Sto ExtraSeal®
81709 ExtraSeal
Air and Moisture Barrier Component beneath
Direct-Applied Stucco

Technical Data

<table>
<thead>
<tr>
<th>REPORT</th>
<th>TEST METHOD</th>
<th>TEST CRITERIA</th>
<th>TEST RESULTS</th>
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</thead>
<tbody>
<tr>
<td>Adhesion</td>
<td>ASTM D 4541</td>
<td>CMU: ≥ 50 psi (345 kPa)</td>
<td>CMU: &gt;100 psi (689 kPa)</td>
</tr>
<tr>
<td>Air Leakage Resistance</td>
<td>ASTM E2178</td>
<td>&lt;0.004 cfm/ft² @ 1.57 psf</td>
<td>Complies</td>
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<tr>
<td></td>
<td></td>
<td>(&lt; 0.02 L/m²-s @ 75 Pa)</td>
<td></td>
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<tr>
<td>Water Penetration</td>
<td>ASTM E514</td>
<td>Measure water penetration</td>
<td>No water penetration</td>
</tr>
<tr>
<td>Resistance</td>
<td></td>
<td>through CMU substrate</td>
<td></td>
</tr>
<tr>
<td>Surface Burning*</td>
<td>ASTM E84</td>
<td>Flame Spread: ≤ 25</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Smoke developed: ≤ 450</td>
<td></td>
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<tr>
<td>VOC</td>
<td>Calculated</td>
<td>Meets EPA¹ and SCAQMD¹ emission</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>standards for Building</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Envelope Coating, VOC &lt;50 g/L</td>
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</table>

¹ EPA=Environmental Protection Agency, SCAQMD=South Coast Air Quality Management District
* Results based on comparable cementitious Sto products with E84 testing

Features

1. Vapor Permeable
   - Minimizes risk of water entrapment in walls

2. Resists Water Penetration
   - Minimizes risk of water damage to substrate and water leakage to the interior.

3. Polymer-modified cement-based product
   - Excellent adhesion, increased durability, compatible with high pH substrates

4. Easy spread by trowel
   - Applicator friendly

5. Zero VOC
   - Can qualify for credits in sustainable design programs

Preparation

Concrete and masonry surfaces: Surfaces must be structurally sound, clean, absorptive, slightly pitted or profiled, and free of frost, damage, and all bond-inhibiting materials, including dirt, dust, 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. Thoroughly dampen CMU and absorptive concrete surfaces in hot, dry weather to reduce surface absorption just prior to installation of Sto ExtraSeal. Verify bond of Sto ExtraSeal to properly prepared surfaces as specified by design professional at 28 day age of the stucco assembly.

Mixing

Use 5-6 qts. (4.7-5.7 L) of water per 50 lb. (22.7 kg) 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.

Sto ExtraSeal is a portland cement-based air and moisture barrier component for use over prepared concrete and concrete masonry (CMU) walls beneath StoPowerwall and other Sto listed ASTM C926 stucco brown coats. It provides substrate water penetration resistance and air leakage resistance.

Coverage
(per 50 lb [-23 kg] bag)

As a skim Coat on CMU
130-160 ft² (12.1 – 14.9 m²) at 1/16 inch (1.6mm) dry thickness
As a scratch Coat (applied over Sto ExtraSeal skim coat):
90-100 ft² (8.4 – 9.3m²)

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

Packaging
50 lbs. (~23 kg) bag.

Shelf Life
12 months, if properly stored in original unopened packaging.

Storage
Store off the ground in a cool, dry area. Protect from extreme heat, moisture, and direct sunlight.
Applying Only to Clean, Sound, Properly Prepared, Frost-Free Surfaces: Thoroughly dampen absorbent surfaces - concrete masonry (CMU), and absorbent concrete, especially during hot weather conditions (greater than 85 degrees F [29 degrees C]). IMPORTANT: specify CMU with flush joints for best results and to improve material coverage.

Skim Coat: Apply a uniform coat of Sto ExtraSeal at nominal 1/16-1/8 inch (1.6-3 mm) thick by trowel before the 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 dimensional of the perforated flange on stucco accessories (e.g. casing beads, expansion or control joint accessories), as the Sto ExtraSeal scratch coat may not adhere to other air barrier and flashing components. Refer to Sto 655.xx Details.

Scratch Coat: Apply a 1/4 inch (6 mm) scratch coat of Sto ExtraSeal by trowel minimum 24 hours after the skim coat is dry. Rake the surface horizontally with a stucco scratch coat tool. Allow to dry minimum 24 hours, longer in cool or damp weather, before application of brown coat.

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

*Sto Listed ASTM C926 Stucco Brown Coat Products: StoPowerwall Stucco, Sto Quikrete 1200

Finish Coat: Allow final stucco application to completely dry before applying Sto primer or finish. Check for pH<10 before installing Sto primer or 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 product bulletins for Sto primer and finish installation instructions.

Curing, 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.

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

limitations:

- Use only when and 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 during drying period due to direct sun, wind, and 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 on surfaces with standing or glistenimg water.
- Do not use on wood substrates.
- Do not use on air barrier, flashing, or rough opening protection materials. Sequence work so these materials lap over the Sto ExtraSeal skim coat, and apply appropriate stucco accessory over the lapped area.
- Not intended for use as rough opening protection.
- Not intended for permanent exposure to weather.
- Not for use below grade.
- Not recommended as a base or adhesive for stone, tile, or other adhered masonry veneer or as part of an adhered masonry veneer assembly.
- Not recommended as a base for pump or machine applied stucco brown coats.

Health And Safety

DANGER!: Health Precautions
Causes serious eye damage, skin irritation. May cause an allergic skin reaction. May cause respiratory irritation. Causes damage to organs through prolonged or repeated exposure. Harmful if inhaled.

Safety Precautions

First Aid
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.

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.