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**ENVIRONMENTAL BUILDING PRODUCTS
dba ENDURO PRODUCTS**
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ENDURO-KOTE/ENDURO-KOTE-XL WALKING DECK AND ROOF COVERING SYSTEM

CSI Section: 07 18 13 Pedestrian Traffic Coatings

1.0 RECOGNITION

Environmental Building Products' Enduro-Kote/Enduro-Kote XL walking deck and roof covering system recognized in this report has been evaluated for durability, weather resistance, wind uplift resistance, and fire classification. The following code editions are recognized:

- 2018, 2015, and 2012 International Building Code® (IBC)
- 2018, 2015, and 2012 International Residential Code® (IRC)

2.0 LIMITATIONS

Use of the Enduro-Kote/Enduro-KoteXL walking deck and roof covering system recognized in this report is subject to the following limitations:

- 2.1 The Enduro-Kote/Enduro-Kote XL walking deck and roof covering system shall be manufactured, identified, and installed in accordance with this report and the applicable code. In the event of a conflict this report governs.
- 2.2 The Enduro-Kote/Enduro-Kote XL walking deck and roof covering system shall be installed on slopes not less than one unit vertical in 48 units horizontal (2-percent slope).
- 2.3 The supporting structure shall be designed to support the loads and is beyond the scope of this report.
- 2.4 Environmental Building Products' Enduro-Kote/Enduro-Kote XL walking deck and roof covering system is manufactured in Anaheim, California.

3.0 PRODUCT USE

3.1 General: Environmental Building Products' Enduro-Kote/Enduro-Kote XL walking deck and roof covering system recognized in this report is a cementitious walking deck used directly over plywood substrates. The system has a Class A fire classification when tested in accordance with ASTM E108, and installed in accordance with Section 4.3 of this report.

3.2 Wind Resistance: The maximum allowable wind loads are limited by the capacity of the deck construction. The

decking shall be designed to withstand wind pressures determined in accordance with Section 1609.5.1 of the IBC.

4.0 PRODUCT DESCRIPTION

4.1 General: Environmental Building Products' Enduro-Kote walking deck and roof covering system is a cementitious, multi-layer protective coating system for use over plywood substrates. The system consists of cementitious base coatings (EKC), embedded with a corrosion-resistant metal lath, a textured coating, and an acrylic color coat.

4.1.1 Components:

- **Base Coat** – The Base Coat consists of a mixture of one 46-pound (20.9 kg) bag of EKC cementitious powder and 1-gallon (3.8 L) of EKL acrylic emulsion. Bags of EKC have a shelf life of one year when stored in unopened containers and dry conditions at temperatures between 50°F and 95°F (13°C and 32°C). The 5-gallon (18.9 L) containers of EKL have a shelf life of 1-year when stored in unopened containers and at temperatures between 50°F and 95°F (13°C and 32°C).
- **Metal Lath** - Minimum 2.5 pound-per-square-yard (1.36 kg/m²) galvanized diamond-mesh expanded metal lath complying with ASTM C847.
- **Optional Fiberglass Binder:** The fiberglass binder consists of ELA Modified Polymer Binder provided in 5-gallon containers. Unopened containers have a shelf life of one year when stored at temperatures between 50 °F and °F (13 °C and 32 °C)
- **Optional Fiberglass Mat:** The fiberglass mat shall be 0.75 oz/s.f. non-directional chopped strand mat.
- **Texture Coat** – same as the base coat, as above.
- **Topcoat** – An acrylic color coat provided in 5-gallon (18.9 L) containers. Unopened containers have a shelf life of one year when stored at temperatures of between 50°F and 95°F (13°C and 32°C).

4.2 Installation: The Enduro-Kote/Enduro-Kote XL walking deck and roof covering system shall be installed in accordance with the manufacturer's published installation instructions, the applicable code, and this report. Coatings may be applied within a temperature range of 50°F to 95°F (10°C to 35°C). Coatings shall not be applied when subject to wet weather. Substrates and all coating surfaces shall be structurally sound, clean, dry, and sloped to comply with the minimum requirements of the applicable code.

4.2.1 Substrates: Wood-based substrates shall be minimum nominal 5/8-inch (15.9 mm) thick plywood, have tongue and groove edges, and be exterior grade complying with U.S. DOC PS-1, in accordance with the applicable code. Edges shall be blocked. Penetrations and terminations of the sheathing shall be protected with metal flashing. Metal flashing shall be minimum 26 gage [0.019 inch (0.48 mm)], corrosion-resistant, and shall extend a minimum of 2 inches (51 mm) onto the sheathing.

The product described in this Uniform Evaluation Service (UES) Report has been evaluated as an alternative material, design or method of construction in order to satisfy and comply with the intent of the provision of the code, as noted in this report, and for at least equivalence to that prescribed in the code in quality, strength, effectiveness, fire resistance, durability and safety, as applicable, in accordance with IBC Section 104.11. This document shall only be reproduced in its entirety.





4.2.2 Lath: Metal lath with no overlap at seams shall be fastened to the plywood substrate with minimum No. 16 gage corrosion-resistant staples, minimum ⁵/₈-inch-long (15.9 mm) with ⁷/₈-inch (22.2 mm) crown, uniformly distributed with not less than 24 fasteners per square foot (0.0929 m²). The metal lath shall lap metal flashing a minimum of 2-inches (50.8 mm).

4.2.3 Base Coat (EKC): The Base Coat is mixed per instructions on the bag and poured and troweled over the metal lath in two layers. The first layer of EKC shall be nominally ¹/₈-inch (3.2 mm) thick and fully cover the metal lath. The coverage rate is approximately 46 square feet (4.27 m²) per 46-pound (20.9 kg) bag of EKC and 1-gallon (3.8 L) of EKL acrylic emulsion. The first coat shall air-cure for a minimum of 2 hours before the second coat is applied. The second layer of the Base Coat is identical to the first coat except applied to a minimum thickness of ¹/₁₆-inch (1.6 mm) with a coverage rate of approximately 92 square feet (8.55 m²). The second coat shall air cure for 24 hours before application of the Texture Coat.

4.2.4 Enduro-Kote XL Option: A reinforcing layer may be installed after the first base coat has cured for additional protection by adding a layer of ELA Binder reinforced with 0.75 oz. per s.f. chopped strand mat. The fiberglass mat shall be laid out and overlapped a minimum of ¹/₄ inch (6.4 mm) to a maximum of 1 inch (25.4 mm) covering the entire base coat. The ELA Binder shall be applied at a rate of one gallon per 50 square feet and allowed to cure until dry enough to support foot traffic. Once the ELA Binder has cured, the application shall be inspected for pin holes and imperfections. An additional coat shall be applied as needed to ensure the fiberglass mat is thoroughly covered with ELA Binder. When this option is utilized, the walking deck system will be known as Enduro-Kote XL.

4.2.5 Texture Coat: The Texture Coat is spray-applied over the Base Coat. The coating is applied to a minimum thickness of ¹/₁₆-inch (1.6 mm) with a coverage rate of approximately 92 square feet (8.55 m²). The Texture Coat shall cure for a minimum of 24 hours.

4.2.6 Color Coat (EKS): The Color Coat (EKS) is roller-applied in two coats at a coverage rate of 180 square feet (16.72 m²) per gallon. The Color Coat may be applied within a temperature range of 50°F to 95°F (10°C to 35°C). The Color Coat shall not be applied when subject to wet weather.

4.3 Fire Classification: Environmental Building Products' Enduro-Kote/Enduro-Kote XL walking deck and roof covering system, when installed in accordance with this report at a slope of one-unit vertical in 48 units horizontal (2-percent slope), has a Class A roof fire classification when tested in accordance with ASTM E108.

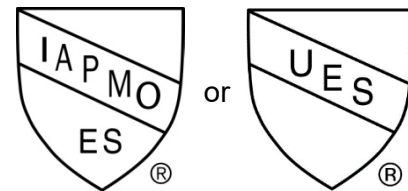
4.4 One-hour Fire-resistance-rated Assembly: Environmental Building Products' Enduro-Kote walking deck and roof covering system, when installed in accordance with this report over minimum ⁵/₈-inch-thick (15.9 mm)

plywood substrate supported by minimum nominal -2x10 wood joists spaced 16 inches (406 mm) on center with ⁵/₈-inch-thick (15.9 mm) Type X gypsum board fastened to the exposed faces of the joists, has a one-hour fire-resistance rating when tested in accordance with ASTM E119. The assembly may be considered equivalent to the double wood floor over wood joists spaced 16 inches on center floor or roof construction noted in IBC Table 721.1(3), Item Number 13.

4.5 Repairs: Damaged areas shall be cleared of all existing material and replaced in the manner described in Section 4.2 of this report. In the event of damaged substrates, the fire classification and strength properties shall be investigated, and the results submitted to the building official.

5.0 IDENTIFICATION

Each of the coating components described in Section 4.0 of this report bears a label noting the manufacturer's name (Environmental Building Products), address, product name, shelf life, a batch number keyed to the date of manufacture, the approved inspection agency (Ramtech Laboratories), and evaluation report number (ER-483). Either IAPMO UES Mark of Conformity also may be used as shown below:



IAPMO UES ER-483

6.0 SUBSTANTIATING DATA

Data in accordance with ICC-ES AC39, approved June 2017, editorially revised May 2018, data in accordance with ASTM E108, manufacturer's descriptive literature, and installation instructions. Test reports are from laboratories in compliance with ISO/IEC 17025.

7.0 STATEMENT OF RECOGNITION

This evaluation report describes the results of research completed by IAPMO Uniform Evaluation Service on Environmental Building Products' Enduro-Kote/Enduro-Kote XL walking deck and roof covering system to assess conformance to the codes and standards shown in Section 1.0 of this report and documents the product's certification. The Enduro-Kote/Enduro-Kote XL walking deck and roof covering system are produced at locations noted in Section 2.4 of this report under a quality control program with periodic inspection under the supervision of IAPMO UES.

For additional information about this evaluation report please visit www.uniform-es.org or email at info@uniform-es.org