westcoat®

SYSTEM SPECIFICATION

WP WATERPROOF
RELIABLE MOISTURE BARRIERS

Shur Deck over Plywood

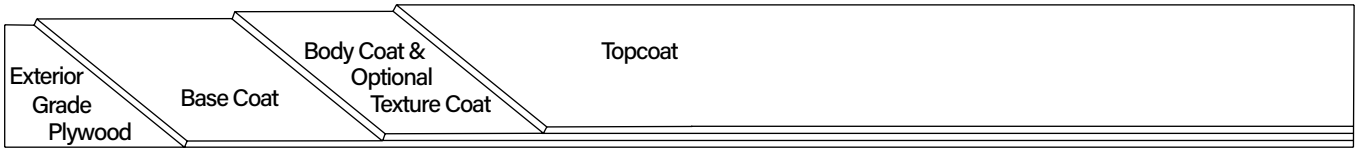
Description

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. The Shur Deck System is finished with a high-solids, pigmented acrylic sealer which provides long-term protection of the system from UV degradation, offering aesthetic appeal and enhanced design flexibility.

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	Body Coat (2 coats)	Texture Coat (optional)	Top Coat (2 coats)
	30-45 ft² per mix	1st coat: 80-90 ft² per mix 2nd coat: 80-90 ft² per mix	100-150 ft per mix	1st coat: 300-350 ft² per gal 2nd coat: 300-350 ft² per gal

Components		Shelf Life
	WP-53 Hybrid Sealant	1 year
	WP-25 Metal Lath	Indefinite
	or	
	WP-30 Westcoat Glass Lath	5 years
	WP-40 Sheet Membrane	1 year
	WP-10 Staples	Indefinite
	TC-11 Dry Polymer Basecoat Cement	1 year
	SC-10 Acrylic Topcoat	2 years

ER-517
IAPMO ES ®

Certifications

IAPMO Evaluation Report ER-517
Class A Fire-Retardant Roofing System
One-Hour Fire Resistance Rating
Meets 2023 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

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Advantages
Seamless, Monolithic Membrane ▪ 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 ▪ One-Hour Fire Resistance Rating ▪ Class A Fire-Retardant System

Inspection
For installation of the Shur Deck system, plywood must be a minimum of ⅝ inch (¾ inch preferred) CDX or exterior grade. For applications over pressure-treated lumber, please contact your Westcoat Representative prior to application. Slope must be a minimum of ¼ 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.

Flashing
Install a minimum 26 gauge, bonderized, 4″x 6″ wall-to-deck flashing where the deck meets the wall. Place the 6-inch side up the vertical wall and 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 flashings seams and overlaps using 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).

Sheet Membrane
Westcoat requires the installation of 6 inch WP-40 Sheet Membrane to all plywood seams for reinforcement. For maximum protection, WP-40 36 inch, can be applied to the entire deck. WP-40 may also be installed behind or on top of the flashing as a backup waterproofing measure. For increased adhesion, WP-43 Sheet Membrane Primer may be used prior to applying the Sheet Membrane. WP-40 may not be left exposed to the sun for more than 7 days. See WP-40 Sheet Membrane and WP-43 Sheet Membrane Primer Product Specification Sheets for additional information.

Metal or Glass Lath
The Shur Deck System can be installed with either the WP-25 Metal Lath or WP-30 Westcoat Glass Lath. For maximum protection against corrosion, WP-30 Westcoat Glass Lath should be used in lieu of WP-25. 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 ½ inch from all deck edges, leaving ½ inch of flashing exposed. With the lath in place, start in the center working your way out. Staple the lath with WP-10 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 WP-30, ensure that the lath is secured properly to the plywood. This is especially true at all overlaps and edges. See WP-30 Westcoat 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 TC-11 Dry Polymer Basecoat 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 40-45 square feet per batch. Please note, if using WP-30 Westcoat 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, Flashing Fabric can be applied over the base coat. Install WP-45 Flashing Fabric to all vertical flashings. Apply a coat of WP-95 Waterproofing Membrane onto the vertical surface of 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 Flashing 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. Allow the Flash Wrap to dry for 4-6 hours before proceeding with the Body Coat.

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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 ¾ 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 and allow 72 hours for vehicular traffic. 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.

Deck Drain
- If a drain is required, Westcoat's WP-35 ALX™ Deck Drain may be installed between the Sheet Membrane and Metal Lath steps in the application instructions. Please read the WP-35 ALX™ Deck Drain Product Specification Sheet for detailed instructions.

* 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.

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.
- Westcoat 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 Shur Deck system.
- 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 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.
- 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.

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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	¼ inch
Water Absorption(ASTM D-570, AC 39/S4.8)	Average 9.0%
Weight	<2 lbs/ft^2
Wind Resistance	80 mph
Freeze/Thaw Cycling (ASTM C67)	No breakage or weight loss