

Auto Deck Waterproof Vehicular Traffic Deck Surfacing



MATERIAL STANDARDS

- ASTM C109
- ASTM C794
- ASTM D2047
- ASTM D2240
- ASTM D4060
- ASTM D638
- ASTM E108
- ASTM G23
- MIL-D-3134 (F; Para. 4.7.6)

SPECIFICATION CLASSIFICATIONS

- 07 14 16 Cold Fluid-Applied Waterproofing
- 07 16 13 Polymer Modified Cement Waterproofing
- 07 18 13 Pedestrian Traffic Coatings
- 07 18 16 Vehicular Traffic Coatings
- 07 19 00 Water Repellents
- 07 55 53 Elastomeric Protected Membrane Roofing
- 07 55 56 Fluid-Applied Protected Membrane Roofing

COLOR

Auto Deck is available in 8 standard colors. Consult the Mer-Thane 300/310 Color Selection Guide for additional details. Custom colors are available upon request.

Notes: ¹Production 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. ²Custom 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

Auto Deck is a multi-layer, water-based, elastomeric decking and roofing system that provides seamless, synthetic-latex waterproofing membrane protection and superior durability and weatherability using a high-performance, neoprene rubber latex cement mortar and urethane topcoat. This integral system is designed to provide superior positive side waterproofing, concrete substrate protection and aesthetics for light to heavy vehicular traffic applications and heli-pad operations that require protection from common environmental conditions (i.e., moisture and heat). Auto Deck also offers resistance to common petroleum based chemicals typically found in vehicular traffic, heli-pad and machine/equipment maintenance environments (e.g., oil, brake fluid, transmission fluid).

Integral coves can be incorporated to provide additional waterproofing protection and easy cleanability. The use of Mer-Ko's Mer-Thane topcoat, a high-performance urethane sealer, provides long-term durability and aesthetic appeal using standard and custom color options that enhance any design motif or safety marking requirements.

Auto Deck installs at a minimum 1/8" to 3/16" (3.2mm to 4.7mm) finished thickness and is designed for use over properly prepared new or existing concrete substrates. Mortar layers can be sloped for additional drainage and protection against water pooling and penetration and to prevent elevation problems at doorways, landings, steps, elevator shafts, etc.

Auto Deck incorporates membrane flashing for drains, vertical surfaces and thresholds. A wide variety of finishing techniques and textures can be used to provide additional skid resistance and enhanced aesthetics.

USES/APPLICATIONS

- Multi-Level Parking Structures/Vehicular Parking Areas
- Heli-Pads
- Commercial Ferry Decks
- Exterior Flat/Walking Roof Decks
- Recreational Roof Decks
- Transportation Vehicle & Equipment Maintenance Areas
- Marine Dry Dock & Refurbishment Areas
- Decorative Exterior Positive Waterproofing Applications

ADVANTAGES

- Seamless, monolithic waterproofing membrane system
- Excellent adhesion to sound, solid, dry substrates
- Can be installed over new and existing surfaces
- Maintains elastomeric properties at high temperatures
- Resists degradation from sun, ozone and weather
- Superior chemical resistance to oils, fuels and many chemicals
- Outstanding long-term durability and performance
- Superior resistance to damage caused by flexing and twisting
- One-Hour Fire Resistance Rating
- Class A Fire-Retardant Roofing System

LIMITATIONS

- Will not bridge seismic cracks or wide construction joints
- Substrate must be dry before and during application
- 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.

Notes: ¹A Mer-Ko urethane topcoat must be used when additional aggregate is desired. ²Skid-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

Abrasion Resistance	0.001 gram loss (ASTM D4060, H-22 Wheel, 1,000 gram load for 1,000 cycles)
Adhesion	> 650 psi (ASTM C794) (Burlap reinforced membrane)
Compressive Strength	3,500 psi (ASTM C109)
Elongation	0.22 ft./ft. (ASTM D638)
Fire Rating	One-Hour Fire Resistive (ASTM E108) Class A Fire-Retardant Rated
Indentation Characteristics	Complies (MIL-D-3134 F)
Membrane Value	No seepage under water-heads to 115 ft.
Ozone Resistance	No visual adverse effects after 30 days exposure
Resistance to Aging	400 hours, No visual signs of failure (ASTM G23, AC 39)
Coefficient of Friction	0.08 (ASTM D2047, MIL-D-3134, Para. 4.7.6)
Solids Content	28% Minimum
Surface Hardness84 (ASTM D2240, Shore D)
Tensile Strength	>625 psi (ASTM D638) (Glassmat reinforced)
Thickness	1/8 to 3/16 inch (3.2mm to 4.7mm)
Weight	2.0 to 2.75 lbs./sq. ft.

INSTALLATION STEPS – OVERVIEW

1. Clean and properly prepare the substrate.
2. Brush apply a primer coat using a mix of ARC Emulsion and ARC Membrane Filler along the perimeter flashing and over the entire horizontal deck substrate.
3. Prepare the deck perimeter flashing by brush applying Auto Deck Waterproofing Membrane to the flashing, followed by embedded 10” Synthetic Burlap (Type III Fabric). Immediately saturate with a second coat of Auto Deck Waterproofing Membrane.
4. Trowel apply Auto Deck Waterproofing Membrane over the primer coat while embedding Type III Fabric (synthetic burlap) into the wet Membrane. Immediately follow with a second trowel application of Waterproofing Membrane to completely saturate the fabric.

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.
5. Trowel apply two (2) coats of Auto Deck Bodycoat Powder mixed with Auto Deck (WD) Emulsion to create a highly flexible, durable rubber wearing surface.
6. Rough sand or lightly trowel scrape any surface imperfections.
7. Apply one smoothing coat of Auto Deck Membrane Filler mixed with Auto Deck (WD) Emulsion to create an easy to maintain surface.
8. Lightly sand the surface and sweep away any residual dust.
9. Apply the first Mer-Thane topcoat in the desired color by squeegee or trowel and backroll using a 1/4” nap roller. While the topcoat is still wet, broadcast the desired silica sand or quartz aggregate into the wet topcoat.
10. Apply the second Mer-Thane topcoat in the same manner as the first ensuring full coverage of the broadcast aggregate by the topcoat liquid.

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.

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.