

Enduro-FlexKote

SECTION (07 18 13) - PEDESTRIAN TRAFFIC COATING FOR CONCRETE AND STEEL

PART 1 **GENERAL**

- 1.1 SCOPE:** This Guideline will provide the necessary instructions and establish uniform procedures for the application of the ENDURO-FLEX KOTE waterproof system, to qualify for the Limited Warranty. The Guideline covers the installation of a waterproofing system which is trowel applied and designed to supply a positive seal from moisture penetration when applied over sound substrates.
- 1.2 MODIFICATIONS:** The methods involved may require modification to adjust to job site conditions, air temperature, and weather. Consult Enduro Products for specific design requirements.
- 1.3 CONDITION OF PLYWOOD SUBSTRATE AND SURFACES:**
- 1.31 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 entraine holes. Do not install over on-grade slabs, slabs over unvented metal pans, or split slabs with buried membrane.
 - 1.32 Concrete shall be sloped for drainage per the Code, and shall be cured a minimum of 28 days.
 - 1.33 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.
 - 1.34 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.
- 1.4 STEEL SUBSTRATE AND SURFACES:**
- 1.41 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.
 - 1.42 Galvanized sheet metal flashing shall be bonderized, and shall be installed in accordance with applicable codes.
- 1.5 JOB SITE CONDITIONS:**
- 1.51 Avoid application prior to or during inclement weather.
 - 1.52 Normal application shall be limited to a temperature range between 50°F and 95°F.
 - 1.53 If there are deficiencies in the structural integrity of any portion of the structure, which will affect the application of the ENDURO- FLEX KOTE System, the owner/general contractor shall be notified in writing, and corrections made, before application can proceed.

PART 2 **QUALIFICATIONS**

- 2.1 APPLICATOR:** Shall be regularly engaged and specializing, (for the preceding 5 years), in the application of similar materials and listed as an approved applicator by Enduro Products. Shall be a licensed contractor in the state where work will be performed.
- 2.2 SUBMITTALS:** Shall include a sample of the ENDURO-FLEX KOTE System. Submit Specifications and appropriate approvals as required.

PART 3 MATERIALS The materials shall be delivered to the job site in the original sealed containers. The label shall bear the product name, manufacturer lot number, and precautionary labels. Applicator shall read and understand all Material Safety Data Sheets prior to using materials. All materials listed are manufactured and distributed by Enduro Products.

- 3.1 ENDURO-FLEX EFC-UL98 CEMENTITIOUS POWDER:** Packaged in 28 pound bags.
- 3.2 ENDURO-FLEX EFL-UL94 ACRYLIC POLYMER:** Dispersion: packaged 2 gallons in a 5 gallon container.
- 3.3 ENDURO-KOTE EKC CEMENTITIOUS MIX:** Packaged in 46 pound bags.
- 3.4 ENDURO-KOTE EKL ACRYLIC EMULSION:** Packaged in 5 gallon container.
- 3.5 ENDURO-KOTE EKS ACRYLIC COLOR COAT:** Packaged in 5 gallon container.

PART 4 **APPLICATION**

4.1 ENDURO-FLEX:

- 4.11 **CONCRETE CRACK ISOLATION:** Prepare all minor cracks by routing out to 1/8-inch minimum in width and depth. Compress the Enduro-Flex mixture into the 1/8-inch routed area with a trowel and feather the Enduro-Flex into the adjacent substrate a minimum of two inches in each direction. Fiber glass reinforcement shall be alkali resistant, Type III, Organic Resin Treated, per ASTM Standard Specification D1668. The trowel coat may follow after the surface is hard. (Major cracks should be treated as construction, expansion, control, or isolation joints. DO NOT bridge these types of joints).
- 4.12 **MIXING:** The mixture consists of two gallons of EFL-UL94 Acrylic Polymer Dispersion and a 28 pound bag of EFC-UL98 Cementitious Powder, mixed in the 5 gallon container of EFL-UL94 Liquid.
- 4.13 **TROWEL COAT:** Comb the Enduro-Flex mixture over the substrate with a "V" notched trowel. Trowel thoroughly until all voids and pin holes are closed and sealed, then smooth the mixture to a minimum average of 1/16-inch thick. Allow to cure a minimum of two hours, or until the surface is hard, depending on humidity and air temperature, before application of Enduro-Kote.

4.2 ENDURO-KOTE:

- 4.21 **MIXING:** The mixture consists of one gallon of EKL Acrylic Emulsion and one 46 pound bag of EKC Cementitious Powder mixed in a 5 gallon container.
- 4.22 **FIRST COAT:** Trowel the Enduro-Kote mixture over the Enduro-Flex to a minimum

average thickness of 1/16-inch. The next coat is applied when the surface is hard.

- 4.23 **TEXTURE COAT:** Using the same mixture as the First Coat, spray the mixture with a Pattern Pistol and hopper, over the First Coat, and knock down with a trowel to a minimum average thickness of 1/16-inch. The Enduro-Dek Architectural design or smooth finishes may substitute for the Texture Coat, providing the average thickness is no less than 1/16-inch. Allow a minimum air cure time of two hours before applying the color coat.
- 4.24 **COLOR COAT:** Mixed Color Coat is applied by brush and roller over the Texture Coat or smooth finish in two coats. Under normal conditions, the second coat can be applied when the first coat is dry to the touch.

4.3 TOLERANCES:

- 4.31 The minimum average thickness of the FlexKote System shall not be less than 3/16-inch.

PART 5 METHOD OF REPAIR AND MAINTENANCE

- 5.1 **REPAIR:** Excess cracking or fractures in the substrate may cause cracking on the ENDURO-FLEX KOTE surface. Repair may be accomplished as described in Item 4.11 "Concrete Crack Isolation". After the Enduro-Flex repair surface is hard, apply the Enduro-Kote as described in Section 4.2 Enduro-Kote Application.
- 5.2 **MAINTENANCE:** Maintenance of the Enduro-Flex System is the responsibility of the ultimate user/owner. A copy of the Maintenance Policy and Procedure may be obtained from the Manufacturer or Approved Applicator.

PART 6 PEDESTRIAN TRAFFIC BETWEEN COATS Light pedestrian traffic (depending on air temperature, humidity, etc.) may be allowed on the Enduro-Flex coat after the surface is hard. Light traffic may be allowed on the Enduro-Kote first coat, texture coat, and color coat, after approximately two hours cure time. However, the color coat should be given twenty-four hours cure time, before heavy pedestrian traffic is allowed. No traffic should be allowed on the completed system until the owner/contractor has given final approval of the Applicator's work.

PART 7 QUALITY ASSURANCE

- 7.1 ENDURO-FLEX KOTE is manufactured under a rigid in-house Quality Control Program, with follow-up inspections by an Independent Quality Control Agency.
- 7.2 Physical characteristics of materials used in the manufacturing process of ENDURO- KOTE and ENDURO-FLEX 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-FLEX KOTE Waterproof System, guarantees water proofing performance for a period of "FIVE" Years from date of installation by an Approved Applicator. 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 waterproofing 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.