

westcoat

SYSTEM SPECIFICATION

Shur Deck

over Concrete

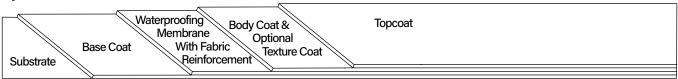
Description

Shur Deck (over Concrete) is a multi-layer, cementitious walking deck system designed for use over concrete substrates. This system consists of cementitious filler, reinforced flexible latex waterproofing membrane and acrylic sealer. Installed at a minimum ³/₁₆ inch finished thickness, this seamless, trowel applied system provides long term durability and waterproofing protection over concrete substrates.

Uses

The Shur Deck System is designed for exterior walking roof decks, observation decks, promenade decks and balconies, all pedestrian traffic areas and walkways and breezeways.

System Overview



| System Data | | | | | | |
|---------------|---|--|---|--|--|--|
| Coverages | Base Coat 80-90 ft ² per mix | WP Membrane WP-95: 100-150 ft² per gal (Under WP-45) WP-45: 300LF/Roll WP-95: 50 ft² (Above) | Body Coat (2 coats) 1st coat: 80-90 ft² per mix 2nd coat: 80-90 ft² per mix | Texture Coat (optional) 100-150 ft ² per mix | Top Coat (2 coats) 1st coat: 300-350 ft² per gal 2nd coat: 300-350 ft² per gal | |
| | | | Shelf Life | | | |
| Components | EC-72 Ep | oxy Patch Gel | 2 years | ER-517 | | |
| | WP-47A Seam Tape | | 1 year | | | |
| | TC-11 Dry | Polymer Basecoat Ceme | <u>ent</u> 1 year | | IAPMO | |
| | <u>WP-53 H</u> | <u>ybrid Sealant</u> | 1 year | ES ® | | |
| | | ashing Fabric | Indefinite | | | |
| | <u>WP-95 W</u> | <u> /aterproofing Membrane</u> | 1 year | | | |
| | | ri-Directional Fiberglass | 5 years | | | |
| | SC-10 Ac | rylic Topcoat | 2 years | | | |
| Certification | Class A Meets A | IAPMO Evaluation Report ER-517 Class A Fire-Retardant Roofing System Meets AC39 Standards for Walking Deck Meets 2023 City of Los Angeles Building and Residential Code (LABC & LARC) | | | | |





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Advantages

Seamless, Monolithic Membrane • 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 • Class A Fire-Retardant System

Inspection

Concrete must be a minimum of 2 inches thick. It must be clean, dry and free of grease, paint, oil, dust, curing agents, laitance 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 curing time is required on all concrete. Slope must be a minimum of ¼ inch per linear foot. Decks should meet local building code.

Moisture

All concrete should be tested for moisture before applying a seamless coating. If moisture emissions exceed 4% by weight using a concrete moisture meter (ASTM F2659) or if the relative humidity (RH) exceeds 75% (ASTM F2170), please refer to the EC-15 Moisture Vapor Barrier Product Specification Sheet.

Preparation

Concrete shall be prepared by water blasting, grinding or shot blasting as required to produce a clean, sound substrate, equal to a minimum CSP 3 per ICRI. All holes shall be cleaned and filled with TC-11 Dry Polymer Basecoat Cement or TC-30 Slope Mix. All high spots shall be removed by chipping or grinding. Concrete control joints shall meet local building codes and comply with industry standards.

Concrete Expansion Joints

Moving expansion joints should be honored and filled with a 2 part urethane sealant (approved by Westcoat). Sides of joints should be cleaned and applied per joint sealant manufacturer's recommendation after the Shur-Deck process is completed.

Concrete Seams and Cracks

Cracks greater than $\frac{1}{32}$ inch should be routed out $\frac{1}{4}$ x $\frac{1}{4}$ inch. Install WP-47A Seam Tape over all cracks and seams. Apply Mer-Ko EC-72 Epoxy Patch Gel into the tape with a trowel or putty knife to smooth and broadcast with 30 grit silica sand to allow adhesion of the coating. Allow 3-4 hours for the EC-72 to cure, before the next coat. This is a remedial approach to patch cracks and there is no guarantee that cracks will not reappear.

Flashing

Flash at the junction of the wall and deck using 4 x 6 inch flashing. Flash the fascia with 2 x 4 inch drip edge flashing. Use a minimum of 26-gauge bonderized sheet metal. Flashing for concrete should be set in a bed of Westcoat's EC-72 and nailed only as needed. The vertical portion of the wall to deck flashing should be nailed at all studs, after the epoxy base has cured. Overlap all seams at least 4 inches. Caulk between overlapped flashing as well as the seam with WP-53 Hybrid Sealant. (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).





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Primer Requirements

Priming is not required over properly prepared concrete. Surface should be saturated surface dry (SSD) with no standing water present when applying material.

Base Coat

The Base Coat consists of 1 gallon of water to one 50 lb. bag of TC-11 Dry Polymer Basecoat Cement. Blend with a mechanical mixer for 2-3 minutes, until an even consistency is achieved. Trowel the material over the properly prepared concrete at a rate of 80-90 ft² per mix. The minimum thickness of the Base Coat should be 1/16 inch thick. Brush the mix smoothly onto the flashing and all vertical surfaces while applying the Base Coat to the horizontal surface. The Base Coat must be allowed to dry for a minimum of 8 hours at 70F degrees/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.

Waterproofing Membrane with Fabric Reinforcement (Flashing)

Install WP-45 Flashing Fabric to all vertical flashings. Apply a coat of WP-95 Waterproofing Membrane onto the vertical surface and onto the adjacent horizontal surface by using a brush or roller at a rate of 100-150 square feet per gallon. Immediately embed the WP-45 fabric, fuzzy side down, into the wet WP-95 overlapping successive runs of fabric edges and ends, a minimum of 2 inches. Apply a coat of WP-95 at a coverage rate of 50 square feet per gallon over the WP-45. Make sure the fabric is fitted tightly in corners and around protrusions. Apply additional WP-95 as necessary over the fabric areas to ensure positive waterproofing is completely covering the fabric. The waterproofing membrane should be a minimum of 20 mils DFT.

Waterproofing Membrane with Fabric Reinforcement (Deck)

Install the WP-48 Tri-Directional Fiberlath to the horizontal surfaces. Roll out the WP-48 and cut to size. Lay the lath "curl side" down over the Base Coat. Overlap successive runs of WP-48 edges and ends a minimum of 2 inches. Pour the WP-95 Waterproofing Membrane onto the WP-48 and spread smooth with a trowel and back roll, completely covering the WP-48. The coverage rate of the WP-95 in this application is 65 square feet per gallon. Apply additional WP-95 as necessary over areas to ensure positive waterproofing. Once dry to the touch, apply an additional coat of WP-95 over the entire surface at a rate of 150 square feet per gallon by trowel or roller. Allow final coat to fully dry before applying the Body Coat, ~24 hours. Applications in elevated or high humidity will require additional dry time. Waterproofing Membrane shall be a total of 15 mils (DFT).

DISCLAIMER: PURCHASER'S SOLE AND EXCLUSIVE REMEDY AGAINST THE MANUFACTURER OF WESTCOAT, SHALL BE LIMITED SOLELY TO THE





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Body Coat

The Body Coat is applied in two coats. Mix 1 gallon of water to one 50 lb. bag of TC-11 Dry Polymer Basecoat 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 80-90 square feet 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 TC-11 Dry Polymer Basecoat Cement. The Texture Coat is applied to the surface at a rate of 100-150 square feet per bag. Allow the Texture Coat to dry a minimum 2 hours at 70F degrees, 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, TC-12 Shur Deck Fine Cement may be used in lieu of TC-11. Please refer to the TC-12 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 SC-10 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 SC-10 using a 3/8-1/2 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 SC-10 4-6 hours drying time at 70F 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. Allow 5 days prior to any abrasion or chemical exposure.

Optional Materials

Skid Resistance

- CA-29 Mini Safe Grip, CA-30 Small Safe Grip or CA-31 Large Safe Grip can be added to the SC-10 Acrylic Topcoat for added skid resistance.
- * Please refer to Product and System Specification Sheets for additional information.

Clean Up

Uncured material can be removed with soap and warm water. If cured, material can be removed mechanically or with an environmentally-safe solvent.





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Maintenance

Exterior surfaces can be swept daily with water and a broom. For tougher dirt or grease, use degreaser diluted with water 20:1 and a soft bristle brush or broom. Be sure to rinse well. To remove calcium or lime build up, brush diluted 100 grain vinegar onto the surface; be sure to rinse any residue. The Merko System should be inspected for wear every 2 to 4 years. The system should be resealed with the appropriate Westcoat sealer every 3 to 5 years depending upon traffic and UV exposure. Contact the original installer of Westcoat for complete re-coating instructions.

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.

Solvent based products are extremely flammable, extinguish all pilot lights and sources of ignition such as electrical motors. Be sure to have adequate cross ventilation prior to installing.

Limitations

- This system is designed for professional use only.
- Read Product Specification Sheets for every product you will be using before beginning the project.
- Do not apply at temperatures below 50°F or above 90°F.
- 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 Shur Deck Pro system.
- Concrete substrates must have a minimum compressive strength of 3,000 psi tested by "point loading" technique.
- Shur Deck System 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 Pro surface.
- Cementitious materials should be used within 30 minutes, do not re-temper.
- The Waterproofing 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 Westcoat 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 Westcoat products to freeze.





RELIABLE MOISTURE BARRIERS

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Slip Precaution

Westcoat Specialty Coatings Systems 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. Westcoat 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.

Test Data

| Test | Results | |
|--|--|--|
| 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 | |
| Fire Rating Class A Fire-Retardant Rated | ASTM E-108 | |
| Ozone Resistance - 30 day exposure | No visual adverse effects | |
| Resistance to Aging (ASTM G23, AC 39) | 2,000 hours No visual signs of failure | |
| Tensile Strength (ASTM C190) | >450 psi | |
| Thickness | 3/16 inch | |
| Water Absorption(ASTM D-570, AC 39/S4.8) | Average 9.0% | |
| Weight | <2 lbs/ft² | |
| Wind Resistance | 80 mph | |
| Freeze/Thaw Cycling (ASTM C67) | No breakage or weight loss | |

