

### TOTAL FINISHED THICKNESS

1/16" - 1/8"

### MATERIALS NEEDED

- MK-52 Mer-Ko Epoxy Patch Gel
- MK-72 Mer-Ko Seam Tape
- MK-50 Mer-Ko WB Epoxy
- MK-5 Shur Deck Cement
- MK-40 Mer-Ko Topcoat

### USES/APPLICATIONS

- Driveways
- Walkways
- Patios
- Courtyards
- Entryways
- Pool Decks

### SUBSTRATES

The Concrete Overlay System can be installed over properly prepared concrete substrates.

### SYSTEM DESCRIPTION

Mer-Ko Concrete Overlay System is a series of cementitious coatings that are bonded to the concrete with a variety of optional textures and colors. The Mer-Ko Concrete Overlay System is a decorative topping designed to change plain concrete into a very decorative, durable and textured finish. Mer-Ko Concrete Overlay System was created to resurface exterior concrete. This system can be used to protect existing concrete, increase slip-resistance, as well as transform unsightly or unattractive concrete. Some uses include: driveways, walkways, patios, courtyards, entryways and pool decks.

### ADVANTAGES

- Cost-effective
- Fast drying
- Low maintenance
- Long lasting
- Solvent-free
- Skid-resistant finishes available
- 9 Standard colors
- Attractive
- Low VOC
- Low odor
- Variety of textures and patterns
- Just add water

### 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.

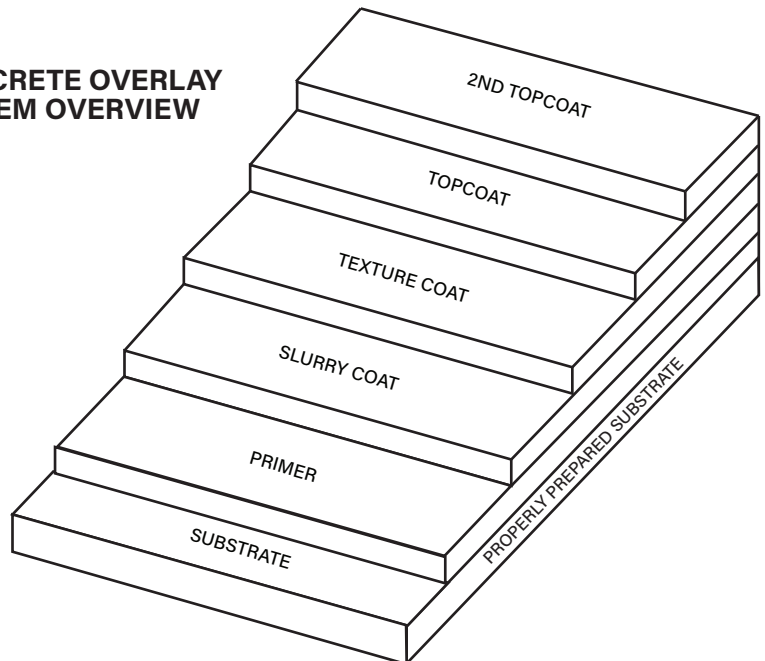
### SKID-RESISTANCE

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.

### CONCRETE OVERLAY SYSTEM OVERVIEW



**COVERAGES**

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

**PRIMER**

MK-50 Mer-Ko WB Epoxy  
250-350 ft<sup>2</sup> / gallon

**SLURRY COAT**

MK-5 Shur Deck Cement  
100-150 ft<sup>2</sup> / 50 lb. bag mix

**TEXTURE COAT**

MK-5 Shur Deck Cement  
150-200 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

**INSTALLATION CONDITIONS**

The Concrete Overlay 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****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 2,500 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 efflorescence, moisture and hydrostatic pressure. If moisture emissions exceed 5 lbs/1000 square feet (ASTM F1869) or if the relative humidity (RH) exceeds 75% (ASTM F2170), please refer to Westcoat's EC-15 Moisture Vapor Barrier Product Specification Sheet.

**PREPARATION**

Pre-cut and clean all cracks and joints with a concrete diamond blade to at least ¼ x ¼ inch. Prepare concrete to a profile equal to CSP 3 as specified by ICRI. Methods may vary according to the thickness of the coating to be applied and the condition and hardness of the concrete. Other factors include the forecasted use of the surface and the environment in which it is to be installed. When preparing the surface, use caution when shot blasting around pools, scarifying too aggressively, leaving grind marks or grinding too smooth.

**CRACK TREATMENT**

Fill cracks with MK-52 Epoxy Patch Gel. MK-72 Seam Tape (3 inch) may also be used to help reinforce, in which case the MK-52 should be placed into the tape and smoothed with a trowel or putty knife. Broadcast fine silica onto the wet epoxy to provide a surface for the Mer-Ko Concrete Overlay System to bond. MK-52 should be allowed to dry completely prior to slurry coat application. This is a remedial approach to patch cracks and there is no guarantee that cracks will not reappear.

**CONCRETE REPAIR**

Minor spawls and patching can be filled with MK-5 Shur Deck Cement. For larger patch work, MK-10 Mer-Ko Underlayment Cement can be used. Please refer to the appropriate Product Specification Sheet for additional information.

**PRIMER**

Premix each component separately. In a clean bucket, mix 2 parts A with 1 part B (by volume) of MK-50 Mer-Ko WB Epoxy. 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. Allow MK-50 to become tacky and trowel slurry coat into tacky primer. Do not let the primer dry and shell over, as this may prevent the slurry coat from properly adhering. Alternatively, you can roll the MK-50. Immediately broadcast 30 grit silica sand to refusal and allow the MK-50 to dry (1-4 hours at 70F degrees). Remove all loose sand prior to installing the slurry coat.

**DECORATIVE CUT PATTERN**

Another way to deal with cracks is to cut a pattern using a crack chaser. While the slurry is being installed, clean out expansion joints and cracks with a margin trowel. Then simply incorporate a pattern of "fake cracks" along with the existing cracks, which create the look of flagstone by cutting with a crack chaser into any pattern you choose.

**SLURRY COAT**

The Slurry Coat consists of 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 slurry mix into the prepped concrete to produce a smooth finish. Each batch will cover 100-150 square feet. Using a brush wet with water, feather all outside edges, seams and expansion joints. Apply the slurry coat continuously, keeping a "wet edge", blending each new mix into the prior mix. Stop only at existing seams in the concrete. After surface is dry, scrape or grind off any ridges or trowel marks. Re-apply slurry as needed to smooth all surfaces, being sure to honor all expansion joints.

**TEXTURE COAT**

The Texture Coat can be applied in a variety of methods and finishes depending on the desired look. Such available finishes include, but are not limited to, knockdown, broom, skip trowel or smooth finish. The Texture Coat is prepared by mixing 1 gallon of water with each bag of MK-5 Shur Deck Cement. Blend with a mechanical mixer for 2-3 minutes, until an even consistency is achieved. If a smoother finish is required, MK-6 Shur Deck Fine Cement can be used in lieu of MK-5. Coverage of the Texture Coat is between 150-200 square feet per batch, depending on the desired texture and finish. If you are unsatisfied with the results, scrape off immediately and re-apply. After the texture has hardened enough to walk on, scrape and/or slightly sand the surface to even out the look and feel of the texture. Vacuum and remove any excess cement dust and debris before proceeding with the Mer-Ko Topcoat.

**SYSTEM COMPONENTS**

- MK-72 Mer-Ko Seam Tape  
100 LF Roll (3"x100')
- MK-50 Mer-Ko WB Epoxy Primer  
1.5 gal kit
- MK-52 Mer-Ko Epoxy Patch Gel  
1/2 gal & 2 gal kits

- MK-5 Shur Deck Cement  
50 lb bag

- MK-40 Mer-Ko Topcoat  
5 gal pail

**(Optional)**

- MK-86 Slip Resistant Additive  
32 ounce container
- MK-6 Shur Deck Fine Cement  
50 lb bag

**TOPCOAT**

The MK-40 Mer-Ko Topcoat is applied in two coats. Thin the 1st coat with 25% water and apply at the rate of 300 ft<sup>2</sup> per gallon. Allow to dry for 2 hours at 70°F, 50 percent relative humidity. The 2nd coat must be applied neat. Apply the second coat of the MK-40 perpendicular to the first at the rate of 200 ft<sup>2</sup> 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 ft<sup>2</sup> 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.

**CAUTIONS & LIMITATIONS**

- Mer-Ko systems are designed for professional installation.
- In freezing climates, sufficient pitch is required to ensure run-off.
- Do not apply at temperatures below 50°F or above 90°F.
- The Concrete Overlay System provides moderate chemical resistance. Avoid exposure to harsh chemicals or acids.
- Heavy objects can affect the system and result in hairline cracks at the surface of the system. Avoid placing heavy objects on or dragging them across the surface.
- Cementitious materials should be used within 30 minutes, do not re-temper.
- Not designed for heavy steel wheeled traffic.
- Protect all finished surfaces that are not intended to receive the overlay system materials.
- Rain will wash away uncured Mer-Ko acrylic products.
- If inclement weather threatens, cover area to protect new application.
- Topcoats/Sealers will make the surface slippery. Please be aware of the texture of the surface and how the topcoat/sealer will affect the look, feel and skid resistance.
- Approval and verification of proposed colors, textures and slip resistance is recommended.

**CARE & MAINTENANCE**

The Concrete Overlay System is designed to provide easy cleanability and low maintenance. To extend the life of the system 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 area. Rinse thoroughly with clean water after scrubbing. Do not use solvents to remove contaminants as this may cause damage to the 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.

The system 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 Concrete Overlay System is not impacted by aesthetic imperfections. Refer to Cementitious Care & Maintenance Instructions for more detailed information on proper care and maintenance.

**PHYSICAL CHARACTERISTICS**

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Thickness  
1/16" - 1/8"

**STORAGE & HANDLING**

Store all 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.

**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.