

PRODUCT BULLETIN

Sto ExtraSeal®



PRODUCT DESCRIPTION

Sto ExtraSeal is a polymer modified portland cement-based material for use over prepared vertical above-grade concrete and concrete masonry (CMU) walls as part of a StoGuard® waterresistive air barrier system. It is used beneath StoPowerwall® and other Sto listed ASTM C926 compliant stucco brown coats.

FEATURES	BENEFITS
Water-resistant material	Minimizes risk of water damage
Vapor Permeable	Minimizes risk of condensation in walls
Polymer-modified cement-based product	Excellent adhesion, increased durability, compatible with high pH substrates
Easy spread by trowel	Applicator friendly
Zero VOC	Can qualify for credits in sustainable design programs
Compatible with other StoGuard Products	Reliability and peace of mind

Coverage per Bag

Combined skim coat and scratch coat: $90-100 \text{ ft}^2 (8.4 - 9.3 \text{m}^2)$ at nominal ¼ inch (6mm) scratch coat thickness and nominal 1/16-1/8inch (1.6-3mm) skim coat thickness

When used only as a skim coat: $130-150 \text{ ft}^2 (12.1 - 13.9 \text{m}^2)$ at nominal ¹/₁₆-¹/₈-inch (1.6-3mm) thickness

Coverages are approximate and will vary depending on mix ratio with water, application technique, waste factor, surface conditions, and other variables that may exist. Construct a mockup under actual conditions of use to verify proper surface preparation, coverage, and method of application, for approval by the appropriate authority.

Packaging

50 lb (23 kg) bag

Shelf Life

12 months in original, unopened packaging

Store off the ground in a cool, dry area. Protect from extreme heat, moisture, and direct sunlight.

SURFACE PREPARATION

Surfaces must be fully cured, structurally sound, clean, dry, and free of frost, damage, and all bond-inhibiting materials, including dirt, dust, grease, efflorescence, form oil, curing compounds, paints or coatings, salts, laitance, or other surface conditions that could interfere with adhesion. The surface should be absorbent and slightly scarified or have surface roughness. Loose or weak materials must be removed, and surface damage must be repaired.

Concrete Masonry: provide open texture concrete masonry units with flush joints and free of surface contamination. Remove projecting mortar so it is even with the plane of the wall.

Concrete: remove form release agents or other surface contamination, remove form ties and correct surface defects such as spalls or honeycombs with Sto Wall Leveler and Patch or Sto Leveler and Skim Coat. Provide a surface that is slightly scarified.

If adhesion is in question conduct tensile bond tests as directed by design professional to verify adequacy of adhesion to the substrate. Conduct sufficient tests in a sufficiently wide area to ensure results are representative of the surface conditions on the project.

Where the surface is too smooth, dense, or non-absorbent to receive Sto ExtraSeal, or where form oil, an existing coating, or other surface contamination prohibits adhesion, furred or selffurred lath should be installed as specified by the design professional (refer to StoPowerwall® or StoPowerwall® DrainScreen® guide specifications and verify adequacy of lath attachment with respect to design wind pressures).

Refer to Sto Guide Specification 6500 for information on substrates, construction sequencing, field quality assurance and control testing, and other design and installation guidance.



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MIXING

Use 5-6 qts. (4.7-5.7 L) of water per 50 lb. (23kg) bag. Mix manually by adding one bag of Sto ExtraSeal to clean, potable water in a clean mixing pail. Mix with a clean, rust free, electric drill and paddle. Allow to set approximately 5 minutes, adjust mix if necessary by adding up to 12 fl. oz (0.35 L) of water to a bag, and remix to a uniform consistency. Avoid re-tempering after mixing of product. Do not exceed maximum amount of water in mix ratio. Pot life is approximately 45 minutes, depending on conditions.

APPLICATION

Apply only to clean, sound, properly prepared, frost-free surfaces. In hot weather store material in a cool environment just prior to use and use cold water for mixing. Thoroughly dampen CMU and absorbent concrete surfaces in hot, dry weather to reduce surface absorption just prior to installation of product. Work away from the sun or provide shade, and work during cooler periods of the day.

Skim Coat: apply a uniform coat of Sto ExtraSeal at nominal $^{1}/_{16}$ $^{1}/_{8}$ inch (1.6-3mm) thickness by trowel BEFORE stucco grounds and accessories are installed to achieve a void and pinhole free surface.

Air Barrier and Flashing Connections: tie-in adjoining air barrier and flashing components such as window rough opening protection, making sure overlap onto Sto ExtraSeal DOES NOT EXCEED THE WIDTH OF THE PERFORATED FLANGE on stucco accessories (e.g. casing beads, expansion or control joint accessories). The Sto ExtraSeal scratch coat (see below) may not adhere to other air barrier and flashing components. Refer to Sto Detail Series 65c.xx.

Scratch Coat: apply a nominal ¼ inch (6 mm) scratch coat of Sto ExtraSeal by trowel minimum 24 hours after the skim coat is dry. Scratch the surface horizontally with a stucco rake tool. Allow to dry minimum 24 hours, longer in cool or damp weather, before application of brown coat.

Brown Coat: apply StoPowerwall Stucco or a Sto listed* ASTM C926 compliant portland cement stucco brown coat in accordance with applicable codes and manufacturer's requirements, including moist curing of the stucco brown coat for minimum 4 hours. Limit total thickness, including Sto ExtraSeal skim coat and scratch coat, and stucco brown coat, to 5/8 inches (16mm) maximum.

APLICATION (CONTINUED)

*Sto Listed ASTM C926 Stucco Brown Coat Products: Refer to StoPowerwall Stucco Addendum at www.stocorp.com.

Finish Coat: allow final stucco application to completely dry before applying finish (Sto Coating, Sto Textured Finish, Sto Specialty Finish, or StoCast Finish). Check for pH < 10 before installing finish; or, wait 28 days for full cure of stucco. Alternatively, install StoPrime Hot minimum 2 days after moist cure of stucco brown coat, then install Sto finish after 7-day age of stucco. Refer to applicable Sto product bulletins for Sto primer, coating, and finish installation instructions.

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

Drying: Sto ExtraSeal does not require moist curing. Sto ExtraSeal dries within 8 hours under normal drying conditions [70°F (21°C), 50% RH]. Cold and/or damp weather will extend drying time. Hot or dry conditions will accelerate drying. Protect from rain and freezing until completely dry. Full cure of product is at 28 days. IMPORTANT: IF TEMPORARY HEATERS ARE USED, VENTILATE TO THE EXTERIOR TO PREVENT WATER VAPOR FROM CONDENSING ON OR WITHIN THE WALL ASSEMBLY COMPONENTS.

LIMITATIONS

- Rapid loss of moisture during drying period due to direct sun, wind, or high temperatures, can cause cracking and low strength development in portland cement-based materials.
 Adjust scheduling of work accordingly to avoid each of these conditions.
- Use of excess water in the mix can cause cracking and low strength development in portland cement-based materials.
 Do not exceed recommended amount of mix water.
- Do not use to level irregular or out-of-plane wall surfaces.

 Use appropriate Sto repair mortar for these purposes.
- Do not use on surfaces with standing or glistening water.
- Do not use on wood substrates.
- Do not use over air barrier, flashing, or rough opening protection materials. Sequence work so these materials lap over the Sto ExtraSeal skim coat and apply appropriate stucco accessories over the lapped area.
- Not intended for use as rough opening protection
- Not intended for permanent exposure to weather. Protect with stucco brown coat within 60 days of application.
- Not for use below grade.



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LIMITED WARRANTY

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

HEALTH & SAFETY

Health Precautions

Contains Portland cement and crystalline-free silica. Avoid breathing dust. As with any chemical construction product, exercise care when handling.

Safety Precautions

Use adequate ventilation. Use of a NIOSH/MSA-approved dust respirator, safety goggles and protective gloves is recommended.

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.

 $\label{thm:basic} \mbox{HYGIENE: Wash hands immediately after use. Wash clothing before re-use.} \\ \mbox{\bf Spills}$

Collect in an appropriate container. Uncured material may be removed with water.

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 Safety Data Sheet (SDS) at www.stocorp.com for further health and safety information.

TECHNICAL DATA

REPORT	TEST METHOD	TEST CRITERIA	TEST RESULT*		
Air Leakage Resistance	ASTM E2178	<0.004 cfm/ft ² @ 1.57 psf	Pass		
-		(< 0.02 L/m ² ·s @ 75 Pa)			
Water Penetration Resistance	ASTM E514	Measure water penetration	No water penetration		
		through CMU substrate			
Adhesion	ASTM D4541	> 50 psi (345 kPa)	> 50 psi (345 kPa)		
Surface Burning	ASTM E84	Flame Spread: ≤ 25	Flame spread: 0		
		Smoke developed: ≤ 450	Smoke developed: 5		
			Class A Building Material		
Building Code Compliance	Complies with 2018 IBC, IRC, and IECC requirements as an air barrier material				
	 Complies with 	Complies with 2020 FBC requirements as an air barrier material			
	 Complies with 	Complies with 2020 FBC requirements as an air barrier assembly when used			
	with StoGuard	with StoGuard® Detail Components and other components specified by the code			
VOC	Calculated	Meets EPA ¹ and SCAQMD ¹ en	nission standards for Building		
		Envelope Coating, VOC less than 50 g/L			
	Results are based on lab testing under controlled conditions. Results can vary between labs or from field tests				
 EPA=Environmental Protection Agency, South Coast 	. EPA=Environmental Protection Agency, South Coast AQMD=South Coast Air Quality Management District				

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	Revision Number: 004 Date: 03/2024	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
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