

### TOTAL FINISHED THICKNESS

¼"

### CERTIFICATIONS

- Evaluated System - IAPMO ER-517
- Meets Class A Fire Test ASTM E-108
- Meets One-Hour Fire Rating ASTM E-119
- Meets 2020 City of Los Angeles Building and Residential Code (LABC & LARC)
- Meets Wildland Urban Interface (W.U.I) Requirements
- Meets the Requirements of Decking SFM 12-7A-4 Parts A & B

### SPECIFICATION CLASSIFICATIONS

- 07 18 13 Pedestrian Traffic Coatings

### MATERIALS NEEDED

- MK-90 Polyurethane Caulking
- MK-70 Shur Deck Metal Lath  
or
- MK-71 Shur Deck Glass Lath
- MK-62 Sheet Membrane
- MK-85 Shur Deck Staples
- MK-5 Shur Deck Cement
- MK-40 Mer-Ko Topcoat

### USES/APPLICATIONS

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

### SYSTEM DESCRIPTION

Shur Deck is a multi-layer, cementitious roof and walking deck system designed for use over plywood or concrete substrates. This system consists of reinforcing metal lath, a series of cementitious layers and acrylic sealer. Installed at a minimum ¼ inch finished thickness, this seamless, trowel applied system provides longterm durability and waterproofing protection over plywood substrates.

### ADVANTAGES

- Seamless & monolithic
- Excellent adhesion to plywood substrates
- Will not soften under high temperatures
- Resists degradation from UV, ozone and weathering
- Outstanding long-term durability and performance
- Solvent-free
- Environmentally friendly
- One Cement System

### AESTHETIC FINISHES/TEXTURES

Traditional trowel and broom finishes are available. In addition, design options such as skip trowel texturing, trowel knock-down, stippling, stenciling, etc. are also available. This wide array of finish options provides unlimited aesthetic design.

### 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

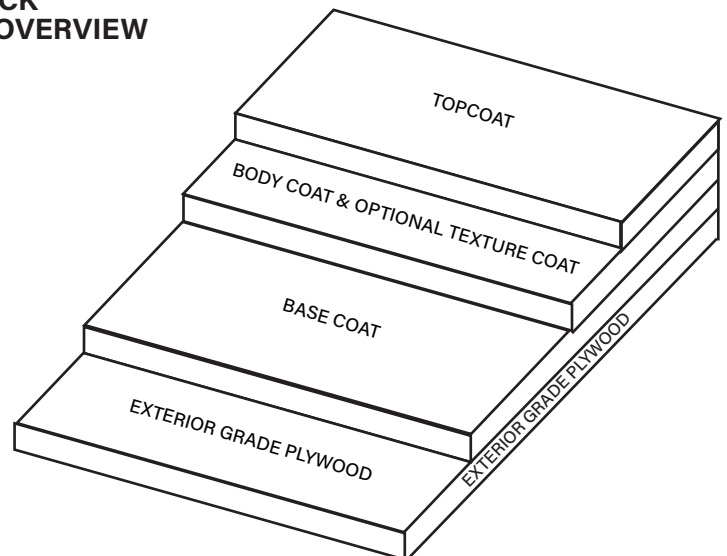
MK-40 Mer-Ko Topcoat is available in 9 colors and features a semi-gloss sheen. Refer to the Mer-Ko Color chart for color selections.

### INSTALLATION CONDITIONS

The Shur Deck system must not be Installed if the surface or ambient temperature is or will drop below 50°F or rise above 90°F within 24 hours or when precipitation is expected or occurring.



### SHUR DECK SYSTEM OVERVIEW



**COVERAGES**

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

**SHEET MEMBRANE**

MK-62 Sheet Membrane  
6" x 75' each roll (37.5 ft<sup>2</sup>)

**METAL LATH**

MK-70 Shur Deck Metal Lath  
27" x 97" each sheet (18.18 ft<sup>2</sup>)  
OR

**GLASS LATH**

MK-71 Shur Deck Glass Lath  
39.36" x 150' each roll (492 ft<sup>2</sup>)

**BASE COAT**

MK-5 Shur Deck Cement  
30-45 ft<sup>2</sup> / bag

**BODY COAT (\*Two Coats)**

MK-5 Shur Deck Cement  
1st Coat - 90 ft<sup>2</sup>/50 lb. bag mix  
2nd Coat - 90 ft<sup>2</sup>/50 lb. bag mix

**TEXTURE COAT (OPTIONAL)**

MK-5 Shur Deck Cement  
200 ft<sup>2</sup>/50 lb. bag mix

**TOPCOAT (Two Coats)**

MK-40 Mer-Ko Topcoat  
1st Coat - 300 ft<sup>2</sup>/ gallon  
2nd Coat - 200 ft<sup>2</sup>/ gallon

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

**SUBSTRATE INSPECTION AND PREPARATION****PLYWOOD**

For installation of the Shur Deck Pro system, plywood must be a minimum of 5/8 inch (3/4 inch preferred) CDX or exterior grade. For applications over pressure-treated lumber, please contact your Mer-Ko Representative prior to application. Slope must be a minimum of 1/4 inch per linear foot to allow for proper drainage. Decks should meet local building codes. The deck shall be tongue and groove, completely blocked and nailed (glued and screwed is best). Plywood shall have a maximum joist span of 16 inches. Deflection should be less than L/360. OSB is not a suitable substrate for this material. Moisture vapor commonly collects in areas below a vapor barrier, such as the waterproofing membrane of the deck covering system. Venting must be added to help relieve moisture vapor transmission. Please refer to all local building codes regarding venting requirements.

**PREPARATION**

Be sure the surface is clean, dry and free of grease, paint, oil, dust or any foreign material that may prevent proper adhesion. "Dry" plywood is typically defined as having less than a 10% moisture reading or by showing no moisture with a plastic sheeting test. Applicator is responsible for ensuring that the substrate is acceptable for application. Do not apply to wet plywood.

**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 sheet metal 4" x 6" wall to deck flashing where the deck meets the wall. Place the 6" side up the vertical wall and a 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 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).

**SHEET MEMBRANE**

Mer-Ko requires the installation of 6 inch MK-62 Sheet Membrane to all plywood seams for reinforcement. For maximum protection, MK-62 36 inch, can be applied to the entire deck. MK-62 may also be installed behind or on top of the flashing as a backup waterproofing measure. For increased adhesion, MK-61 Sheet Membrane Primer may be used prior to applying the Sheet Membrane. MK-62 may not be left exposed to the sun for more than 7 days. See MK-62 Sheet Membrane and MK-61 Sheet Membrane Primer Product Specification Sheets for additional information.

**METAL OR GLASS LATH**

The Shur Deck System can be installed with either the MK-70 Shur Deck Metal Lath or MK-71 Shur Deck Glass Lath. For maximum protection against corrosion, MK-71 Shur Deck Glass Lath should be used in lieu of MK-70. Place the desired lath on the plywood and cut it to fit the area ensuring the edge of the lath is offset two inches from any parallel plywood seams. The lath should run across the grain of the plywood (across the long seams) when possible. The grain of the metal lath should be placed so that it curves down at the edge of the deck. When using the glass lath, unroll lath and place curl side down. Lath should be held back 2 inches from all deck edges, leaving 2 inches of flashing exposed. With the lath in place, start in the center working your way out. Staple the lath with MK-85 Shur Deck Staples, using a minimum of 22 staples per square foot. Overlap the lath 1-2 inches and staple every 1-2 inches along the seam. With a hammer, lightly pound down any seams or staples that are higher than the lath. When using the MK-71, ensure that the lath is secured properly to the plywood. This is especially true at all overlaps and edges. See MK-71 Shur Deck Glass Lath Product Specification Sheet for additional information.

**BASE COAT**

Pour 1 gallon of potable water into a clean mixing bucket and then add one bag of MK-5 Shur Deck Cement. Mix until uniform with a mechanical mixer at a low rpm. Pour the mixture onto the metal lath and with trowel on edge, smooth the mixture to the top of the lath at the rate of 45 square feet per batch. Please note, if using MK-71 Shur Deck Glass Lath, coverage of the Base Coat will be 30 square feet per batch. Trowel and brush the base coat up to the metal lath edge, leaving 2 inches of flashing exposed. For best results, tape off the flashing. Use a paintbrush to spread the base coat into all edges. Tap the deck lightly with a hammer to help in smoothing out trowel ridges. As soon as it is dry, usually 1 to 2 hours at 70 °F/ 50% RH, scrape off any high spots or ridges, before applying the Body Coat. Lower temperatures and higher humidity will require longer dry times.

**FLASH WRAP (OPTIONAL)**

For additional waterproofing and protection along the perimeter of the deck, Flash Wrap can be applied over the base coat. Install MK-80 Mer-Ko Burlap (10") to all vertical flashings. Apply a coat of MK-25 Mer-Ko Membrane onto the vertical surface of and onto the adjacent horizontal surface by using a brush or roller at a rate of 100-150 ft per gallon. Immediately embed the MK-80 burlap, fuzzy side down, into the wet MK-25, overlapping successive runs of fabric edges and ends, a minimum of 2 inches. Apply a coat of MK-25 at a coverage rate of 50 ft per gallon over the MK-80. Make sure the burlap is fitted tightly in corners and around protrusions. Apply additional MK-25 as necessary over the burlap fabric areas to ensure positive waterproofing is completely covering the burlap. The waterproofing membrane should be a minimum of 20 mils DFT. Allow the Flash Wrap to dry for 4-6 hours before proceeding with the Body Coat.

**SYSTEM COMPONENTS**

- MK-62 Sheet Membrane  
6" x 75' (37.5 ft<sup>2</sup> Rolls)  
36" x 75' (225 ft<sup>2</sup> Rolls)

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- MK-70 Shur Deck Metal Lath  
27" x 97"  
OR
- MK-71 Shur Deck Glass Lath  
39.36" x 150'

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- MK-85 Shur Deck Staples  
1" x 5/8" - 10,000 staples per box

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- MK-5 Shur Deck Cement  
50 lb bag

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- MK-40 Mer-Ko Topcoat  
5 gal pail

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- (Optional)
- MK-86 Slip Resistant Additive  
32 ounce container
- MK-6 Shur Deck Fine Cement  
50 lb bag
- MK-80 Mer-Ko Burlap (10" Roll)  
10" x 300' - 250 ft<sup>2</sup>
- MK-25 Mer-Ko Membrane (5 gal pail)
- MK-61 Sheet Membrane Primer (1 gal can)

**BODY COAT**

The Body Coat is applied in two coats. Mix 1 gallon of water to one 50 lb. bag of MK-5 Shur Deck Cement. Blend with a mechanical mixer for 2-3 minutes, until an even consistency is achieved. Trowel the material over the dry membrane surface at a rate of 90 ft<sup>2</sup> per mix. Brush the mixed material onto the flashing and all vertical surfaces where bonding will occur and trowel apply to the entire deck surface as smooth as possible. Allow the first coat to dry for a minimum of 2 hours before applying the second coat. Repeat the process for the 2nd coat as mentioned above. An optional texture coat may be applied on top of the second application of the Body Coat. The Body Coat must be allowed to dry for a minimum of 2 hours at 70°F/50% RH or until dry to the touch before moving to the next step. Remove minor surface imperfections by lightly scraping or sanding. Be sure to remove all debris prior to commencing with the next step.

**TEXTURE COAT (OPTIONAL):**

An optional Texture Coat is prepared by mixing 1 gallon of water with each bag of MK-5 Shur Deck Cement. The Texture Coat is applied to the surface at a rate of 100-150 ft<sup>2</sup> per bag. Allow the Texture Coat to dry a minimum 2 hours at 70°F, 50 percent relative humidity and then sand the surface to produce the desired level of finish. Ensure all dust and debris has been removed. For a smoother Texture Coat, MK-6 Shur Deck Fine Cement may be used in lieu of MK-5. Please refer to the MK-6 Product Specification Sheet for additional information.

**TOPCOAT**

Do not apply if rain is forecast within 48 hours or heavy dew within 24 hours. If multiple batches of MK-40 are present, box all materials prior to use, to ensure color consistency. Use a mechanical mixer at a slow speed and mix material until a homogeneous mixture and color is obtained. The material may be thinned by adding up to a maximum of one quart of water per gallon, for the first coat. For best results, it is not recommended to thin the final coat. Roll two thin applications of MK-40 using a 3/4 inch roller at a rate of 300-350 square feet per gallon. Roll the material in two directions to achieve a uniform finish. Coverage will vary according to texture. For best results, allow MK-40 4-6 hours drying time at 70 degrees before permitting light pedestrian traffic or additional coats are applied. Allow 24 hours to cure before heavy traffic is permitted. Allow 48 hours before heavy objects are placed on the surface and allow 72 hours for vehicular traffic. Allow 5 days prior to any abrasion or chemical exposure.

**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.

**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 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 the Shur Deck system.
- Shur Deck provides moderate chemical resistance. Avoid exposure to harsh chemicals or acids.
- Heavy objects can affect the decking system and result in hairline cracks at the surface of the system. Avoid placing heavy objects on or dragging them across the Shur Deck surface.
- Cementitious materials should be used within 30 minutes, do not re-temper.
- The MK-25 Mer-Ko Membrane should not be exposed for more than 72 hours prior to being covered with the Body Coat.
- 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.
- Do not allow Mer-Ko products to freeze.
- Moisture vapor commonly collects in areas below a vapor barrier, such as the waterproofing membrane of the deck covering system. Vent must be added to help relieve moisture vapor transmission. Please refer to all local building codes regarding venting requirements.

**PHYSICAL CHARACTERISTICS**

Abrasion Resistance (ASTM 1242A, AC-39  
Wheel, 1,000 mg load for 1,000 cycles)  
0.001 inch loss

Adhesion (ASTM C794)  
> 374 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

Tensile Strength (ASTM C190)  
>450 psi

Thickness  
¼ inch

Water Absorption (ASTM D570, AC-39/S4.8)  
Average 9.0%

Weight  
< 2 lbs/ft<sup>2</sup>

Wind Resistance  
80 mph

Freeze/Thaw Cycling (ASTM C67)  
No breakage or weight loss

**CARE & MAINTENANCE**

Shur Deck is designed to provide easy cleanability 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 Shur 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 Shur 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.