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CALIFORNIA

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RESEARCH REPORT: RR 26083 (CSI #05310)

BASED UPON IAPMO EVALUATION REPORT NO. ER- 395

REEVALUATION DUEDATE:April 1, 2020Issued date:December 1, 2018Code:2017 LABC

**GENERAL APPROVAL** – Reevaluation – Multicoat Corporation Metal Lathe Cementitious Coating System for use on above grade decks.

# DETAILS

The above assemblies and/or products are approved when in compliance with the recognition, limitations, use, description, installation, and identification in Evaluation Report No. ER-395, issued May 5, 2016, revised May 31, 2018, of the IAPMO Evaluation Services, Incorporated. The report, in its entirety, is attached and made part of this general approval.

The system has a Class-A fire classification, when tested in accordance with ASTM E108, and installed in accordance with Section 4.0 of ER-395.

# The approval is subject to the following conditions:

- 1. The Metal Lathe Waterproofing System shall be installed in accordance with Section 4.2 of ER-395, the manufacturer's published installation instructions, the applicable code, and this report. In the event of a conflict this report governs.
- 2. The Metal Lathe Waterproofing System shall be installed on slopes not less than one unit vertical in 48-units horizontal (2-percent slope).
- 3. The maximum allowable wind loads are limited by the capacity of the deck construction. The decking must be designed to withstand wind pressures determined in accordance with Section 1609.5.1 of the IBC.

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- 4. The supporting structure must be designed to support the loads and is beyond the scope of this report.
- 5. Liquid components shall be applied when the ambient temperature is between 55°F and 90°F (13°C and 32°C) and the relative humidity is between 43 and 82 percent. Liquid materials shall not be applied when rain or precipitation is expected or occurring. Substrates and all coating surfaces shall be structurally sound, clean, dry, and sloped no less than 2-percent.
- 6. Wood based substrates shall be minimum nominal 5/8-inch (15.9 mm) thick.
- 7. Damaged areas must be cleared of all existing material and replaced in the manner described in Section 4.2 of ER-395. In the event of damaged substrates, the fire classification and strength properties must be investigated and the results submitted to the Department of Building and Safety Research Section.

# DISCUSSION

The report is in compliance with the 2017 Los Angeles City Building Code.

The approval is based on tests and analysis in accordance with ICC-ES Acceptance Criteria for Walking Decks (AC39) dated April 2011 (revised January 2013), and ASTM E108.

Addressee to whom this Research Report is issued is responsible for providing copies of it, complete with any attachments indicated, to architects, engineers and builders using items approved herein in design or construction which must be approved by Department of Building and Safety Engineers and Inspectors.

This general approval will remain effective provided the Evaluation Report is maintained valid and unrevised with the issuing organization. Any revisions to the report must be submitted to this Department, with appropriate fee, for review in order to continue the approval of the revised report. This general approval of an equivalent alternate to the Code is only valid where an engineer and/or inspector of this Department has determined that all conditions of this approval have been met in the project in which it is to be used.

This general approval of an equivalent alternate to the Code is only valid where an engineer and/or inspector of this Department has determined that all conditions of this approval have been met in the project in which it is to be used.

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Attachment: IAPMO Evaluation Report No. 395 (2 pages)

**EVALUATION REPORT** 

Originally Issued: 05/05/2016

Revised: 05/31/2018

Valid Through: 05/31/2019

### MULTICOAT CORPORATION METAL LATHE WATERPROOFING SYSTEM

CSI Section: 07 18 13 Pedestrian Traffic Coatings

## **1.0 RECOGNITION**

TM

Multicoat Corporation's Metal Lathe Waterproofing System recognized in this report has been evaluated for durability, weather resistance, wind uplift resistance and fire classification. The following code editions are recognized:

- 2015 and 2012 International Building Code® (IBC)
- 2015 and 2012 International Residential Code<sup>®</sup> (IRC)

### 2.0 LIMITATIONS

**2.1** The Metal Lathe Waterproofing 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 Metal Lathe Waterproofing 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.

### **3.0 PRODUCT USE**

**3.1 General:** Multicoat Corporation's Metal Lathe Waterproofing System recognized in this report is a cementitious walking deck. The system has a Class A fire classification, when tested in accordance with ASTM E108, and installed in accordance with Section 4.2 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:** Multicoat Corporation's Metal Lathe Waterproofing System is a cementitious multi-layer protective coating system for use on above ground decks. The system consists of a resin modified cementitious base coat (**Multi-Base**), embedded with a corrosion resistant metal lath, with an elastomeric waterproofing membrane (**Mulasticoat**<sup>®</sup>), a synthetic resin modified cementitious top coating (**Krete Kote/Top Coat**) and an optional sealer (**Acrathane/Colorseal**).

4.1.1 Components:

• Multi-Base - A resin modified cementitious base coat provided in 65-pound (29.5 kg) bags which

are field mixed with 1 to  $1\frac{1}{4}$  gallons (3.8 to 4.7 liters) of water. Bags of Multi-Base have a shelf life of two years when stored in unopened containers and dry conditions at temperatures between 40°F and 90°F (4.4°C and 32°C).

- Metal Lath Minimum 2.5 pound-per-squareyard (1.36 kg/m<sup>2</sup>) galvanized diamond-mesh expanded metal lath complying with ATM C847.
- Mulasticoat<sup>®</sup> An elastomeric waterproofing membrane provided in 1, 5 and 55 gallon (3.8, 18.9 and 208 liter) containers or 275 gallon (1,041 liter) totes. Mulasticoat has a shelf life of eighteen months when stored in unopened containers at temperatures of between 55°F and 90°F (13°C and 32°C).
- Krete Coat/Topcoat A synthetic resin modified cementitious top coating provided in 65-pound (29.5 kg) bags which are field mixed with 1¼ to 2 gallons (6.6 to 7.6 liters) of water. Unopened bags have a shelf life of 2 years when stored in dry conditions at temperatures of between 40°F and 90°F (4.4°C and 32°C).
- Acrathane Colorseal A water-based modified resin sealer provided in 1 and 5 gallon (3.8 and 18.9 liter) pails. Colorseal has a shelf life of 24 months when stored in unopened containers at temperatures of between 40°F and 90°F (4.4°C and 32°C).

**4.2 Installation:** The Metal Lathe Waterproofing System shall be installed in accordance with the manufacturer's published installation instructions, the applicable code, and this report. Liquid components shall be applied when the ambient temperature is between  $55^{\circ}$ F and  $90^{\circ}$ F ( $13^{\circ}$ C and  $32^{\circ}$ C) and the relative humidity is between 43 and 82 percent. Liquid materials shall not be applied when rain or precipitation is expected or occurring. Substrates and all coating surfaces shall be structurally sound, clean, dry, and sloped to meet the minimum requirements of the applicable code.

**4.2.1 Substrates:** Wood based substrates shall be minimum nominal  $\frac{5}{8}$ -inch (15.9 mm) thick, have tongue and groove edges, and be exterior grade complying with U.S. DOC PS-1 or PS-2, in accordance with the applicable code. Edges shall be blocked. Seams between sheathing and all exposed joints shall be caulked. Penetrations and terminations of the sheathing shall be protected with metal flashing. Metal flashing shall be minimum No. 26 gage [0.019 inch (0.48 mm)], corrosion-resistant, and shall extend a minimum of 2-inches (51 mm) onto the sheathing.

**4.2.2 Lath:** Metal lath shall be placed in a staggered pattern with lath joints a minimum of 6-inches (155 mm) offset from sheathing joints. Metal lath joints shall be lapped a minimum of 1-inch (25.4 mm). Lath shall be fastened to



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 safely, as applicable, in accordance with IBC Section 104.11. This document shall only be reproduced in its entirety.

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EVALUATION REPORT

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the sheathing using minimum No. 16 gage [0.0598 inch (1.52 mm)], 1-inch-crown (25.4 mm),  $\frac{5}{100}$ -inch (15.9 mm) long, corrosion resistant staples. Staples shall be spaced a minimum of 3-inches (75 mm) on-center in the field and 1-inch (25.4 mm) on-center at the overlap joints.

**4.2.3 Multi-Base:** Multi-Base is mixed per instructions on the bag and poured over the metal lath. The base coat shall fully cover the metal lath and fully dry before application of the next layer. Coverage rate is 40 to 60square feet  $(3.72 \text{ to } 5.57 \text{ m}^2)$  per bag.

**4.2.4 Mulasticoat<sup>®</sup>:** Mulasticoat<sup>®</sup> is roll-placed over the Multi-Base in two layers. All flashing details, i.e. coves, 90° corners, drains and posts, shall be coated with Mulasticoat<sup>®</sup> embedded into polyester stitch bond fabric. The first coat shall dry 1 to 2 hours before application of the second coat. The second coat is roll-applied cross-wise to the first coat. Fine sand is broadcast over the second coat of Mulasticoat<sup>®</sup> while it is still wet. Excess/lose sand is brushed off after drying prior to application of Krete Kote/Top Coat. Coverage rate is 40 to 50 square feet. (3.72 to 4.64 m<sup>2</sup>) per gallon.

**4.2.5 Krete Kote/Top Coat:** Krete Kote/Top Coat is mixed per instructions on the bags and trowel or squeegee applied over the dry Mulasticoat<sup>®</sup> in one or two layers. Coverage rate is 100 square feet (9.29 m<sup>2</sup>) per bag.

**4.2.6 Acrathane Colorseal:** Acrathane Colorseal is applied directly in two coats at a combined rate of 150 to 200 square feet per gallon with a total dry film thickness of 0.005 inches (0.13 mm).

**4.3 Fire Classification:** Multicoat Corporation's Metal Lathe Waterproofing 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 fire classification, when tested in accordance with ASTM E108.

**4.4 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 authority-having-jurisdiction (AHJ).

#### **5.0 IDENTIFICATION**

Each of the coating components described in Section 4.0 of this report bears a label noting the manufacturer's name (Multicoat Corporation), 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-395). Either UES Mark of Conformity may be used as shown below:



#### 6.0 SUBSTANTIATING DATA

Data in accordance with ICC-ES AC39, dated October 2013, editorially revised December 2016, data in accordance with ASTM E108, manufacturer's descriptive literature and installation instructions. Test results are from laboratories in compliance with ISO/IEC 17025.

Multicoat Corporation's Metal Lathe Waterproofing System is manufactured in Rancho Santa Margarita, California, under a quality control program with inspections by Ramtech Laboratories.

#### 7.0 CONTACT INFORMATION

Multicoat Corporation 23331 Antonio Pkwy Rancho Santa Margarita, California 92688 www.multicoat.com

#### **8.0 STATEMENT OF RECOGNITION**

This evaluation report describes the results of research carried out by IAPMO Uniform Evaluation Service on Multicoat Corporation's Metal Lathe Waterproofing System to assess conformance to the codes and standards shown in Section 1.0 of this report and documents the product's certification.

Bris Daber

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