



Armor SX5000 PRO-Grade Solvent-Based Silane Siloxane Water Repellent Sealer

Foundation Armor
10 Howe Drive
Amherst, NH 03031
(866) 306-0246
FoundationArmor.com
For Professional Use

PRODUCT DESCRIPTION

The Armor SX5000 is a professional-grade solvent-based Silane-Siloxane water repellent sealer that penetrates deep into the concrete surface where it chemically reacts to form a hydrophobic barrier below the surface inside the pores. The hydrophobic barrier is designed to reduce the absorption of water. By reducing the absorption of water, damage and deterioration caused by water absorption is also reduced.

BENEFITS/FEATURES

- ◆ Will maintain the natural, unsealed look and feel of the substrate
- ◆ Will provide up to 7-10 years of life before the need for a recoat
- ◆ Breathable, won't trap subsurface moisture
- ◆ Won't leave a surface film or coating
- ◆ Will reduce the formation of mold and mildew
- ◆ Will reduce damage caused by water absorption from the use of de-icing salts and from freeze thaw cycles
- ◆ Will reduce the movement of moisture through the concrete pores

SUGGESTED APPLICATIONS

- ◆ Concrete and Concrete Pavers
- ◆ Brick and Masonry
- ◆ Bluestone, Flagstone, Slate
- ◆ Natural Stone
- ◆ Driveways, walkways, patios, etc.
- ◆ Bridge decks, parking lots, sidewalks, etc.

TECHNICAL INFORMATION

Solids.....	12%	Wet Appearance.....	Clear
Drying Time.....	1-2 hours	Dry Appearance.....	Invisible
Re-Coat Time.....	0-24 hours	VOC Content.....	< 250 g/L
Foot Traffic.....	8-12 hours		
Wheel Traffic.....	24 - 48 hours		
Application Temp.....	55°F - 85°F		

COVERAGE

Porous Surfaces: Up to 175 FT²/gallon in one coat.
Smooth Surfaces (once properly prepped): Up to 200-225 FT²/gallon in one coat.

Coverage will vary depending on porosity, surface condition, application method, and the amount of material applied by the applicator. The above coverage rates are estimates and will vary. Two coats are suggested for even coverage and appearance.

COMPLIANCES

- ◆ Dried coating is USDA accepted

SHELF LIFE

When properly sealed and stored, the shelf life of the Armor SX5000 is up to 1 year.

PACKAGING

The Armor SX5000 is available in a 16 OZ Sample, 1 Gallon Bottle, 5 Gallon Pail, and 55 Gallon Drum.

APPLICATION INSTRUCTIONS

Surface Preparation:

The Armor SX5000 should be applied to a completely clean and dry surface. If the surface was cleaned with water or pressure washed prior to application, allow the surface to dry for at least 24 hours before sealing. While the surface may appear dry and feel dry to touch, water below the surface trapped in the pores can cause the same issues. While pressure washing the surface is typically sufficient, spot treatment may be necessary for deep or older stains. If the surface is smooth troweled, or does not easily accept water, acid etching may be required prior to applying sealer. It is always suggested to apply the Armor SX5000 to a test area to verify absorption, coverage, compatibility, and project suitability.

The Armor SX5000 is designed specifically for unsealed concrete and masonry surfaces. It can also be applied over surfaces previously sealed with a silane-siloxane sealer.

Application:

An acetone-resistant commercial pump sprayer is recommended to achieve the best coverage and results. Be sure the psi is no greater than 20. Use a .3-5 GPM adjustable cone tip.

Apply the first coat of Armor SX5000, ensuring the entire surface is evenly saturated. Wait roughly 10-15 minutes, then apply the second coat. The substrate should appear to be drying, but not fully dried when the second coat is applied. Do not flood the surface or allow puddles to form, this will result in over application and the formation of dark spots on the surface. Less porous surfaces, such as bluestone, flagstone, and slate, may only require one coat.

Substrates sealed with Armor SX5000 may be coated with silicone emulsion paints and many oil based paints once the surface has had 72 hours to dry. Testing is always necessary and recommended to assure proper adhesion. Adhesion may be improved if the surface is pressure washed and allowed to dry prior to application. Armor SX5000 is not a paint primer. Adhesion of cementitious coatings, stucco, plaster, etc., may be adversely affected. These types of substrate treatments should be installed and allowed to fully cure before applying Armor SX5000. Always test to verify compatibility.

Time of Day

The temperature of the air and surface must be 55-85 degrees F during application. If freezing conditions exist prior to application, it is highly recommended that the substrate be allowed to fully thaw. Should this recommendation not be followed, the product may not yield adequate protective properties.

Once applied, the surface should be kept dry for at least 24 hours.

Clean-Up

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

Product Removal

Armor SX5000 penetrates deep into to the surface. Removal is not recommended.

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, dyes, powder release dyes, stains, sealers, etc. This product is designed for unsealed, uncolored, and untreated surfaces ONLY.
- ◆ The formation of dark spots is rare, and completely avoidable, so long as the product is properly applied to a properly prepared surface. Dark spots are a clear indication of improper surface preparation or improper application, or a combination of both. We always suggest applying the product to a test area first to verify compatibility, suitability, coverage, and appearance. The following steps can be taken to avoid dark spots:
 - ◆ When using a cleaner, ensure the cleaner has been completely removed from the surface, and ensure the PH of the concrete has not been changed. Many cleaners will leave a residue, and can alter the PH of the concrete (like bleach). Application on a high PH surface will result in the formation of dark spots.
 - ◆ When applying around a pool or pool deck, or any other area where contaminated water or liquids come into contact with the substrate (such as salt water, chlorinated water, cleaning chemicals, chemicals, oils, gas, etc.) it is important to make sure that there is absolutely nothing on the surface or in the pores of the substrate during the time of application, and while curing.
 - ◆ Do not over apply. Over application can result in the formation of dark spots on the surface.
 - ◆ We do not suggest applying to pavers less than 1 year old. If applying sealer to pavers less than one year old, verify with paver manufacturer that pavers are able to be sealed. Sealing before suggested guidelines can result in dark spots or sealer failure.
 - ◆ Avoid the use of petroleum based de-icing salts as those can leave stains on the surface.
 - ◆ Other causes of dark spots include: the presence of water or contaminants on the surface or in the pores, the existence of a cleaner, sealer, paint, coating, etc. on the surface or in the pores, the premature introduction of water or other liquids before the product is fully cured, a chemical reaction to something present on or in the substrate, and other causes.
 - ◆ In the event that dark spots form, most spots can be removed with the use of an industrial degreaser such as the Spartan SC200 cleaner (not a Foundation Armor product). However, depending on the cause of the dark spots, additional solutions may be necessary. If you have questions about the best way to remove dark spots, please reach out to a Foundation Armor technician.
- ◆ Coverage rates depend upon many conditions including application method, surface porosity, and applicator.
- ◆ Sealer is not resistant to brake fluid, gasoline, or many other similar products.
- ◆ Sealer will not stop surface stains, tire marks, etc. as the surface of the substrate is fully exposed.
- ◆ Do not dilute or thin sealer with any products.
- ◆ Store product in an area where the temperature is between 55-80 degrees F, and not in direct sunlight.
- ◆ 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. 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, performance, and project suitability.
- ◆ Surface water beading will not occur on all surfaces. While some surfaces may experience an instantaneous bead, others won't experience a surface water bead at all. Surface water bead is not a sealer benefit, and is not an indicator that the sealer is or isn't working. To know if the sealer has been properly applied and is working to its full potential, you will notice that water puddles on the surface and takes longer to absorb into the surface.
 - ◆ How to tell if it is time to re-seal: While the sealer can work below the surface for up to 7-10 years, the surface of the substrate may need to be resealed sooner. Actual life depends on several factors including but not limited to the porosity of the substrate, the initial amount of sealer applied, cleaners applied to the surface, the PH of the substrate, the environment, etc. If you notice water no longer puddles on the surface, or that the substrate instantly absorbs water, a touch-up coat should be applied.
- ◆ This is a penetrating sealer which means the surface of the concrete is still exposed. It is simply designed to reduce damage and deterioration caused by water absorption.
- ◆ Silane-Siloxane sealers can reduce damage and deterioration caused by the use of most de-icing salts, but harsh de-icing salts should be avoided. You should always test the de-icing salt on your concrete before using. De-icing salts turn ice into water, and Silane-Siloxane sealers will help to reduce the absorption of that water. The surface of the substrate is still exposed however and some de-icing salts, such as de-icing salts containing magnesium chloride, can eat away at the surface of the concrete. To preserve the life of your concrete we suggest testing a gentle de-icing salt designed for use on concrete and masonry, or the use of sand.
- ◆ Silane-Siloxane sealers can reduce the formation of mold and mildew on the surface but how much the mold and mildew will be reduced depends on several factors including (but not limited to) the cause of the mold and mildew, the pitch of the substrate (if water is directed toward or away from where the mold forms), the amount of sun exposure, the amount of Silane-Siloxane sealer present in the pores, etc.
- ◆ In all cases, refer to the Safety Data Sheet on FoundationArmor.com 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. Proper personal protective equipment should be worn when applying this product.
- ◆ When applying, odors are strong. Area should be properly ventilated during the time of application, and for at least 7 days after application, to allow for the solvents to fully release and the odors to dissipate.
- ◆ HVAC ducts should be blocked to avoid distribution of solvents and odors. Extinguish any pilot lights or other sources of ignition prior to starting.
- ◆ Product is HAZMAT and is not returnable. Please consider purchasing a 16 ounce sample to test product before purchasing larger quantities.
- ◆ The Technical Data Sheet may change from time to time. Please visit FoundationArmor.com prior to applying and verify you are using the most up-to-date version.