



StoColor[®] Lotusan[®] Low VOC

The exterior coating with <u>Lotus-Effect</u>® technology 80217 StoColor Lotusan – Low VOC



Technical Data					
REPORT	TEST METHOD	TEST CRITERIA	TEST RESULT		
Accelerated Weathering	ASTM G-155	2,000 hours	Pass, No Deleterious Effects		
Resistance to Wind Driven Rain	ASTM D-6904 (formerly Fed Spec TTC-555B)	Weight Gain 1 coat with primer 2 coats without primer	Pass, No Water Penetration <0.3 oz (<0.02 lbs) <1.4 oz (<0.09 lbs)		
Tensile Strength psi (MPa)	ASTM D-412		182 (1.25)		
Mold Resistance	ASTM D-3273	28 day exposure	Pass, No Mold Growth		
Adhesion to Concrete psi (MPa)	ASTM D-4541		550 (3.79)		
Water Vapor Permeability Perms (ng/Pa·s·m²)	ASTM E-96 Wet-cup method	2 coats	40 (2280)		
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.				
Percent Solids, by vol	ume*		52		

Typical values for material cured at 73°F (23°C) and 50% R.H.

^{*} Percent Solids by volume is approximated from change in thickness from wet application to measured dry film.

Fe	Features Benefits		
1	Super-hydrophobic	 Extremely water repellent Outstanding resistance to soiling Improved resistance to mold, mildew and algae 	
2	Vapor permeable	Allows substrate to breathe naturally; resists blisters caused by trapped vapor	
3	UV Resistant	Excellent color retention	
4	Water-based	Safe, non-toxic; cleans up with water	
5	Low VOC	Safe for workers and the environment	

Surface Preparation

All surfaces must be structurally sound, clean, dry, and free of frost and surface contamination such as dust, dirt, salts, grease, oils, efflorescence, mold, algae, mildew, and any other contamination that may affect adhesion. Use appropriate repair methods for the substrate to repair pitting, spalls, cracks, peeling, blistering, delamination, weak surface conditions such as laitance, water damage, or other defects that may exist.

Pressure washing is a recommended means of surface preparation. Follow necessary safety precautions and adjust pressure to avoid damage to the underlying substrate or substrate condition. For mold, algae, and mildew removal, treat surfaces with a commercial mildew removal and/or wash product carefully following manufacturer's application and safety directions. Rinse thoroughly with clean water, and allow a minimum of 24 hours to dry thoroughly.

Mixing

Mix with a clean, rust-free electric drill and paddle. For spray applications up to 5% dilution with water (40 ounces [1.2 L]) is permissible. The amount of water to add is proportional to the amount of colorant - darker colors use less water, lighter colors use more water. Add water

in increments to increase flow and facilitate spraying. DO NOT EXCEED MAXIMUM ALLOWABLE WATER ADDITION. Call Sto Technical Services (800 221-2397) for questions.

StoColor Lotusan is a smooth, vertical, above grade exterior wall coating with Lotus-Effect technology for concrete, stucco, masonry and EIFS.
Lotus-Effect technology mimics the self cleaning capabilities of the lotus leaf.

Coverage

200-270 ft² per gallon $(4.9-6.5 \text{ m}^2\text{ per liter})$ per coat, applied at 5-7 mils (0.13 to 0.18 mm), wet to achieve 2.6-3.6 mils DFT per coat.

940-1270 ft² (85-115 m²) per pail for a single coat, applied at 5-7 mils (0.13 to 0.18 mm) per coat, wet to achieve 2.6 – 3.6 mils DFT per coat.

470-635 ft² (44-58 m²) per pail for two coats, applied at 5-7 mils (0.13 to 0.18 mm) per coat, wet to achieve 2.6-3.6 mils DFT per coat.

Coverage may vary depending on application technique and surface conditions.

Packaging

5 gallon pail (19 L).

Color

Available in virtually any color including custom color matches.

Shelf Life

12 months, if properly stored and sealed.

Storage

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





StoColor® Lotusan® - Low VOC

Application

Apply only to sound and clean, dry, properly prepared, frostfree surfaces. Do not apply over damp surfaces or during rain, hail, or snow events or if rain, hail, or snow is imminent. Apply StoColor Lotusan – Low VOC in two uniform coats by brush, roller or with proper spray equipment to prepared/primed substrate. Apply coating in a continuous application, always working from a wet edge or architectural break to eliminate cold joints. Back roll open texture surfaces such as concrete masonry. Achieve 2.6 -3.6 DFT per coat. Allow sufficient time for drying between

IMPORTANT

ALWAYS check color for proper match. If color does not match, STOP-call your Sto representative. Minor shade variations may occur from batch-to-batch (refer to batch number on pail). Avoid installing separate batches side-byside and avoid application in direct sunlight. Avoid installing new coating adjacent to weathered or aged coating. Sto Corp. will not be responsible for shade or color variation from batch-to-batch, variation caused by application or substrate deficiencies, or fading resulting from natural causes such as weather. See Tech Hotline Nos. 0694-C, 0893-EC and 1202-CF for helpful tips on prevention of color problems.

Prevent or repair leaks from roofs, parapets, windows, sealants, or other components of construction, and prevent accumulation of water inside the wall assembly during or after construction. Water accumulation behind the coating could cause damage to the coating or underlying construction

Prepare a job site mock-up of the final coating assembly to verify aesthetics and adhesion to properly prepared/primed surfaces as specified by design professional or owner's quality assurance agent.

Substrates and Recommended Primers:

Substrate	Min. Age	Primer	WFT (DFT)
Concrete	28d	StoPrime Hot	5 (2.1)
Stucco	7d	StoPrime Hot	5 (2.1)
CMU	28d	StoPrime	6-8 (2.7-
			3.7)
EIFS	N/A	StoPrime Sand	4-6
			(1.8-2.7)
Painted	N/A	Depends on paint & its condition.	
		Test to determine best primer	

Note: StoPrime Conditioner is recommended as a surface conditioner and supplemental component for chalking substrate conditions. Selection of primer may vary depending on actual substrate conditions such as pH, absorption, texture, and desired aesthetic look.

Spray Application

When spray applying we recommend using a Graco 1095 or equivalent with a 19 to 21 mil tip size. Initial pressure should be 1900 to 2100 psi. Adjust pressure to optimize application for field conditions. See Mixing instructions for water

Curing/Drying

Dries within 24 hours under normal conditions [70°F (21°C), 50% RH]. Drying time varies with temperature/humidity and surface conditions.

Lotus-Effect® Technology

The super hydrophobic properties of Lotus-Effect technology are not immediate and require up to 30 days of weathering after it is applied to develop. These properties develop with aging and environmental conditions. Some highly textured surfaces may have reduced hydrophobic properties.

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

Limitations

- Protect installed materials from rain, freezing, and continuous high humidity until completely dry.
- Apply when ambient and surface temperatures are 40°F (4°C) and rising.
- Do not apply if the surface temperatures is less than 5°F (2.8°C) above the ambient dew point temperature.
- Do not apply in freezing conditions or during precipitation.
- Do not overcoat with solvent-based materials.
- Do not use below grade, on horizontal surfaces, or in areas of ponding water.
- Dark colors and colors requiring organic pigments may not be available.
- Custom color samples will not show hydrophobic properties until weathered.
- For directions on cleaning and general maintenance of StoColor Lotusan refer to the Tech Hotlines available on www.stocorp.com

Health And Safety

WARNING!

Causes eye and skin irritation. **Precautionary Statement**

Wash hands thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.
FIRST AID MEASURES

Eye Contact: Immediately flush eyes with plenty of water for at least 15 to 20 minutes. Ensure adequate flushing of the eyes by separating the eyelids with fingers. Get immediate medical attention.

Skin Contact: Immediately wash skin with plenty of soap and water for 15 to 20 minutes, while removing contaminated clothing and shoes. Get medical attention if irritation develops or persists. Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention. Ingestion: If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

Store locked up.

Spills

Collect with suitable absorbent material such as cotton rags.

Disposal

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

Warning KEEP CONTAINER 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.

Safety Data Sheet (SDS) is available at www.stocorp.com

LIMITED WARRANTY

This product is subject to a written limited warranty which can be obtained free of charge from Sto Corp.

Refer to Sto Specifications for more complete information on proper use and handling of this product.

Sto Corp.

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S155-80217

Revision: A7.0 Date: 08/2018

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 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 rull 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.