STIFEL VC

Single component, water based, economical silane sealer for vertical concrete, brick masonry and concrete masonry surfaces.

VOLATILE ORGANIC COMPOUND (VOC) REGULATORY COMPLIANCE

GREEN™ ENGINEERED

STIFEL VC	USEPA	OTC	CARB-SCM	SCAQMD	LADCO	UT-R307	MCAQD	CANADA	CT, MD, DE, D.C.
	■	■	■	■	■	■	■	■	■

HOW IT WORKS

STIFEL VC chemically reacts with siliceous materials found in concrete and masonry to form a hydrophobic barrier, preventing the absorption of water and waterborne chloride ions. The small molecular structure of a silane molecule allows it to move through concrete pores and penetrate deeply, up to 1/2" inch or more. Protection is provided long after surface coatings and other "penetrating type" sealers have succumbed to abrasion or oxidation.

APPLICATIONS

- Use on all exterior, vertical concrete cast-in-place or precast concrete.
- Use on all exterior, vertical concrete masonry or brick masonry.
- Use on new or existing substrates.
- Use in applications where conventional silanes containing hydrocarbon solvent carriers cannot safely be used.

ADVANTAGES

- Unique silane chemistry does not evaporate under site application conditions, allowing for deep penetration (up to 1/2 inch) with consistent protection regardless of substrate or application conditions, such as warm or windy weather. Conventional silane sealers contain highly volatile silanes that evaporate during application, requiring a higher solids content to compensate for product lost through evaporation.
- ***The unique silane in STIFEL VC goes into the concrete, not into the atmosphere.***
- Protects treated surfaces from damage resulting from the absorption of water and chloride ion-containing deicing salts.
- Minimizes concrete freeze/thaw related surface scaling.
- Protects treated concrete from developing delaminations and spalls resulting from corrosion of imbedded reinforcing steel.
- Minimizes the formation of efflorescence staining and mortar leaching of treated masonry surfaces.
- Allows treated surfaces to breathe naturally. Water entering from the unprotected side or via cracks does not become trapped, minimizing surface sweating.
- Substantially extends the serviceable life of concrete structures and significantly reduces maintenance costs.
- Concrete skid resistance and texture are not altered.
- The adhesion bond strength of most sealants and top coats is improved with proper application of STIFEL VC.
- Safe and easy to use - single component, water based formulation is very low odor and has a high flash point (>200º F/100º C).
- Can be safely applied to concrete surfaces containing cured polyurethane, polysulfide or silicone joint sealants without affecting joint sealant performance.
- Green Engineered™ – better for health and the environment.
- Meets all federal and state VOC requirements.

⚠ PRECAUTIONS ⚠

- Certain extremely porous substrates may require an alternative STIFEL sealer to provide maximum performance. Contact Nox-Crete for more information.
- Although STIFEL VC can be used on horizontal surfaces, STIFEL GC and STIFEL SC will provide improved performance.
- Do not apply to concrete less than 28 days old.
- Do not apply to frost covered or permeated surfaces.
- To ensure proper performance, substrate temperatures must be above freezing, 32° F (0° C), at the time of STIFEL VC application, and remain above freezing for at least 8 hours following product application.
- Application to inadequately cleaned or wet substrates could result in less than optimum performance and blotchy or discolored appearance.
- Substrates with highly variable porosities may have color variations after treatment due to the varying and irregular absorption of STIFEL VC.
- Do not apply to glass or glazed tile. In case of accidental contact, remove immediately with soap and water.
- Do not apply to decorative surfaces without a test application to determine treated surface appearance acceptability.
- Product may damage vegetation or painted surfaces with contact.
- May not be compatible with certain paints, caulks, sealants or coatings.
- Protect from freezing. If allowed to freeze, product packaging may rupture and the emulsion stability of this product may be affected, making it difficult to keep product mixed during application. Product which is suspected of freezing should not be used.
- 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.

- New concrete or masonry should be a minimum of 28 days old and free from accumulations of dust, oil, grease, rubber tire residue, concrete curing or bondbreaking membrane or residue, paint, protective sealers or other foreign materials.
- For existing brick and masonry unit construction, rout and tuck-point 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.
- Mix container contents thoroughly immediately prior to use.
- Typical application rate ranges from approximately 100 sf / gal (2.5 sm / L) on porous substrates such as fractured face or fluted concrete masonry and soft bricks to 175 sf / gal (4.3 sm / L) on dense, non-absorbent substrates such as precast concrete and hard brick. Proper application rate is achieved at saturation to surface rejection and approximately 8-12 inches (20 - 30 cm) of run down.
- Apply using a low pressure, high volume sprayer or hand pump, air pressure-type construction sprayer. For substrates with varied surface elevations, use extra care and necessary application methods to ensure all exposed surfaces receive adequate treatment.
- Apply only to a wet edge and avoid overlaps or respotting of previously treated areas.
- Do not allow material to persist or puddle on recently caulked or sealed joints. Redistribute accumulated product.
- Clean application equipment promptly with soap and water.
- Treated surfaces should be power washed periodically. Inspect all mortar joints annually for soundness. Repair and reseal as needed.

TECHNICAL DATA

Color	Milky White
Odor	Mild
Bulk Density	8.3 lbs. / t (992 g / L)
Freeze Point	32º F (0º C)
Flash Point	> 212º F (100º C) PMCC
Active Solids	7.5%
VOC	<20 g / L

TEST DATA

ASTM C 642 Water Absorption of Hardened Concrete	86.3% Reduction
ASTM D 6489 Water Absorption of Hardened Concrete	
24 Hours	91.6% Reduction
48 Hours	90.4% Reduction
RILEM Test Procedure on Precast Concrete *Simulates wind driven rain at 88 mph*	
240 Minutes	94% Reduction

PACKAGING

Packaged in 5.28 gal (20 L) bag-in-a-box 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 Products Group 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

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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.

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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.

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