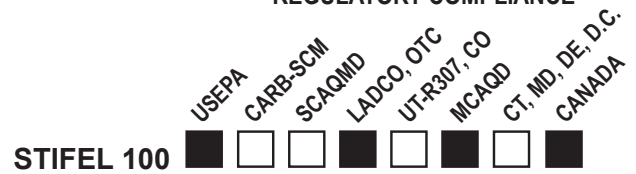


STIFEL 100

Transparent, breathable silane sealer penetrates deep and chemically reacts with concrete to create a long-lasting water-repellent surface.

VOLATILE ORGANIC COMPOUND (VOC) REGULATORY COMPLIANCE



HOW IT WORKS

Ready-to-use formula penetrates deep into concrete and masonry where it chemically reacts with siliceous materials to form a hydrophobic barrier to prevent the absorption of water and waterborne chloride ions. STIFEL 100 has a small molecular structure allowing it to move through concrete pores and penetrate deep, up to 1/2 inch or more.

APPLICATIONS

- ◆ Use on concrete parking garages, driveways, parking lots, sidewalks, bridge decks, pool decks, patios, vertical concrete, masonry and more.
- ◆ Protects reinforcing steel in concrete from corrosion due to the effects of water, deicing salts and other water borne chemicals.
- ◆ Suitable for use on smooth concrete or exposed aggregate.
- ◆ Suitable for use in precast, prestressed and poured-in-place applications.
- ◆ Use in lightweight and air entrained concrete.

ADVANTAGES

- ◆ Silane penetrates deep into the substrate to achieve a high level of water and chloride screening.
- ◆ Protects against the damaging effects of water intrusion, deicing chemicals and exposure to freeze/thaw conditions.
- ◆ Breathable to allow interior moisture to escape without damaging sealer.
- ◆ Colorless, non-staining, non-yellowing – does not alter the natural appearance of concrete's surface.
- ◆ Protects without altering the appearance or texture of the treated surface.
- ◆ Chemical reactions within the capillaries form long-lasting water repellent groups that crosslink to minimize water intrusion.
- ◆ As a water repellent, helps to protect from damage caused by chloride ion intrusion to extend the life of the treated surfaces.
- ◆ Leaves no residue on most non-porous surfaces such as glass, metal frames or painted surfaces.

▲ PRECAUTIONS ▲

- ◆ Certain extremely porous substrates may require an alternative STIFEL sealer to provide maximum performance. Contact Nox-Crete for more information.
- ◆ Do not apply to concrete less than 28 days old.
- ◆ Do not apply to frost covered or permeated surfaces.
- ◆ Do not apply if rain is anticipated within 2 hours following application, or if high winds or other conditions prevent proper application.
- ◆ To ensure proper performance, substrate temperatures must be above 20° F (-7° C) and below 100° F (40° C).
- ◆ Application to inadequately cleaned or wet substrates could result in less than optimum performance.
- ◆ Product may damage vegetation with contact.
- ◆ May not be compatible with certain paints, caulks, sealants or coatings.
- ◆ Stifel 100 may damage certain types of glass and plastic. Perform a small test to verify product does not discolor, stain or otherwise damage surfaces that might be subject to overspray. If so, the surfaces must be protected.
- ◆ Verify that product is within the "USE BY" date stated on product packaging. Do not use expired product. The use of expired product may result in poor product performance or failure.

USE INSTRUCTIONS

- ◆ Request current (verify) product literature, labels and safety data sheets from manufacturer in writing and read thoroughly before product use.
- ◆ Environmental and substrate conditions and construction type have a major impact on product selection, application methods, appearance and performance. Product literature provides general information applicable to some conditions. However, an adequate site test application by the purchaser or installer in advance of field scale use is mandatory (irrespective of any other verbal or written representations) to verify product and quantities purchased can be satisfactorily applied and will achieve desired appearance and performance under intended use conditions.
- ◆ Substrate should be a minimum of 28 days old and free from accumulations of dust, oil, grease, rubber tire residue, concrete curing or bondbreaker membrane or residue, paint, protective sealers or other foreign materials.

STIFEL 100

Water Repellent Sealer



chemical solutions to concrete problems

- ◆ For existing concrete surfaces previously exposed to vehicular traffic, dustless abrasive shotblasting, sandblasting or high pressure, 3,000 psi (21 MPa min.), water blasting is recommended to remove surface contaminants and open substrate for maximum sealer penetration.
- ◆ For existing brick and masonry unit construction, rout and tuckpoint all unsound or cracked mortar joints. Seal all sources of moisture entry at eve, parapet or flashing points. Once repairs are completed, clean walls with a suitable masonry cleaner to remove any efflorescence, mortar residue or laitance.
- ◆ Allow cleaned surfaces to dry for 48 hours or more.
- ◆ For horizontal surfaces, apply to the point of surface saturation. Typical application rates will vary depending upon the substrate porosity and surface area, but generally range between 200 sf/gal (4.9 sm/L) and 400 sf/gal (9.8 sm/L).
- ◆ For vertical surfaces, apply to the point of surface saturation with a controlled rundown of 6-8 inches (15-20 cm) working from the top to the bottom to ensure uniform coverage. Application rates will vary depending upon the substrate porosity and surface area. Typical application rates will range from 100 sf/gal (2.5 sm/L) to 400 sf/gal (9.8 sm/L).
- ◆ Apply using a low pressure, high volume sprayer or hand pump, air pressure-type construction sprayer.
- ◆ Applied product will flow to low areas or openings. Openings in the substrate, such as sewer or storm drain inlets, should be plugged to prevent accidental entry or escape of material.
- ◆ Using a broom, redistribute accumulated material from depressions or puddles to insure maximum distribution.
- ◆ For vertical applications, apply to a wet edge and avoid overlaps or recoating of previously treated areas.
- ◆ Clean up application equipment with mineral spirits.
- ◆ Treated surfaces should be swept clean and washed down at least quarterly. Areas subject to wheel traffic or other wear should be retreated when wear approaches product penetration depth.

TECHNICAL DATA

	Stifel 100
Color	Water White
Percent Active Silane Solids (by Weight)	>95%
Flash Point	145° F (63° C)
Bulk Density	7.3 lbs/gal (0.88 kg/L)
VOC	390 g/L
Dry Time	4-6 hours @ 70° F (21° C) and 50% RH

TEST DATA

NCHRP 244	
Series II	
Reduction in Water Absorption	88%
Reduction in Chloride Ion Absorption	88%
Series IV Accelerated Weathering, Southern Exposure	
Reduction in Chloride Ion Absorption	99%
ASTM G 85, G 53 Accelerated Weathering	
3,500 Hours	No Change

ASTM C642 (Standard Test Method for Density)	
Absorption and Voids in Hardened Concrete	
1 day	0.09%
2 days	0.11%
50 days	0.34%
OHD L-34, Test method for depth of penetration of concrete	
Depth of Penetration	0.45 in
Alberta Transportation BT001; Test Procedure for Determination of Waterproofing Performance after Surface Abrasion on Type I Sealers	
Waterproofing Performance	89%

PACKAGING

Packaged in 5 gal (19 L) pails and 55 gal (208 L) drums.

SHELF LIFE

Shelf life is one year. Use before the "USE BY" date stated on product packaging.

HANDLING/STORAGE

Store in a dry location within a temperature range between 40° F (4° C) and 100° F (38° C).

AVAILABILITY & TECHNICAL SERVICES

In addition to corporate offices in Omaha, Nebraska, NOX-CRETE INC. maintains regional offices and distribution centers in principal markets throughout the world. For source or technical information, call 800-669-2738 or 402-341-2080.

LIMITED WARRANTY

NOTICE-READ CAREFULLY

CONDITIONS OF SALE

NOX-CRETE offers this product for sale subject to, and Buyer and all users are deemed to have accepted, the following conditions of sale and limited warranty which may only be varied by written agreement of a duly authorized corporate officer of NOX-CRETE. No other representative of or for NOX-CRETE is authorized to grant any warranty or to waive limitation of liability set forth below.

WARRANTY LIMITATION

NOX-CRETE warrants this product to be free of manufacturing defects. If the product when purchased was defective and was within use period indicated on container or carton, when used, NOX-CRETE will replace the defective product with new product without charge to the purchaser.

NOX-CRETE makes NO OTHER WARRANTY, either express or implied, concerning this product. There is NO WARRANTY OF MERCHANTABILITY. In no case shall NOX-CRETE be liable for special, indirect or consequential damages resulting from the use or handling of the product and no claim of any kind shall be greater in amount than the purchase price of the product in respect of which damages are claimed.

INHERENT RISKS

NOX-CRETE MAKES NO WARRANTY WITH RESPECT TO THE PERFORMANCE OF THE PRODUCT AFTER IT IS APPLIED BY THE PURCHASER, AND PURCHASER ASSUMES ALL RISKS ASSOCIATED WITH THE USE OR APPLICATION OF THE PRODUCT.