

## Shur Deck

### Waterproof, Fire-Resistive Roof & Pedestrian Decking



#### APPROVALS

- One-Hour Fire Resistive Rating
- Class A Roofing & Decking System
- ICC-ES - Report No. 5968

#### MATERIAL STANDARDS

- AC 39/Section 4.3
- AC 39/Section 4.8
- ASTM 1242A
- ASTM C109
- ASTM C190
- ASTM C297
- ASTM C67
- ASTM C794
- ASTM D2047
- ASTM D2240
- ASTM D412
- ASTM D570
- ASTM D756
- ASTM E108
- ASTM E119
- MIL-D-3134 (Para. 4.7.6; Para. 3.9, 4.7.4)
- UBC 15-2

#### SPECIFICATION CLASSIFICATIONS

- 07 14 16 Cold Fluid-Applied Waterproofing
- 07 16 13 Polymer Modified Cement Waterproofing
- 07 18 13 Pedestrian Traffic Coatings
- 07 19 00 Water Repellents
- 07 25 00 Weather Barriers
- 07 55 53 Elastomeric Protected Membrane Roofing
- 07 55 56 Fluid-Applied Protected Membrane Roofing
- 09 94 13 Textured Finishing
- 09 94 16 Faux Finishing
- 09 96 13 Abrasion-Resistant Coatings

#### COLOR

Shur Deck is available in 15 standard matte finish colors. Semi-gloss finishes are also available in select colors. Refer to the Shur Deck Color Selection Guide for additional details. Custom colors are available upon request.

Notes: <sup>1</sup>Production run colors may vary from color chart. Printed color charts are as closely representative to actual colors as modern printing technology allows. Final color selection should be made from an actual sample. <sup>2</sup>Custom colors require additional lead time.

#### AESTHETIC FINISHES/TEXTURES

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

#### PRODUCT DESCRIPTION

Shur Deck is a multi-layer, water-based, cementitious roof and walking deck system designed for use over plywood or concrete substrates. This system consists of reinforcing metal lath, neoprene rubber latex resin, cementitious powder filler, flexible latex waterproofing membrane and acrylic sealer. Installed at a 3/16" (4.8mm) finished thickness, this seamless, trowel applied system provides long-term durability and waterproofing protection and prevents cracking over plywood or concrete substrates.

Shur Deck incorporates flashing for drains, vertical surfaces and thresholds. Metal lath reinforcement provides stress relief for thermal expansion and moderate seismic movement. Sloping and integral coving can be incorporated for additional protection against water penetration and pooling and to prevent elevation problems at doorways, landings, steps, etc.

Shur Deck's seamless, flexible, skid-resistant, crack-resistant, waterproofing walking surface offers a wide variety of finish options and textures to ensure maximum design flexibility and aesthetic appeal.

#### USES/APPLICATIONS

- Exterior Flat/Walking Roof Decks
- Observation Decks
- Promenade Decks & Balconies
- Commercial & Residential Pedestrian Traffic Areas
- Walkways, Breezeways & Exterior Corridors

#### ADVANTAGES

- Seamless, monolithic, impermeable membrane
- Excellent adhesion to sound, solid, dry properly prepared plywood or concrete substrates
- Maintains elastomeric properties at high temperatures
- Resists degradation from sun, ozone and weather
- Acceptable for use over occupied space
- Moisture resistant
- Superior chemical resistance to salt spray, oils, fuels and many chemicals
- Excellent resistance to water penetration and carbon dioxide diffusion
- Outstanding long-term durability and performance
- Superior resistance to damage caused by flexing and twisting
- One Hour Fire-Resistive Rating
- Class A Roofing & Decking System
- Solvent-free and environmentally friendly
- Easy to maintain

#### LIMITATIONS

- Not designed for vehicular or heavy steel wheeled traffic
- Sub-surface must be dry before and during application
- Not for use over OSB board
- Cold climate applications require additional technical considerations. Consult Mer-Ko for specific requirements.

#### SKID-RESISTANCE

Additional skid-resistance can be added by broadcasting silica sand or quartz aggregate into the topcoat. Various sieve sizes are available depending upon the level of skid-resistance desired.

Note: <sup>1</sup>A Mer-Ko urethane topcoat must be used when additional aggregate is desired. <sup>2</sup>Skid-resistance and degree of cleanability work inversely. The greater the skid-resistance (i.e., use of larger sized aggregates) the more difficult it is to clean the finished surface.

### PHYSICAL CHARACTERISTICS

<b>Abrasion Resistance</b> .....	0.001 inch loss (ASTM 1242A, AC 39, H-22 Wheel, over MerKo Seal SG Topcoat 1,000 gram load for 1,000 cycles)
<b>Adhesion</b> .....	> 755 psi (ASTM C794) (Burlap reinforced membrane)
<b>Bond Strength</b> .....	Over Plywood, Before Aging .....68 psi (ASTM C297) Over Galvanized Sheet Metal, Before Aging .... 106 psi Over Plywood, After Aging .....98 psi Over Galvanized Sheet Metal, After Aging ..... 127 psi Over Plywood, Freeze/Thaw Exposure ..... 74 psi Over Galvanized Sheet Metal, Freeze/Thaw Exposure ..... 115 psi
<b>Compressive Strength</b> .....	3,500 psi (ASTM C109)
<b>Elongation</b> .....	0.04 ft./ft. (ASTM D412) No visual signs of failure
<b>Freeze/Thaw Cycling</b> .....	No breakage or weight loss (ASTM C67)
<b>Fire Rating</b> .....	ICC-ES Listed (ASTM E108, AC 39/S4.3, UBC 15-2) One-Hour, Class A Fire-Resistive Rated
<b>Indentation Characteristics</b> .....	Complies (MIL-D-3134, Para. 3.9, 4.7.4)
<b>Membrane Value</b> .....	No seepage under water-heads to 115 ft.
<b>Ozone Resistance</b> .....	No visual adverse effects after 30 days exposure
<b>Resistance to Aging</b> .....	400 hours, No visual signs of failure (ASTM D756, AC 39)
<b>Slip Resistance</b> .....	Dry Leather ..... 0.49 (ASTM D2047, MIL-D-3134, Para. 4.7.6) Wet Leather ..... 0.59 Dry Rubber ..... 0.80 Wet Rubber* ..... 0.84 <small>*0.60 or better may be achieved by adding microspheres to the topcoat</small>
<b>Solids Content</b> .....	28% Minimum
<b>Surface Hardness</b> .....	84 (ASTM D2240, Durometer D)
<b>Tensile Strength</b> .....	>625 psi (ASTM C190) (Glassmat reinforced)
<b>Thickness</b> .....	3/16 to 1/4 inch (4.7mm to 6.35mm)
<b>Water Absorption</b> .....	Average 9.0% (ASTM D570, AC 39/S4.8)
<b>Weight</b> .....	<2 lbs./sq. ft.
<b>Wind Resistance</b> .....	80 mph (129 kph)

### CHEMICAL RESISTANCE

Solution	Staining	Crazing	Softening	Delamination	Spalling
Industrial Detergent	1	No	No	No	No
Ammonia Solution	1	No	No	No	No
Hydrochloric Acid	1	No	No	No	No
Chlorine Solution	1	No	No	No	No
Anti-Freeze	1	No	Yes	No	No
Turpentine	1	No	No	No	No
Paint Thinner	1	No	No	No	No
Kerosene	1	No	No	No	No
Salt Solution	1	No	No	No	No

1 = Unaffected 2 = Superficial 3 = Considerable

Any recommendation or suggestion relating to the use of MER-KO products made via current technical literature, marketing materials, application guides, specifications, and the like, or in response to specific inquiry or otherwise, is based on data believed to be reliable. However, the products and information are intended for use by Buyers having requisite skill and know-how in the industry. Therefore, it is the responsibility of the Buyer to satisfy the necessary requirements of suitability of the products for its own particular use, and it shall be deemed that Buyer has done so, at its sole discretion and risk. Variation in environment, changes in procedures of use, or extrapolation of data may cause unsatisfactory results. Mer-Ko believes the information contained herein is true and accurate as of the date of publication. Information contained here is for evaluation only. Mer-Ko reserves the right to modify and/or change products or literature at any time and without prior notice.

Mer-Ko  
A ParexLahabra, Inc. Brand  
4125 E. La Palma, Suite 250  
Anaheim, CA 92807

**Sales & Service (800) 851-6303 • (323) 775-2461**  
**Technical Help • (866) 516-0061**

Phone: 714-778-2266  
Fax: 714-774-2079  
infomer-ko@parexlahabra.com, email  
www.parexmer-ko.com, web site

### INSTALLATION STEPS – OVERVIEW

- Clean and properly prepare the plywood or concrete substrate.
- Install expanded metal lath over the entire deck area using butted seams and staples. Metal lath should overlap all metal flashing with lath edge a maximum of two inches (2") from termination perimeter.
- Trowel apply one bondcoat of Shur Deck Compound mixed with water to completely cover the metal lath. Minimum finished thickness is 1/8 inch (1.6mm). Allow two (2) hours minimum for cure. Elevated humidity conditions will require a longer cure time.

*Note: For concrete applications, eliminate the metal lath and Shur Deck Compound application. Instead, prime the concrete using one primer coat mix of Shur Deck Compound wetted out to a slurry mixture over the entire horizontal substrate. Ensure all flashings and drains are well coated. Allow a 4-6 hour cure time. Elevated humidity conditions will require a longer cure time.*

- Trowel apply Shur Deck Waterproofing Membrane over the cured bondcoat/primer coat while embedding Glassmat Type II or synthetic burlap (Type III Fabric) into the wet Membrane. Immediately follow with a second trowel application of Waterproofing Membrane to completely saturate the fabric. Each coat of Waterproofing Membrane should be applied at 1/16 inch (1.6mm) minimum thickness. Cure time between coats is one (1) hour minimum.

*Note: Apply the membrane/fabric/membrane layers in small sections working across and off the deck surface. This will reduce installation time and minimize the opportunity for wet material to be tracked off of the deck and require additional clean-up.*

- Trowel apply a bodycoat of Shur Deck Compound over the Waterproofing Membrane at a minimum finished thickness of 1/16 inch (1.6mm). Allow one (1) hour minimum cure time.
- If an aesthetic texture coat is desired, apply Shur Deck Compound with a hopper gun and flatten with a trowel for a 'knock-down' finish, or use other finishing techniques and patterns as desired.
- Roller finish with two coats of Mer-Ko Seal Satin, Mer-Ko Seal SG or Mer-Thane Sealer in the desired color for added aesthetic appeal.

*Note: Silica sand or quartz aggregate can be broadcast into the topcoat to provide additional texture and increased skid-resistance. A urethane topcoat must be used when additional aggregate is desired.*

### WARRANTY

Five (5) and ten (10) year warranties are available, in addition to a five (5) year extension program, depending upon product selection, project design and customer warranty needs. Contact Mer-Ko's Customer Service Department for specific warranty information.

### TECHNICAL ASSISTANCE

Specification assistance is highly recommended during the initial design process to ensure the most effective engineering details and product selection for long-term durability and protection. Technical assistance for all product and application questions is available by contacting your local Mer-Ko Representative at (800) 851-6303.