



# **WEATHER DECK**



## **WEATHER DECK SUBMITTAL PACKAGE**

**DIVISION 7 – THERMAL AND MOISTURE PROTECTION  
SECTION 07 18 13 PEDESTRIAN TRAFFIC COATINGS  
PLYWOOD SURFACES**

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# **SYSTEM SPECIFICATION SHEET**

### TOTAL FINISHED THICKNESS

¼" to ⅝" (6.35mm to 7.9mm)

### APPROVALS

- One-Hour Fire Resistance Rating
- Class A Fire-Retardant Roofing System
- IAPMO Evaluation Report # 517

### MATERIAL STANDARDS

- |              |             |
|--------------|-------------|
| • ASTM C109  | • ASTM D638 |
| • ASTM C794  | • ASTM E108 |
| • ASTM D2047 | • ASTM E119 |
| • ASTM D4060 | • ASTM G23  |
| • ASTM D570  | • AC 39     |

### SPECIFICATION CLASSIFICATIONS

- 07 14 16 Cold Fluid-Applied Waterproofing
- 07 18 13 Pedestrian Traffic Coatings

### MATERIALS NEEDED

- MK-90 Mer-Ko Polyurethane Caulking  
(When Installed Over Concrete)
- MK-65 Weather Deck Slip Sheet
- MK-95 Slip Sheet Adhesive
- MK-80 Mer-Ko Burlap (10" Roll)
- MK-25 Mer-Ko Membrane
- MK-30 Weather Deck Emulsion
- MK-2 Weather Deck Fine Cement
- MK-75 Mer-Ko Lath (38" Roll)
- MK-1 Weather Deck Body Cement
- MK-40 Mer-Ko Topcoat

### USES/APPLICATIONS

- Exterior Walking Roof Decks
- Observation Decks
- Promenade Decks & Balconies
- All Pedestrian Traffic Areas
- Walkways & Breezeways

### SUBSTRATES

Weather Deck can be installed over properly prepared plywood or concrete substrates.

### SYSTEM DESCRIPTION

Weather Deck is a multi-layer decking system that provides seamless, waterproofing membrane protection, superior durability and weather-ability using all high-performance materials. Installs at a minimum ¼ to ⅝ inch finished thickness and is designed for use over properly prepared plywood or concrete substrates. This waterproofing system incorporates an anti-microbial component, a performance additive that inhibits the growth of mold and mildew on the surface and in damp environments.

The incorporation of a "floating" slip-sheet isolates the system's membrane from substrate cracks and minor surface imperfections, providing stress relief for thermal expansion and system integrity when exposed to moderate seismic movement. Weather Deck is finished with a high-solids, pigmented acrylic sealer which provides long-term protection of the system from UV degradation, offering aesthetic appeal and enhanced design flexibility.

### ADVANTAGES

- Seamless, monolithic membrane
- Excellent adhesion to most sound, dry substrates
- Maintains elastomeric properties at low temperatures
- Will not soften under high temperatures
- Resists degradation from UV, ozone, and weathering
- Outstanding long-term durability and performance
- Superior resistance to flexing and twisting
- One-Hour Fire Resistance Rating
- Class A Fire-Retardant System

## ER-517



### AESTHETIC FINISHES/TEXTURES

Traditional trowel and broom are available, in addition to advanced design options such as lace texturing, trowel knock-down, stippling, stenciling, etc. This wide array of options provides unlimited aesthetic design without superior protection.

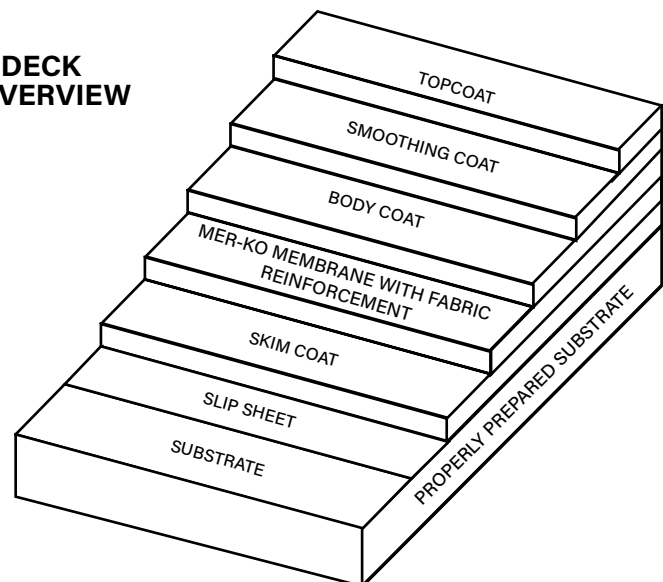
### SKID-RESISTANCE

Skid-resistance can be increased by applying a knock down or orange peel type of texture. In conjunction, the use MK-86 Mer-Ko Slip Resistant Additive is recommended with the application of the Topcoat, to enhance skid-resistance.

### COLORS

MK-40 Mer-Ko Topcoat is available in 9 colors and features a semi-gloss sheen. Refer to the Mer-Ko Color chart for color selections.

### WEATHER DECK SYSTEM OVERVIEW



**COVERAGES**

Coverage rates are approximate only and can vary greatly due to surface conditions, humidity, temperature and installation techniques.

**PLYWOOD JOINTS**

MK-2 Weather Deck Fine Cement & MK-30 Weather Deck Emulsion  
150-200 LFT/40 lb. bag mix

**CONCRETE JOINTS**

MK-90 Mer-Ko Polyurethane Caulking  
96-128 LFT/20.29 fl. oz sausage  
(Based On 3/16" Bead)

**SLIP SHEET**

MK-65 Weather Deck Slip Sheet  
216 ft<sup>2</sup>/roll

**SKIM COAT**

MK-2 Weather Deck Fine Cement & MK-30 Weather Deck Emulsion  
200 ft<sup>2</sup>/40 lb. bag mix (Yield 1/32")

**MEMBRANE WITH FABRIC REINFORCEMENT (FLASHING)**

MK-25 Mer-Ko Membrane  
50 ft<sup>2</sup>/ gallon (Yield 20 mil DFT)  
MK-80 Mer-Ko Burlap (10" Roll) 300 LFT/roll

**MEMBRANE WITH FABRIC REINFORCEMENT (DECK)**

MK-25 Mer-Ko Membrane  
1st Application:  
40-45 ft<sup>2</sup>/ gallon (Yield 15 mil DFT)  
MK-75 Lath (38" Roll) 475 ft<sup>2</sup>/roll  
2nd Application:  
130-140 ft<sup>2</sup>/ gallon (Yield 5 mil DFT)

**BODY COAT (\*Total Coverage for Two Coats)**

MK-1 Weather Deck Body Cement & MK-30 Weather Deck Emulsion  
40-45 ft<sup>2</sup>/50 lb. bag mix (Yield 1/8")

**SMOOTHING COAT**

MK-2 Weather Deck Fine Cement & MK-30 Weather Deck Emulsion  
150-200 ft<sup>2</sup>/40 lb. bag mix (Yield 1/32")

**TOPCOAT (Two Coats)**

MK-40 Mer-Ko Topcoat  
300-350 ft<sup>2</sup>/ gallon

Additional topcoat material may be required for textured or skid resistant finishes

**INSTALLATION CONDITIONS**

The Weather Deck system must not be installed if the surface or ambient temperature is or will drop below 55°F or rise above 90°F within 24 hours or when precipitation is expected or occurring.

**SUBSTRATE INSPECTION AND PREPARATION**

The substrate surface must be clean, dry and free of dust and any other contaminants at the time of material application. A minimum finished deck slope of 1/4" per foot slope is required for proper drainage. Use 26 gauge bonderized steel or equivalent flashing around the perimeter; clean and degrease all metal flashings. Do not use copper perimeter flashings. Stainless steel requires scuffing with the use of 100-120 grit sand paper prior to cleaning.

**PLYWOOD**

Plywood must be minimum 5/8 inch (3/4 inch preferred) exterior grade. Slope must be a minimum of 1/4 inch per linear foot and shall provide for proper drainage. Decks should meet local building codes. The deck shall be tongue and groove, properly blocked and nailed (glued and screwed is best). Plywood shall have a maximum joist span of 16 inches. OSB is not a suitable substrate for this material. Be sure the surface is clean, dry and free of grease, paint, oil, dust or any foreign material that may prevent proper adhesion. Do not apply to wet plywood.

**CONCRETE**

Concrete must be clean, dry and free of laitance, grease, paint, oil, dust, curing agents or any foreign material that will prevent proper adhesion. The concrete should be at least 3000 psi, porous and able to absorb water. A minimum of 28 days cured is required on all concrete. Before starting flooring work, test existing concrete for moisture. If moisture emissions exceed 3 lbs./1000 sq ft. or 75% RH, contact the manufacturer before application. Concrete 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 per ICRI.

**APPLICATION INSTRUCTIONS**

In each step of the application, always be sure that the previous coat has fully dried before applying the next coat. Read all instructions before starting application.

**FLASHING**

Install a minimum 26 gauge, bonderized, 4"x 6" wall-to-deck flashing where the deck meets the wall. Place the 6-inch side up the vertical wall and minimum 4"x 2" fascia flashing on deck edge with the 4" side placed on the deck. Nail in a staggered pattern every 4 to 6 inches. Be sure to caulk all flashings seams and overlaps using MK-90 Polyurethane Caulking.

**WALL VENTS**

Wall vents help alleviate vapor transmission pressure that can build up underneath the waterproofing membrane of the waterproof deck system. It is recommended that wall vents be installed in the flashing, on all decks that are larger than 500 ft<sup>2</sup> or approximately one vent for every 300 ft<sup>2</sup>. Wall vents are available from Thunderbird Products ([www.thunderbirdproducts.com](http://www.thunderbirdproducts.com)).

**PLYWOOD**

Fill all plywood seams with MK-2 Weather Deck Fine Cement. Combine 1.75 to 2 gallons of MK-30 Weather Deck Emulsion and up to 1 quart of water with one 40 lb. bag of MK-2 Weather Deck Fine Cement. Blend with a mechanical mixer until an even consistency is achieved. Fill plywood seams and strike flush prior to drying. A mason's grout bag may be used to expedite this process. After material has dried remove surface imperfections by lightly scraping or sanding. Be sure to remove all debris prior to commencing with the next step.

**CONCRETE**

All holes shall be cleaned and filled with MK-90 Mer-Ko Polyurethane Caulking or an appropriate Mer-Ko Underlayment. All high spots shall be removed by chipping or grinding. Concrete control joints shall meet local building codes and comply with industry standards.

**SLIP SHEET**

Apply MK-65 Weather Deck Slip Sheet over the entire deck with a 2 inch distance from all vertical surfaces, parapets, drain openings, etc. The slip sheet edges shall overlap a minimum of 2 inches and end of roll terminations shall be staggered. A 1/4 inch bead of MK-95 Slip Sheet Adhesive 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 4000 ft<sup>2</sup>. All seams should be rolled with a weighted roller to ensure the slip sheet is flat and even. 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.

**SYSTEM COMPONENTS**▪ **MK-90 Mer-Ko Polyurethane Caulking**

20.29 fl. oz. sausage &amp; 10.5 fl. oz. cartridges

▪ **MK-65 Weather Deck Slip Sheet**

36"x 72' - 216 ft²

▪ **MK-95 Slip Sheet Adhesive**

10.5 fl. oz. tube

▪ **MK-80 Mer-Ko Burlap (10" Roll)**

10"x 300' - 250 ft²

▪ **MK-25 Mer-Ko Membrane**

5 gal pail

▪ **MK-30 Weather Deck Emulsion**

5 gal pail

▪ **MK-2 Weather Deck Fine Cement**

40 lb bag

▪ **MK-75 Mer-Ko Lath (38" Roll)**

38"x 150' - 475 ft²

▪ **MK-1 Weather Deck Body Cement**

50 lb bag

▪ **MK-40 Mer-Ko Topcoat**

5 gal pail

**(Optional)**▪ **MK-86 Mer-Ko Slip Resistant Additive**

32 ounce container

**SKIM COAT - FLASHING AND HORIZONTAL SURFACE**

The Skim Coat is prepared by mixing one bag of MK-2 Weather Deck Fine Cement with 1.5 to 2 gallons of MK-30 Weather Deck Emulsion. 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. Ensure all dust and debris has been removed.

**MER-KO MEMBRANE WITH FABRIC REINFORCEMENT (FLASHING)**

Apply a thick coat of MK-25 Mer-Ko Membrane onto the vertical and adjacent horizontal surface 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, place the MK-80 Mer-Ko Burlap fuzzy side down into the wet MK-25, overlapping successive runs of fabric edges and ends a minimum of 2 inches. Make sure the burlap is fitted tightly in corners and around protrusions. Apply additional MK-25 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.

**MER-KO MEMBRANE WITH FABRIC REINFORCEMENT (DECK)**

Install the MK-75 Mer-Ko Lath to the horizontal surfaces. Roll out the MK-75 and cut to size. Lay the lath "curl side" down over the Base Coat. Overlap successive runs of MK-75 edges and ends a minimum of 2 inches. Pour the MK-25 Mer-Ko Membrane onto the MK-75 and trowel smooth and back roll completely covering the MK-75. The coverage rate of the MK-25 in this application is 45-50 ft² per gallon. Apply additional MK-25 as necessary over areas to ensure positive waterproofing. Apply an additional coat of the MK-25 over the entire surface at a rate of 130 to 140 ft² per gallon by trowel or roller. Let 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.

**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 and up to 1 quart of water to one bag of MK-1 Weather Deck Body Cement. The first coat is troweled across the dry membrane at a rate of 80 to 90 ft² per mix. A second coat is applied again, at a rate of 80-90 ft² per mix. Allow a minimum of 2 hours between coats. The Body Coat should equal a minimum 1/8 inch total thickness. Allow the Body Coat to dry a minimum 4 hours at 70°F, 50 percent relative humidity. Remove minor surface imperfections by lightly scraping or sanding. Ensure all dust and debris has been removed.

**SMOOTHING COAT**

The Smoothing Coat is mixture of 1.5 to 2 gallons of MK-30 Weather Deck Emulsion and up to 1.5 quarts of water to one 40 lb. bag of MK-2 Weather Deck Fine Cement. 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, apply a second coat. The first coat needs to dry a minimum of two hours before proceeding with any second application. Allow the final coat to dry a minimum 24 hours at 70°F, 50 percent relative humidity and then the surface can be sanded to produce the desired level of finish. Ensure all dust and debris has been removed.

**TOPCOAT**

The MK-40 Mer-Ko Topcoat is applied in two coats. Apply the first coat at the rate of 300 to 350 ft² per gallon. Allow to dry for 2 hours at 70°F, 50 percent relative humidity. Then apply a second coat of the MK-40 perpendicular to the first, at the rate of 300 to 350 ft² per gallon. Allow 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.

**SLIP RESISTANT ADDITIVE (OPTIONAL)**

To enhance skid resistance, mix 1 quart (32 ounces by volume) of MK-86 per 5 gallons of MK-40 Mer-Ko Topcoat (apply to the 2nd of the two coats). This will leave a consistent texture that is still fairly easy to clean. The actual slip resistance will be greatly affected by the existing texture of the surface you are covering and the thickness of the topcoat applied. Do not exceed this amount without consulting Mer-Ko.

**PHYSICAL CHARACTERISTICS****Abrasion Resistance**

(ASTM D4060, C-17 Wheel, 1,000 gram load for  
1,000 cycles)  
0.375 mg loss

**Adhesion (ASTM C794)**

> 755 psi

**Compressive Strength (ASTM C109)**

3,500 psi

**Elongation (ASTM D638)**

0.04 ft./ft.

**Fire Rating**

One-Hour (ASTM E-119)

Class A Fire-Retardant Rated (ASTM E-108)

**Ozone Resistance**

No visual adverse effects after 30 days exposure

**Resistance to Aging (ASTM G23, AC 39)**

2,000 hours No visual signs of failure

**APPLICATION INSTRUCTIONS - ON STAIRS****SUBSTRATE PREPARATION**

After the initial substrate preparation, nail all metal flashings 3 inches on center with staggered spacing using galvanized roofing nails. Install appropriate aluminum stair nosing on all treads using screw nails or galvanized deck screws. Install according to stair nosing manufacturer's recommendation. Protect the bull nose/ finished portion of the stair nosing during application of the Weather Deck system. The MK-65 Weather Deck Slip Sheet is not used on stairs, a direct bond to the substrate occurs.

**SKIM COAT FLASHING, VERTICAL AND HORIZONTAL SURFACES**

Apply the Skim Coat to all stairs. Follow the same instructions per section "Skim Coat".

**MER-KO MEMBRANE WITH FABRIC REINFORCEMENT**

Install MK-80 Mer-Ko Burlap to all stairs. Follow the same instructions per section "Mer-Ko Membrane with Fabric Reinforcement".

**BODY COAT**

Apply the Body Coat to all stairs. Follow the same instructions per section "Body Coat". Use a torpedo level to check every step for proper pitch.

**SMOOTHING COAT**

Apply the Smoothing Coat to all stairs. Follow the same instructions per section "Smoothing Coat".

**TOPCOAT**

Apply the MK-40 Topcoat to all stairs. Follow the same instructions per section "Topcoat".

**CAUTIONS & LIMITATIONS**

- Mer-Ko waterproof deck systems are designed for professional installation.
- System warranties require installation by currently listed applicators.
- In freezing climates, sufficient pitch is required to ensure run-off.
- When covering a "sandwich slab" provision must be made to vent the area created between the existing vapor barrier and the Weather Deck.
- When installing a deck system over an unheated enclosed space (e.g., garage, etc.) provisions must be made to vent the area.
- Drains must be of a design suitable to receive Weather Deck system.
- Concrete substrates must have a minimum compressive strength of 3000 psi tested by "point loading" technique.
- Weather Deck provides moderate chemical resistance. Avoid exposure to harsh chemicals or acids.
- Heavy objects can affect movement of the slip sheet decking system and result in hairline cracks at the surface of the system. Avoid placing heavy objects on or dragging them across the Weather Deck surface.
- Cementitious materials should be used within 30 minutes, do not re-temper.
- The substrate must be flat. Irregularities, if not corrected, will reflect on the Weather Deck surface.
- Compositions of oxychloride cement, epoxies, urethanes, PVC's, PVA's, silicones, solvent thinned elastomer solutions or combinations thereof will not be considered acceptable under this specification.
- The Waterproofing Membrane should not be exposed for more than 72 hours prior to being covered with the MK-1 Weather Deck Body Cement.
- Do not leave any layer unprotected for more than 30 days prior to completing the full system installation, including the final topcoat application.
- Not designed for vehicular or heavy steel wheeled traffic.
- Protect all finished surfaces that are not intended to receive the deck coating system materials.
- Rain will wash away uncured Mer-Ko acrylic products.
- If inclement weather threatens, cover deck to protect new application.
- Sealers will make the surface slippery. Please be aware of the texture of the surface and how the sealer will affect the look, feel and skid resistance.
- Approval and verification of proposed colors, textures and slip resistance is recommended.

**PHYSICAL CHARACTERISTICS**

Tensile Strength (ASTM D-638)

&gt;625 psi

Thickness

 $\frac{1}{4}$  to  $\frac{5}{16}$  inch

Water Absorption (ASTM D-570, AC 39/S4.8)

Average 7.9%

Weight ..... Average 2.5 lbs/ft<sup>2</sup>

Wind Resistance ..... 80 mph

**CARE & MAINTENANCE**

Weather Deck is designed to provide easy clean-ability and low maintenance. To extend the life of the deck to its maximum potential, establish a regular cleaning schedule using a mild soap and water solution, TSP (Tri Sodium Phosphate) or similar products (check suitability before using). Use a stiff broom or scrub brush to remove any contaminants on the surface of the deck. Rinse thoroughly with clean water after scrubbing. Do not use solvents to remove contaminants as this may cause damage to the deck surface. The Mer-Ko Topcoat is designed to resist direct exposure to environmental elements and withstand normal wear. When traffic patterns become visible or heavy impacts mar the surface, the topcoat should be re-applied to restore aesthetic appeal. Decks should be re-sealed every 3 years or sooner for best results or per the schedule listed on the warranty issued. The functionality of the Weather Deck system is not impacted by aesthetic imperfections. Refer to Cementitious Care & Maintenance Instructions for more detailed information on proper care and maintenance.

**STORAGE & HANDLING**

Store all Weather Deck materials off the ground in a dry environment at temperatures between 50°F and 90°F and not in direct sunlight. All materials should be stored in compliance with local fire and safety requirements. Always wear proper safety equipment, including particle mask, eye protection and gloves when mixing and/or applying these products.

**SHELF LIFE**

Product shelf life for most products is six (6) to twelve (12) months from the date of manufacture when properly stored in the original, unopened container. Refer to individual Product Specification Sheets for specific storage and shelf life information.

**WARRANTY**

Standard five (5) year warranties are available depending upon product selection and project design. Contact Mer-Ko Customer Service Department for specific warranty information.

**SLIP PRECAUTION**

Mer-Ko highly recommends the use of a slip-resistant additive to all coatings/systems that may be exposed to wet, oily, greasy or slippery conditions. It is the end user's responsibility to provide a flooring system that meets current safety standards. Mer-Ko and its distributors will not be responsible for injury incurred during a slip and fall incident. For the current coefficient of friction requirements, please consult your local building codes.

**HEALTH PRECAUTIONS**

Inhalation of vapor or mist can cause headache, nausea, irritation of nose, throat and lungs. Prolonged or repeated skin contact can cause slight skin irritation. Cements contain silicas; dust mask or respirator should be used when mixing, sanding or grinding.

**DISCLAIMER**

Purchaser's sole and exclusive remedy against the manufacturer of Mer-Ko, shall be limited solely to the replacement of any defective material or a payment by the manufacturer in an amount equal to the cost of the original material.



# **MER-KO®**

## **CSI SPECIFICATION**



**DIVISION 7 – THERMAL AND MOISTURE PROTECTION**  
**SECTION 07 18 13 PEDESTRIAN TRAFFIC COATINGS**  
**PLYWOOD & CONCRETE SURFACE(S)**

**PART 1 GENERAL**

**1.01 SUMMARY**

- A. Section includes: Provides a complete slip sheet waterproof system for plywood and concrete surfaces that meets the requirements for specific use indicated in the contract documents. Include all applicable substrate testing, surface preparation, and detail work.

**1.02 RELATED SECTIONS**

- A. Specified elsewhere:
1. Section 07 24 00 Exterior Insulation and Finish Systems
  2. Section 09 97 26 Cementitious Coatings
  3. Section 07 01 10.81 Waterproofing Replacement
  4. Section 07 10 00 Dampproofing and Waterproofing
  5. Section 07 14 00 Fluid Applied Waterproofing
  6. Section 07 14 16 Cold Fluid Applied Waterproofing
  7. Section 07 16 13 Polymer Modified Cement Waterproofing
  8. Section 09 09 00 Finishes
  9. Section 09 94 00 Decorative Finishing

**1.03 REFERENCES**

- A. IAPMO – ER-517  
B. California Building Code (2022 CBC) & Residential Code (2022 CRC)  
C. City of Los Angeles Building Code (2023 LABC) & Residential Code (2023 LARC)  
D. Class I Vapor Retarder (ASTM E96)

**1.04 SUBMITTALS**

- A. Submit under provisions of Section 013300.  
B. Product Data: Submit manufacturer's product data sheets on each product and system to be used including:  
  1. Preparation instructions and recommendations.
  2. Storage and handling requirements.
  3. Installation methods.
  4. Maintenance requirements.  
C. Selection Samples: For each system specified, provide two sets of samples and color charts representing manufacturer's full range of colors and patterns.

**1.05 QUALITY ASSURANCE**

- A. All materials used in the pedestrian traffic system shall be manufactured and provided by a single manufacturer to ensure compatibility and proper bonding.  
B. Use adequate numbers of skilled workmen thoroughly trained and experienced in the necessary crafts and completely familiar with the specified requirements and methods needed for proper performance of the work of this section.

- C. Contractor shall have a minimum of 3 years experience installing pedestrian traffic coatings of this type which is required for this project and who is acceptable to the manufacturer.
  - 1. Applicator shall designate a single individual as project foreman who shall be on site at all times during installation.
  - 2. Contractor must show and have QCA Qualified Contractor/Applicator paperwork from the manufacturer of the coating system, as required to obtain a long-term jobsite specific warranty.
- D. Convene a pre-application meeting before the start of application of coating system. Require attendance of parties directly affecting work of this section, including: Architect, contractor, applicator, and authorized representative of the coating system manufacturer and interfacing trades. Review the following:
  - 1. Drawings and specifications affecting work of this section.
  - 2. Protection of adjacent surfaces.
  - 3. Surface preparation and substrate conditions.
  - 4. Application.
  - 5. Field quality control.
  - 6. Protection of coating system.
  - 7. Repair of coating system.
  - 8. Coordination with other work.

#### 1.06 DELIVERY, STORAGE & HANDLING

- A. Delivery: Materials shall be delivered to the job site in sealed, undamaged containers. Each container shall be clearly marked with manufacturer's label showing type of material, color, and lot number.
- B. Storage: Store all materials in a clean, dry place with a temperature range in accordance with manufacturer's instructions.
- C. Handling: Handle products carefully to avoid damage to the containers. Read all labels and Material Safety Data Sheets prior to use.

#### 1.07 PROJECT SITE CONDITIONS

- A. Maintain environmental conditions (temperature and weather) within the limits recommended by the manufacturer.
- B. Schedule coating work to avoid rain and excessive dust and airborne contaminants. Protect work areas from moisture and excessive airborne contaminants during coating application.
- C. Before any work is started, the applicator shall examine all surfaces for any deficiencies. Should any deficiencies exist, the architect, owner or general contractor shall be notified in writing and any corrections necessary shall be made.

#### 1.08 WARRANTY

- A. Upon completion of the work in this section provide a written warranty from the manufacturer against defect of materials for a period of 5 (five) years. To obtain project specific warranty the coating system applicator must be a Mer-Ko by Westcoat Qualified Contractor/ Applicator and apply for warranty.

### **PART 2 PRODUCTS**

#### 2.01 MANUFACTURERS

- A. Acceptable manufacturer: Mer-Ko by Westcoat; 4007 Lockridge Street, San Diego, CA 92102. Telephone 844-537-7203. Website: mer-ko.com

#### 2.02 MATERIALS

- A. As basis of design Mer-Ko Weather Deck (no substitutions will be accepted): Slip sheet waterproof walking deck system that provides seamless, waterproofing membrane protection, superior durability and weather-ability using all high-performance materials.

## 2.03 COMPONENTS

- A. Weather Deck System: Slip sheet waterproof walking deck system for use over plywood substrates, IAPMO # 517.
  - 1. Slip Sheet: Apply MK-65 Slip Sheet over entire deck.
  - 2. Skim Coat: Combine one 40 lb bag of MK-2 Weather Deck Fine Cement with 1.5 to 2 gallons of MK-30 Weather Deck Emulsion. Apply by trowel over the entire horizontal surface with a minimum of 1/32 inch thickness.
  - 3. Mer-Ko Membrane with Fabric Reinforcement (Flashing): Apply a thick coat of MK-25 Mer-Ko Membrane onto the vertical and adjacent horizontal surface using a brush or roller at a rate of 50 ft<sup>2</sup> per gallon. While the material is still wet, place the MK-80 Mer-Ko Burlap fuzzy side down into the wet MK-25, overlapping successive runs of fabric edges and ends a minimum of 2 inches.
  - 4. Mer-Ko Membrane with Fabric Reinforcement (Deck): Install the MK-75 Mer-Ko Lath to the horizontal surfaces. Pour the MK-25 Mer-Ko Membrane onto the MK-75, smooth trowel and back roll at 45-50 ft<sup>2</sup> per gallon to completely cover the MK-75. Apply an additional coat of the MK-25 over the entire surface at a rate of 130 to 140 ft<sup>2</sup> per gallon by trowel or roller.
  - 5. Body Coat: Combine 1 to 1.25 gallons of MK-30 Weather Deck Emulsion and up to 1 quart of water to one bag of MK-1 Weather Deck Body Cement. The first coat is troweled across the dry membrane at a rate of 80 to 90 ft<sup>2</sup> per mix. A second coat is applied again, at a rate of 80-90 ft<sup>2</sup> per mix. The Body Coat should equal a minimum 1/8 inch total thickness.
  - 6. Smoothing Coat: Combine 1.5 to 2 gallons of MK-30 Weather Deck Emulsion and up to 1.5 quarts of water to one 40 lb. bag of MK-2 Weather Deck Fine Cement. Apply over all vertical and horizontal surfaces at a rate of 150-200 ft<sup>2</sup> per mix, producing a minimum 1/32 inch thickness.
  - 7. Topcoat: Apply desired color of the MK-40 Mer-Ko Topcoat in two coats. Apply the first coat at the rate of 300 to 350 ft<sup>2</sup> per gallon. Allow to dry for 2 hours at 70°F, 50 percent relative humidity. Then apply a second coat of the MK-40 perpendicular to the first, at the rate of 300 to 350 ft<sup>2</sup> per gallon

## 2.04 ACCESSORIES

- A. Supplemental Materials:
  - 1. Flashing shall be minimum 26 gauge bonderized sheet metal. 4" x 6" inch at wall to deck juncture and 4" x 2" drip edge at outside perimeter of deck. Caulk all flashing seams and overlaps using MK-90 Polyurethane Caulking. (Note: If the flashing is not bonderized, it must be prepared in accordance with SSPC-SP11 surface preparation standards, in order for the coating to adhere properly).
  - 2. Drains for plywood shall be WP-35 ALX Deck Drain available through Thunderbird.
  - 3. Optional Slip Resistance: MK-86 Slip Resistant Additive added to topcoat.

## PART 3 EXECUTION

### 3.01 EXAMINATION

- A. Verification of conditions.
  - 1. Inspect all surfaces to receive the pedestrian traffic system. Verify that surfaces are dry, clean, and free of contaminants that would prevent coating system from properly adhering to the surface.
  - 2. Verify that substrates have ¼ inch slope per linear foot.
  - 3. Before starting work, report in writing to the owner any unsatisfactory conditions.

### 3.02 SURFACE PREPARATION

- A. General:
  - 1. Prepare surfaces using methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
- B. Plywood substrate:

1. Provide minimum 5/8 inch CDX exterior grade plywood.
  2. Plywood shall have a maximum joist span of 16 inches.
  3. Deflection should be less than L/360.
- C. Concrete substrate:
1. Create a surface profile by grinding, water blasting, or shot blasting to achieve a surface profile equal to CSP 3 as specified by ICRI.
  2. Rout and clean cracks and static joints: fill with manufacturer's recommended flexible epoxy filler material.
  3. Honor all moving and expansion joints. Seal with manufacture's recommended joint sealant.
  4. Repair any non-moving surface deviations with manufacturer's recommended patching material.

### 3.03 INSTALLATION

- A. Install coatings in accordance with manufacturer's instructions.
- B. Mix all materials in accordance with manufacturer's instructions.
- C. Use application equipment, tools, and techniques in accordance with manufacturer's instructions.
- D. Uniformly apply coatings at spread rates and in number of coats to achieve specified coverage.
- E. Adhere to all limitations, instructions, and cautions for pedestrian coatings as stated in the manufacturer's published literature.

### 3.04 FIELD QUALITY CONTROL

- A. Verify coatings and other materials are as specified.
- B. Verify coverages and finish of the system as work progresses.
- C. Manufacturer's representative shall provide technical assistance and guidance for surface preparation and application of coating systems.

### 3.05 PROTECTION AND CLEAN-UP

- A. Installation areas must be kept free from traffic and other trades during the application procedure and cure time.
- B. Protect finished surfaces of coating system from damage during construction.
- C. Touch-up, repair or replace damaged coating system after substantial completion.
- D. Clean area and remove all debris upon completion of work. Dispose of empty containers properly according to current Local, State and Federal regulations.
- E. Allow material to cure 4 to 6 hours before light pedestrian traffic is permitted, 24 hours before heavy traffic and an additional 48 hours before heavy objects are placed on the surface.

### 3.06 MAINTENANCE

- A. Contractor shall provide to owner, maintenance and cleaning instructions for the waterproof decking system upon completion of work. Owner is required to clean and maintain the surfaces to maintain manufacturer's warranty.

## END OF SECTION

*This guide specification has been prepared by Mer-Ko by Westcoat to assist design professionals in developing a project specific specification. This guide is a template that must be reviewed and adapted by specifiers to comply with project requirements. This guide specification is not to be copied directly into a project specification manual without review.*



# **EVALUATION REPORT**



### MER-KO BY WESTCOAT

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### 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)
- 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 ¼ 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 ¼ 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.



### 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 ¼ 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.

**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 ft<sup>2</sup> 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 ft<sup>2</sup> 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 ft<sup>2</sup> 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 ft<sup>2</sup> 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 ensuring complete coverage of the MK-75 lath. The coverage rate of the MK-25 material in this application is 60-65 ft<sup>2</sup> 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 ft<sup>2</sup> 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 ft<sup>2</sup> per mix, and the second coat is applied at the same rate (80-90 ft<sup>2</sup> per mix). A minimum cure time of 2 hours between coats is required. The minimum total thickness of the Body Coat is  $\frac{1}{8}$  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 ft<sup>2</sup> per bag, for a minimum  $\frac{1}{16}$ -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 ft<sup>2</sup> 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 ft<sup>2</sup> 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 ft<sup>2</sup> 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.

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  $\frac{1}{4}$ -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  $\frac{1}{4}$  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 ft<sup>2</sup>. 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  $\frac{1}{32}$ -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 ft<sup>2</sup> 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 ft<sup>2</sup> 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 ft<sup>2</sup> 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. The 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 ft<sup>2</sup> per mix, and the second coat is applied at the same rate (80-90 ft<sup>2</sup> 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 ft<sup>2</sup> 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.

**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 ft<sup>2</sup> 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 ft<sup>2</sup> 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 3/8 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 3/8 inch thick.

## 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.

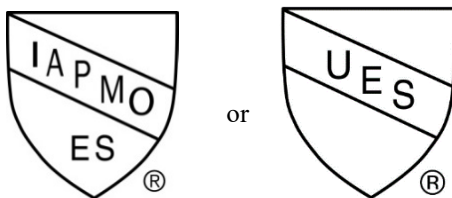
**k) Plywood:** Plywood, with an exterior bond classification, conforming to DOC PS-1 or DOC PS-2, shall be a minimum of 3/8 inch thick.

**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 (AC308) 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.

For additional information about this evaluation report please visit [www.uniform-es.org](http://www.uniform-es.org) or email us at [info@uniform-es.org](mailto:info@uniform-es.org)





## CALIFORNIA SUPPLEMENT

### MER-KO BY WESTCOAT

4007 Lockridge Street

San Diego, CA 92102

(844)-537-7203

[www.mer-ko.com](http://www.mer-ko.com)

### MER-KO SHUR DECK, SHUR DECK PRO, 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, 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](http://www.uniform-es.org) or email us at [info@uniform-es.org](mailto: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 ¼ 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.

**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.

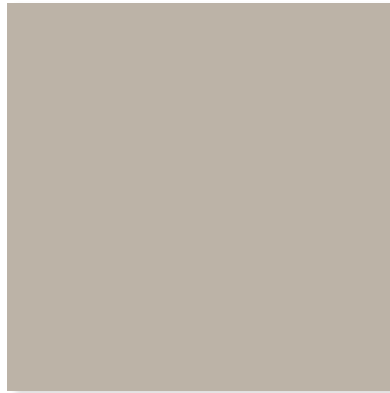
For additional information about this evaluation report please visit [www.uniform-es.org](http://www.uniform-es.org) or email us at [info@uniform-es.org](mailto:info@uniform-es.org)

# **MER-KO®**

## **COLOR CHART**



IRON | 1012



HARBOR GRAY | 1052



HAZELNUT | 1008



DOVER GRAY | 1095



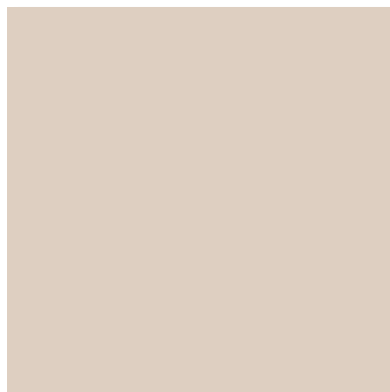
LINEN | 1040



CASHMERE | 1044



DOLPHIN GRAY | 1041



CREAM | 1009



TIMBER TAN | 1005

This chart is for reference only. Viewing any color chart is less accurate than a cured sample. Please apply sample onsite before beginning any project.



Color   Product Number	Availability
Cashmere   1044	Made to Order
Cream   1009	Made to Order
Dolphin Gray   1041	Made to Order
<b>Dover Gray   1095</b>	<b>Stock</b>
Harbor Gray   1052	Made to Order
Hazelnut   1008	Made to Order
Iron   1012	Made to Order
<b>Linen   1040</b>	<b>Stock</b>
Timber Tan   1005	Made to Order

- Stock = 2-day lead time | Made to Order = 10-day lead time.
- Extended manufacturing time may apply to larger volume orders.
- Custom Colors available with color matching fee, minimum order, and extended manufacturing time.

# **MER-KO®**

## **SAMPLE WARRANTY**

# MER-KO<sup>®</sup>

## WARRANTY

### by westcoat

#### WEATHER DECK MATERIAL WARRANTY

Project Address

QCA Contractor/ Applicator

Subject to the conditions, limitations and requirements set forth below, Westcoat warrants the Weather Deck materials to be free of defects in the material for a period of five (5) years from the date of original purchase of the materials provided that the materials are installed by a factory trained state-licensed contractor and subject to all terms and conditions set forth below. Westcoat disclaims any warranty for the labor or installation of the Weather Deck materials.

If the Weather Deck materials fail due to defects within the warranty period, Westcoat, in its sole discretion, will either provide replacement materials for the defective Weather Deck materials or reimburse the original purchaser in an amount not to exceed the original cost of the materials. Westcoat shall in no way be responsible or liable for any labor costs or any incidental or consequential damages, including without limitation, economic losses, lost profits, business interruption, loss of use, contribution, indemnity or other losses arising from the use of the Weather Deck materials.

This warranty is limited to the original purchases and is non-transferable. This warranty is void if the Weather Deck materials are: applied to the top of OSB; not properly maintained; not installed pursuant to the current system information sheet; and/or applied at any area that is not built in accordance with applicable building codes. The warranty is also void if all of the materials are not purchased from an authorized distributor of Westcoat.

This warranty does not apply to and Westcoat has no responsibility or liability for: (1) the condition or movement of the substrate; (2) parts, products, or accessories not sold by Westcoat such as sheet metal flashings, scuppers and drains; (3) the loss of gloss, fading or cleaning; (4) repairs and/or maintenance of the sealer and texture coat (5) the application of its materials over an oriented strand board ("OSB") substrate; (6) abuse or misuse of the materials; or (7) improper installation.

THIS MATERIAL WARRANTY AND THE REMEDIES PROVIDED HEREUNDER ARE EXCLUSIVE AND GIVEN IN LIEU OF ALL OTHER WARRANTIES (WHETHER WRITTEN, ORAL, IMPLIED OR STATUTORY). THERE ARE NO OTHER WARRANTIES, EITHER EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, THAT EXTEND BEYOND THAT SPECIFICALLY DESCRIBED HEREIN. PURCHASER'S SOLE AND EXCLUSIVE REMEDY AGAINST THE MANUFACTURERS OF WESTCOAT, INCLUDING CLAIMS BASED UPON THE MANUFACTURER'S NEGLIGENCE OR STRICT LIABILITY, SHALL BE LIMITED SOLELY TO THE REPLACEMENT OF ANY DEFECTIVE WEATHER DECK MATERIAL OR A PAYMENT BY THE MANUFACTURER IN AN AMOUNT EQUAL TO THE COST OF THE ORIGINAL WEATHER DECK MATERIAL.

The Westcoat Shur Deck system requires a maintenance topcoat with MER-KO ACRYLIC TOPCOAT as specified every three to five years (depending on ultraviolet exposure and/or traffic) as determined by a licensed contractor or design professional. Inspections are required one year after installation and every two years thereafter by a licensed contractor or design professional. The record of the inspection must be kept in writing and entitlement to the benefits of this warranty require the purchaser to show proof of purchase of the materials and the record of inspection(s).

All claims arising from any defect in the Weather Deck materials or under this Warranty shall be made, in writing, to Westcoat within ninety (90) days of the discovery of the alleged defect and within the time period of this warranty. Upon notification, Westcoat shall have the right to inspect and determine course of repair. The absence of a written claim within this time period shall constitute a waiver of all claims, rights and damages against Westcoat, and its affiliates. This warranty shall not toll or extend any statute of limitation applicable to a claim of negligence, breach of contract or strict liability against Westcoat.

Any and all disputes, claims or damages arising out of the use of Weather Deck materials or this Warranty shall be arbitrated in the County of San Diego, State of California, utilizing the services of a neutral dispute resolution service upon which the purchaser and Westcoat agree, or if they cannot agree, utilizing the services of the American Arbitration Association. The purchaser and Westcoat hereby waive any right they may have to have a jury decide any dispute.

# **MER-KO®**

## **GENERAL MAINTENANCE**



# WEATHER DECK

## CARE & MAINTENANCE

### STANDARD CARE & MAINTENANCE

With proper maintenance, you will extend the life of the Mer-Ko Cementitious Waterproof Decking system to its maximum potential. The following instructions will provide you with the proper methods of maintenance.

1. If puddling or standing water occurs, remove it and remedy the situation to maximize life of the system.
2. Establish a normal maintenance schedule for washing the deck surface using a mild soap and water solution. TSP (Tri Sodium Phosphate), all purpose cleaner, or similar products are recommended. Test all cleaners in an inconspicuous area to ensure Compatibility. Use a stiff broom or scrub brush (Polypropylene, nylon or horsehair) to remove any contaminants on the surface of the deck. Rinse the deck thoroughly after scrubbing. No solvents should be used to remove Contaminants as this may cause damage to the deck surface. All corrosive substances, chemicals and organic materials should be cleaned and rinsed away immediately to prevent damage and/or staining.
3. Planter boxes or flower pots should be raised off of the deck and moved every 2 months to allow the deck system to thoroughly dry out. Planters that drain onto the deck system may cause staining due to the natural minerals in the potting media. Self contained or internal drainage systems should be considered. Plastic retainer rings or dishes should be used under all planters to protect the deck system from damage. Concrete or clay pots are not recommended for use on the Mer-Ko Cementitious Systems.
4. Any type of matting that contains a rubber backing holds moisture, e.g. rubber backed indoor/outdoor carpet, should NOT be used on the deck system. The resulting trapped moisture will increase risk of damage to the topcoat.
5. Patio furniture should have 2 inch coasters or rubber pads to prevent indentation or tears in the deck surface. If a barbecue is used on top of the Mer-Ko Cementitious Deck System, it is suggested that an aluminum or plastic pan be placed beneath the barbecue to catch any hot grease or coals that may spill.

### REPAIRING SPECIFIC AREAS AND/OR INSTALLING WEATHER DECK WHERE THE DECK STRUCTURE HAS BEEN ADDED ONTO:

1. Cut out the predetermined-damaged area of the existing system completely through the MK-65 Weather Deck Slip Sheet and remove the affected section of the deck coating.
2. Grind the edges of the existing deck surface repair areas, creating a minimum 8 inch taper exposing each layer of the system. Remove resulting debris.
3. Install a new section of MK-65 Weather Deck Slip Sheet that is a minimum 2" larger than the repair area on all sides and tuck it under the existing MK-65. Bond the new and existing slip sheet together all around the perimeter using a minimum ¼ inch bead of MK-95 Slip Sheet Adhesive. Apply pressure using a weighted roller. Allow to dry 24 hours at 70°F, 50% RH.
4. Prime the MK-65 Weather Deck Slip Sheet with a skim coat of MK-2 Weather Deck Fine Cement (40lb bag) mixed with 1½ gallons of MK-30 Weather Deck Emulsion. Allow the primed areas to dry a minimum of 2 hours at 70°F, 50% RH. Remove minor surface imperfections by lightly trowel scraping and or sanding. Remove resulting debris.
5. Place MK-75 Mer-Ko Lath over the dry skim coat, overlapping runs and edges a minimum of two inches. Apply MK-25 Mer-Ko Membrane at a rate of 45- 50 ft² into the MK-75. Once dry, apply a second coat of MK-25 over the entire surface at a rate of 130-140 ft² to completely cover the MK-75. Allow to dry a minimum of 24 hours at 70°F, 50% RH or until dry enough to walk on without leaving impressions. Applications in elevated or high humidity conditions will require additional dry time.
6. Apply MK-1 Weather Deck Body Cement (50lb bag) mixed with 1¼ gallons of MK-30 Weather Deck Emulsion in two applications, approximately level with the adjacent deck coating. Allow a minimum of 2 hours between coats. Allow to dry a minimum of 4 hours at 70°F, 50% RH. Remove any surface irregularities, (e.g., overlaps or cold joints), by sanding, using a mason's stone or trowel scraping. Remove resulting debris to allow a secure bond of the Smoothing Coat.
7. Apply a coat of MK-1 Weather Deck Fine Cement (40lb bag) mixed with 1½ gallons of MK-30 Weather Deck Emulsion, as a Smoothing Coat over the surface, feathering it onto the adjacent coating areas. Allow to dry a minimum of 2 hours at 70°F, 50% RH.
8. Sand the surface using approximately, medium 120-grit sandpaper as necessary to produce the desired level of finish. Remove any dust or debris.
9. MK-50 Mer-Ko WB Primer must be applied, prior to the MK-40. Premix each component separately. In a clean bucket, mix 2 parts A with 1 part B (by volume) of MK-50. Mix thoroughly with a low speed (400-600 rpm) drill motor for 3-4 minutes. Make sure to scrape the sides and bottom of the container during mixing. MK-50 can be thinned with water, up to 50%. After mixing, dip and roll or spray and back roll the MK-50 onto the surface at a rate of 250-350 square feet per gallon. Do not allow material to puddle. MK-40 may be applied as soon as the MK-50 is dry to the touch, (approximately 1 to 4 hours at 70°F) but no later than 6 hours.
10. Apply MK-40 Mer-Ko Topcoat using a paint roller, in a sample area using appropriate finish texture technique(s) and color(s) to achieve the desired finish. Upon approval, apply the MK-40 Mer-Ko Topcoat in the selected color and finish to all vertical base flashing and horizontal deck areas. Allow to dry a minimum of 2 hours at 70°F, 50% RH, then apply a second coat of Mer-Ko Seal Topcoat perpendicular to the first. Allow to dry before returning to light service; 6 to 8 hours for normal service.

**For further information regarding substrate preparation, installation conditions and storage & handling, refer to the Weather Deck System Specification.**

**TO PREPARE AREAS WHERE CRACKS HAVE OCCURRED:**

Grind/sand the existing system (down to the waterproofing without damaging it) back 4 inches from the predetermined joint/crack area on both sides (and ends if the repair is not continuous) of the affected area and remove resulting debris. Grind the edges of the existing deck surface repair areas, creating a minimum 6 inch taper exposing each layer of the system. Remove resulting debris. Follow steps 5 through 10 on page 1.

**2. RE-SEALING INSTRUCTIONS:**

Mer-Ko Cementitious Waterproof Decking systems should be resealed every 3-5 years based on wear for best results, or per the schedule listed on the warranty issued. Follow the inspection guidelines detailed in the warranty at the time of scheduled Maintenance.

1. The deck surface must be clean, dry and free of any debris, dirt, dust, oil, grease, paint or other contaminants. Wash the deck as indicated in the Standard Care & Maintenance. Allow the deck surface to dry completely before continuing.
2. Sand smooth any debris stuck to the deck, then remove the residual contaminants and repair any gouges with the appropriate materials.
3. Patch any normal stress cracks using MK-90 Mer-Ko Polyurethane Caulking.
4. MK-50 Mer-Ko WB Primer must be applied, prior to the MK-40. Premix each component separately. In a clean bucket, mix 2 parts A with 1 part B (by volume) of MK-50. Mix thoroughly with a low speed (400-600 rpm) drill motor for 3-4 minutes. Make sure to scrape the sides and bottom of the container during mixing. MK-50 can be thinned with water, up to 50%. After mixing, dip and roll or spray and back roll the MK-50 onto the surface at a rate of 250-350 square feet per gallon. Do not allow material to puddle. MK-40 may be applied as soon as the MK-50 is dry to the touch, (approximately 1 to 4 hours at 70°F) but no later than 6 hours.
5. For best results, always apply the sealer to a cool surface or in the shade. Do not reseal Mer-Ko Cementitious Waterproofing Systems if ambient temperature is below 55°F or above 90°F or when precipitation is expected or occurring within 24 hours. Thoroughly mix MK-40 Mer-Ko Topcoat to ensure an even and consistent color before application. Apply MK-40 over the primed deck at a rate of approximately 300-350 ft<sup>2</sup> per gallon. An additional coat of the MK-40 may be applied, as needed. Allow 6 to 8 to dry, before returning to light service and 24 hours for normal service at 70°F, 50% RH.

**SHELF LIFE**

Product shelf life for most products is six (6) to twelve (12) months from the date of manufacture when properly stored in the original, unopened container. Refer to individual Product Specification Sheets for specific storage and shelf life information.

**HEALTH PRECAUTIONS**

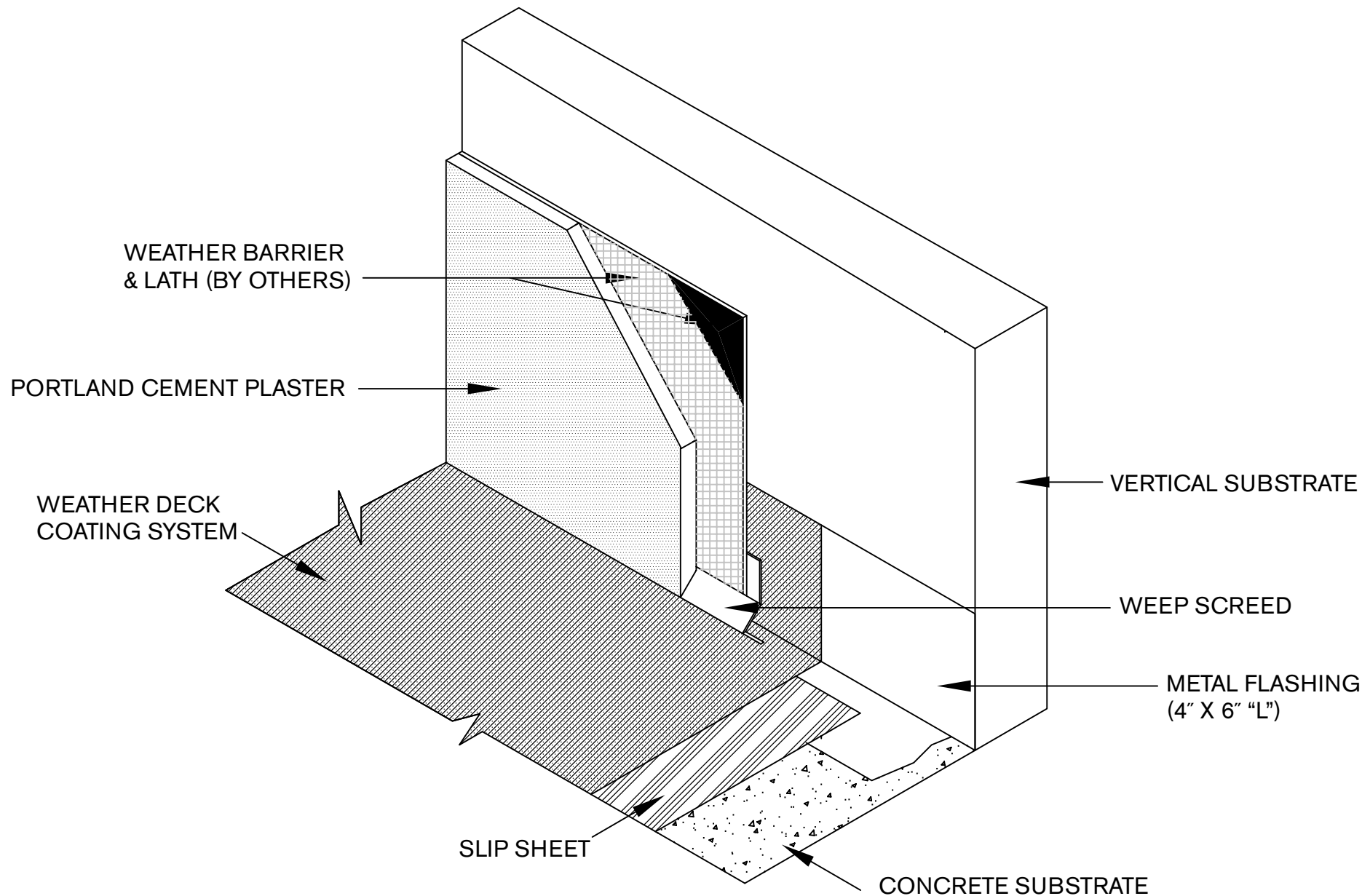
Inhalation of vapor or mist can cause headache, nausea, irritation of nose, throat and lungs. Prolonged or repeated skin contact can cause slight skin irritation. Cements contain silicas; dust mask or respirator should be used when mixing, sanding or grinding.

**DISCLAIMER**

Purchaser's sole and exclusive remedy against the manufacturer of Mer-Ko, shall be limited solely to the replacement of any defective material or a payment by the manufacturer in an amount equal to the cost of the original material.

# **MER-KO®**

## **ARCHITECTURAL DETAILS**



## WEATHER DECK - STUCCO TRANSITION (CONCRETE)

DIVISION 07 18 13  
Pedestrian Traffic Coatings

SCALE : NTS

**MER-KO**<sup>®</sup>  
by westcoat

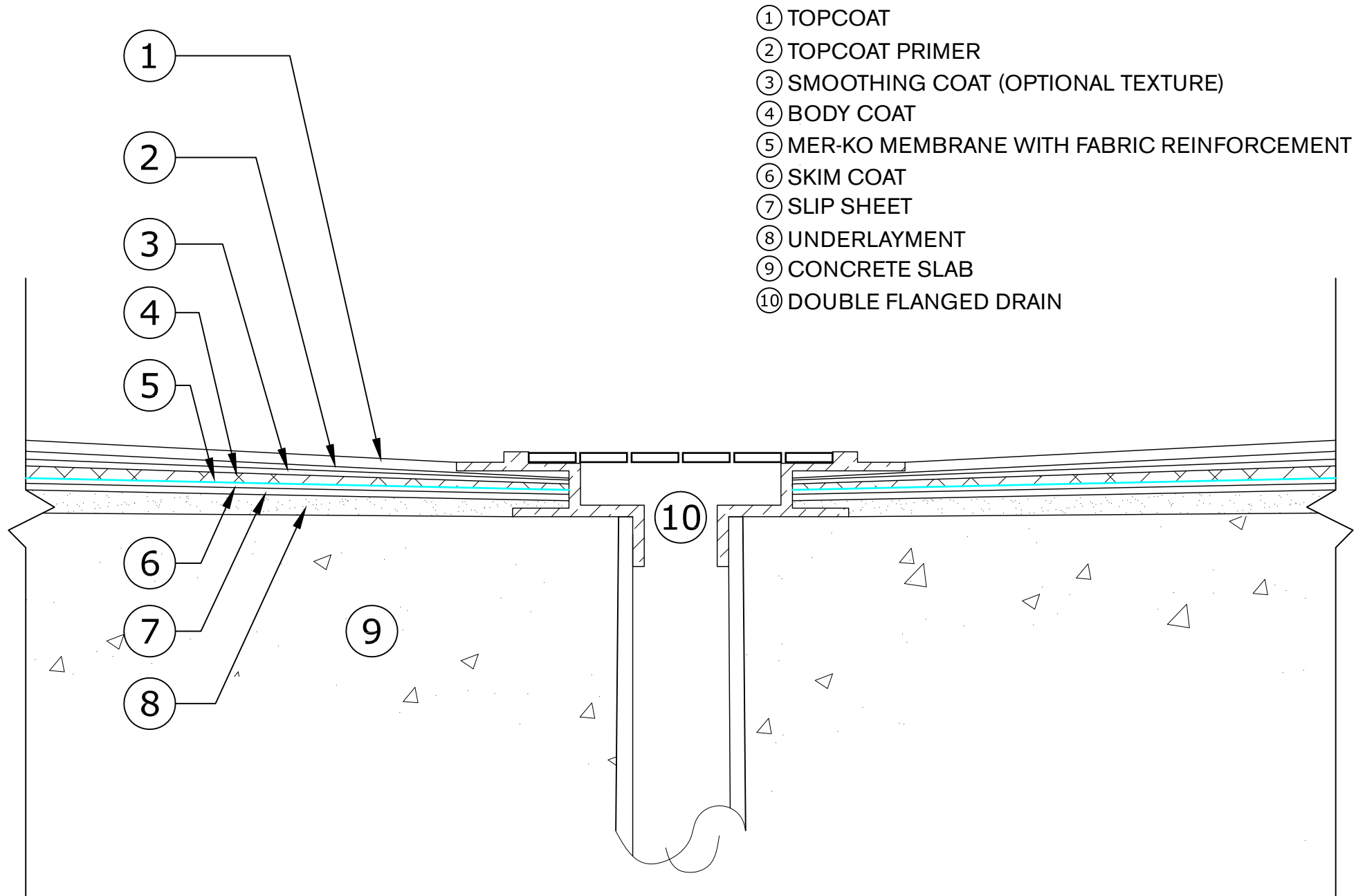
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ER-517



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## WEATHER DECK WITH DOUBLE FLANGE

DIVISION 07 18 13  
Pedestrian Traffic Coatings

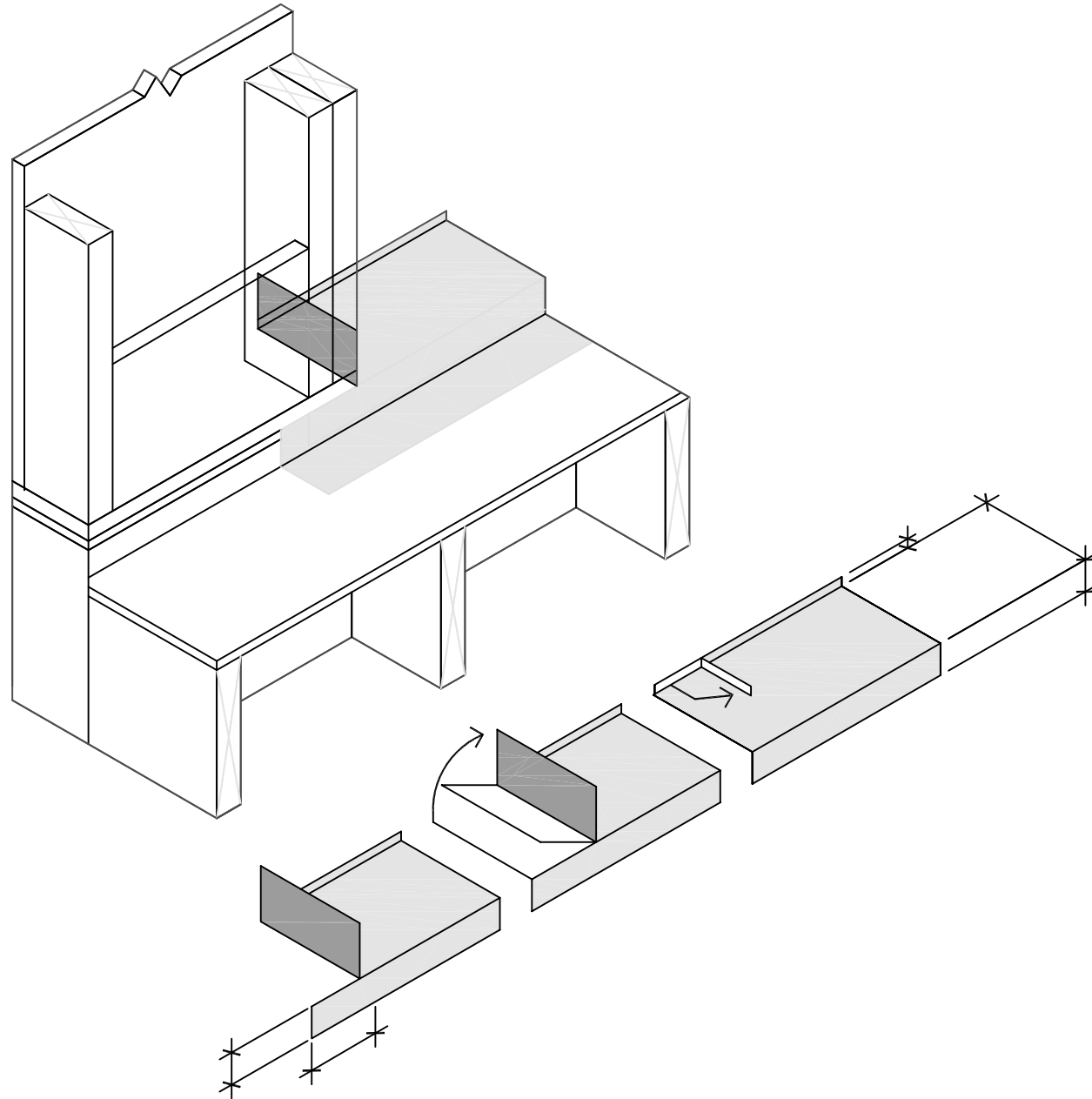
SCALE : NTS

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## DECK FLASHING AT DOOR OR SILL PAN

DIVISION 07 18 13  
Pedestrian Traffic Coatings

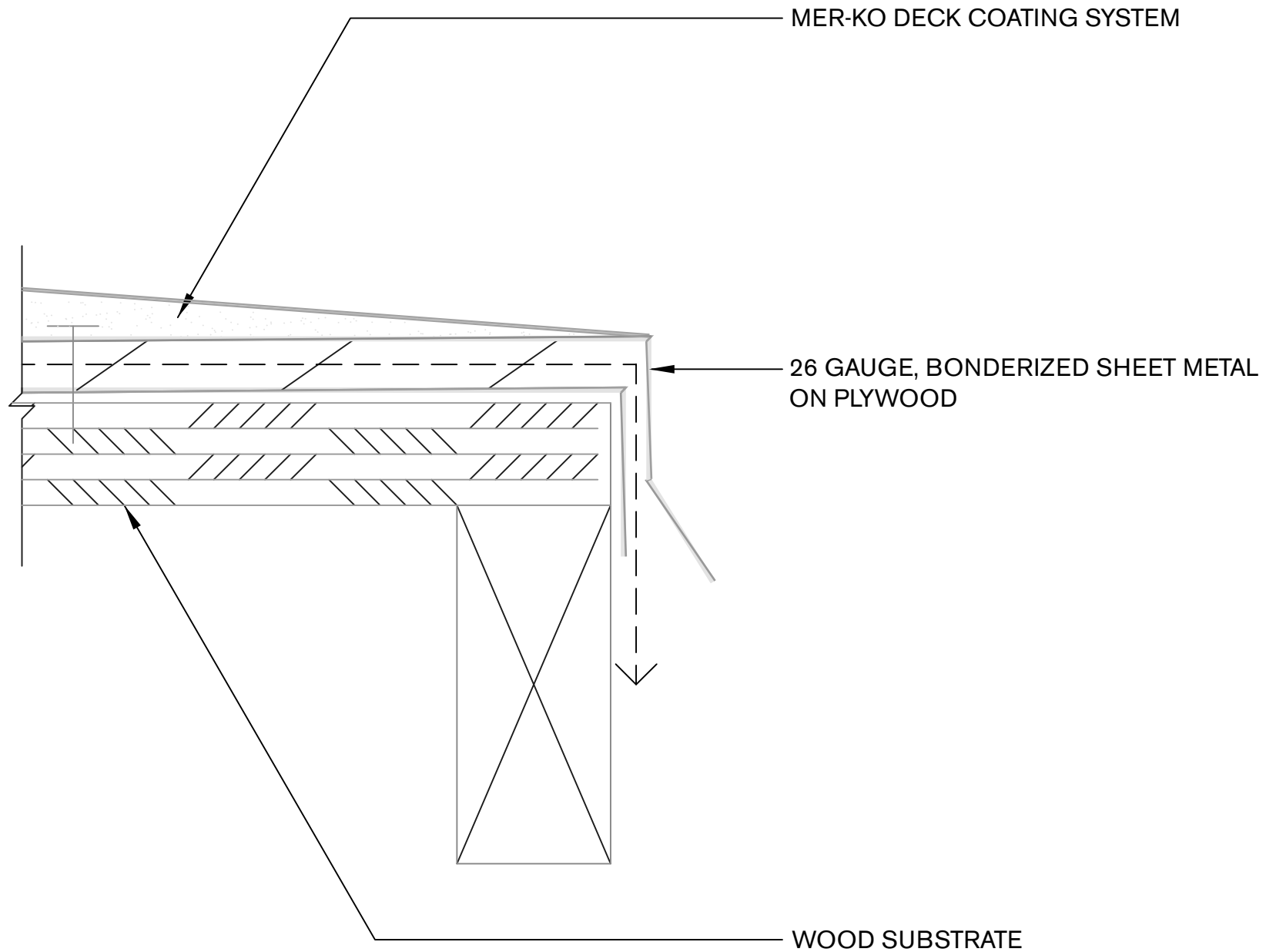
SCALE : NTS

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## DECK FLASHING EDGE VENT

DIVISION 07 18 13  
Pedestrian Traffic Coatings

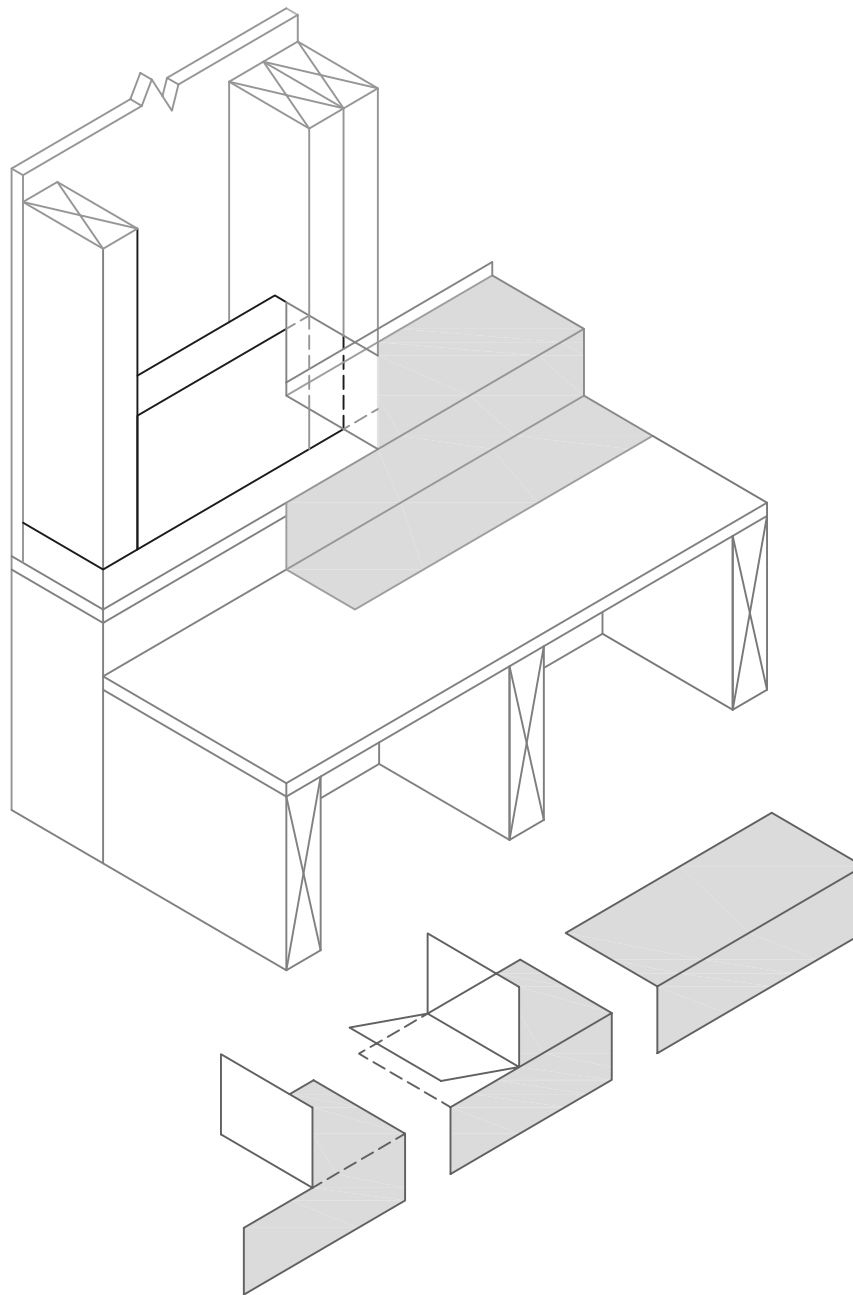
SCALE : NTS

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# DECK FLASHING ONE PIECE TO DOOR PAN

DIVISION 07 18 13  
Pedestrian Traffic Coatings

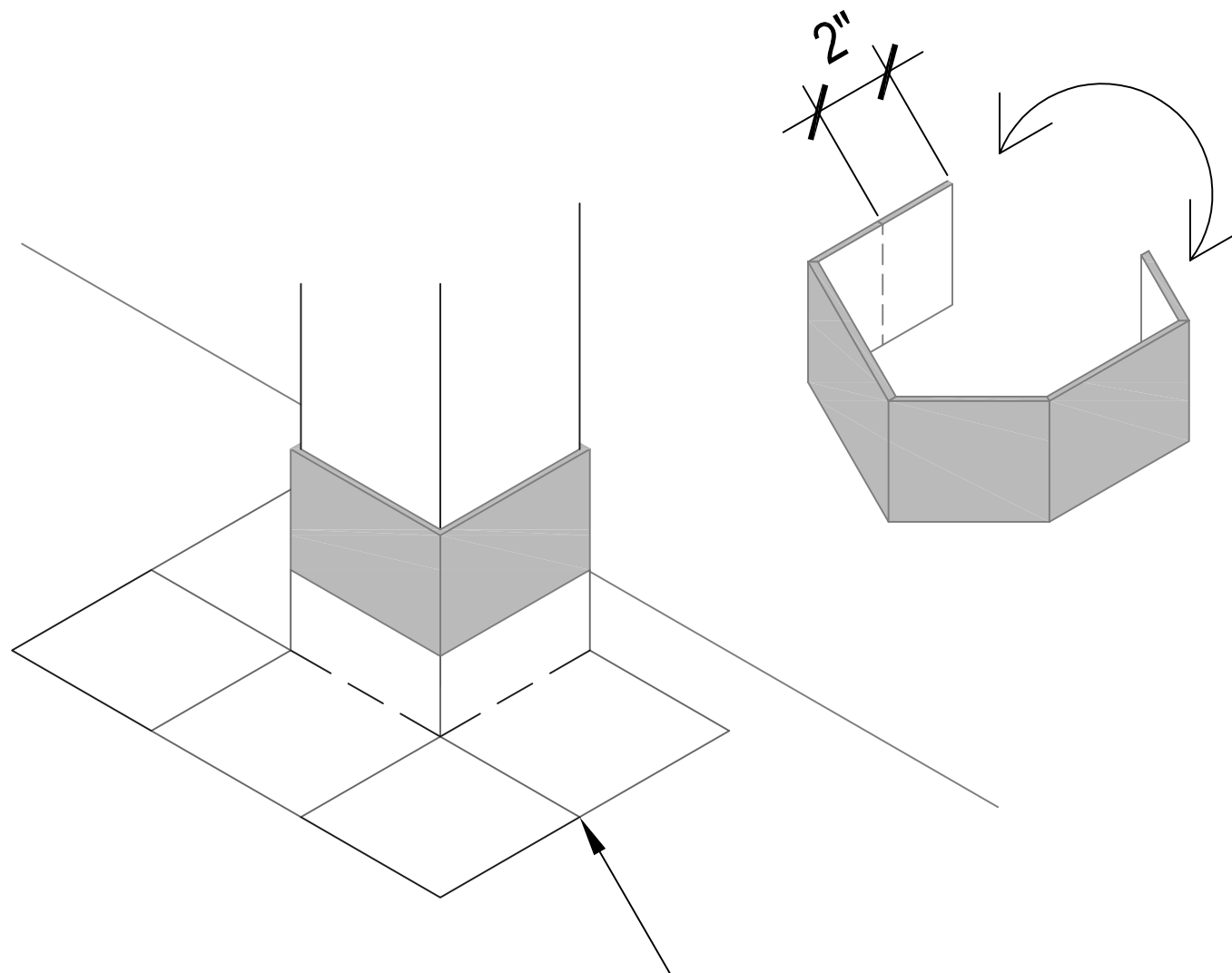
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Fully Soldered  
4" on Horizontal  
2" on Vertical

DECK FLASHING - REGLET COUNTER FLASHING OVER POST COLLAR

DIVISION 07 18 13  
Pedestrian Traffic Coatings

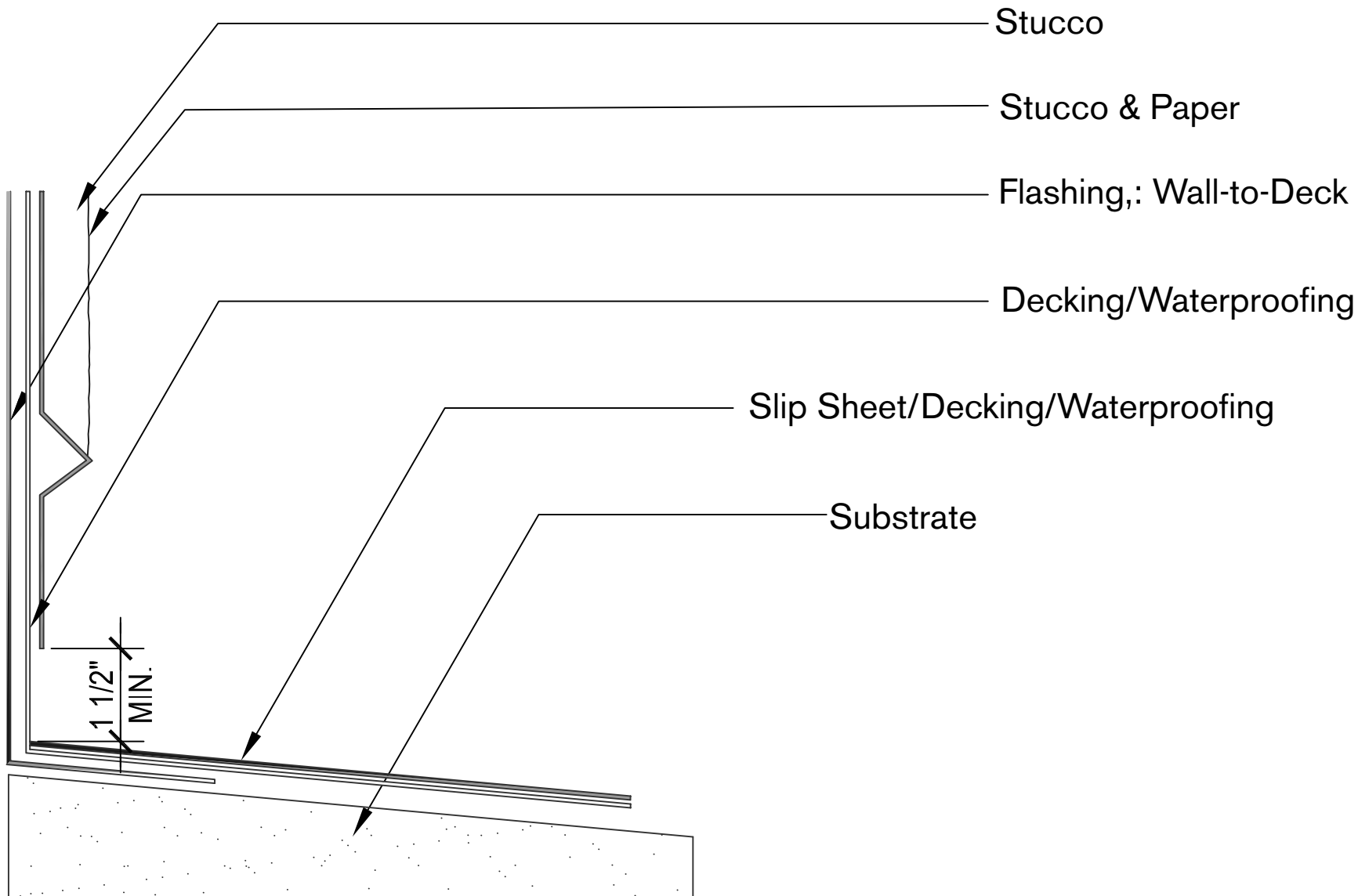
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## DECK FLASHING - TWO PIECE METAL

DIVISION 07 18 13  
Pedestrian Traffic Coatings

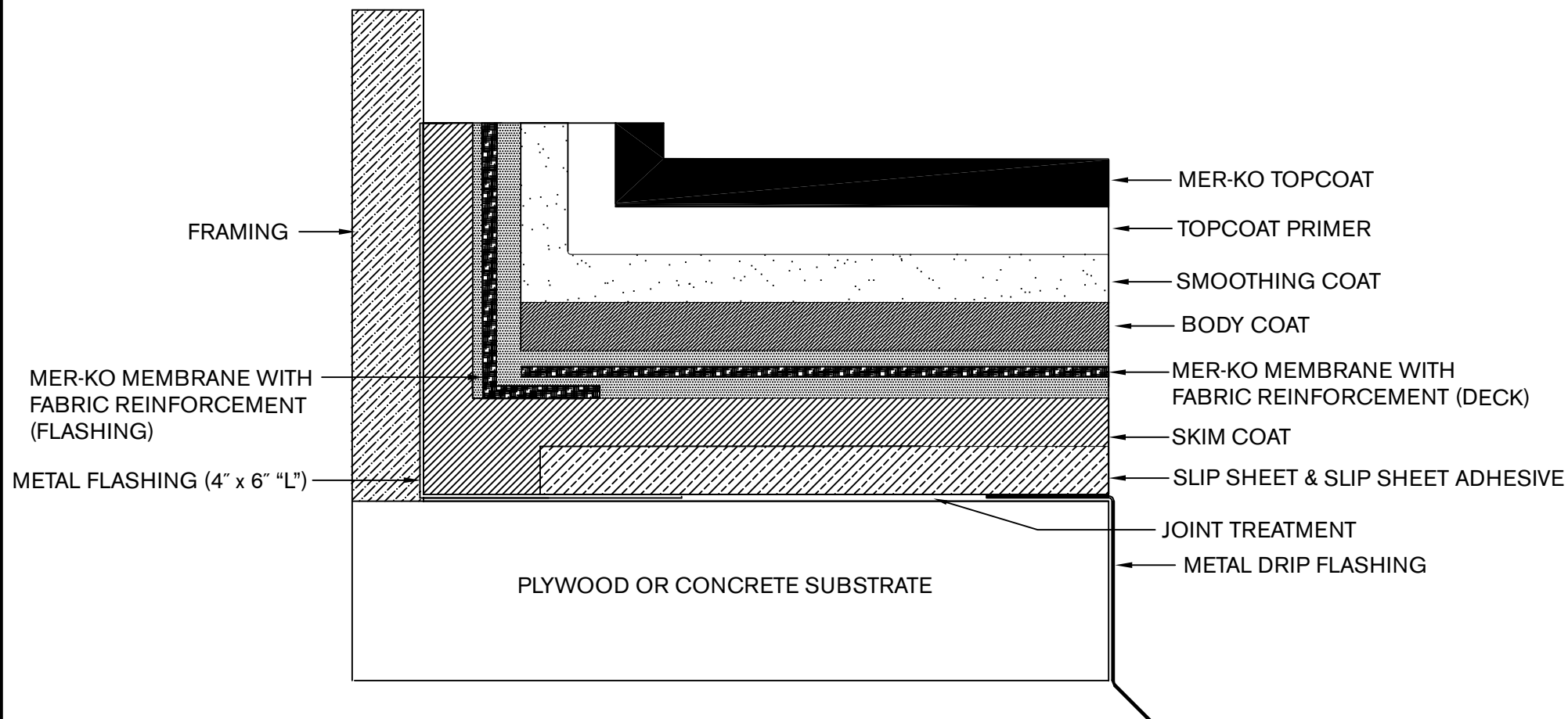
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## WEATHER DECK - OVERVIEW

DIVISION 07 18 13  
Pedestrian Traffic Coatings

SCALE : NTS

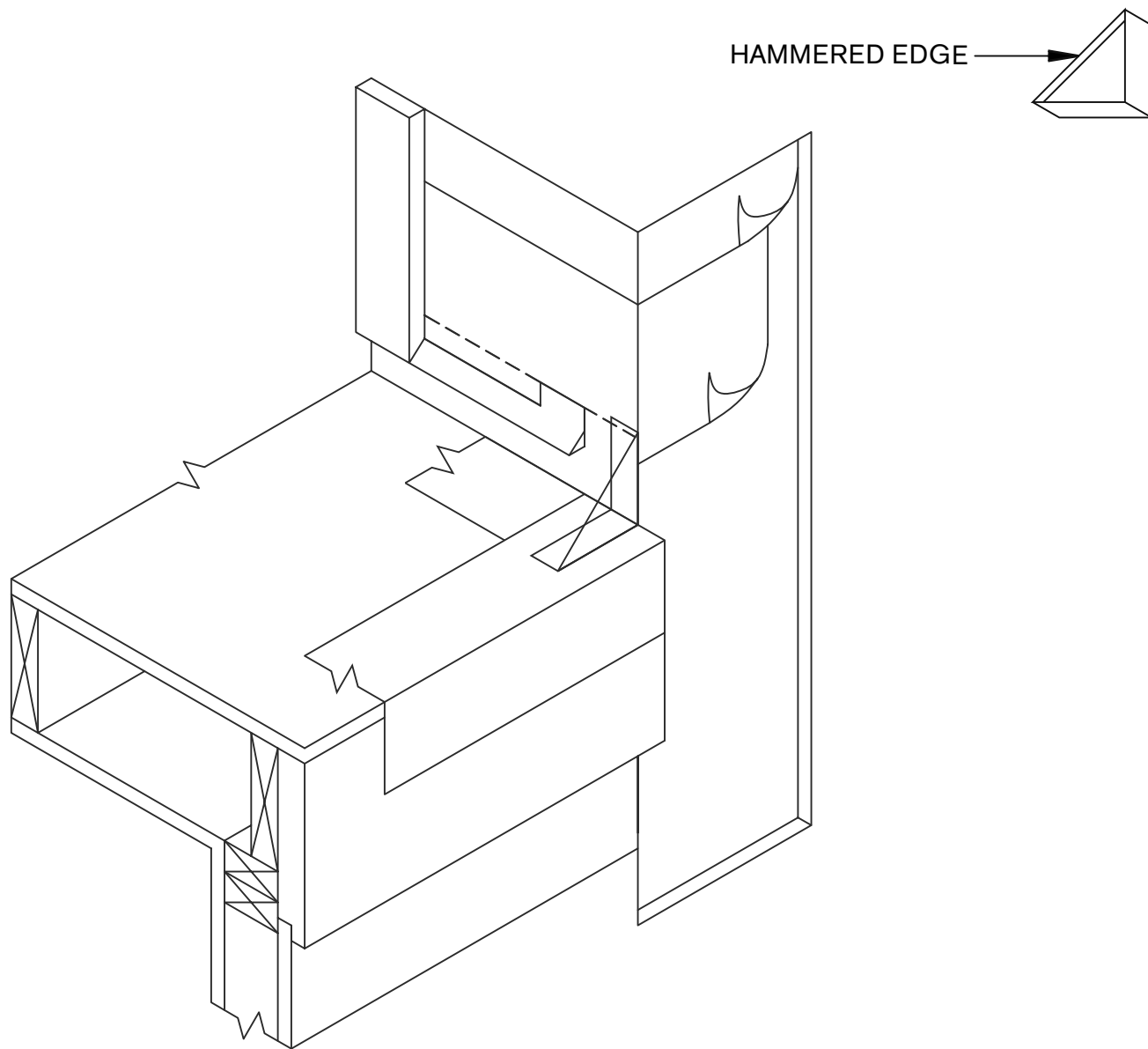
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ER-517



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## DECK TERMINATION INTO INSIDE WALL

DIVISION 07 18 13  
Pedestrian Traffic Coatings

SCALE : NTS

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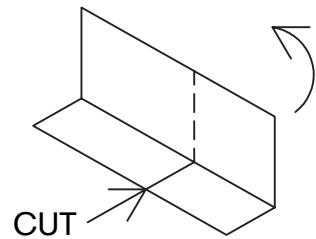
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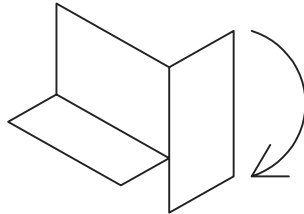
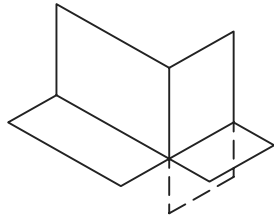


REV. 11/2018 TC





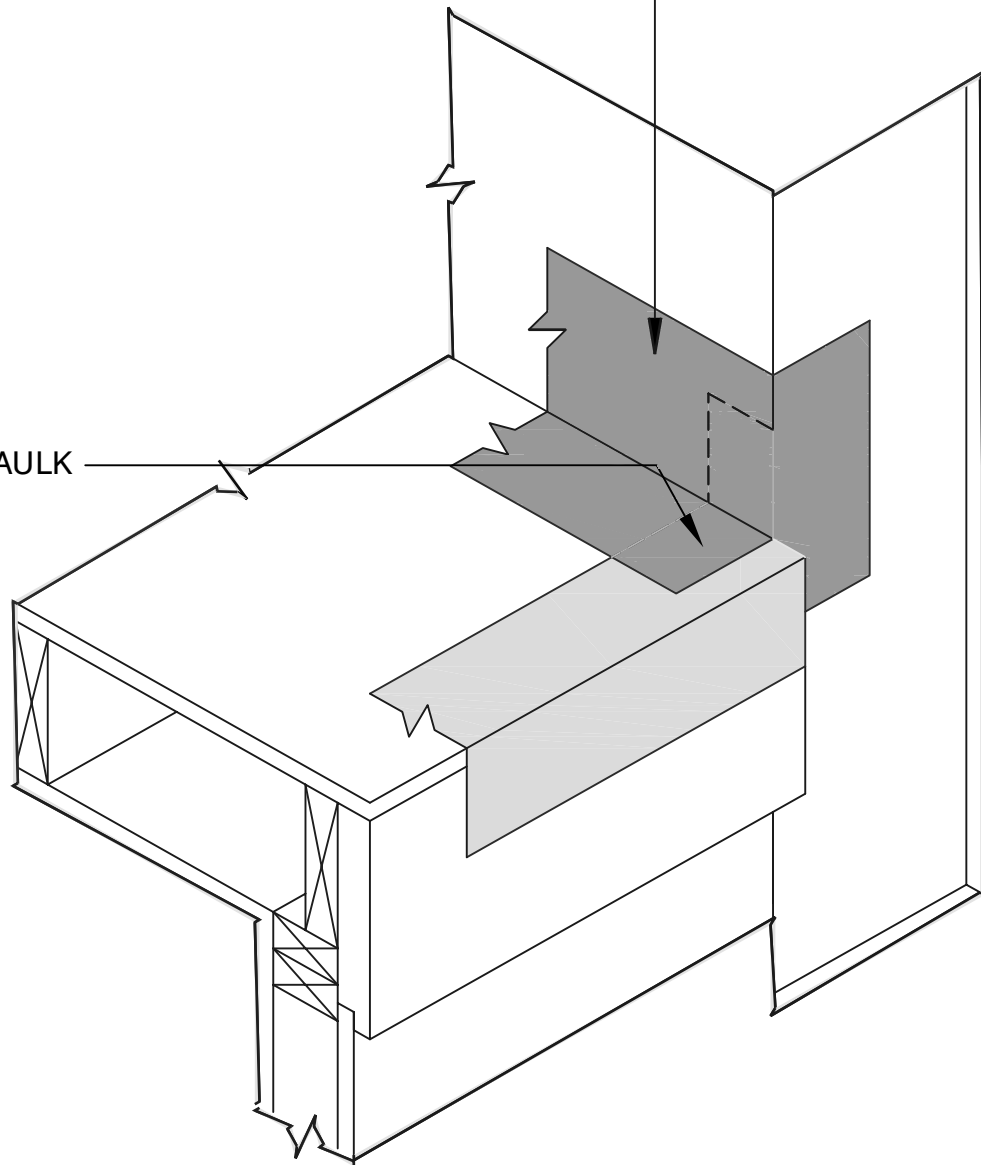
CUT



FOLD  
DOWN

SEALANT LAP  
URETHANE CAULK

MINIMUM 6" VERTICAL  
MINIMUM 4" HORIZONTAL



## DECK TERMINATION INTO OUTSIDE WALL

DIVISION 07 18 13  
Pedestrian Traffic Coatings

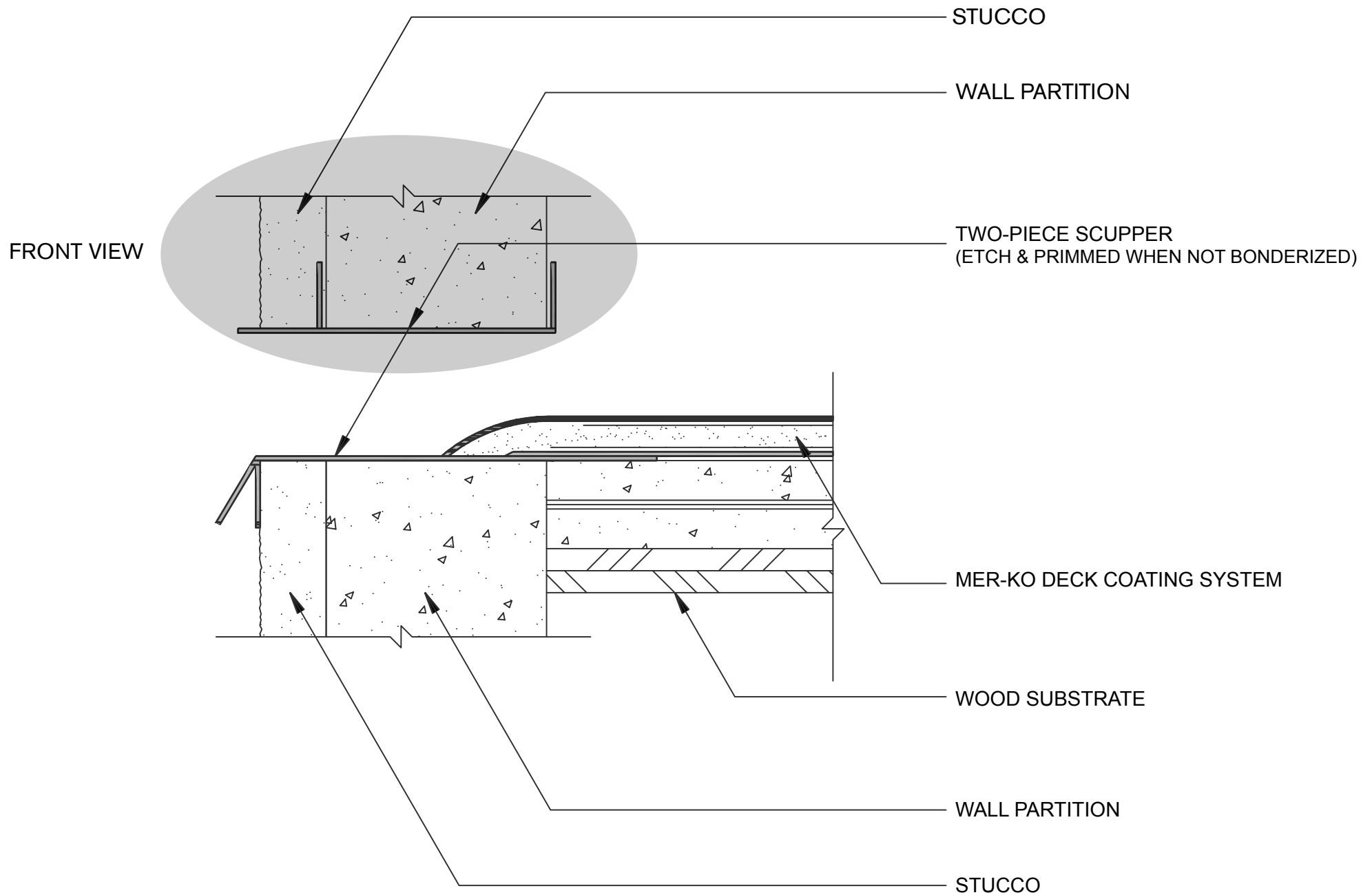
SCALE : NTS

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by westcoat

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REV. 11/2016 TC



## DECK TERMINATION INTO TWO-PIECE SCUPPER

DIVISION 07 18 13  
Pedestrian Traffic Coatings

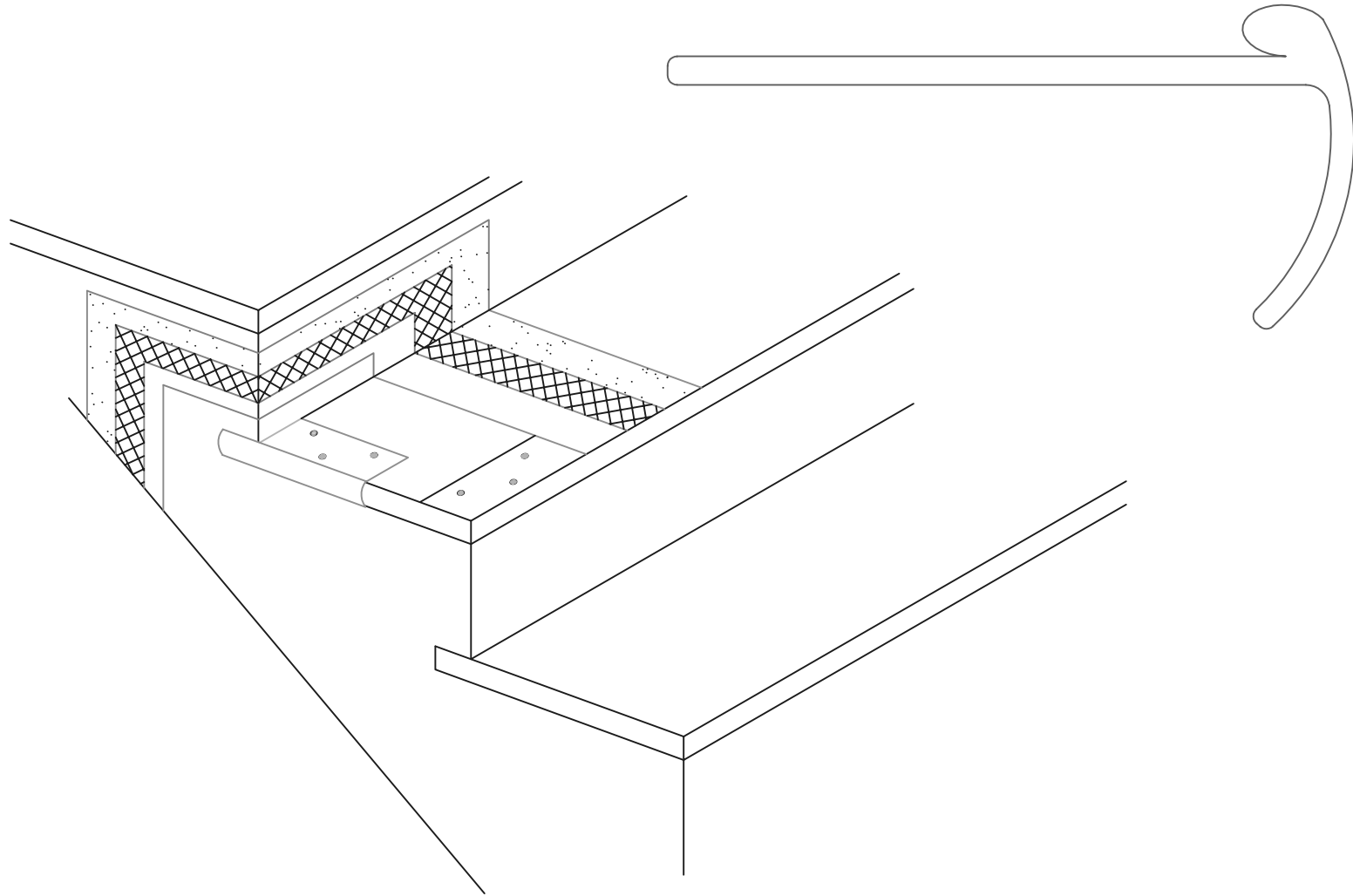
SCALE : NTS

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ER-517  
IAPMO  
ES

REV. 11/2016 TC



# STAIR CONSTRUCTION AND NOSING

DIVISION 07 18 13  
Pedestrian Traffic Coatings

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