

Elastideck

Division 9: Finishes

A two-component, acrylic modified, flexible waterproofing membrane for above grade waterproofing of horizontal concrete surfaces.

SECTION 099726 – CEMENTITIOUS COATINGS

PART 1 GENERAL

1.1 SUMMARY

Provide labor, materials, equipment and supervision necessary to complete the application of coating.

1.2 SYSTEM DESCRIPTION

The products shall meet or exceed the following performance requirements:

Base		
Powder		Portland cement
Liquid		Milky, liquid emulsion
Polymer		Styrene acrylic
pH	Wet mix	greater than 12
VOC	ASTM D3960	Less than 0.15 pounds per gallon (per mixed kit)
Setting time	ASTM C953	Initial 120 minutes – Final 300 minutes
Elongation	ASTM D2370	180 percent
Water vapor transmission	ASTM E96	8 to 10 perms
Resistance to hydrostatic pressure	CRD-48-73	100 percent reduction
Accelerated weathering	ASTM C1519	2000 hours – no effect
Taber abrasion resistance	ASTM C1353	2000 cycles, less than 0.8 percent weight loss (H22 wheel with 500 grams of weight)
Tensile strength – psi	ASTM C307	810
Mandrel bend test	ASTM D522	1/8 inches at 68 degrees F and 27 degrees F

1.3 SUBMITTALS

- A. Manufacturer's current product data bulletin.
- B. The trained applicator shall prepare a test area on the structure as a submittal for approval of proper application and adhesion.
- C. The trained applicator shall submit to the specifier a list of five projects that he has completed within the last five years, exhibiting the applicator's skills. The list shall include project name, location, and description of work and completion date.

1.4 QUALITY ASSURANCE

Products shall be installed by a trained applicator with a minimum of five years' experience and meet the requirements of the specifier.

1.5 DELIVERY, STORAGE & HANDLING

- A. Deliver all products in original labeled, sealed, and undamaged containers.
- B. Store all products in accordance with manufacturer's printed instructions.
- C. Handle products in accordance with manufacturer's printed instructions.

1.6 PROJECT/SITE CONDITIONS

- A. All products shall be applied at substrate and ambient temperatures of 45 degrees F or above.
- B. A minimum substrate and ambient temperature of 45 degrees F shall be maintained 24 hours after completion of work.
- C. Application must be protected from high winds and precipitation for 8 hours after installation.
- D. Do not apply products to frozen surfaces.

1.7 SCHEDULING

The work requires close coordination with related sections and trades.

PART 2 PRODUCTS

2.1 MANUFACTURERS

The following manufacturers are approved for the project.
Conproco

2.2 MATERIALS

- A. Elastideck: A two-component, acrylic modified, flexible waterproofing membrane for above grade waterproofing of horizontal concrete surfaces. Elastideck provides abrasion resistance and waterproofing to the existing substrate.
- B. Color: _____

PART 3 EXECUTION

3.1 EXAMINATION

- A. Installation shall be performed strictly in accordance with manufacturer's current product data bulletin.
- B. Examine substrates and conditions under which materials will be installed. Do not proceed with installation until unsatisfactory conditions are corrected.

- C. Coordinate installation with adjacent work to ensure proper sequence of construction. Protect adjacent areas and landscaping from contact due to mixing, handling, and application of materials.

3.2 SURFACE PREPARATION

- A. Remove loose and deteriorated material, laitance, dirt, dust, oil and any surface contaminants that will inhibit proper bond.
- B. The concrete deck surface must be free of ridges and sharp projections. If metal form or decks are used they should be ventilated to permit adequate drying time of concrete on exterior exposed deck.
- C. The concrete must have cured for a minimum of 7 days (minimum 3,000 psi compressive strength). Water-cured treatment of concrete is recommended.
- D. Restore any damaged areas of the concrete deck to match adjacent areas.
- E. All surface preparation shall be determined prior to application in accordance to ICRI Technical Guideline No. 03732 Selecting and Specifying Concrete Surface Preparation for Sealers, Coatings, and Polymer Overlays.
- F. Remove a minimum of 1/16 inch of surface by abrasive blasting, steel shotblasting, scarifying, needle-scaling or high pressure water. Surface must have a Concrete Surface Profile (CSP) of 5.
- G. Clean and pre-stripe non-structural cracks (up to 1/16 inch) with one 4 inch wide, 50 mils. application of Elastideck.
- H. Dynamic cracks, joints and transitions (wall-to-slab) must be properly detailed with a closed cell backer rod and polyurethane sealant. Apply 4 to 6 inch wide stripe of material over sealant and embed mesh fabric while material is plastic.
- I. Saturate surface with clean water, (saturated surface dry/SSD), with no standing water during application.

3.3 APPLICATION

A. Priming

No priming is necessary under normal circumstances.

B. Mixing

1. Stir or mechanically mix using a low speed drill (400 to 600) until homogenous.
2. Thoroughly shake Elastideck Admix to disperse the pigment.
3. Pour Elastideck Admix into a clean mixing vessel and slowly add all of the powder.
4. Mix continuously for 3 minutes to a uniform, lump-free consistency.
5. Do not over mix, as this will entrain excess air.
6. Do not re-temper.

7. Elastideck has a pot life of 10 to 15 minutes. Preplan work to be within pot life.

C. Application

1. At time of application, surfaces should be saturated surface dry (SSD) but hold no standing water.
2. Apply 50 mils. coat over the entire surface with a heavy nap roller, sponge float, squeegee or spray.
3. Option: Apply two 30 mils coats using a ½" nap roller for waterproofing, longer service life and more consistent texture.
4. Work material into substrate to promote proper adhesion.
5. Do not exceed 60 mils. per coat.
6. Do not overwork the finish.
7. Apply Super Color Stain in the same color to provide stain resistance after Elastideck has cured for at least 24 hours and can accept foot traffic.

D. Curing

1. Protect from direct sunlight, wind, rain, and frost during curing period.
2. Do not place rubber mats or equivalent on Elastideck for 14 days.

3.4 CLEANING

- A. Material left over at the job site by the approved applicator shall be removed.
- B. All adjacent surfaces and materials shall be cleaned.
- C. Clean tools with soap and water before the material dries.
- D. Cured material must be removed mechanically.

END OF SECTION 099726