



StoPowerwall® Stucco Systems Designing the Evolution of Stucco

StoPowerwall® Stucco Systems

Faster, better, more economical and durable stucco installation from Sto, the leader in wall cladding systems.

StoPowerwall NExT DrainScreen is an advanced, integrated system that combines the best protective and aesthetic elements into a superior wall cladding. The system is comprised of several components including StoGuard fluid-applied waterproof air barrier, Sto DrainScreen drainage mat, StoPowerwall stucco and Sto textured finishes. Together these make a system that performs better than traditional stucco, with finishes and coatings that keep out moisture while providing a myriad of design options.

Fluid-applied waterproof air barrier

StoGuard, the NExT component, is a fluid-applied waterproof air barrier membrane that unites energy efficiency and durability, creating a continuous waterproof air barrier beneath StoPowerwall claddings.

- Superior protection against moisture intrusion
- Continuous air barrier resists leakage and improves energy efficiency
- Improved indoor air quality
- Protection against mold and mildew
- Easy and safe to install

Drainage

Sto DrainScreen is a drainage mat between the cladding and the StoGuard seamless waterproof air barrier. Should water reach the area between the protected substrate and cladding it can drain from the wall assembly via the drainage mat, which also helps speed the drying of moisture-laden air (water vapor) that can accumulate in the wall assembly. Drainage and drying can be particularly important in hot and humid climates and in areas with wind-driven rain.

StoPowerwall® Stucco

Sto's blend of Portland cement, fibers and other additives has field-mixed stucco beat hands down for 1/2" to 7/8" stucco applications:

- Factory mixed for consistent quality
- High compressive strength and tensile strength for greater impact resistance and less cracking
- Enables lower weight per square foot because it can be installed in thinner sections than conventional stucco
- Protects against moisture intrusion and looks better longer
- Faster installation with less field mixing reduces cost and improves quality

Sto Textured Finishes and Smooth Coatings

High-performance finishes and coatings extend StoPowerwall systems' protective properties by resisting moisture and UV degradation, enhancing weather resistance and appearance over time. A comprehensive array of colors and textures gives architects the design options they desire.



Cover photo: Southface Eco Office, Atlanta GA. LEED Platinum Certification

StoPowerwall NExT incorporates StoGuard seamless fluid-applied membrane which provides a continuous air and moisture barrier, to increase energy efficiency and to protect sheathing.



StoPowerwall Stucco Systems Stand Apart from the Rest

Locally produced for the best value

StoPowerwall stucco is produced locally from the best raw materials for the highest quality, most economical stucco application.

Lightweight = cost effective

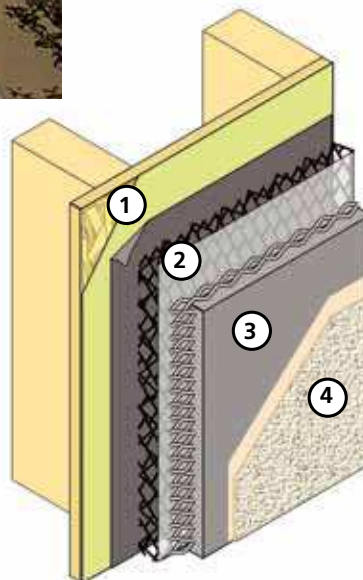
StoPowerwall stucco can be applied at 5/8" over metal lath, thinner than conventional stucco so its structural requirements are less, saving you time and money.

Unmatched color selection and design options

StoPowerwall finishes and coatings deliver excellent color uniformity and a wide array of tint choices using highly concentrated pigments that won't dilute material like universal tints can. With a variety of textured finishes and smooth coatings and more than 1 million tint formulas, StoPowerwall puts custom design options at your fingertips.

Why drainage?

Hot and humid climates and regions that experience wind-driven rain benefit tremendously from a drainage mat in the wall cavity. This component is required in many regions and will likely be adopted more widely in the near future. Sto DrainScreen creates an air gap that promotes drainage and drying of wall assemblies.



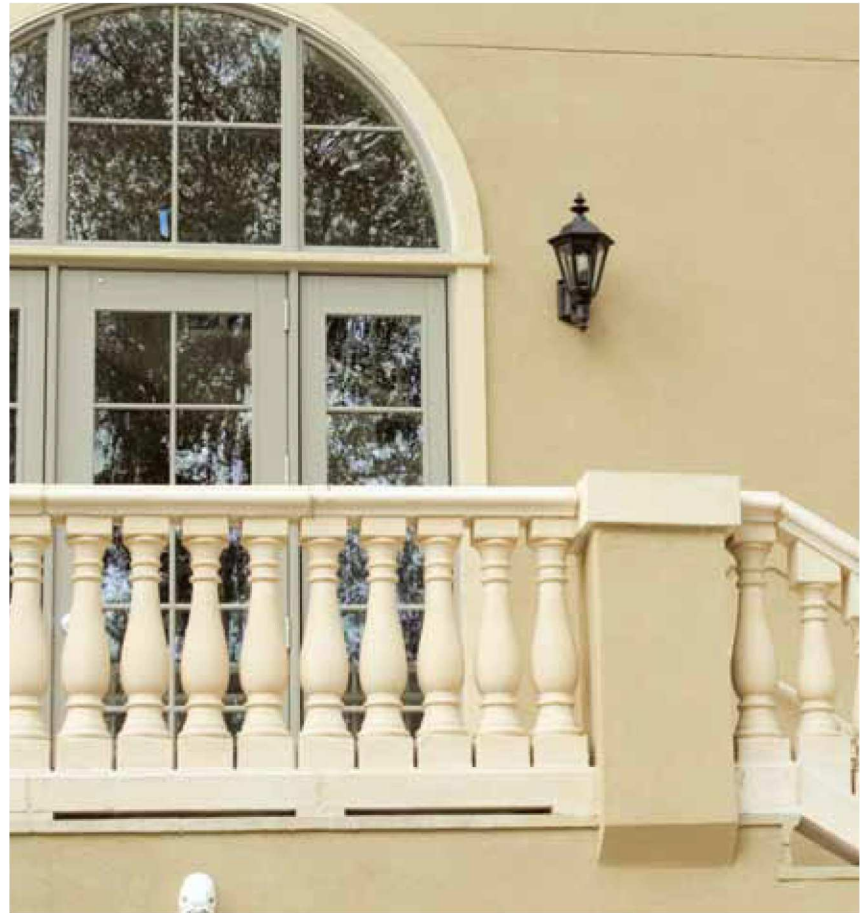
StoPowerwall NExT DrainScreen System

- 1: StoGuard fluid-applied membrane
- 2: Sto DrainScreen
- 3: StoPowerwall stucco
- 4: Sto Textured finish / Smooth coating

StoPowerwall NExT and DrainScreen: the only stucco system you need

With all the moisture protection, energy efficiency and durability of StoGuard fluid-applied waterproof air barrier and the drainage of Sto DrainScreen built in.

Sto unites StoGuard fluid-applied membrane and Sto DrainScreen drainage cavity with strong, lightweight StoPowerwall systems for a wall cladding that resists water penetration and air leakage and allows drainage better than other stucco applications. The secret of Sto's success is in the unique combination of products working together to deliver superior durability, weather protection and good looks. Custom-color coatings and textured finishes make it easy to achieve high-impact curb appeal as well.

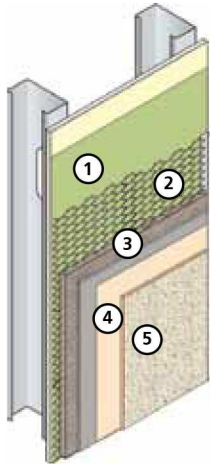


StoPowerwall Systems Features and Benefits

Feature	Benefit
Waterproof Air Barrier Protection	StoGuard waterproof air barrier saves energy and protects against moisture intrusion by resisting air leakage and providing a waterproof layer of protection behind stucco
Premium Acrylic, Elastomeric and Lotus-Effect Finishes and Smooth Coatings	<ul style="list-style-type: none"> • Vapor permeable to minimize blistering, peeling and bubbling • Excellent weatherability to resist wind-driven rain and UV light degradation • Superior fade and UV resistance for long-lasting durability and color retention • Superior resistance to algae, mildew and mold growth
High Compressive Strength Greater than 2,500 psi	Greater impact resistance for greater customer satisfaction
High Tensile Strength Greater than 200 psi	Less cracking for greater in-service satisfaction
Allows for Lower Weight per Square Foot Than Field Mixed Stucco	Lower and less expensive structural requirements
Superior Weather Resistance	<ul style="list-style-type: none"> • Does not absorb as much moisture as conventional stucco • Resists moisture penetration • Helps maintain appearance longer
Faster Installation	<ul style="list-style-type: none"> • Less field mixing = less time and better consistency • Can be applied in one application • Lower installation costs
Design Flexibility	Numerous color and finish texture choices
Drainage	Sto DrainScreen creates an air gap that promotes drainage and drying

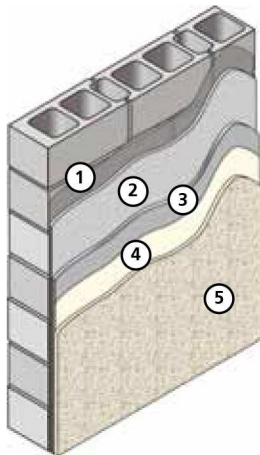
Standard System Warranties

Finish Type	Warranty (StoPowerwall NExT DrainScreen)	Warranty (StoPowerwall NExT System with primer)	Warranty (StoPowerwall System with primer)
Stolit Lotusan	up to 13 years	up to 12 years	up to 10 years
Powerflex Silco	up to 13 years	up to 12 years	up to 10 years
Powerwall	up to 11 years	up to 10 years	up to 7 years
Powerflex	up to 11 years	up to 10 years	up to 7 years



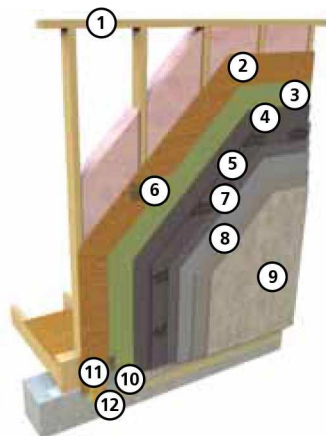
StoPowerwall NExT Components Applied on Frame Construction (wood or steel)

- 1: StoGuard Waterproof Air Barrier – fluid applied, continuous, seamless, structural
- 2: Generic expanded metal lath
- 3: StoPowerwall stucco – factory blended with fibers added to increase strength and durability
- 4: Sto primer – for best color results and long lasting durability
- 5: Sto textured finish or smooth coating – protects against weather and provides a beautiful exterior in a variety of textures and virtually unlimited colors



StoPowerwall Stucco System Direct Applied to Concrete Masonry

- 1: Sto bonding agent (optional)
- 2: StoPowerwall Stucco
- 3: StoPowerwall Stucco
- 4: Sto Primer – for best color results and long lasting durability
- 5: Sto Finish – protects against weather and provides a beautiful exterior in a variety of textures and virtually unlimited colors



StoPowerwall Stucco System Insulated with StoGuard

- 1: Wood frame
- 2: Exterior Grade Plywood
- 3: StoGuard Waterproof Air Barrier
- 4: Code Compliant Paper or Felt WRB (water-resistive barrier)
- 5: Sto DrainScreen
- 6: StoGuard Joint Treatment
- 7: Metal Lath
- 8: StoPowerwall Stucco
- 9: Textured Stucco Finish
- 10: Corrosion-Resistant Weep Screed or Flashing
- 11: StoGuard RapidSeal with StoGuard Mesh
- 12: Sto Smooth Coating (or other compatible UV resistant top coat)

Sto finishes and coatings cover all the bases

Sto's integrally colored finishes and coatings protect against weather and deliver good looks that last longer.

Sto textured finishes and smooth coatings provide the finishing touch to StoPowerwall stucco systems. Our finishes and coatings are manufactured in ISO-certified facilities to meet strict quality control standards. Sto elastomeric finishes use high polymer content and marble aggregate – not quartz – and are designed for maximum crack bridging and minimum pinholing.

Low pinholing is essential when it comes to building upkeep and appearance. Pinholes give water and dirt a place to accumulate, discoloring surfaces and providing food for mildew and algae. Sto finishes provide a strong, flexible outer skin that protects building exteriors while keeping them looking cleaner for a longer time. And Sto finishes are available in virtually unlimited colors at no additional cost.



StoPowerwall Textured Finish & Smooth Coating Options

Textured Finishes	Lotus-Effect® Technology (Self-Cleaning) Properties	Acrylic	Elastomeric	Silicone-Enhanced
	Patented self-cleaning properties keep walls cleaner longer with less maintenance	Integral colored coatings and finishes that provide high coverage and long lasting durability	Flexible coatings and finishes that provide crack resistance and weatherproofing	Keep walls clean and dry longer with increased resistance to algae, dirt pick-up and mold growth
Stolit Lotusan	◆			
Powerflex Silco			◆	◆
Powerflex			◆	
Powerwall		◆		
Smooth Coatings	Lotus-Effect® Technology (Self-Cleaning) Properties	Acrylic	Elastomeric	Silicone-Enhanced
StoCoat Lotusan	◆			
StoSilco Lastic			◆	◆
Stolastic			◆	
StoCoat Acryl		◆		



Sto Lotusan®

Featuring Lotus-Effect® technology, a patented breakthrough technology modeled on the unique self-cleaning lotus leaf, Sto Lotusan finishes and coatings are incomparable to any exterior product on the market. Like the lotus leaf, the finish is rinsed clean with rainfall, thereby reducing maintenance costs.

- Super hydrophobic, unprecedented water repellence
- Long-lasting curb appeal and reduced maintenance costs
- Pronounced self-cleaning properties
- Highly resistant to mold, mildew and algae
- Available in a variety of textures and colors



Using Sto Hot Prime has many advantages, including blocking surface alkalinity, reducing stucco water absorption and minimizing efflorescence. Sto Hot Prime is also tintable to enhance the finish color and increase the yield of the finishes.



StoPowerwall Supports Sustainable Building Initiatives

Program	Requirement	StoPowerwall NEXt
IECC – International Energy Conservation Code®	Air Sealing Energy Efficiency	Yes
IGCC – International Green Construction Code™	Indoor Environmental Quality Energy Efficiency	Yes
LEED Credit Potential (see www.stocorp.com for product LEED information)	Energy and Atmosphere Prereq 2: Minimum Energy Performance	Yes
	Material and Resources Credit 4: Recycled Content	Yes
	Credit 5: Regional Materials	Yes
	Indoor Environmental Quality Credit 4.1: Low Emitting Materials – Paints and Coatings	Yes
ASHRAE 189.1	Air Sealing Indoor Environmental Quality Energy Efficiency	Yes
EPA – Environmental Protection Agency	Low VOC Coatings Compliance	Yes
SCAQMD – South Coast Air Quality Management District	Low VOC Coatings Compliance	Yes

Find out more

Questions or comments? Visit www.stocorp.com, call (800) 221-2397 or email marketingsupport@stocorp.com.

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Limitations of Stucco

StoPowerwall stucco is a Portland Cement plaster that serves as a base for Sto acrylic, silicone enhanced and elastomeric finish coatings. StoPowerwall stucco functions as a decorative and protective exterior wall covering and may also be used on soffits, ceilings and interior walls. As with any exterior wall covering, the proper integration of other components of construction, in particular, the use of flashing to direct water to the exterior, is essential. Efflorescence is a normal occurrence in Portland Cement based products and can affect final appearance of finish products installed over stucco. Some degree of cracking is normal in Portland Cement stucco and should be expected. Cracking is generally not caused by a material defect in the stucco and can be minimized by following sound construction practice such as the proper installation of lath, the use of properly graded sand, the proper incorporation of stress relief joints in the construction, moist curing of the stucco after it has been applied, and proper sequencing of construction to avoid stresses in the freshly placed stucco. See our website for key details for building with stucco.

ATTENTION

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. **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.