



FLOOR SHIELD

CONCRETE SEALER, DENSIFIER, AND CHEMICAL HARDENER

PRODUCT DESCRIPTION: *Specco Floor Shield* is a ready to use, colorless, non-yellowing, penetrating, protective concrete sealer designed for use on natural concrete flooring. *Floor Shield* becomes an integral part of the concrete matrix and chemically hardens the treated surface, thereby increasing its long-term durability and wear resistance. *Floor Shield* eliminates efflorescence, dusting and pitting of the concrete by densifying and reducing open capillarity. Surfaces treated with *Floor Shield* are more resistant to water intrusion, acids, oils and grease, and are easier to maintain than traditional acrylic, epoxy or urethane sealers. *Floor Shield* cannot yellow, discolor, chip, peel or flake as there is no surface film that can show signs of wear or abrasion. If secondary floor treatments such as paints, adhesives, or floor coverings are to be applied, *Floor Shield* is an ideal primer sealer as it neutralizes the free alkalis in the concrete which results in an improved surface bond. *Floor Shield* will aid curing of freshly placed concrete and eliminate hairline cracking due to the reaction in the cement matrix which improves moisture retention (hydration) and thereby stabilizes the surface.

APPLICATIONS: *Floor Shield* is recommended for indoor or outdoor commercial floors subject to heavy forklift or tire traffic such as warehouses, manufacturing plants, food processing plants, breweries, bottling plants, service garages, parking decks, mills, refineries, or any facilities with large exposed concrete floors. Additional uses include high pedestrian traffic floors such as hallways, lobbies, grocery stores, museums, hospitals or schools.

BENEFITS:

- Improved wear resistance and surface strength on floors subject to vehicular or pedestrian traffic
- Complies with all U.S.D.A. regulations -ideal for interior use on concrete floors for food service environments
- Provides added water repellency and improved stain resistance
- Decreases permeability of the surface which aids cleanability
- Applies in one flood coat
- Provides a maintenance free treated surface that cannot chip, peel, or flake
- Odorless water-based formulation
- Provides improved levels of sheen or gloss over time.
- Compatible with any type of floor covering when standard preparation and application guidelines are followed

COMPOSITION: Water-based silicate dispersions with added hardeners and penetrating agents.

LEED CREDIT CONSIDERATIONS: MR Credits 5.2: Regional materials- Greater than 20% extracted, processed and manufactured regionally at production location: Kankakee, Il. 60901. 90% Content Harvested within 500 miles.

PHYSICAL DATA @ 70° F (21°C)	APPROXIMATE VALUES:
Color:	Light blue clear solution
Weight/gallon:	9.60 lb.+/-0.10
pH:	11.00 +/- 0.50 (Alkaline)
V.O.C. levels	0 g/L (0 lbs. /gal.)

TECHNICAL DATA: Contains no volatile organic compounds. Meets Architectural Coatings Section 183(e) Final Rule limit for concrete sealers.

SURFACE PREPARATION: Floors to be treated with *Floor Shield* should be free of resin or film forming applied cure and seal compounds. If these types of cures were used, they must be removed by either abrasive or chemical means such as *Specco Lightening HD* or similar floor stripper cleaners. *Floor Shield* can be applied to damp surfaces as long as they are free of any puddles or ponding water that would inhibit the penetration and dilute or weaken the initial chemical reaction.

APPLICATION: NEW CONCRETE: Apply *Floor Shield* "as is" (undiluted) generously to the surface directly from the container immediately following the finishing operation, and as soon as the surface is firm enough to walk on. *Floor Shield* is most commonly applied using a low pressure, high volume pump at 40-60 psi and approximately 3-5 gallon (11-19L) per minute. Apply *Floor Shield* in a continuous, heavy flood-coat to the point of saturation, keeping the entire area wet for a **minimum of 30 minutes to a maximum of 1 hour** to allow for adequate absorption.



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APPLICATION-NEW CONCRETE (continued): Brush or squeegee out any water puddles or low spots that are visibly present using a soft-bristled broom. Do not allow any areas to dry out during this time, by either applying additional **Floor Shield** to the dry spots or lightly misting with water and rescrubbing the dry areas accordingly. After the 30-60 minute soak time has elapsed, the **Floor Shield** will start to become somewhat slippery, and the surface should then be thoroughly rinsed with water. Using light bristled brooms and /or a squeegee and walking carefully wearing shoes with good traction to avoid any slipping, remove all remaining surface residue until the treated area is completely dry. This residue solution is non-toxic and can be emptied into a sanitary sewer. Any areas that are still slippery after the first rinse should be re-agitated and flushed again. **Note:** If the slab is an exterior broom finished surface, NO flushing is required, but any remaining **Floor Shield** should be broomed or squeegeed off the surface after the required 30-60 minute soak time.

SECOND COAT: After the first application has dried, a second coat should NOT be necessary on most substrates, however, it may be needed only on very porous or absorbent flooring if water absorption (darkening) is still experienced. Wait 2-4 hours following the first coat to re-apply a second coat and repeat the above process. Dry time is typically 2 to 4 hours during ambient weather conditions. Clean equipment with soap and water immediately after use.

Note:- If improved levels of gloss are desired on the floor after one coat, a second coat can be applied AFTER the first coat has dried, by diluting the **Floor Shield** 1 to 1 by volume with potable water and NOT rinsing the surface down afterwards.

APPLICATION-OLD CONCRETE (EXISTING): Lightly pre-dampen the existing concrete with water to a S.S.D. (saturated surface dry) condition. This pre-step is to allow even penetration of the **Floor Shield** and to prevent any subsequent mottling or surface color differences that may form by uneven absorption of the sealer into the substrate. Brush or squeegee out any remaining water puddles or low spots that are visibly present.

Apply **Floor Shield** (as stated above) in a continuous, heavy flood-coat to the point of saturation, keeping the entire area wet for a **minimum of 30 minutes** to allow for adequate absorption. Do not allow any areas to dry out during this time, by either applying additional **Floor Shield** or lightly misting with water and rescrubbing the area accordingly. **Option 1:** If the majority of the **Floor Shield** HAS penetrated the concrete surface after 30 minutes, then broom or squeegee out any remaining excess material from any low spots to ensure there are no puddles remaining. **Option2:** If the majority of the **Floor Shield** HAS NOT penetrated the concrete surface after 30 minutes, then wait until the surface becomes slippery underfoot and thoroughly flush the entire surface with clean water. Squeegee or broom the excess solution off until the treated area is completely dry. This will remove any remaining sealer deposits and allow improved color uniformity on the final slab. The floor is ready for occupancy or use immediately following removal of the rinse residue and drying, however, allow 5-7 days for full cure out ONLY if any subsequent paint or floor coverings are to be applied.

COVERAGE: Coverage rates are approximately **150-250 square feet per gallon (4-5m²/liter)** for estimating purposes. This value will vary depending on concrete porosity, texture and surface temperature. Specco recommends that a test application be made on the actual surface to be treated, to accurately determine coverage rates, effectiveness and influence on surface appearance.

MAINTENANCE: A permanent semi-gloss sheen will usually develop anywhere from 4-12 months after application. Additional levels of sheen (gloss) can also be obtained by use of a propane burnisher with periodic treatments.

LIMITATIONS: Although **Floor Shield** will "aid" curing on new concrete slabs, it is not designed to meet **ASTM C-1315** Cure and Seal Specifications. **Floor Shield** is also not recommended for applications over areas previously treated with curing compounds or sealers unless these coatings have been COMPLETELY removed by either chemical or mechanical (abrasive) methods. Additional coats of **Floor Shield** may be needed on abnormally porous slabs, as well as any broomed textured surfaces or scarified floors. **Floor Shield** is not effective on lightweight or extremely porous substrates with excessive air pockets. **Floor Shield** cannot remedy dusting or surface scaling (erosion) problems due to improper curing, poor mix designs, over troweled surfaces, or excess carbonation, however, additional applications may help minimize some of these situations. On concrete with very high exposure to road salts and deicing chemicals, the use of **Specco Saltshield** is recommended as a topcoat and can be used in tandem with the **Floor Shield** for improved corrosion, water, and scaling resistance. In cases of excessive moisture and high hydrostatic pressures underneath the slab, **Floor Shield** may not be able to stop excessive salt or moisture migration on its own. Please consult Specco technical service for additional product options in these cases.



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LIMITATIONS (continued): *Floor Shield* will leave a slightly darkened, matt-satin type finish appearance to the substrate and should not be used when a natural seal (no color alteration or darkening) is desired. If the treated floors are to be painted after the *Floor Shield* application, it is recommended to wait at least 7 days on Existing Concrete and 28 days on New Concrete before applying any subsequent paints or warehouse lane stripping.

CAUTIONS: *Floor Shield* should be applied by low pressure sprayer only and not airless sprayer types which can atomize the product allowing inhalation and subsequent health hazard to the applicator. *Floor Shield* is only recommended for application to EXISTING integrally colored concrete surfaces that are fully cured (28 days) and is not to be used on new integrally colored pours due to chance of reaction with pigment. The end user should also make sure to flush the entire surface with water after 40-60 minutes of application. When *Floor Shield* is applied excessively (allowed to puddle) and dries in this condition, a white residue may form on the surface of the substrate. This residue consists of excessive alkaline carbonate salt deposits that are semi- water soluble and can be removed with water spray and slight agitation methods. If the *Floor Shield* is **not** washed off after the 40-60 minute application time, a higher degree of sheen (gloss) will be present on the treated surface. *Floor Shield* is not effective on lightweight or extremely porous substrates with excessive air pockets. Do not apply in temperatures below 45° F. Do not apply to frozen or frost filled surfaces. Protect new concrete from freezing that has been treated with *Floor Shield* for at least 7 days. Protect glass (windows) , foliage, shrubs and grass from over spray. If *Floor Shield* is sprayed onto glass, immediately wipe the surface down with a damp towel and flush the area generously with water. The treated surface will be slippery until dry, so precautions should be taken to restrict foot traffic/ pedestrian access into the application area.

GHS HAZARD RATINGS: WARNING:



Irritant: Skin & Respiratory Irritation.

FIRST AID: Refer to product S.D.S. (Safety Data Sheet) for complete health and safety information before using this product. FOR MEDICAL EMERGENCIES ONLY –CALL INFOTRAC AT 800-535-5053.

WARNINGS & SAFETY INFORMATION: *Floorshield* is relatively safe to use. Keep containers closed. Avoid ingestion, skin and eye contact and inhalation of the spray mist. Keep away from food and drink. Wash hands thoroughly after use and before eating. Do not take internally. **FOR PROFESSIONAL USE ONLY. KEEP OUT OF REACH OF CHILDREN.**

H.M.I.S. CODES: HEALTH = 1, FLAMMABILITY= 0, REACTIVITY = 0, PERSONAL PROTECTION = G (GLOVES, GOGGLES, RESPIRATOR)

SHIPPING NAME: Contains Sodium Silicate, CAS#1344-09-08 - Not regulated by D.O.T.

SHIPPING CLASS: ITEM 33880, SUB 2, Freight Class 55 Concrete Sealer, Water-Based

STORAGE: Ideal storage is between 60° to 80° F. Keep from freezing. If product is frozen, let container thaw, and re-agitate/stir the solution before using.

PACKAGING: 5 gallon (18.9 L), 55 gallon (208 L), and 265 gallon (1000L) containers. **SHelf LIFE:** 1 year properly stored

WARRANTY: Specco Industries Inc (Specco) solely and expressly warrants that its products shall be free from defects in materials and workmanship for one (1) year from the date of purchase. Unless authorized in writing by an officer of Specco, no other representations or statements made by Specco or its representatives, in writing or orally, shall alter this warranty. **SPECCO MAKES NO WARRANTIES, IMPLIED OR OTHERWISE, AS TO THE MERCHANTABILITY OR FITNESS FOR ORDINARY OR PARTICULAR PURPOSES OF ITS PRODUCTS AND EXCLUDES THE SAME.** If any Specco product fails to conform with this warranty, Specco will replace the product at no cost to Buyer. **Replacement of any product shall be the sole and exclusive remedy available and buyer shall have no claim for incidental or consequential damages.** Specco does not authorize anyone on its behalf to make any written or oral statements which in any way alter Specco's installation information or instructions in its product literature or on its packaging labels. **Specco explicitly excludes any written or oral statements or implied warranty on the performance of an applied/installed product manufactured or sold by or through Specco. Specco has no control over Specco application standards adherence, site conditions, atmospheric variations, installer/applicator skill level or the determination of the suitability of any Specco products for a specific intended purpose. Buyer shall be solely responsible for determining the suitability of Specco's products for the Buyer's intended purposes.** Product demonstrations, if any, are done for illustrative purposes only and do not constitute a warranty or warranty alteration of any kind.

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