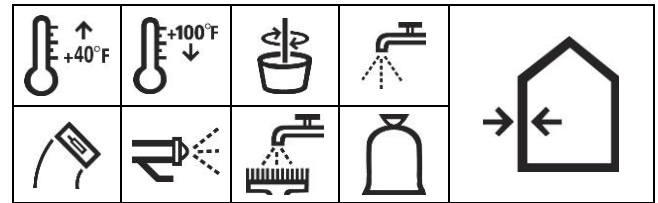


Sto ExtraSeal™

81423 ExtraSeal™

Air and Moisture Barrier Component beneath Direct-Applied Stucco



Technical Data			
REPORT	TEST METHOD	TEST CRITERIA	TEST RESULTS
Air Permeance ¹	ASTM E2178	≤ 0.004 cfm/ft ² @ 1.57 psf (≤ 0.02 L/m ² ·s @ 75 Pa)	< 0.004 cfm/ft ² @ 1.57 psf (< 0.02 L/m ² ·s @ 75 Pa)
Water Penetration	ASTM E514	Detect and measure through-wall water penetration after 4 hours at water spray rate of 3.4 gal/ft ² (138 L/m ²) and 10 lb/ft ² (500 Pa) pressure	No water penetration detected
Water Vapor ¹ Permeance	ASTM E96 Method B (wet cup)	> 5 perms 286 ng/(Pa·s·m ²)	> 8 perms 458 ng/(Pa·s·m ²)
Adhesion to CMU	ASTM D 4541	> 50 psi (345 kPa)	> 100 psi (690 kPa)
Shear Bond Strength	Lab Method	> 50 psi (345 kPa)	> 100 psi (690 kPa)
Surface Burning	ASTM E84	Flame Spread: ≤ 25 Smoke developed: ≤ 450	< 25 < 450
VOC (g/L)	<50 g/L Calculated	0 VOC, meets EPA and SCAQMD ² VOC requirements for adhesives and architectural coatings.	

Sto ExtraSeal is a portland cement-based air and moisture barrier component for use beneath direct applied stucco brown coats. It is applied by trowel or pump to vertical above grade concrete and concrete masonry (CMU) wall surfaces.

Coverage

As a Skim Coat
40-60 ft² (3.7 – 5.6 m²) when applied at 1/8 inch (3 mm) thick.

As a Scratch Coat
20-30 ft² (1.8 – 2.8 m²) when applied at 1/4 inch (6 mm) thick.

Coverage will vary depending on mix ratio with water, application technique and surface conditions. Rough or out of plane surfaces require thicker layers of material which will reduce coverage.

Packaging

65 lbs. (29.5 kg) bag.

Shelf Life

12 months, if properly stored and sealed.

Storage

Store off the ground in a cool, dry area. Protect from extreme heat (90°F [32°C]), moisture, direct sunlight, and freezing.

¹ When applied as an assembly with ASTM C 926 compliant stucco brown coat

² EPA, Environmental Protection Agency
SCAQMD, South Coast Air Quality Management District

Features	Benefits
1 Fully adhered structural air barrier system	Reduces energy consumption, undamaged by wind and stack effect
2 One component multipurpose product	Simplifies mixing, application, and handling – air barrier performance and back-up moisture protection – when combined with ASTM C 926 compliant stucco brown coats
3 High build, filling and leveling capability	Does not require flush CMU mortar joints, works to fill and level rough concrete or CMU wall surfaces
5 Vapor Permeable	Minimizes risk of water damage to substrate and water entrapment in walls
6 Resists Water Penetration	Minimizes risk of water damage to substrate and water leakage to the interior.
7 Polymer-modified cement based fiber reinforced product	Excellent adhesion, increased durability and freeze thaw resistance, compatible with high pH substrates, resists cracking
8 Fast drying in cold and wet weather compared to many liquid applied products	Reduces risk of water and freeze damage in wet and/or cold weather. Same day application for skim coat and scratch coat in most cases
9 Low VOC	Can qualify for credits in sustainable design programs

Sto ExtraSeal™

Application

Surface Preparation

Surfaces must be structurally sound, clean, dry or damp, absorbent, slightly pitted or profiled, and free of frost, damage, and all bond-inhibiting materials, including dirt, efflorescence, paint or other coatings, form oil and other foreign matter. Loose or damaged material must be removed by water blasting, sandblasting or mechanical wire brushing and repaired. Dampen highly absorbent surfaces with water. **IMPORTANT:** verify bond to properly prepared surfaces as specified by design or construction professional, at minimum 28 day age of assembly.

Mixing

Use approximately 1 gallon (3.8 L) of clean water with each 65 lb. (29.5 kg) bag of Sto ExtraSeal. Slight water adjustments may be required to achieve desired consistency depending on ambient temperature and humidity conditions. Avoid using excess water. Add ½ to 2/3 of the required water and one bag of Sto ExtraSeal in a paddle type mortar mixer and begin mixing. Then add sufficient water to achieve a uniform mix of workable consistency. Mix for 2 minutes after all of the materials are in the mixer. Allow material to rest for 1 minute, then continue mixing for 1-3 minutes. Material may be re-tempered once in the first 45 minutes after mixing. Avoid re-tempering after the first 45 minutes and discard material older than 1 hour or material that becomes too firm to apply. Keep mix ratio consistent from batch-to-batch and mix each batch separately. Use only the amount of water necessary for a workable mix. Use of excess water is detrimental to performance.

Application

Surface and ambient temperatures must be above 40°F (4°C) during application and for 24 hours following set. Apply a uniform coat of Sto ExtraSeal at approximately 1/8 inch (3 mm) thick by spray or trowel BEFORE stucco grounds and accessories are installed. For spray applications “knock down” with a trowel. Trowel sufficiently to achieve a uniform, smooth closed surface. Thickness will vary with substrate condition. Tie-in other air barrier components and install stucco grounds over the skim coat (refer to Sto guide details). Apply a ¼ (6mm) scratch coat of Sto ExtraSeal by spray or trowel any time after the skim coat is dry and firm enough to receive the scratch coat. Scratch the surface horizontally with a stucco rake tool. Allow to dry and apply an ASTM C 926 compliant portland cement stucco brown coat in accordance with applicable codes and manufacturer’s requirements as soon as the scratch coat is firm enough to receive the brown coat. Limit total thickness, including Sto ExtraSeal and stucco brown coat, to 5/8 inches (16 mm) maximum. Finish stucco wall surfaces with Sto primer and the desired texture/color Sto smooth or textured finish. Refer to applicable product bulletins for primer and finish installation.

Curing, Drying

Moist cure material as needed under hot, dry or windy conditions by lightly fogging the surface for up to 48 hours. Cold and/or damp weather will extend drying time. Hot or dry conditions will accelerate drying. Protect from rain and freezing until completely dry.

Clean Up

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

Health And 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. **HYGIENE:** Wash hands immediately after use. Wash clothing before re-use.

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) on www.stocorp.com or by calling 1-800-221-2397 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.

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

Limitations

- Use only when surface and ambient temperatures are above 40° F (4° C) and rising during application and drying period.
- Do not use when temperature is above 100° F (37.7° C).
- Rapid loss of moisture from exposure to direct sunlight, wind and high temperatures, can cause cracking in portland cement-based materials. Adjust scheduling of work accordingly to avoid these conditions.
- Do not use on surfaces with standing or glistening water.
- 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.
- Not intended for permanent exposure to weather. Protect with brown coat and finish within 90 days.
- Not for use below grade.
- Not recommended as a base or adhesive for stone, tile, or other adhered masonry veneer or with EIFS.
- Some cracking and efflorescence are inherent in Portland cement products. These are not product defects.

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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.