



Armor L3000 Lithium Silicate Concrete Densifier & Surface Hardener

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For Professional Use

PRODUCT DESCRIPTION

The Armor L3000 is a ready-to-use water based lithium silicate concrete densifier and surface hardener. It chemically reacts with the free lime and calcium in the concrete to form a permanent calcium silicate hydrate structure within the pores. Once fully reacted, concrete will experience an increase in density and surface hardness of up to 45%.

BENEFITS/FEATURES

- ◆ Creates a permanent, hardened structure within the pores
- ◆ Ready to use, no mixing or diluting required
- ◆ Penetrating, breathable, zero VOC
- ◆ Reduces water seepage through concrete
- ◆ Reduce freeze-thaw damage and road salt damage
- ◆ Reacts with alkalis to reduce efflorescence
- ◆ Prevents the rusting and expansion of rebar
- ◆ Hardens the surface by up to 45% to reduce concrete dusting

SUGGESTED APPLICATIONS

- ◆ Poured, broom finished, and troweled concrete
- ◆ Polished concrete
- ◆ Driveways, walkways, and stairs
- ◆ Pool decks and patios
- ◆ Garage, warehouse, and basement floors and walls
- ◆ Car ports, pole barns, retail and restaurant floors

TECHNICAL INFORMATION

Solids.....	Proprietary	Wet Appearance.....	Clear
Drying Time.....	1-2 hours	Dry Appearance.....	Invisible
Re-Coat Time.....	2-3 hours	VOC Content.....	0 VOC
Foot Traffic.....	12-24 hours		
Wheel Traffic.....	24 - 48 hours		
Application Temp.....	55°F - 85°F		

COVERAGE

Old or Porous Surfaces	175-200 ft ² /gallon in one coat
Dense or Trowel Finished Surfaces	350-400 ft ² /gallon in one coat

Coverage rates will vary depending upon surface porosity and texture, and application method. Excessive build up should be avoided.

COMPLIANCES

- ◆ VOC and OTC compliant in all 50 states

SHELF LIFE

When properly sealed and stored, the shelf life of the Armor L3000 is up to 1 year.

PACKAGING

The Armor L3000 is available in a 16 OZ Sample, 1 Gallon Bottle, 5 Gallon Pail, and 55 Gallon Drum.

APPLICATION INSTRUCTIONS

Preparation

Protect all people, property, and plants in case splash and wind drift could occur. Do not apply to any surface that is dirty, frozen, or heavily saturated or flooded with water. Surface must be clean and free of all debris, dry, and absorbent. Mist water in a small area to test the surface for absorbency. Any surface to be treated should uniformly wet out. If the surface to be treated does not wet out uniformly, it is then recommended to prepare the surface mechanically to remove any remaining surface contaminants.

Application

New (Uncured) Concrete: It is not traditionally recommended to apply Armor L3000 to concrete earlier than 7 days. If this application is necessary, ensure the removal of all soft cut saw debris prior to application. Apply after final troweling at a rate of 300-400 sq. ft. per gallon using a commercial grade pump sprayer with a 0.3-0.5 gal./min. cone tip, lint free mop, or soft bristle push broom. Ensure floor saturation, removing any puddle areas with a soft bristle push broom or mop. Apply more Armor L3000 to areas that appear to be more porous and are absorbing the material more. **If excess Armor L3000 is allowed to dry on the concrete surface, a white residue may form and can only be removed by mechanical means such as sanding or grinding process.**

Existing Concrete: Apply at a rate of 200-300 sq. ft. per gallon using a commercial grade pump sprayer with a 0.3-0.5 gal./min. cone tip. Ensure floor saturation, removing any puddle areas with a soft bristle push broom. Apply more Armor L3000 to areas that appear to be more porous and are absorbing the material more. Rework any excess material with a soft bristle broom. **If excess Armor L3000 is allowed to dry on the concrete surface, a white residue may form and can only be removed by mechanical means such as sanding or grinding process.**

Polished Concrete: After completing the 400 grit stage of polishing, apply a uniform coat of Armor L3000 at a rate of 200-300 sq. ft. per gallon using a commercial grade pump sprayer with a 0.3-0.5 gal./min. cone tip, lint free mop, or soft bristle push broom, ensuring floor saturation. Do not allow to puddle. **If excess Armor L3000 is allowed to dry on the concrete surface, a white residue may form and can only be removed by mechanical means such as sanding or grinding process.** Follow through with additional polishing steps until desired appearance is achieved. Additional applications of Armor L3000 can be added at any stage before the final polishing phase is done if necessary at a rate of 200-300 sq. ft. per gallon. Remove any excess residue with polishing diamonds or polishing pads. Flushing with water is not necessary. Note: For softer concrete an initial application of Armor L3000 can be applied after the 80 grit stage prior to the standard polishing steps to achieve a harder surface.

Please note: If applying another sealer or coating over a surface sealed with a densifier, it is important to allow the densifier at least 7 days to cure before applying the sealer or coating. It is also important to follow the surface preparation and application instructions of the sealer or coating you are applying. Densifiers are designed to reduce the size of the surface pores, and many coatings require the surface to be ground to a specific surface profile in order to open the surface pores to allow for proper bonding. If the densifier was applied to an already ground and prepped surface, the surface will need to be re-ground and re-prepped once the densifier cures. In many cases, a densifier is not required when a coating is being used. We suggest talking to the coating manufacturer before applying a densifier.

Clean-Up

Use warm water and soap. Dispose of containers in accordance with local and federal regulations.

Product Removal

Once the Calcium Silicate Structure (CSH) has hardened within the pores it can not be removed unless the concrete itself is removed.

PRECAUTIONS AND LIMITATIONS

- ◆ Product is designed for fully cured concrete. Concrete must be a minimum of 28 days old before applying product.
- ◆ Do not apply over floor adhesives, paints, coatings, sealers. This product is designed for unsealed surfaces.
- ◆ Coverage rates depend upon many conditions including application method, surface porosity, and applicator.
- ◆ Sealer is not resistant to brake fluid, gasoline, and many other similar products.
- ◆ Sealer will not stop surface stains as the surface of the substrate is fully exposed.
- ◆ Do not dilute or thin sealer with any products.
- ◆ Do not over apply. Over application can result in the formation of CSH crystals on the surface which can only be removed through mechanical grinding.
- ◆ Store product in an area where the temperature is between 55-80 degrees F, and not in direct sunlight.
- ◆ Proper personal protective equipment should be worn when applying this product. Refer to the Safety Data Sheet prior to application.
- ◆ Properly protect and cover any areas not intended or suggested to be sealed during application.
- ◆ Foundation Armor offers no guarantee, warranty or other claims to the success or results of a job or project.
- ◆ In all cases, refer to the Safety Data Sheet prior to application for complete health and safety information. Do not swallow, avoid direct contact with skin, avoid inhalation, keep out of reach of children and pets.
- ◆ The applicator is responsible for suitability of application, and the results of the application. We suggest applying to a test area first to verify compatibility, absorption, coverage rate, and project suitability.
- ◆ Product is not returnable once opened or used so please consider purchasing a 16 ounce sample to test product before purchasing larger quantities.

