

# StoPowerwall® ExtraSeal™

Portland cement stucco directly applied to CMU with continuous air and moisture barrier and high performance finish



Substrate: Code compliant concrete masonry wall construction	
1)	Sto ExtraSeal Air and Moisture Barrier
2)	Sto ExtraSeal scratch coat
3)	StoPowerwall Stucco or any ASTM C 926 compliant stucco brown coat
4)	Sto primer (optional)
5)	Sto Textured Finish

## System Description

StoPowerwall ExtraSeal is a stucco wall assembly with continuous air and moisture barrier for direct applications to CMU wall construction. It combines the strength and durability of traditional stucco with Sto ExtraSeal moisture protection and Sto high performance finishes.

## Uses

StoPowerwall ExtraSeal can be used in residential or commercial CMU wall construction for superior aesthetics, durability, air and moisture control.

Features	Benefits
<b>Integrally colored factory blended textured finish</b>	Consistent color and aesthetics increase curb appeal
<b>Impact and puncture resistant</b>	Withstands abuse, reduced maintenance
<b>Continuous air and moisture barrier</b>	Protects against mold and moisture problems
<b>Fully compatible, tested materials</b>	Peace of mind

Properties	
<b>Weight</b>	< 7 psf (34.2 kg/m <sup>2</sup> )
<b>Stucco Assembly Thickness</b>	Nominal 5/8 inch (16 mm)
<b>R-value (stucco only)</b>	0.15 – 0.18 ft <sup>2</sup> ·h·°F / Btu (0.026 – 0.031 m <sup>2</sup> ·K / W)
<b>Wind Load Resistance</b>	Equivalent to CMU wall construction
<b>Air Barrier Material Compliance</b>	<ul style="list-style-type: none"> <li>• IBC and IRC (2015)</li> <li>• ASHRAE 90.1-2013</li> </ul>
<b>Construction Types, Fire Resistance</b>	<ul style="list-style-type: none"> <li>• Suitable for types I – V construction</li> <li>• ASTM E119 hourly rated assemblies</li> </ul>

## Warranty

**Up to 12 year Limited Warranty available on Sto products, depending on options selected.**

## Maintenance

Requires periodic cleaning to maintain appearance, repair of cracks and impact damage if they occur, recoating to enhance appearance of weathered finish. Sealants and other façade components must be maintained to prevent water infiltration.

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Limitations
Fire resistance rated assemblies based on CMU base wall assembly rating
Wind load resistance: equivalent to wind load capacity of CMU wall construction
Cracking can occur in Portland cement stucco. Cracking is generally not caused by a material defect in the stucco and can be minimized by following sound design and construction practices such as the proper installation of lath, the proper incorporation of stress relief joints in the construction, proper sand gradation for field mixed stucco, proper proportioning of stucco mix ingredients, use of the minimum amount of water in the stucco mix for placement of stucco, avoiding the use of excess water, moist curing of the stucco after it has been applied, and proper sequencing of construction to avoid stresses in the freshly placed stucco.
Efflorescence is a normal occurrence in portland cement based products and can affect final appearance of finish products installed over stucco.
For use on vertical above grade walls only. Do not use below grade or on roofs or roof-like surfaces.
Dark or highly saturated finish colors may require added maintenance compared to light or pastel colors.
Air Barrier and base coat materials are not intended for prolonged weather exposure. Refer to component product bulletins for specific limitations involving exposure, use, handling and storage of component materials.
For application to concrete substrates verify bond to the prepared substrate, as specified by the design professional, at minimum 28 day age of stucco assembly. Where the substrate is too smooth, dense, or non-absorbent for adhesion, install appropriate metal lath plaster base as specified by the design professional.

Sustainable Design	
Air Quality and VOC Compliance	
All finish coatings, adhesives, air barrier joint treatments and coatings meet US EPA (40 CFR 59) and SCAQMD (Rule 1113) emission standards for architectural coatings.	
LEED Credit Eligibility	
<ul style="list-style-type: none"> <li>• Energy and Atmosphere (EA)</li> <li>• Materials and Resources (MR)</li> <li>• Innovation in Design (IA)</li> </ul>	
Regulatory Compliance and Standards Testing	
<b>ICC ESR 2323</b>	StoPowerwall Stucco
<b>ASTM E 2178<sup>1</sup></b>	Sto ExtraSeal air and moisture barrier complies with 2012 and 2015 IECC requirements as an air barrier material ( $\leq 0.004$ cfm/ft <sup>2</sup> at 0.3 inches water [0.02 L/s·m <sup>2</sup> ] air permeability)
<b>ASTM E 514<sup>2</sup></b>	Sto ExtraSeal air and moisture resists water penetration for 4 hours
<b>ASHRAE 90.1-2013<sup>3</sup></b>	Air barrier complies with Section 5, Building Envelope, air barrier requirements
<b>ASTM E 119<sup>4</sup></b>	Assembly meets requirements for hourly rated assembly when installed over code compliant hourly rated CMU wall construction

1. *Standard Test Method for Air Permeance of Building Materials*
2. *Standard Test Method for Water Penetration and Leakage Through Masonry*
3. *Energy Standard for Buildings Except Low-Rise Residential Buildings*
4. *Standard Test Methods for Fire Test of Building Construction and Materials*

<p><b>Sto Corp.</b>                  3800 Camp Creek Parkway                  Building 1400, Suite 120                  Atlanta, GA 30331</p> <p>Tel: 404-346-3666                  Toll Free: 1-800-221-2397                  Fax: 404 346-3119</p> <p><b>www.stocorp.com</b></p>	<p><b>SB – S6500</b>                  Revision: 001                  Date: 06/2016</p>	<p style="text-align: center;"><b>Attention</b></p> <p>Sto products are 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. They 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 Sto products 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. <b>STO CORP. DISCLAIMS ALL WARRANTIES EXPRESS 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.</b> 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, <a href="http://www.stocorp.com">www.stocorp.com</a>.</p>
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