



SCOFIELD® Formula One™ Guard-W

A water-based finish used in conjunction with a high-speed burnisher to enhance the gloss of ground and polished concrete surfaces. SCOFIELD® Formula One™ Guard-W is intended to provide a measure of protection against water intrusion, a fast turnaround time, excellent image clarity and easier maintenance.

TECH-DATA BULLETIN TD-1880.03 Rev. 12.19.2014

1. Product Description:

SCOFIELD® Formula One™ Guard-W is a VOC-compliant, cost-effective finish that contains lithium silicate; it will improve the gloss level and surface durability of ground and polished concrete when used with a high-speed burnisher. After polishing, concrete surfaces treated with SCOFIELD Formula One Guard-W will demonstrate enhanced clarity; the final color will generally be deeper than that of the original installation. It also improves resistance to water intrusion, reducing maintenance costs. Used after the substrate is treated with SCOFIELD® Formula One™ Lithium Densifier MP, it further reduces liquid permeability while remaining breathable.

SCOFIELD Formula One Guard-W is an economical product capable of providing longer life and higher reflectivity for ground and polished concrete of all grades and classes. The treated and burnished concrete will provide a surface that is easy to maintain and environmentally sound, with an increased gloss level and clarity. This product does not contain sodium or potassium silicate.

SCOFIELD Formula One Guard-W is normally used after treatment with SCOFIELD Formula One Lithium Densifier MP followed by grinding to the desired grit or finish. Refer to Scofield's Tech-Data Bulletin TD-1830 SCOFIELD Formula One Lithium Densifier MP for product information. The two products correctly used together will provide treated surfaces that require minimum maintenance. Periodic cleaning with a mildly alkaline or neutral cleaner and reburnishing is generally sufficient to maintain a like-new appearance.

SCOFIELD Formula One Guard-W has a low VOC level and is an environmentally sound, green building material. It may contribute to earning LEED® credits for Indoor Environmental Quality, EQ Credit 4.2: Low-Emitting Materials: Paints & Coatings, based on low contribution of VOC. See the current Material Safety Data Sheet for exact VOC documentation.

2. Coverage:

The application rate of SCOFIELD Formula One Guard-W is determined by the porosity and the polished surface profile of the concrete floor at the time of treatment. Polished concrete will usually require an application rate of 1500-2000 square feet per gallon (36.7-49.0 m²/L) for each coat. To insure complete and proper coverage, two coats must be applied prior to burnishing.

3. Limitations:

SCOFIELD Formula One Guard-W is not a curing compound and does not conform to ASTM C 309 requirements. SCOFIELD Formula One Guard-W is intended only for use on ground and polished concrete. It is a penetrating and reactive material that functions without forming any appreciable film or coating on the intended ground and polished surfaces when properly applied and finished.

SCOFIELD Formula One Guard-W is alkaline and can react with glass and aluminum. Such areas adjacent to the concrete to be treated should be properly covered for protection.

Surfaces treated with SCOFIELD Formula One Guard-W should not be cleaned with or exposed to acidic cleaners or substances. Many acids will cause white spots on the treated concrete that are difficult to remove.

The water and stain repellency of substrates treated with

SCOFIELD Formula One Guard-W will develop over time; 2 weeks is generally sufficient for this to take place.

SCOFIELD Formula One Guard-W is not intended for use on underwater applications or on surfaces other than ground and polished concrete.

WARNING!

SCOFIELD Formula One Guard-W is alkaline and can damage eyes, skin and other body tissues upon contact. Use of proper safety equipment is required. Before using or handling, read the Material Safety Data Sheet and Warranty.

TEST SECTION

Treating ground and polished concrete flatwork takes skill and practice. Prior to general application, a representative jobsite test section must be produced and approved on each individual concrete surface as described in section 6. Jobsite Test Sections to verify and approve suitability, proper surface preparation methods, application techniques, coverage, grinding and polishing procedures where applicable, stain resistance, resulting appearance, overall performance, and wet and dry slip resistance.

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4. Slip Resistance:

Only surfaces that will have adequate slip resistance should be considered for treatment with SCOFIELD Formula One Guard-W. After application of SCOFIELD Formula One Guard-W, the slip resistance (Coefficient of Friction) should be determined to ensure that it is within established safety guidelines.

For safety considerations, a representative jobsite test section as described in section 6. Jobsite Test Sections must be produced prior to SCOFIELD Formula One Guard-W application. The entire surface of the test section must be inspected and tested after completion to verify and approve the adequacy of wet and dry slip resistance.

5. Storage and Shelf Life:

Under normal conditions and when kept indoors, off of the floor, and within a temperature range of 40-100° F (4-38° C), the shelf life of SCOFIELD Formula One Guard-W in unopened containers is 2 years from the date of manufacture. Opened containers should be closed after use, then used within 1 month. Inventory must be rotated to maintain product that is within shelf life limits.

SCOFIELD Formula One Guard-W must not be exposed to freezing temperatures. If product becomes frozen it must be discarded.

6. Jobsite Test Sections:

To verify and approve suitability, appearance, and safety, representative test sections must be produced on the actual jobsite substrate prior to general application of SCOFIELD Formula One Guard-W. Test sections must be of adequate size to be representative, and be produced by the same workers who will apply the SCOFIELD Formula One Guard-W using the contemplated application or grinding and polishing equipment and techniques where applicable. All test sections must be prepared and treated as specified to verify and approve the



suitability of the product for its intended purpose. The entire surface of the test section must be inspected after completion to verify and approve the adequacy of wet and dry slip resistance.

7. Cautions:

DANGER!

WARNING! CORROSIVE TO EYES AND SKIN. CAUSES SEVERE BURNS. SPRAY MIST CAUSES IRRITATION TO RESPIRATORY TRACT. DO NOT TAKE INTERNALLY. KEEP OUT OF THE REACH OF CHILDREN. Contains lithium silicate. Use only with adequate ventilation. Do not breathe vapors or spray mist. Avoid contact with eyes, skin and clothing. Possible developmental hazard. Contains lithium that may adversely affect the developing fetus. Ensure fresh air entry during application and drying. If you experience eye watering, headaches or dizziness or if air monitoring demonstrates vapor/mist levels are above applicable limits wear a properly fitted P100/organic vapor respirator (NIOSH TC-84A approved) during and after application. Follow respirator manufacturer's directions for respirator use.

First Aid: Eyes—DO NOT RUB EYES. FLUSH IMMEDIATELY WITH WATER. Hold eyelids apart while flushing material out thoroughly with large amounts of water. Skin—Wash thoroughly with soap and water. Remove soiled clothing and footwear and wash before reuse. Inhalation—Move to fresh air. If symptoms persist or develop or if ingested, get medical attention.

Wash thoroughly immediately after handling. Close container after each use. In case of spillage, absorb with inert material and dispose of in accordance with applicable regulations. Do not reuse empty container. Before using or handling, read the *Material Safety Data Sheet and Warranty*.

8. Applicable Standards:

No ASTM specifications exist at this time covering silicate treatments for concrete.

9. Packaging:

SCOFIELD Formula One Guard-W is available in 1-gallon (3.8 L) and 5-gallon (18.9 L) pails and in 55-gallon (208 L) drums.

10. Equipment for Preparation and Application:

When using equipment and materials during preparation and installation, suitable protective gear must be worn and government regulations, manufacturer's instructions, and all applicable safety requirements must be followed.

Microfiber pad applicators are recommended for placing SCOFIELD Formula One Guard-W. A hand sprayer with a fan tip may also be used. Do not apply with a roller.

A propane-powered, high-speed burnisher with a minimum speed of 2500 rpm is required to generate the intended gloss.

11. Substrate Preparation:

Surrounding areas and adjacent surfaces must be protected from unintended contact. The surface should be divided into work sections using walls, joint lines, or other stationary features as natural stopping points.

For optimum performance on colored ground and polished concrete, SCOFIELD Formula One Guard-W must only be applied to fully cured concrete that is a minimum of 28 days old to allow for adequate penetration of the surface.

Wet concrete should be allowed to dry adequately prior to application of SCOFIELD Formula One Guard-W so that the pores near the surface are not filled with water. During cooler temperatures or higher relative humidity conditions the drying interval should be increased to achieve the level

of dryness necessary for good penetration.

After SCOFIELD Formula One Lithium Densifier MP has been applied and grinding and polishing is complete, the concrete surface must be allowed to dry completely prior to application of SCOFIELD Formula One Guard-W.

12. Application:

After surface preparation as described in the previous section, apply SCOFIELD Formula One Guard-W at the coverage rate described in section 2.

After the proper amount is applied and evenly spread, allow the first coat of SCOFIELD Formula One Guard-W to dry, generally 20-40 minutes, depending on temperature and humidity. The second coat is then applied in the same manner, and then third coat (if desired) is applied after the second coat has dried.

After all coats have been applied and are thoroughly dried (usually 30-60 minutes, depending on temperature and humidity), the surface is polished with high-speed burnisher using diamond-impregnated pads. Begin with coarse diamonds, generally 400 grit, and repeat the process using progressively finer diamonds. In some cases, a single polishing using a 3000-grit diamond pad may provide adequate results. For optimum results, wait 24 hours prior to final burnishing.

After burnishing is complete, all treated and finished surfaces must be thoroughly inspected to verify and approve installation and safety, including wet and dry slip resistance, prior to opening the area to traffic.

13. Maintenance:

Ground and polished concrete and polished concrete surfaces treated with SCOFIELD Formula One Guard-W are generally very durable and require little maintenance other than scheduled cleaning with water and a neutral or alkaline cleaner. Spills should be cleaned up when they occur in accordance with good housekeeping practices. No waxes or subsequent surface treatments are necessary in most applications but if wax or floor finish is used it should be tested for compatibility prior to use.

Surfaces previously treated with SCOFIELD Formula One Guard-W that lose the initial sheen can receive a maintenance application and reburnishing to restore the sheen and enhance water and stain resistance. The need for maintenance applications will vary depending on traffic and exposure conditions, and is typically performed on an as-needed basis. To determine if a maintenance application is needed, burnish a representative portion. If burnishing does not improve the floor appearance, a reapplication of SCOFIELD Formula One Guard-W is necessary. The water and stain repellency will be restored to full levels as the new material reacts over time, generally within 2 weeks after application. All coatings, waxes or other materials must be completely stripped and the floor dried prior to the reapplication of SCOFIELD Formula One Guard-W.

14. Availability:

SCOFIELD Formula One Guard-W is marketed nationwide and internationally, directly to the user and through strategically located warehouses, dealers, and representatives. Contact Scofield for its nearest representative.

Scofield offers a complete line of engineered systems for coloring, texturing, and improving performance in architectural concrete. Scofield Systems address specialized requirements for interior, exterior and vertical uses with compatible systems of complementary products including coloring admixtures, color hardeners, colored cementitious toppings, stains, curing compounds, sealers, coatings, repair products and texturing tools. Visit the Scofield website at www.scofield.com for further information.



■ **15. Warranty Summary:**

Since no control is exercised over product use, L. M. Scofield Company (Scofield) represents and warrants only that its products are of consistent quality within manufacturing tolerances. NO OTHER ORAL OR WRITTEN REPRESENTATION OR STATEMENT OF ANY KIND, EXPRESS OR IMPLIED, NOW OR HEREAFTER MADE IS AUTHORIZED OR WARRANTED BY SCOFIELD, INCLUDING THOSE OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Liability for breach of contract, negligence, or on any other legal basis is limited to the lesser of refund or replacement of defective materials. SCOFIELD WILL NOT BE LIABLE FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING FOR DELAYS OR LOST PROFITS. Communication of this warranty and its limitations to end users is not the responsibility of Scofield, but should be communicated by those in direct contract with the end user. Any claim regarding product defect must be received in writing within one year from the date of manufacture. No claim will be considered without such written notice or after the specified time interval. The end user shall determine the suitability of the products for the intended use and assumes all risks and liability in connection therewith.



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