

Enduro-Lastic

SECTION (07 18 13) - PEDESTRIAN TRAFFIC COATINGS FOR PLYWOOD, CONCRETE AND STEEL

PART 1 **GENERAL**

- 1.1 PRODUCT DESCRIPTION:** The ENDURO-LASTIC Waterproof Deck Coating System, consists of a Modified Polyrner Binder, that is reinforced with a fiberglass, multi-directional chopped strand mat. The ENDURO-LASTIC fiber glass underlayment is covered with a modified cement textured walking surface, and a color coat. The ENDURO-LASTIC Waterproof Deck Coating is a breathing membrane system that has been tested for water vapor transmission.
- 1.2 PRODUCT USE:** ENDURO-LASTIC is designed for new construction, and reconstruction applications on many types of surfaces, including walkways, stairs, and balconies, with a concrete, plywood, or steel substrate. It is ideal for reconstruction of elastomeric systems, exposed aggregate, Magnesite/Diato, cementitious systems, concrete toppings over structural concrete, etc. 1.21 The methods of application involved may require modification to adjust to job site conditions, air temperature, and weather. (Consult Enduro Products for specific design requirements).
- 1.3 PLYWOOD SUBSTRATE:** Plywood must be structurally sound, clean, dry, and free of dust, paint or any foreign materials, and sloped for drainage a minimum of 1/4-inch per lineal foot. The plywood must be a minimum of (19/32) 5/8-inch nominal thick, exterior grade, applied to framing a maximum of 16-inches on center, with all joints blocked or tongue and grooved, supported along all edges, fastened by ring shank nails, or counter sunk screws, spaced as required by The Code. Wood substrate must comply with ICC-ES PCC-ES acceptance criteria for walking decks AC39, Section 1.2 for exterior grade plywood. All slider and door thresholds, jambs, posts, walls, scuppers, and fascia edges must have bonderized metal flashing in accordance with The Code.
- 1.4 JOB SITE CONDITIONS:**
- 1.41 Substrate shall be of sound structural grade, in accordance with A.C.I. (American Concrete Institute) 301 Specifications for Structural Concrete for Buildings, and shall have a steel-troweled, fine broom finish, free of loose particles, fins, ridges, voids, or air entrained holes.
 - 1.42 Concrete shall be sloped for proper drainage per The Code, and shall be cured a minimum of 28 days.
 - 1.43 Surface must be free of curing agents, bond breakers, oil, grease, dust or any foreign matter, which will prevent proper bonding. Surface can be cleaned by water blasting, sand blasting, or a detergent scrub and rinse.
 - 1.44 Control joints and expansion joints shall have been installed at all known deck stress concentration points throughout the surface of the deck to control cracking caused by shrinkage and deflection.

1.5 STEEL SUBSTRATE AND SURFACES:

- 1.51 Steel surfaces shall be solidly backed by a rigid substrate and shall have sufficient rigidity to avoid excessive deflection. The surface must be roughened sufficiently to assure proper bonding, which may be obtained by sanding or grinding. All dust, oil, grease, and any foreign matter must be removed from the surface.
- 1.52 Galvanized sheet metal flashing shall be bonderized, and shall be installed in accordance with applicable codes.

1.6 JOB SITE CONDITIONS:

- 1.61 Avoid application prior to or during inclement weather.
- 1.62 Normal application shall be limited to a temperature range between 50°F and 95°F.
- 1.63 If there are deficiencies in the structural integrity of any portion of the structure, which will affect the application of the

PART 2 QUALIFICATIONS

- 2.1 APPLICATOR:** Shall be regularly and specializing (for the preceding five years), in the application of similar materials, and shall be a licensed contractor in the state where the work will be performed.
- 2.2 SUBMITTALS:** Shall include a sample of the ENDURO-LASTIC System, and Application Guideline/Specifications.

PART 3 MATERIALS The materials shall be delivered to the job site in the original sealed containers. The label shall bear the product name, manufacturers lot number, and precautionary labels. Applicator shall read and understand all Material Safety Data Sheets prior to using materials.

- 3.1 ENDURO-LASTIC ELA-98 MODIFIED POLYMER BINDER:** Packaged in 5-gallon containers. (NOTE: DO NOT USE Accelerator Chemicals with ELA-98 Modified Polymer).
- 3.2 .75 oz. FIBER GLASS, MULTIDIRECTIONAL CHOPPED STRAND MAT:** 70 to 75 pound rolls with 1,350 to 1,450 square feet per roll.
- 3.3 ENDURO-KOTE EKL EMULSION:** Packaged in 5-gallon containers.
- 3.4 ENDURO-KOTE EKC CEMENTITIOUS MIX:** Packaged in 46pound bags. (NOTE: Mix one gallon of EKL Emulsion, with one 46 pound bag of EKL Cementitious Mix to obtain the CEMENTITIOUS MIXTURE for Texture Coat, patching and repair purposes, and sloping).
- 3.5 ENDURO-KOTE EKS COLOR COAT:** Packaged in 5-gallon containers.

PART 4 SUBSTRATE SURFACE PREPARATION, NEW CONSTRUCTION & RECONSTRUCTION

- 4.1 NEW CONSTRUCTION, PLYWOOD:** Fill all joints, knots, and feather uneven plywood joints with the CEMENTITIOUS MIXTURE.
- 4.2 NEW CONSTRUCTION, CONCRETE:** Fill all holes and imperfections in concrete surface with

CEMENTITIOUS MIXTURE. Apply caulk in control joints, and level to surface of concrete. DO NOT install ENDURO-LASTIC System over expansion joints. Stop ENDURO-LASTIC at the edge of the expansion joint, and caulk the joint, if necessary.

4.3 RE-CONSTRUCTION, MISCELLANEOUS SUBSTRATE SURFACES:

- 4.31 ELASTOMERIC WITH SMALL AGGREGATE: Remove all loose material and fasten plywood joints and metal flashing where necessary. Clean entire surface by brooming or scrub washing if necessary. The CEMENTITIOUS MIXTURE should be used to smooth over rough areas and fill plywood joints. Use EKL Emulsion as a Primer before application of the ENDURO-LASTIC System.
- 4.32 ELASTOMERIC WITH LARGE AGGREGATE: Remove all loose aggregate and repair and clean as described in Section 4.31. Use EKL Emulsion as a Primer. Mix a loose mixture of the CEMENTITIOUS MIXTURE and trowel it into the aggregate. After several hours of cure, and when dry, trowel another coat of the CEMENTITIOUS MIXTURE over the entire surface, leaving a smooth surface for the application of the ENDURO-LASTIC System.
- 4.33 MAGNESITE/DIATO: Remove and repair unstable areas with the CEMENTITIOUS MIXTURE. Sand the entire surface to remove the build-up of sealer coating. After cleaning, use the EKL Emulsion as a primer before installing the ENDURO-LASTIC System.
- 4.34 CEMENTITIOUS SYSTEMS: Prepare surface as described in Section 4.31. Use the EKL Emulsion as a primer before application of the ENDURO-LASTIC System.
- 4.35 STRUCTURAL GRADE CONCRETE AND CONCRETE TOPPING: Remove existing waterproof coating, if necessary. Clean entire surface with water blaster or scrub brush and rinse. Repair all voids rough surfaces, cracks, etc., with the CEMENTITIOUS MIXTURE. Caulk all control joints and level smooth with surface. Use EKL Emulsion as a primer before application of the ENDURO-LASTIC System. DO NOT install ENDURO-LASTIC System over expansion joints. Stop ENDURO-LASTIC at the edge of the expansion joint, and caulk the joint, if necessary.
- 4.36 SLOPING FLAT SURFACES: The CEMENTITIOUS MIXTURE may also be used for sloping surfaces before the application of the ENDURO-LASTIC System. Allow sloped areas a minimum of 24 hours of cure time before application of the ENDURO-LASTIC fiberglass under-layment. NOTE: The surface preparations, described above, do not represent all job site conditions, which may vary considerably. Consult Enduro-Products for unusual applications.

PART 5 APPLICATION

- 5.1 **ENDURO-LASTIC FIBER GLASS UNDER-LAYMENT:** Lay out the Fiber Glass Chopped Strand Mat over area to be immediately worked, stopping at the riser of the flashing, and extend past the fascia edge approximately 3/4-inch. DO NOT OVERLAP fiber glass mat. Shred edges that join, approximately one inch, and mesh together. Use a 1/2-inch drill motor, set at a maximum of 300 R.P.M., and a flat cross mixing tool, to mix the ENDURO-LASTIC ELA-98 Modified Polymer for approximately 3 minutes or until thoroughly mixed. Apply the ELA-98 with a roller, at the rate of 50 square feet per gallon, over the fiber glass mat, back rolling

the entire area, in both directions. Use an aluminum Venus Roller, designed for fiber glass mat, over the wet ELA-98, to eliminate air bubbles and wrinkles. Cure time depends on Air Temperature and Humidity. During low range temperature conditions, the ELA-98 has to be applied at a thinner rate to allow for curing, and a second coat will be required the next day to obtain the proper film thickness. The Texture and Color Coat may be applied when the ELA-98 is dry. During medium to high temperature and low humidity conditions, the Texture and Color Coat may be applied after four to six hours cure time, or when the ELA-98 is dry. Before application of the Texture Coat, trim the excess fiber glass mat at the fascia edge with a sharp utility knife.

5.2 ENDURO-LASTIC TEXTURE AND COLOR COAT: 5.2 ENDURO-LASTIC TEXTURE AND COLOR COAT: Using the CEMENTITIOUS MIXTURE in a hopper with a pattern pistol, spray the mixture over the ENDURO-LASTIC under-layment in a pattern, at the rate of 200 square feet per mixture, and knock down with a trowel to a thickness of 1/16-inch. (The Enduro-Dek Architectural Design Coating may substitute for the Texture Coat). After the Texture Coat has cured for several hours, and is hard, the Color Coat (after mixing), may be applied at the approximate rate of 150 square feet per gallon. The Color Coat should be allowed to cure for 2 hours before "light" traffic is allowed.

5.3 Traffic should be restricted on the completed ENDURO-LASTIC System until the Owner/ Contractor has given final approval, and accepted the applicator's work.

PART 6 MAINTENANCE Maintenance of the ENDURO-LASTIC System is the responsibility of the ultimate User/ Owner. A copy of the Maintenance Policy and Procedure may be obtained from the Applicator or Enduro Products.

PART 7 QUALITY CONTROL

7.1 ENDURO-LASTIC is manufactured under a rigid in house Quality Control Program.

7.2 Physical characteristics of materials used in the manufacturing process of ENDURO-LASTIC are certified by the material suppliers to be within the tolerances of the materials used for the original required testing procedures.

PART 8 LIMITED WARRANTY The ENDURO-LASTIC Waterproof System guarantees waterproofing performance for a period of "five" years from date of installation. This Warranty is invalidated if failure is caused by misuse, mistreatment, faulty design, structural or seismic failure, improper application, deviations from specifications, or other circumstances beyond the control of Enduro Products. This Warranty covers water proofing performance only, and in no event will Enduro Products be liable for incidental or consequential damages, nor shall liability, if any, extend beyond the purchase price of the material.