaces are free from mil glaze. In cases where mil glaze is present, abrade and clean the surface with Clorox® Outdoor Bleach.
4. Boards that have warped ends must be re-secured with stainless steel screws.
5. Fasteners that have heaved must be replaced with stainless steel screws that are at least 1/2" longer in length than the existing fastener.

3.03 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, including boards and fasteners, and proper cleaning.
 - b. Protection of surrounding environment.
 - c. Application of Encore Pretreat
 - d. Application of Encore Composite Coating Repair Coat. (Applied before Pretreat is fully dry.)
 - e. Inspection of Repair Coat. Touchup.
 - f. Application of Encore Composite Coating Finish Coat.
 - g. Inspection of Finish Coat. Touchup.
 - h. Clean up.

B. Inspection of Prepared Wood Surface

1. Before the application of Pretreat or Encore Composite Coating for Wood, the substrate must be clean, free from dust and debris, free from any bond inhibiting agents, and completely dry. All structurally unfit boards or beams and fasteners 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

1. Using a pump-up hand-held sprayer, apply Encore Pretreat to the prepared surface and allow time for the polymer system to penetrate below the surface. Ambient temperature plays a major role in drying time. Do not allow the polymer to dry before moving to Step 2 below.
2. Working from the 5-gallon pail, using a 3/8" to 3/4" nap roller, apply the Repair Coat perpendicular to the grain. Apply evenly and allow to dry.
3. Conduct inspection and touchup areas that are not uniformly coated.
4. Working parallel or with the grain, apply the Finish Coat. Allow to dry.
5. Final mil thickness of the two coats shall average between 8-10 mils.
6. Conduct inspection and touchup areas that are not uniformly coated.
7. Allow to dry thoroughly.

- E. Clean Up
 - 1. Immediately seal the pail containing unused coating.
 - 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.

3.04 Project Completion and Quality Control

- A. Return to Service
 - 1. Project shall not be allowed to return to full service prior to a full 24 hours 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. Air Temperature
 - b. Substrate Temperature
 - c. Dew Point