



Technical Data

TEST	METHOD	RESULTS
Adhesion to Concrete psi (MPa)	ASTM D-4541	28 Days 305 (2.07)
Surface Burning	ASTM E-84	< 25 Flame Spd < 450 Smoke Developed 0 5
Elongation at Break (%)	ASTM D-412	28 days 21.4
Tensile Strength psi (MPa)	ASTM D-412	28 days 440 (3.0)
Tensile Strength (recovery) at 10 minutes	ASTM D-412	28 days N/A
Tensile Strength (recovery) at 24 hours	ASTM D-412	28 days N/A
Water Vapor Permeability perms (ng/Pa.s.m2)	ASTM E-96	28 days 62.9 (3607)
Mold Resistance	ASTM D 3273	28 days > 85% humidity No Mold Growth
Solids Content by Volume (%)		67
Moisture Resistance	ASTM D 2247	14 days No Deterioration
VOC (g/L)	This product complies with US EPA (40 CFR 59) and South Coast AQMD (Rule 1113) VOC emission standards for architectural coatings. VOC less than 50 g/L.	
Application Thickness Wet mils (mm)	5 - 7 (0.13 - 0.18)	
Tested Thickness Dry mils (mm)	4 (0.10)	

StoSilco Shield is a silicone-enhanced smooth wall coating. It is used over prepared concrete, masonry, plaster/stucco, and EIFS finishes as a decorative and protective coating.

Volume Yield

+/- 4.7 gal.

Coverage

475-650 ft² (42.8-58.5 m²) per pail (2 coats).

Coverages may vary depending on application technique and surface conditions.

Packaging

5 gallon pail (19 L).

Color

800 Standard Color or Custom Color Matched.

Shelf Life

12 months, if properly stored and sealed.

Storage

Protect from extreme heat, [90°F (32°C)] freezing, direct sunlight.

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Features	Benefits
1 Hydrophobic	Repels water; resists wind driven rain
2 Non-thermoplastic	Does not soften at high temperatures; maximum resistance to dirt and airborne pollutants
3 Vapor permeable	Allows substrate to breathe naturally, resists blisters caused by trapped water vapor
4 UV Resistant	Excellent color retention
5 Water-based	Safe, non-toxic, cleans up with water
6 Low VOC	Safe for workers and the environment

Surface Preparation

Concrete and masonry surfaces: Surfaces must be free of all bond-inhibiting materials, including dirt, efflorescence, form oil and other foreign matter. Loose or damaged material must be removed by waterblasting, sandblasting or mechanical wire brushing and repaired. Avoid application over irregular surfaces. Resurface, patch or level surfaces to required tolerance and

smoothness with appropriate Sto leveling materials. Fill surface voids. Refer to ASTM D-4258 and ASTM D-4261 for complete details on methods of preparing cementitious substrates for coatings.

Exterior Insulation and Finish Systems (EIFS): Surface must be clean, sound, dry, frost-free, and free of all bond-inhibiting materials, including dirt and efflorescence.

Mixing

Mix with a clean, rust-free electric drill and paddle.

Application

Apply StoSilco Shield with brush, roller or proper spray equipment in two coats. Allow first coat to dry to the touch before application of second coat. Recommended dry mil thickness is 5-7 mils in two applications (prime coat and final coat). Once applied, the working time is up to 20 minutes depending upon material, ambient temperatures and surface conditions.

IMPORTANT: Apply coating in a continuous application, always working from a wet edge to eliminate cold joints. Minor shade variations may occur from batch to batch (refer to batch number on pail). Avoid installing separate batches side-by-side and avoid application in direct sunlight.

Limitations

Use StoSilco Shield only when surface and ambient temperatures are above 40°F (4°C) during application and drying period. Dark colored finishes are not recommended for use over Exterior Insulation and Finish Systems (EIFS). Select finish colors with a lightness value of 20 or greater when used as part of an EIF System. StoSilco Shield should not be used on horizontal, below grade or water immersed surfaces. Do not apply if the surface temperature is less than 5°F (2.8°C) above the ambient dew point temperature.

Protect from rain, freezing, and continuous high humidity until completely dry.

Curing/Drying

StoSilco Shield dries within 4 hours under normal [70°F (21°C), 50% RH] conditions. Drying time varies with temperature/humidity and surface conditions.

Clean Up

Clean tools and equipment with water immediately after use. Dried material can only be removed mechanically.

Sloped surfaces: minimum required slope is 1:2 (27°) and maximum width is 12" (300 mm). Sto Mesh embedded in Sto Flexyl is required beneath finish coating. Increase slope for northern climates to prevent accumulation of ice/snow and water on surface. Periodic inspection and increased maintenance of coating may be required.

Application of StoSilco Shield below grade is not recommended.

Health And Safety

Health Precautions

Product is water-based. As with any chemical construction product, exercise care when handling.

Safety Precautions

Use adequate ventilation. Safety goggles and protective gloves are recommended. Remove contaminated clothing immediately.

First Aid

SKIN CONTACT: Wash thoroughly with soap and water.

EYE CONTACT: Flush immediately with water for 10-15 minutes and contact a physician.

RESPIRATORY PROBLEMS: Remove affected person to fresh air immediately and contact a physician.

HYGIENE: Wash hands immediately after use. Wash clothing before reuse.

Spills

Collect with suitable absorbent material such as cotton rags.

Disposal

Dispose of in accordance with local, state or federal regulations.

Warning

KEEP CONTAINERS CLOSED WHEN NOT IN USE. KEEP OUT OF THE REACH OF CHILDREN. NOT FOR INTERNAL CONSUMPTION. FOR INDUSTRIAL USE ONLY. Consult the Material Safety Data Sheet for further health and safety information.

LIMITED WARRANTY

THIS PRODUCT IS SUBJECT TO A WRITTEN LIMITED WARRANTY WHICH CAN BE OBTAINED FREE OF CHARGE FROM: Sto Corp., 3800 Camp Creek Parkway, Building 1400, Suite 120, Atlanta, GA 30331; Tel: 404-346-3666; Fax: 404-346-3119.

ATTENTION

This product is intended for use by qualified professional contractors, not consumers, as a component of a larger construction assembly as specified by a qualified design professional, general contractor or builder. It should be installed in accordance with those specifications and Sto's instructions. Sto Corp. disclaims all, and assumes no, liability for on-site inspections, for its products applied improperly, or by unqualified persons or entities, or as part of an improperly designed or constructed building, for the nonperformance of adjacent building components or assemblies, or for other construction activities beyond Sto's control. Improper use of this product or use as part of an improperly designed or constructed larger assembly or building may result in serious damage to this product, and to the structure of the building or its components. **STO CORP. DISCLAIMS ALL WARRANTIES EXPRESSED OR IMPLIED EXCEPT FOR EXPLICIT LIMITED WRITTEN WARRANTIES ISSUED TO AND ACCEPTED BY BUILDING OWNERS IN ACCORDANCE WITH STO'S WARRANTY PROGRAMS WHICH ARE SUBJECT TO CHANGE FROM TIME TO TIME.** For the fullest, most current information on proper application, clean-up, mixing and other specifications and warranties, cautions and disclaimers, please refer to the Sto Corp. website, www.stocorp.com.

Sto Corp.

3800 Camp Creek Parkway
Building 1400, Suite 120
Atlanta, GA 30331
Tel: 404-346-3666
Toll Free: 1-800-221-2397
Fax: 404-346-3119
www.stocorp.com



SCR155-228 07/08 VEN 5609

