Description
The Nano Stain Grind & Seal System is a process of grinding the concrete and applying Westcoat’s Nano Stain and SC-65 WB Gloss Polyurethane Sealer. Nano Stain is a semi-transparent, decorative concrete stain. Nano technology allows for deeper penetration into concrete substrates. SC-37 allows for an easy, one-step application to safely stain. There are no caustic ingredients and unlike acid stain, there is no need for neutralizing or rinsing and the stain is low in VOC, making it a more environmentally friendly system. The stain is then sealed for protection.

Uses
The Nano Stain Grind & Seal System is designed to create a stained effect on existing concrete floors with high to low gloss sealer options. This system is used primarily on interior projects including showrooms, restaurants, cafes, breweries, wineries, offices and hotels. This is a light duty system, designed for residential interior floors with light foot traffic. The standard sealer in this system is SC-65G, which is suitable for medium duty traffic areas. If a light to medium duty sealer is acceptable, EC-11 may be used in lieu of SC-65G. Alternative sealer options EC-32 and SC-65SG are suitable for medium duty traffic areas. For medium to heavy duty traffic areas, EC-95 or EC-96 may be used in lieu of SC-65G.

System Overview

System Data

<table>
<thead>
<tr>
<th>Coverages</th>
<th>Nano Stain</th>
<th>Sealer</th>
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<tbody>
<tr>
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<td>400-800 ft² per gallon</td>
<td>300-500 ft² per gallon</td>
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<tr>
<th>Components</th>
<th>Shelf Life</th>
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<tbody>
<tr>
<td>SC-37 Nano Stain</td>
<td>3 years</td>
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<tr>
<td>SC-65G WB Gloss Polyurethane Sealer</td>
<td>1 year</td>
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Advantages
Water-Based • Low Odor • Durable • Deep Penetrating • No Rinsing Needed • Easy to Use • Colors Can be Blended • Can Be Sealed With Both Solvent and Water-Based Sealers • Can Be Applied Over Many Other Acrylics • Low or High Gloss Sealers
Inspection
Concrete 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.

Concrete Patch
Before or after grinding, the concrete can be patched with TC-29 Concrete Patch. In a clean, dry bucket add four parts TC-29 Concrete Patch to one and a half parts water (by Volume) or a ten pound bag to 40-50 ounces of water, depending on the desired consistency. Mix thoroughly for 1-2 minutes with a low rpm drill. Allow 2-4 hours at 72 degrees before grinding. Cracks, spalls, holes and pits should be overfilled and allowed to dry properly. This remedial approach to patch cracks is not guaranteed and it should be noted that when the substrate moves, the crack may reappear. Repaired areas will be visible.

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.

Concrete Repair
For concrete that needs repairs beyond just dormant cracks, TC-23 Mortar Mix can be used. TC-23 is designed to be used as a general concrete repair mix for horizontal and vertical applications and can be used as a patching/underlayment material under most Westcoat systems. Please refer to the TC-23 Mortar Mix Product Specification Sheet for details.

Preparation
Prepare surface by diamond grinding with 60-80 grit tools to achieve a clean, uniform, porous surface that is able to absorb water. Prior to starting work, test existing concrete slab for efflorescence, moisture and hydrostatic pressure. Vacuum surface entirely and ensure that any dust or contaminates are removed, as these will deter adhesion.

Applying Product
SC-37 Nano Stain can be thinned using water as needed. Thinning will affect the depth and intensity of the color. For general use, thinning and applying multiple coats is recommended. A test panel or mock-up should be performed, prior to the application. If different batches or more than one container of SC-37 are to be used, all material should be boxed or mixed together prior to application. All material should be shaken before use and should be shaken periodically during use. Nano Stain can be strained or filtered before application, if needed. SC-37 may be applied using a pump sprayer, airless sprayer, broom or other application methods depending on the desired look. Prior to application, a mock-up should be performed to verify the desired color and effect. Do not apply when temperature is below 50F degrees or above 90F degrees. The surface may be dampened with water before applying the stain. SC-37 should be applied in light applications. A fine mist of stain or water can be applied, should brush or broom marks appear. Different colors may be applied at the same time for a variegated finish. Recoat in ½ to 1 hour at 70F degrees, if needed.
Sealer
Pre-mix each component of SC-65G separately. In a clean bucket, mix 3 parts A with 1 part B (by volume) of SC-65G Water-Based Gloss Polyurethane Sealer. Mix thoroughly with a low speed (200-300 rpm) drill motor for 2-3 minutes. Make sure to scrape the sides and bottom of the container during mixing. Immediately after mixing, apply the SC-65G onto the substrate at a rate of 300-500 square feet per gallon. SC-65G can be sprayed or rolled. For best results, spray SC-65G neat, with an airless sprayer. SC-65G may be applied with a squeegee and back rolled with a ¼ to ⅜ inch, high-quality, non-shedding roller cover, being sure to maintain a wet edge. Alternatively, SC-65G can be applied with a dip and roll method, as desired.

Sealer Dry Time
Allow 12-18 hours at 70 degrees between coats and 24 hours before light foot traffic. Normal foot traffic may be permitted after 48 hours. For vehicular traffic, allow a minimum of 72 hours. See Individual Product Specification Sheet on each sealer for accurate dry times.

Clean Up
Uncured material can be removed with soap and warm water. If cured, material can only be removed mechanically.

Optional Materials
Concrete Patch
- TC-29 Concrete Patch can be used to fill cracks, spalls, holes and pits.
Cement Options
- TC-23 Mortar Mix may be used as a general concrete repair mix for horizontal and vertical applications and can be used as a patching/underlayment material.
Sealer Options
- SC-65SG WB Semi-Gloss Polyurethane Sealer can be used for a lower gloss, low odor, solvent free, chemical, UV and mar resistant finish.
- EC-11 WB Epoxy can be used in lieu of SC-65G when a lower cost, water-based epoxy is desired.
- EC-32 Clear Epoxy Topcoat can be used in lieu of SC-65G when a 100% solids epoxy topcoat is required.
- EC-95 Polyurethane Topcoat can be used in lieu of SC-65G when a solvent-based polyurethane is required.
- EC-96 Satin Polyurethane Topcoat can be used over EC-95 when a low gloss, solvent-based polyurethane topcoat is required.
Skid Resistance
- CA-30 Small Safe Grip or CA-31 Large Safe Grip can be added to the final coat of sealer for added skid resistance.

* Please read Product Specification Sheets on these products prior to use.
**Maintenance**

Interior Floors can be dust mopped daily or mopped using a neutral pH cleaner. For more information on floor care & maintenance, please refer to the General Maintenance sheet.

The Nano Stain System should be inspected for wear every 2 to 4 years. The system should be resealed with the appropriate Westcoat 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.

**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.
- Be sure to paper off any areas that you do not want stained.
- Will not hide imperfections or stains in concrete.
- Nano Stain will stain concrete and can produce a mottled look. Colors and effects will vary.
- SC-37 is designed to resist fading, especially when sealed, but no material is fade-proof when subjected to ultraviolet rays and the elements. Westcoat cannot guarantee any color or material from fading, when exposed to ultraviolet rays.
- Sealers will make the surface slippery, please be aware of the existing texture of the concrete and how the sealer will affect the look and feel.
- 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.