

# ARMOR SX5000 – 250 VOC

PRODUCT CODE: SX500040

## CONCRETE & MASONRY WATER REPELLENT/IMPREGNATING AGENT

WATER REPELLENTS

ARMOR SX5000

### PRODUCT DESCRIPTION

**Armor SX5000** is a 40% active solvent-based Silane-Siloxane water repellent and impregnating agent for porous masonry surfaces such as concrete, block, brick, and unglazed tile. **Armor SX5000** will penetrate and chemically bond deep within the substrate to provide long lasting protection against deterioration or staining due to water conditions. **Armor SX5000** will not impair the natural breathing characteristics of treated substrates, nor will it produce a film. **Armor SX5000** will help concrete and masonry surfaces to resist common issues such as cracking, efflorescence, spalling, staining, and other damages caused by intrusion of water. It also helps protect the surface from damaging effects of water intrusion, acid rain, deicing chemicals and freeze/thaw exposure.

### BENEFITS/FEATURES

- ◆ Greatly delays chloride and water absorption by concrete.
- ◆ Reduces loss of concrete due to freeze / thaw action in the presence of de-icing salt.
  - ◆ Highly resistant to alkalis.
  - ◆ Low volatility and good depth of penetration.

### RECOMMENDED APPLICATIONS

**Armor SX5000** is recommended as a water-repellent impregnating agent and primer for normal and reinforced concrete for bridges, roads, and buildings. **Armor SX5000** also for use on unsealed clay tile, brick, stone, and other masonry.

### TECHNICAL INFORMATION

Solids.....	40% (active)	Wet Appearance.....	Clear to Slightly Hazy
Drying Time.....	1 - 2 hours	Dry Appearance.....	Clear and Invisible
Re-Coat Time.....	refer to instructions	VOC Content.....	<250 g/l
Foot Traffic.....	8-12 hours	Blush Resistance.....	Excellent
Wheel Traffic.....	24-48 hours	Alkalinity Resistance.....	Excellent
Application Temp.....	50°F - 85°F	Concrete Adhesion.....	Excellent

\*\*\*Please note that low air and/or concrete temperatures and/or relative humidity may extend drying times. Follow recommended coverage rates for best results.

### SPECIFICATIONS/COMPLIANCES

“ DRIED COATING IS USDA ACCEPTED

“ NCHRP 244 report, Series II; Reduction in Water Absorption - 81%, Reduction in chloride ion content - 84%, and Water vapor transmission - 100%

### APPROXIMATE COVERAGE RATES

Concrete Surfaces (Bridges, pre-cast, pavers, cast-in place, brick, tile)	100-200 ft <sup>2</sup>
Fired Clay Surfaces (Brick, tile, terra cotta, pavers)	100-200 ft <sup>2</sup>

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

### SHELF LIFE

**Armor SX5000** has a shelf life of up to one year in it's original, sealed, unopened container.

### PACKAGING

**Armor SX5000** is packaged in 1 gallon cans, 5 gallon pails, and 55 gallon drums.

### FOUNDATION ARMOR

3 BUD WAY STE 27 NASHUA NH 03063

Phone: (866) 306-0246

Visit us online at: [www.FoundationArmor.com](http://www.FoundationArmor.com)

## INSTRUCTIONS FOR USE

**SURFACE PREPARATION:** Prior to surface preparation, protect people, property, automobiles, plants and any other non-masonry surfaces and objects from the material, wind drift, and splash, residue, and fumes of the material. Protecting and diverting pedestrians and automobile traffic is also recommended.

Proper surface preparation is highly important. Use the proper cleaning detergent for the substrate at hand. It is recommended that Armor SX5000 be applied on a clean, visibly dry and absorbent surface. Please note that excessive moisture inhibits good penetration, which can reduce the life and performance of the coating. Newly constructed and repointed substrates should be fully cleaned and cured 28 days prior to application. Always test for compatibility!

The temperatures of the air and the surface are very pertinent aspects of applying any coating. The minimum temperature of the air and surface must be at least 40° F during application, and for at least 8 hours after. 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. Also, air and surface temperatures should never exceed 85° F.

Proper equipment should be used when applying Armor SX5000. A brush, roller, or low pressure sprayer should be used to apply. If using a sprayer, be sure the psi is no greater than 20. Set the sprayer to achieve a good, wet stream, avoiding atomization of the product. Be sure that any container used for mixing or material handling is clean, free of any debris, and uncontaminated.

**APPLICATION:** Before applying material, please read full technical data sheet for proper preparation, application, and to be sure to follow all safety measures guide lined in this report. Always test any substrate before overall application to ensure desired results. Please test using the following application instructions. Also, let the test area dry completely before final inspection and approval.

**HORIZONTAL APPLICATION INSTRUCTIONS:** By roller, apply Armor SX5000 at a rate of 100-200 square feet per gallon (see reverse page) depending upon surface type and porosity. Broom out puddles until surface is penetrated. Re-apply the material; less material will be needed for the second application. Second coat can be applied "wet-on-wet", or for best results 4-24 hours later. Once again, broom out any puddles until material has penetrated.

**VERTICAL APPLICATION INSTRUCTIONS:** For best results, apply Armor SX5000 at a rate of 100-200 square feet per gallon (see reverse page) depending upon surface type and porosity, to a dry and absorbent surface. When using a sprayer, saturate from the bottom up while applying enough material for a 4"-8" rundown below the spray contact point. Let the first application penetrate the substrate for at least 5-10 minutes. Re-apply the material; less material will be needed for the second application. Second coat can be applied "wet-on-wet", or for best results 4-24 hours later. When using a brush or roller, saturate the surface uniformly, allowing Armor SX5000 to penetrate for 5-10 minutes. Brush out heavy runs and drips that show signs of no penetration. The second coat is recommended for maximum protection.

Substrates coated with Armor SX5000 may be coated with silicone emulsion paints and many oil based paints as well although 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.

- Allow fresh concrete at least four weeks, preferably six weeks, to set before impregnating it.
- Remove coarse particles and dust from new, unsoiled surfaces with a brush or compressed air. Use super heated steam to clean surfaces that are heavily soiled with oil, abraded rubber, etc. prior to treatment.
- Only impregnate concrete that has a uniformly dry surface with no damp patches. Should it suddenly start to rain, stop treatment and cover the impregnated areas.
- The coated substrate should be protected from weathering conditions for at least 24 hours after application. A neutral pH surface may need several days to achieve full water repellency.

**PLEASE NOTE:** It is always recommended to test the product in a small, inconspicuous area (on the same concrete substrate) for desired results prior to application. Coverage rates may vary for all coatings and substrates depending on porosity, density, texture etc. If applying by spray method, extended coverage rates may be achieved, but be aware that less material will be applied and inadequate film formation or performance expectations may be limited. **CAUTION: Armor SX5000 is highly flammable. Use extreme caution along with plenty ventilation. An approved respirator is required. Avoid ignition sources, flame etc.**

## CLEAN-UP

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

## PRODUCT REMOVAL

Coating deeply penetrates surface. Removal is not recommended.

## PRECAUTIONS AND LIMITATIONS

- ▶ **Armor SX5000** is highly flammable and should be stored in accordance with local laws.
- ▶ It is recommended to store this product in an area where the temperature is between 50 and 80 degrees F.
- ▶ Do not allow **Armor SX5000** to be subject to any form of rain or moisture for 18-24 hours after application.
- ▶ Coverage rates depend upon many conditions including application method, surface porosity, applicator, etc.
- ▶ **Armor SX5000** was designed for a water repellent for porous surfaces. Not intended as a decorative topcoat.
- ▶ **Armor SX5000** will not keep water out of cracks, defects, or open joints.
- ▶ **Armor SX5000** should never be thinned or mixed with any form liquid or solvent.
- ▶ Please know that it may take up to 72 hours for **Armor SX5000** to obtain its water repellency properties.
- ▶ **Armor SX5000** may slightly darken the surface of many new and existing concrete slabs. Test prior to use.

## SPECIAL NOTES

Please consult Material Safety Data Sheet (MSDS) and read Warranty information prior to use. This information can be requested by contacting customer service at 866-306-0246.

**FOR PROFESSIONAL USE ONLY! DO NOT DILUTE!**

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