

Number: 517

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MER-KO BY WESTCOAT 4007 Lockridge Street San Diego, Ca 92102 (844)-537-7203 www.mer-ko.com

MER-KO SHUR DECK, SHUR DECK PRO, SHUR DECK OVER CONCRETE, AND WEATHER DECK SYSTEMS

CSI Sections:

07 18 13 Pedestrian Traffic Coatings 07 50 00 Membrane Roofing

1.0 RECOGNITION

The Mer-Ko Shur Deck, Shur Deck Pro, Shur Deck Over Concrete, and Mer-Ko Weather Deck Systems recognized in this report have been evaluated for use as walking deck and roof covering systems. The durability, impact resistance, weather resistance, wind uplift resistance, roof fire classification, and fire-resistance-rating properties of the Mer-Ko Shur Deck, Shur Deck Pro, Shur Deck Over Concrete, and Mer-Ko Weather Deck Systems were evaluated for compliance with the following codes:

- 2021, 2018, 2015, 2012, and 2009 International Building Code[®] (IBC)
- Building Code® (IBC)

 2021, 2018, 2015, 2012, and 2009 International Residential Code® (IRC)
- 2022 and 2019 California Building Code (CBC) attached Supplement
- 2022 and 2019 California Residential Code (CRC) attached Supplement
- 2023 City of Los Angeles Building Code (LABC) attached Supplement
- 2023 City of Los Angeles Residential Code (LARC) attached Supplement

2.0 LIMITATIONS

Use of the Mer-Ko Shur Deck, Shur Deck Pro, Shur Deck Over Concrete, and Mer-Ko Weather Deck Systems recognized in this report is subject to the following limitations:

- **2.1** Mer-Ko Shur Deck, Shur Deck Pro, Shur Deck Over Concrete, and Mer-Ko Weather Deck Systems shall be manufactured, identified, and installed in accordance with this report and the applicable code. In the event of a conflict, the more restrictive governs.
- **2.2** Mer-Ko Shur Deck, Shur Deck Pro, Shur Deck Over Concrete, and Weather Deck Systems shall be installed on slopes not less than ¹/₄ inch per foot (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** Connection of deck perimeter flashing to substrates shall be designed to meet all applicable code requirements.
- **2.5** The Mer-Ko Shur Deck, Shur Deck Pro, Shur Deck over Concrete, and Mer-Ko Weather Deck Systems are manufactured in San Diego, CA.

3.0 PRODUCT USE

- **3.1 General:** The Mer-Ko Shur Deck, Shur Deck Pro, Shur Deck over Concrete, and Mer-Ko Weather Deck Systems recognized in this report are elastomeric walking deck and roof covering systems used directly over plywood or concrete substrates, as applicable.
- **3.2 Fire Classification Roof Assemblies:** The Mer-Ko Shur Deck, Shur Deck Pro, Shur Deck Over Concrete, and Weather Deck Systems are components of Class A roof assemblies when installed in accordance with this report at a minimum slope of ½ inch per 1 foot (2-percent slope).
- **3.3 One-hour Fire-resistance-rated Floor(Roof)/Ceiling Assembly:** The Mer-Ko Shur Deck, Shur Deck Pro, Shur Deck Over Concrete, or the Weather Deck systems, when installed in accordance with Section 3.5 of this report over minimum ⁵/₈-inch-thick exterior-grade plywood, with minimum 2-by-8 solid sawn lumber joists spaced at 16 inches on center maximum, with all plywood joints blocked, may be used in place of the double wood floor described in Construction 13 of 2021, 2018, 2015, and 2012 IBC Table 721.1(3) [2009 IBC Table 720.1(3)]. Ceiling construction shall comply with Item Numbers 13-1.1 to 13-1.4 of 2021, 2018, 2015, and 2012 IBC Table 721.1(3) [2009 IBC Table 720.1(3)].
- **3.4 Wind Resistance:** Installation to plywood is limited on structures with a maximum height of 40 feet (12.2 m), for use in Exposure B areas subject to the following:
 - a) A basic wind speed of 130 miles per hour under the 2021 IBC and 2018 IBC.
 - b) A maximum design wind speed of 130 miles per hour under the 2021 IRC, 2018 IRC, 2015 IBC, 2015 IRC, and 2012 IBC.
 - c) A maximum of 100 miles per hour nominal design 3-second-gust basic wind speed under the 2009 IBC and 2012 and 2009 IRC.

The maximum allowable wind loads are limited by the capacity of the deck construction. The decking shall be designed to withstand wind pressures in accordance with Section 1609.5.1 of the IBC or Section R301.2.1 of the IRC.



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.



3.5 Installation:

3.5.1 Mer-Ko Shur Deck, Shur Deck Pro, and Shur Deck Over Concrete Systems:

a) General: The Mer-Ko Shur Deck, Shur Deck Pro, and Shur Deck Over Concrete walking deck and roof covering systems shall be installed in accordance with the manufacturer's published installation instructions, the applicable code, and this report. In the event of a conflict, the more restrictive governs.

The system shall be applied where an ambient and surface temperature range of 50°F to 90°F is available for 24 hours. Materials shall not be applied when subject to wet weather. Substrates and all coating surfaces shall be structurally sound, clean, and dry. The minimum finished deck slope shall be ½ inch per 1 foot (2-percent slope).

- b) Plywood Substrates: Plywood substrates shall comply with Section 4.2.3 (d) of this report. All edges shall be blocked. Face plies shall be perpendicular to the supports. The plywood shall be attached to all blocking and end bearing framing with countersunk wood screws, screw- or ring-shank nails equivalent to 8d common nails, spaced 4 inches maximum, on center at sheet perimeters and 8 inches maximum, on center in the field. The plywood shall be installed at a maximum span of 16 inches on center. The plywood shall be dry, clean, and free of any foreign material such as oil, dust, grease, or paint.
- c) Optional: MK-62 Sheet Membrane: The MK-62 Sheet Membrane, complying with Section 4.1.2 (e) of this report, may be applied over all plywood joints in 6- or 36-inch-wide strips or may be applied over the entire plywood deck.
- d) Glass Lath: The MK-71 Shur Deck Glass Lath complying with Section 4.1.2 (g) of this report is applied perpendicular to plywood sheets. Glass Lath shall be installed over a metal flashing, stopping at least 1 inch from any deck edge or vertical juncture in the Shur Deck System and 2 inches in the Shur Deck Pro System. The lath seams shall be staggered a minimum of 2 inches from plywood joints with lath sheet ends staggered a minimum of 12 inches from any adjacent sheets. Lath shall be lapped 1 to 2 inches at seams and stapled to the plywood every 1 to 2 inches. A minimum of 22 MK-85 Shur Deck staples, complying with Section 4.1.2 (i) of this report, per square foot, are required to attach the lath to the plywood substrate. MK-85 staples shall be placed from the center of the lath to the outside edges so as not to form bulges. High staples and lath edges shall be driven flush. The MK-70 Shur Deck Metal Lath may be used in lieu of the MK-71 Shur Deck Glass Lath only for the Mer-Ko Shur Deck and Shur Deck Pro System on plywood substrates.
- e) Concrete Substrates: When applying the Mer-Ko Shur Deck Over Concrete system over a concrete substrate, the MK-71 Shur Deck Glass Lath are not required. Concrete substrates shall comply with Section 4.1.2 (j) of this report.

Concrete surfaces shall be prepared by water blasting, grinding, or shot blasting as required to produce a clean, sound substrate, equal to a minimum CSP 2-3. All holes shall be cleaned and filled with MK-5 Shur Deck Cement or an appropriate Mer-Ko Underlayment. All high spots shall be removed by chipping or grinding. Concrete control joints shall comply with local building codes and comply with industry standards.

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- f) Base Coat: The Base Coat is prepared by mixing 1 gallon of water with one bag of MK-5 Shur Deck Cement complying with Section 4.1.2 (a) of this report. The mixture shall be troweled over the horizontal glass lath surface at a rate of 30 ft² per mix, to a minimum ¹/₈-inch thickness over plywood and lath, and all-metal and plywood shall be completely covered, and surfaces shall be flat. When using the MK-70 Shur Deck Metal Lath complying with Section 4.2.3 (b), coverage to the surface shall be 40-45 ft² per mix. The Base Coat is brushed smoothly onto flashing and all vertical surfaces while applying the Base Coat to the horizontal surface. For concrete substrates, the Base Coat should be applied at 80-90 ft² per mix. The minimum thickness shall be $1/_{16}$ -inch. Prior to proceeding with the next layer, the base coat shall be allowed to cure firm. Applications in elevated humidity conditions will require additional drying time.
- **3.5.2** Shur Deck Pro and Shur Deck over Concrete Systems: As an option, to transition from Shur Deck to Shur Deck Pro and Shur Deck over Concrete, items (g) and (h) complying with Section 3.5.2 of this report are required to be applied over the dry Base Coat.
- g) Mer-Ko Membrane with Fabric Reinforcement (Flashing): MK-25 Mer-Ko Membrane, complying with Section 4.1.2 (b) of this report, shall be applied onto vertical and adjacent horizontal surfaces using a brush or roller at a rate of 50 ft² per gallon. Immediately after the MK-25 has been applied and while the material is still wet, the MK-80 Mer-Ko Burlap complying with Section 4.1.2 (d) of this report shall be installed fuzzy side down into the wet MK-25 material, overlapping successive runs of fabric edges and ends a minimum of 2 inches. Care is taken to ensure that the burlap is fitted tightly in corners and around protrusions. Additional MK-25 shall be applied as necessary over the burlap fabric to ensure positive waterproofing and that the burlap is completely covered. No dry or fabric material spots shall be visible, and the fabric shall be completely flat and without wrinkles. The waterproofing membrane shall be a total of at least 20 mils Dry Film Thickness.
- h) Mer-Ko Membrane with Fabric Reinforcement (Deck): MK-75 Mer-Ko Lath, complying with Section 4.1.2 (c) of this report, shall be applied to the horizontal substrate. The MK-75 is rolled out, cut to size, and laid "curl side" down over the Base Coat. Overlap successive runs of MK-75 edges and ends a minimum of 2 inches. The MK-25 Mer-Ko Membrane, complying with Section 4.1.2 (b) of this report, is poured onto the MK-75 lath and troweled smoothly



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ensuring complete coverage of the MK-75 lath. The coverage rate of the MK-25 material in this application is 60-65 ft² per gallon. Additional MK-25 shall be applied as necessary over areas to ensure positive waterproofing (no pinholes). An additional coat of the MK-25 Mer-Ko Membrane material shall be applied over the entire surface at a rate of 140 to 150 ft² per gallon by trowel or roller. The membrane shall dry a minimum of 24 hours or until dry enough to walk on without leaving impressions. Applications in elevated or high humidity conditions will require additional dry time. The waterproofing membrane shall be a total of at least 20 mils Dry Film Thickness.

- **3.5.3 Shur Deck System:** The Shur Deck System shall follow the installation requirements in accordance with Section 3.5 of this report):
- i) Body Coat: The Body Coat is a two-coat application and is prepared by mixing 1 gallon of water with each bag of MK-5 Shur Deck Cement complying with Section 4.1.2 (a) of this report. The first coat is brushed onto vertical areas and then troweled across the entire deck surface at a rate of 80 to 90 ft² per mix, and the second coat is applied at the same rate (80-90 ft² per mix). A minimum cure time of 2 hours between coats is required. The minimum total thickness of the Body Coat is ¹/₈ inch. The Body Coat shall dry for a minimum of 2 hours at 70°F, 50 percent relative humidity. The surface may then be sanded to produce the desired level of finish. All dust and debris shall be removed.
- j) Texture Coat: An optional Texture Coat is prepared by mixing 1 gallon of water with each bag of MK-5 Shur Deck Cement complying with Section 4.1.2 (a) of this report. The Texture Coat is applied to the surface at a rate of 100-150 ft² per bag, for a minimum ¹/₁₆-inch thickness. The Texture Coat shall dry for a minimum of 2 hours drying time at 70°F, 50 percent relative humidity, and then the surface may be sanded to produce the desired level of finish. All dust and debris shall be removed.
- **k) Topcoat:** The MK-40 Mer-Ko Topcoat complying with Section 4.1.2 (g) of this report shall be applied by roller in two coats. The first coat shall be applied at the rate of 300 to 350 ft² per gallon and allowed to dry for 2 hours at 70°F, 50 percent relative humidity. Then a second coat of the MK-40 Mer-Ko Topcoat shall be applied perpendicular to the first at the rate of 300 to 350 ft² per gallon. The MK-40 Mer-Ko Topcoat shall be allowed 6 to 8 hours to dry before returning to light service and 24 hours for normal service (70°F, 50 percent relative humidity). For small areas or in locations with cool temperatures, one coat of the MK-40 may be applied at 150 to 175 ft² per gallon.

3.5.4 Mer-Ko Weather Deck

a) General: The Mer-Ko Weather Deck walking deck and roof covering system shall be installed in accordance with the manufacturer's published installation instructions, the

applicable code, and this report. In the event of a conflict, the more restrictive governs.

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The system shall be applied where an ambient and surface temperature range of 55°F to 90°F is available for 24 hours. Materials shall not be applied when subject to wet weather. Substrates and all coating surfaces shall be structurally sound, clean, and dry. The minimum finished deck slope shall be \(^1/4\)-inch per foot (2-percent slope).

- b) Plywood: Plywood substrates shall comply with Section 4.2.2 (l) of this report. All edges shall be blocked. Face plies shall be perpendicular to the supports. The plywood shall be attached to all blocking and end bearing framing with countersunk wood screws, screw- or ring-shank nails equivalent to 8d common nails, spaced 4 inches maximum, on center at sheet perimeters and 8 inches maximum, on center in the field. The plywood shall be dry, clean, and free of any foreign material such as oil, dust, grease, or paint. Cracks in the plywood and all plywood joints should be filled by mixing 1.75 to 2 gallons of MK-30 Weather Deck Emulsion described in Section 4.2.2 (e) of this report with one bag of MK-2 Weather Deck Fine Cement complying with Section 4.2.2 (f) of this report. The mixture shall then be applied and stricken flush before drying.
- c) Concrete: Concrete substrates shall comply with Section 4.2.2 (m) of this report. Concrete surfaces shall be prepared using a power sprayer, grinder, or shot blast as required to produce a clean, sound substrate. All holes and joints shall be cleaned and filled with MK-90 Mer-Ko Polyurethane Caulking complying with Section 4.2.2 (c) of this report and tooled. A minimum 24 hours drying time at 70°F, and 50 percent relative humidity shall be observed before continuing with the application of the slip sheet.
- d) Slip Sheet: MK-65 Weather Deck Slip Sheet, complying with Section 4.2.2 (b) of this report, shall be applied over the entire deck maintaining a 2-inch distance from all vertical surfaces, parapets, drain openings, etc. The slip sheet edges shall lap a minimum of 2 inches, and end-of-roll terminations shall be staggered. A ¼ inch bead of MK-95 Slip Sheet Adhesive, complying with Section 4.2.2 (d) of this report, shall be used to bond-slip sheet overlaps, the slip sheet to the deck perimeter, and the slip sheet at intermediate locations to limit the non-bonded area to a maximum of 4,000 ft². A minimum 24 hours drying time at 70°F, 50 percent relative humidity shall be observed before continuing with the installation of the primer coat.
- e) Skim Coat: The Skim Coat is prepared by mixing one bag of MK-2 Weather Deck Fine Cement complying with Section 4.2.2 (f) of this report, with 1.5 to 2 gallons of MK-30 Weather Deck Emulsion complying with Section 4.2.2 (e) of this report. The Skim Coat is applied by trowel over the entire horizontal substrate and adjacent flashing surfaces where bonding will occur, to a minimum ¹/₃₂-inch thickness. A minimum two hours drying time at 70°F, 50 percent relative humidity shall be observed before continuing with



the application of the waterproof membrane. Minor surface imperfections shall be treated by scraping and or sanding. All dust and debris shall be removed.

- f) Mer-Ko Membrane with Fabric Reinforcement (Flashing): A thick coat of MK-25 Mer-Ko Membrane, complying with Section 4.2.2 (a) of this report, shall be applied onto vertical and adjacent horizontal surfaces using a brush or roller at a rate of 50 ft² per gallon. Immediately after the MK-25 has been applied and while the material is still wet, the MK-80 Mer-Ko Burlap complying with Section 4.2.2 (i) of this report shall be installed fuzzy side down into the wet MK-25, overlapping successive runs of fabric edges and ends a minimum of 2 inches. Care is taken to ensure that the burlap is fitted tightly in corners and around protrusions. Additional MK-25 Mer-Ko Membrane material is applied as necessary over the burlap fabric to ensure positive waterproofing (no pinholes) and that the burlap is completely covered. No dry or fabric material spots shall be visible and the fabric shall be completely flat and without wrinkles.
- g) Mer-Ko Membrane with Fabric Reinforcement (Deck): The MK-75 Mer-Ko Lath, complying with Section 4.2.2 (h) of this report, shall be applied to the horizontal surfaces. The MK-75 is rolled out, cut to size, and laid "curl side" down over the Base Coat. Successive runs of MK-75 edges and ends shall be overlapped a minimum of 2 inches. The MK-25 Mer-Ko Membrane liquid, complying with Section 4.2.2 (a) of this report, shall be poured onto the MK-75 lath and trowel smooth ensuring complete coverage of the MK-75 lath. The coverage rate of the MK-25 in this application is 45-50 ft² per gallon. Additional MK-25 Mer-Ko Membrane liquid is applied as necessary over areas to ensure positive waterproofing (no pinholes). An additional coat of the MK-25 Mer-Ko Membrane liquid is applied over the entire surface at a rate of 130 to 140 ft² per gallon by trowel or roller. the membrane shall dry for a minimum of 24 hours or until dry enough to walk on without leaving impressions. Applications in elevated or high humidity conditions will require additional dry time. waterproofing membrane shall be a total of at least 20 mils Dry Film Thickness.
- h) Body Coat: The Body Coat is a two-coat application and is prepared by mixing 1 to 1.25 gallons of MK-30 Weather Deck Emulsion complying with Section 4.2.2 (e) of this report to one bag of MK-1 Weather Deck Body Cement complying with Section 4.2.2 (j) of this report. The first coat is troweled across the dry membrane at a rate of 80 to 90 ft² per mix, and the second coat is applied at the same rate (80-90 ft² per mix). A minimum cure time of 2 hours between coats is required. The minimum total thickness of the Body Coat is ¹/₈ inch. The Body Coat shall dry for a minimum of 4 hours at 70°F, 50 percent relative humidity. minor surface imperfections shall be removed by lightly scraping or sanding. All dust and debris shall be removed.
- i) Smoothing Coat: The Smoothing Coat is a mixture of 1.5 to 2 gallons of MK-30 Weather Deck Emulsion,

complying with Section 4.2.2 (e) of this report, to one 40 lb. bag of MK-2 Weather Deck Fine Cement, complying with Section 4.2.2 (f) of this report. The mixture is applied over all vertical and horizontal surfaces at a rate of 150-200 ft² per mix, producing a minimum ¹/₃₂-inch thickness. Optionally, for texture or an extra smooth surface, a second coat is applied. The first coat needs to dry a minimum of two hours before proceeding with any second application. The final coat shall dry a minimum of 24 hours at 70°F, 50 percent relative humidity, and then the surface may be sanded to produce the desired level of finish. All dust and debris shall be removed.

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j) Topcoat: Two coats of the MK-40 Mer-Ko Topcoat, complying with Section 4.2.2 (k) of this report, shall be applied by a roller at the rate of 300 to 350 ft² per gallon. After allowing the first coat to dry a minimum of 2 hours at 70°F, 50 percent relative humidity, the second coat of MK-40 shall be applied perpendicular to the first coat. Allow 6 to 8 hours to dry before returning to light service, 24 hours for normal service. For small areas or in locations with cool temperatures, one coat of the MK-40 may be applied at 150 to 175 ft² per gallon.

4.0 PRODUCT DESCRIPTION

4.1 Mer-Ko Shur Deck Standard (Over Concrete)

4.1.1 General: Mer-Ko Shur Deck walking deck and roof covering system is an elastomeric, multi-layer protective coating system for use over concrete. The system consists of reinforcing metal lath, cementitious filler, reinforced latex waterproofing membrane, and acrylic sealer.

4.1.2 Components:

- a) MK-5 Shur Deck Cement: The MK-5 is a blend of cement, sand, and polymers, delivered in 50-pound bags. The shelf life is one year maximum when stored in unopened bags in dry locations out of direct sunlight at temperatures ranging from 40°F to 100°F.
- b) MK-25 Mer-Ko Membrane: The MK-25 is an asphalt-modified latex elastomer liquid, delivered in 5-gallon pails. The shelf life is one year maximum when stored in unopened pails in dry locations out of direct sunlight at temperatures ranging from 40°F to 100.
- c) MK-75 Mer-Ko Lath: The fiber lath is delivered in rolls measuring 38 inches wide with a coverage of 475 square feet.
- **d) MK-80 Mer-Ko Burlap:** The MK-80 is delivered in rolls measuring 10 inches wide with coverage of 300 linear feet.
- e) MK-62 Sheet Membrane: The MK-62 Sheet membrane is a self-adhering, nominally 40-mil-thick, reinforced modified bituminous membrane with a white-colored reflective topping applied to the top surface. The



membrane is produced in 6-inch-wide- and 36-inch-wide-by-75-foot-long rolls.

- f) MK-40 Mer-Ko Topcoat: The MK-40 is a pigmented acrylic liquid, delivered in 5-gallon pails. The shelf life is two years maximum when stored in unopened pails in dry locations out of direct sunlight at temperatures ranging from 40°F to 100°F.
- **g) MK-71 Shur Deck Glass Lath:** The MK-71 is delivered in rolls measuring 39 inches wide with a coverage rate of 490 sq. ft.
- h) MK-85 Shur Deck Staples: The MK-85 shall comply with ASTM F1667 and shall have a minimum \(^{\%}\) inch leg, a minimum 1-inch crown, and be formed from hot-dip galvanized or electro-galvanized steel wire having a Class 1 coating weight in conformance with A641 or Types 302, 304, 305, or 316 stainless steel wire.
- i) Concrete: Concrete shall comply with the IBC or IRC as normal-weight, with a minimum specified compressive strength, f_c' , of 3,000 psi.
- j) Permeability: Shur Deck Over Concrete, Shur Deck Pro, or Shur Deck with full coverage of MK-62 has a water vapor permeance rating of 0.1 perm or less when tested in accordance with ASTM E96 Procedure A (Desiccant Method) at 73.4° F (23° C) and 50 percent relative humidity.

4.2 Mer-Ko Shur Deck and Mer-Ko Shur Deck Pro (Over Plywood)

- **4.2.1 Mer-Ko Shur Deck:** Mer-Ko Shur Deck for use over plywood shall use the following components in addition to the applicable items listed in Sections 4.1.2 (a) through (h), except for the MK-25 Mer-Ko Membrane, MK-75 Mer-Ko Lath and MK-80 Mer-Ko Burlap listed in Section 4.1.2 (b), Section 4.1.2 (c), and Sections 4.1.2 (d), respectively. Mer-Ko Shur Deck has the option to use MK-6 and MK-70 as listed in Section 4.2.3 (a) and Section 4.2.3 (b) of this report.
- **4.2.2 Mer-Ko Shur Deck Pro:** Mer-Ko Shur Deck Pro for use over plywood shall use the following components in addition to the applicable items listed in Sections 4.1.2 (a) through (h). Mer-Ko Shur Deck Pro has the option to use MK -6 and MK-70 as listed in Section 4.2.3 (a) and Section 4.2.3 (b) of this report.

4.2.3 Components:

- a) Optional: MK-6 Shur Deck Fine Cement: The MK-6 has the same shelf life as the MK-5, but with a fine texture finish.
- b) Optional MK-70 Shur Deck Metal Lath: The Metal lath shall be 2.5 pounds per square yard, in accordance with ASTM C847. The lath is delivered in sheets measuring 27 inches wide by 97 inches long.

c) Plywood: Plywood, with an exterior bond classification, conforming to DOC PS-1 or DOC PS-2, shall be a minimum of % inch thick.

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4.3 Mer-Ko Weather Deck

4.3.1 General: The Mer-Ko Weather Deck walking deck and roof covering system is an elastomeric, multi-layer protective coating system for use over plywood or concrete substrates. The consists of a sealant, slip sheet, skim coat, waterproofing membrane, fabric, body coat, smoothing coat, and topcoat.

4.3.2 Components:

- a) MK-25 Mer-Ko Membrane: The MK-25 is an asphalt-modified latex elastomer liquid, delivered in 5-gallon pails. The shelf life is one year maximum when stored in unopened pails in dry locations out of direct sunlight at temperatures ranging from 40°F to 100°F.
- b) MK-65 Weather Deck Slip Sheet: The MK-65 is a heavy-weight fibrous mat coated with SBS-modified asphalt delivered in rolls with a coverage of 216 square feet.
- c) MK-90 Polyurethane Caulking: The MK-90 delivered in 20.29 fl. oz. sausages. The shelf life is one year maximum when stored in unopened tubes in dry locations out of direct sunlight at temperatures ranging from 40°F to 100°F.
- **d) MK-95 Slip Sheet Adhesive:** The MK-95 is a Synthetic co-polymer rubber-high solids adhesive delivered in 10.5-ounce tubes. The shelf life is one year maximum when stored in unopened tubes in dry locations out of direct sunlight at temperatures ranging from 40°F to 100°F.
- e) MK-30 Weather Deck Emulsion: The MK-30 is an elastomeric latex polymer liquid, delivered in 5-gallon pails. The shelf life is two years maximum when stored in unopened pails in dry locations out of direct sunlight at temperatures ranging from 40°F to 100°F.
- f) MK-2 Weather Deck Fine Cement: The MK-2 is a blend of Portland cement and sand delivered in 40-pound bags. The shelf life is one year maximum when stored in unopened bags in dry locations out of direct sunlight at temperatures ranging from 40°F to 100°F.
- g) MK-75 Mer-Ko Lath: The fiber lath is delivered in rolls measuring 38 inches wide with a coverage of 475 square feet.
- h) MK-80 Mer-Ko Burlap: The MK-80 is delivered in rolls measuring 10 inches wide with coverage of 300 linear feet.
- i) MK-1 Weather Deck Body Cement: The MK-1 is a blend of Portland cement and sand, delivered in 50-pound bags. The shelf life is one year maximum when stored in

unopened bags in dry locations out of direct sunlight at temperatures ranging from 40°F to 100°F.

- **j)** MK-40 Mer-Ko Topcoat: The MK-40 is a pigmented acrylic liquid, delivered in 5-gallon pails. The shelf life is two years maximum when stored in unopened pails in dry locations out of direct sunlight at temperatures ranging from 40°F to 100°F.
- k) Plywood: Plywood, with an exterior bond classification, conforming to DOC PS-1 or DOC PS-2, shall be a minimum of % inch thick.
- l) Concrete: Concrete shall comply with the IBC or IRC as normal-weight, with a minimum specified compressive strength, f_c' , of 3,000 psi.
- **m) Permeability:** Weather Deck has a water vapor permeance rating of 0.1 perm or less when tested in accordance with ASTM E96 Procedure A (Desiccant Method) at 73.4° F (23° C) and 50 percent relative humidity.

5.0 IDENTIFICATION

Product packaging shall include the company name or trademark, product name or model number, and the IAPMO UES Evaluation Report Number (ER-517) to identify the products recognized in this report. Either IAPMO UES Mark of Conformity may also be used as shown below:





IAPMO UES ER-517

6.0 SUBSTANTIATING DATA

- **6.1** Data in accordance with the ICC-ES Acceptance Criteria for Walking Decks (AC39) approved June 2017, editorially revised November 2020.
- **6.2** Reports of testing for compliance with the Standard Test Methods for Water Vapor Transmission of Materials in accordance with ASTM E96.
- **6.3** 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 the Mer-Ko Shur Deck, Shur Deck Pro, Shur Deck Over Concrete, and Mer-Ko Weather Deck walking deck and roof covering systems, with the Mer-Ko by Westcoat label, to assess conformance to the codes and standards shown in Section 1.0 of this report and documents the product's certification. Products are manufactured at locations noted in Section 2.5 of this report under a quality control program with periodic inspections under the supervision of IAPMO UES.

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For additional information about this evaluation report please visit www.uniform-es.org or email us at info@uniform-es.org VALUATION REPORT Number: 517

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CALIFORNIA SUPPLEMENT

MER-KO BY WESTCOAT 4007 Lockridge Street San Diego, CA 92102 (844)-537-7203 www.mer-ko.com

MER-KO SHUR DECK, SHUR DECK PRO, AND WEATHER DECK SYSTEMS

CSI Sections:

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1.0 RECOGNITION

The Mer-Ko Shur Deck, Shur Deck Pro, and Mer-Ko Weather Deck Systems described in ER-517 and in this report supplement have been evaluated for use as walking deck and roof covering systems. The durability, impact resistance, weather resistance, wind uplift resistance, roof fire classification, and fire-resistance-rating properties of the Mer-Ko Shur Deck, Shur Deck Pro, and Mer-Ko Weather Deck Systems were evaluated for compliance with the following codes:

- 2022 and 2019 California Building Code (CBC)
- 2022 and 2019 California Residential Code (CRC)

2.0 LIMITATIONS

Use of The Mer-Ko Shur Deck, Shur Deck Pro, Shur Deck Over Concrete, and Mer-Ko Weather Deck Systems recognized in this supplement are subject to the following limitations:

- **2.1** For use under 2022 CBC and 2022 CRC, the Weather Deck Systems shall comply with the provisions applicable to the 2021 IBC or 2021 IRC in IAPMO UES ER-517.
- **2.2** For use under 2022 CBC and 2022 CRC, the Weather Deck Systems shall comply with the provisions applicable to the 2018 IBC or 2018 IRC in IAPMO UES ER-517.

- **2.3** The Mer-Ko Shur Deck, Shur Deck Pro, and Mer-Ko Weather Deck Systems may be used as Class A roof covering systems in accordance with Sections 1505.2 of the CBC or R902.1 of the CRC.
- **2.4** Only the Mer-Ko Shur Deck and Shur Deck Pro Systems have been evaluated for use in buildings located in a Fire Hazard Severity Zone within State Responsibility Areas or any Wildland-Urban Interface Fire Area in accordance with Chapter 7A of the CBC or Section R337 of the CRC. The Mer-Ko Shur Deck and Shur Deck Pro Systems comply with the requirements when tested in accordance with ASTM E2632 and ASTM E2726.
- **2.5** This supplement expires concurrently with ER-517.

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

CITY OF LOS ANGELES SUPPLEMENT

MER-KO BY WESTCOAT 4007 Lockridge Street San Diego, CA 92102 (844)-537-7203

MER-KO SHUR DECK, SHUR DECK PRO, SHUR DECK OVER CONCRETE AND WEATHER DECK SYSTEMS

CSI Sections:

07 18 13 Pedestrian Traffic Coatings 07 50 00 Membrane Roofing

1.0 RECOGNITION

The Mer-Ko Shur Deck, Shur Deck Pro, Shur Deck Over Concrete, and Mer-Ko Weather Deck Systems described in ER-517, the California Supplement to ER-517, and this supplemental report have been evaluated for use as walking deck and roof covering systems. The durability, impact resistance, weather resistance, wind uplift resistance, roof fire classification, and fire-resistance-rating properties of the Mer-Ko Shur Deck, Shur Deck Pro, Shur Deck Over Concrete, and Mer-Ko Weather Deck Systems were evaluated for compliance with the following codes:

- 2023 City of Los Angeles Building Code (LABC)
- 2023 City of Los Angeles Residential Code (LARC)

2.0 LIMITATIONS

Use of The Mer-Ko Shur Deck, Shur Deck Pro, Shur Deck Over Concrete, and Mer-Ko Weather Deck Systems recognized in this supplement are subject to the following limitations:

- 2.1 The Mer-Ko Shur Deck, Shur Deck Pro, Shur Deck Over Concrete, and Mer-Ko Weather Deck Systems shall comply with the provisions in the California Supplement applicable to the 2022 CBC for use under the 2023 LABC.
- **2.2** The Mer-Ko Shur Deck, Shur Deck Pro, Shur Deck Over Concrete, and Mer-Ko Weather Deck Systems may be used as Class A roof covering systems in accordance with Sections 1505.2 of the 2023 LABC or R902.1 of the 2023 LARC.
- **2.3** The Mer-Ko Shur Deck, Shur Deck Pro, Shur Deck Over Concrete, and Mer-Ko Weather Deck Systems shall be installed on slopes not less than ½ inch per foot (2-percent slope).

2.4 The supporting structure shall be designed to support the loads and is beyond the scope of this report.

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- **2.5** The Mer-Ko Shur Deck, Shur Deck Pro, Shur Deck Over Concrete, and Mer-Ko Weather Deck Systems shall have a minimum substrate of ⁵/₈-inch-thick exterior-grade plywood.
- **2.6** The Mer-Ko Shur Deck, Shur Deck Pro, Shur Deck Over Concrete, and Mer-Ko Weather Deck Systems shall comply with the LADBS Information Bulletin P/BC 2020-016 (Dwellings in High Wind Velocity Areas (HWA)).
- **2.7** This supplement expires concurrently with ER-517.

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