Description
Westcoat's Solar Reflective Finish System is a series of polymer-modified, white cementitious coatings that are bonded to the concrete or applied over Westcoat's ALX™ and MACoat™ Systems, then sealed with Westcoat's Solar Reflective SC-10 Acrylic Topcoat. The Solar Reflective Finish System meets the requirements of California Title 24 and can be installed with various textures and patterns that will work in many different applications.

Uses
The Solar Reflective Finish System was created to meet the Cool Roof requirements of California Title 24. Some uses include driveways, walkways, patios, courtyards, entryways, roof decks and pool decks. The Solar Reflective Finish System can be installed in both the commercial and residential environment.

System Overview

System Data

<table>
<thead>
<tr>
<th>Coverages</th>
<th>Primer</th>
<th>Slurry Coat</th>
<th>Texture Coat</th>
<th>Top Coat</th>
<th>2nd Top Coat</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>200-300 ft² per gallon</td>
<td>150-300 ft² per batch</td>
<td>200-300 ft² per batch</td>
<td>200-400 ft² per gallon</td>
<td>200-400 ft² per gallon</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Components</th>
<th>WP-47-3 Seam Tape</th>
<th>EC-72 Epoxy Patch Gel</th>
<th>TC-1W White Basecoat Cement</th>
<th>TC-2 Smooth Texture Cement</th>
<th>WP-81 Cement Modifier</th>
<th>SC-10 Acrylic Topcoat (SR Tan or SR Gray)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shelf Life</td>
<td>1 year</td>
<td>2 years</td>
<td>1 year</td>
<td>1 year</td>
<td>2 years</td>
<td>2 years</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Restrictions</th>
<th>Minimum System Thickness</th>
<th>&gt;50 mil</th>
</tr>
</thead>
</table>

Advantages
Meets California Title 24 Requirements • Solar Reflective Topcoat • Cost Effective • Fast Drying • Low Maintenance • Long Lasting • Attractive • Can be Installed Solvent Free • Variety of Textures and Patterns
Inspection
Substrate 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. Prior to starting work, test existing concrete slab for efflorescence, moisture and hydrostatic pressure.

Moisture
All concrete should be tested for moisture before applying a seamless coating. If moisture emissions exceed 5 lbs/1000 square feet (ASTM F1869) or if the relative humidity (RH) exceeds 75% (ASTM F2170), contact the manufacturer before application.

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. The Solar Reflective Finish can be incorporated with Westcoat’s ALX™ and MACoat™ Systems. When used with these systems, TC-1W “White” cement must be used in lieu of TC-1 “Gray” cement for the Base Coat and Slurry Coat steps. Once the Slurry Coat has dried, proceed directly to the “Texture Coat” portion of this specification. Priming is not typically required for use with the ALX™ and MACoat™ Systems. Please refer to these system specification sheets for additional information.

Crack Treatment
Fill cracks with EC-72 Epoxy Patch Gel. WP-47-3 (3 inch seam tape) may also be used to help reinforce, in which case the EC-72 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 Solar Reflective Finish to bond. EC-72 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.

Free Style 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. The Free Style Pattern is only applicable to on grade applications and should not be used with the ALX™ or MACoat™ Systems.

Primer
Mix four gallons of water with one gallon of WP-81 (4 to 1 ratio for a total of 5 gallons) and apply it at a rate of 200-300 square feet per gallon. Roll or spray WP-81 primer over the area to be textured. Only prime areas to be coated the same day. For best results, prime and trowel into damp WP-81 primer.
Slurry Coat
Create the slurry coat by adding one gallon of WP-81 Cement Modifier and up to ½ gallon of water into a clean mixing bucket and add one bag of TC-1W White Basecoat Cement. Mix until uniform with a mechanical mixer at a low rpm. Trowel the slurry mix into the damp primer over the surface to achieve a smooth finish. Each batch will cover 150-300 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
Pour one gallon of WP-81 Cement Modifier in a clean mixing bucket and add one bag of TC-2 Smooth Texture Cement. Mix thoroughly with a low rpm drill motor. Add up to ½ gallon of water to achieve the desired consistency. Make sure to use the exact same amount of water for each mix and combine completely to maintain consistent color and texture. Pour the mix onto the surface to be textured. Trowel the area with a rounded pool trowel to create a semi-smooth finish. Wipe the trowel clean with a wet rag as needed. Trowel consistently and continuously, being sure to keep a wet edge. Make sure to trowel the entire surface the same way throughout the project. Coverage of the texture coat is between 200-300 square feet per batch. An additional Texture Coat may be applied as needed to help ensure an even finish.

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. A floor buffer with 80-100 grit sand paper is helpful for large areas. Be careful to sand or buff consistently and not to damage the texture. Vacuum, sweep and wash off the excess cement dust and debris.

Topcoat
Mix all containers of SC-10 Solar Reflective Acrylic Topcoat to ensure a consistent color. Roll two thin applications of SC-10 SR using a ¾ inch roller at a rate of 200-400 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 SR 4-6 hours drying time at 70 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.
Optional Materials
Primer
• EC-11 Water-Based Epoxy Primer can be used as a primer in place of WP-81 for maximum adhesion.
Skid Resistance
• CA-30 Small Safe Grip or CA-31 Large Safe Grip can be added to the final coat of SC-10 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.

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 Solar Reflective Finish System should be inspected for wear every 2 to 4 years. The system should be resealed with the appropriate Westcoat Topcoat or clear 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.

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.
• 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 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.
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

<table>
<thead>
<tr>
<th>Test</th>
<th>Texture-Crete® Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bond Strength to Concrete (ASTM C297)</td>
<td>278 PSI</td>
</tr>
<tr>
<td>Bond Strength after accelerated aging (ASTM C756)</td>
<td>249 PSI</td>
</tr>
<tr>
<td>Abrasion Test (ASTM D1242)</td>
<td>11% reduction</td>
</tr>
<tr>
<td>Freeze thaw on concrete (ASTM C67)</td>
<td>171 PSI</td>
</tr>
<tr>
<td>Concentrated Load (AC39)</td>
<td>No apparent damage</td>
</tr>
<tr>
<td>Water absorption (ASTM D570)</td>
<td>6.5%</td>
</tr>
<tr>
<td>Percolation Test (AC39 Sect. 4 G)</td>
<td>.25 Inches</td>
</tr>
<tr>
<td>Tensile Strength (ASTM C190-85)</td>
<td>855 PSI</td>
</tr>
<tr>
<td>Compressive Strength (ASTM C109-88)</td>
<td>5690 PSI</td>
</tr>
<tr>
<td>Flexural Strength</td>
<td>1835 PSI</td>
</tr>
<tr>
<td>Impact Strength</td>
<td>22 in/lbs</td>
</tr>
</tbody>
</table>