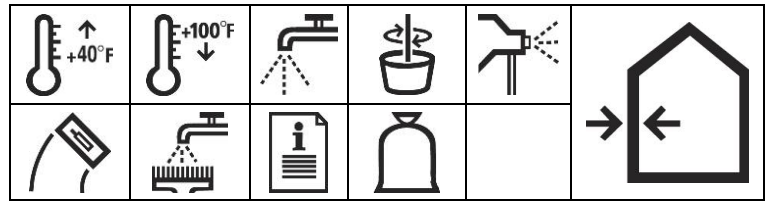


StoPowerwall® Stucco

80103 StoPowerwall® Stucco



Technical Data

StoPowerwall Stucco Blend	Mix Ratio: Water/Concentrate/Sand ¹	Mix Times (min)	Yield ² in ft ² at thickness of:			Compliance ³	
			5/8"	3/4"	7/8"	ASTM C 926	Evaluation Report No.
StoPowerwall	4-6 gal / 80 lbs. / 200 lbs.	3 – 5	40-50	30-40	27-37	Yes ⁴	ICC ESR-2323
StoPowerwall	4-6 gal / 80 lbs. / 180 – 240 lbs. (2.5-3 cu. ft.)	3 – 5	42-54	35-40	30-37	Yes	ICC ESR-2781 and 3529 ⁶
StoPowerwall	4 gal / 80 lbs. / 200 lbs.	5	40-50	30-40	25-35	Yes ⁴	IAPMO ER 382

StoPowerwall® Stucco is a controlled blend of Portland cement, fibers, and chemical additives. StoPowerwall® Stucco, when combined with sand and water at the jobsite, performs like traditional stucco. StoPowerwall® Stucco is suitable for use in residential and commercial wall construction over properly prepared concrete and concrete masonry, or metal plaster bases.

- Sand added at job site: use washed plaster sand in conformance with ASTM C 897 or C 144. Water must be clean and potable.
- Yield will vary with application technique, surface conditions, substrate variances from required tolerance, and other variables that may exist.
- Portland cement in mix complies with ASTM C 150.
- Mix complies with C 926 mix ratio requirements. Installation and other aspects of C 926 such as stucco thickness must be followed for full compliance.
- ICC Evaluation Service, Inc. Acceptance Criteria for Cementitious Exterior Wall Coatings. Refer to evaluation report for detailed information on fire resistance rated assemblies, use on noncombustible type construction, wind load resistance, and other information on use and limitations of product.
- ICC ESR 3529 is a derivative report of ICC ESR 2781.

Packaging

80 lb. bag (36 kg).

Shelf Life

12 months, if properly stored and protected from moisture.

Storage

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

Features	Benefits
1 Fiber-reinforced	Resists cracking; high flexural strength
2 Can be installed in thin sections	Reduces labor costs, can reduce structural requirements compared to conventional stucco
3 Stucco concentrate	Facilitates mixing, reduces labor costs, enables use of local raw materials (sand) for LEED credit eligibility

Surface Preparation

Concrete and masonry surfaces:

Substrates must be absorbent, slightly scarified and free of all bond-inhibiting materials, including dirt, efflorescence, form oil and other foreign matter. Loose, weak or damaged substrates must be removed and repaired. Dampen highly absorbent substrates prior to application of stucco. Verify bond of StoPowerwall Stucco to properly prepared concrete or concrete masonry, as specified by design professional, at minimum 28 day age of stucco.

Wood or metal frame construction:

Self-furring or furred galvanized diamond mesh metal lath or welded wire or fabric lath must be in conformance with and be installed in compliance with the applicable building code.

Refer to ASTM C 926 for complete details on preparation and required condition of surfaces to receive Portland cement stucco and recommended construction practices when installing stucco.

Mixing

Use prescribed amounts of clean water and washed plaster sand meeting ASTM C897 or ASTM C144 with each 80 lb. (36 kg) bag of StoPowerwall Stucco. For best results use sand complying with ASTM C897. Add 1/2 to 2/3 of the required water, 1/2 of the sand, and one bag of StoPowerwall Stucco in a paddle type mortar mixer. Then add the rest of the sand and sufficient water to achieve a uniform

mix of workable consistency. Mix for prescribed number of minutes after all materials are in the mixer. Keep mix ratio consistent from batch to batch and mix each batch separately. **USE ONLY THE AMOUNT OF WATER NECESSARY FOR A WORKABLE MIX. DO NOT EXCEED MAXIMUM AMOUNT OF MIX WATER. USE OF EXCESS WATER IS DETRIMENTAL TO PERFORMANCE.** Avoid re-tempering. Discard material that has taken initial set.



StoPowerwall® Stucco

Application

Conform to ASTM C 926 (except: thickness over metal lath plaster base may be 5/8 inch [16 mm] applied in two coats, and finish as described below). Surface and ambient temperature must be above 40°F (4°C) and below 100°F (34°C) during application and for at least 24 hours following set of stucco. Apply with proper spray equipment or a stainless steel trowel, and only to sound and clean, dry, properly prepared, frost-free surfaces. Consult equipment manufacturer for spray/pump applications.

Metal Plaster Bases: Must be installed in conformance with the applicable building code. Apply stucco in two uniform coats to a uniform total thickness of:

- 5/8 inch (16 mm), or
- ¾ inch (19 mm), or
- 7/8 inch (22 mm),

as required by specifications. Refer to applicable ICC ESR and applicable building code for required minimum thickness and components of fire-resistive rated assemblies, use on noncombustible type construction, and wind load resistant assemblies.

Concrete and Masonry: Do not apply stucco to substrates that have not been properly prepared. Apply StoPowerwall Stucco in two uniform coats to a maximum uniform thickness of 1/2 inch (13 mm).

Installation

Scratch the first coat horizontally and apply the

Limitations

- Refer to applicable ICC ESR for limitations that may exist with respect to Type construction, and other information on use and limitations
- Do not install StoPowerwall Stucco over stucco accessories or joints in construction
- Install only at surface and ambient temperatures above 40°F (4°C) and below 100°F (34°C). Maintain these temperatures for or at least 24 hours following set of stucco
- Do not apply to surfaces that have not been properly prepared.
- Not recommended as a finish coating
- Do not add air-entraining agents, accelerants, waterproofing agents, or any other additives to the stucco mix.
- Some cracking and efflorescence are inherent in Portland cement stucco. These are not product defects.
- Always verify bond to the prepared substrate, as specified by the design professional, at minimum 28 day age of stucco. Where the substrate is too smooth, dense, or non-absorbent for stucco adhesion, install appropriate metal lath plaster base as specified by the design professional.

second coat as soon as the first coat is firm enough to receive it. Alternatively, moist cure the first coat up to 48 hours and dampen the scratched surface with water immediately before applying the second coat. Level the stucco surface with a rod or straight edge, fill low spots with plaster, then darby and float to achieve a smooth, even surface receptive for finish.

Curing/Drying

Moist cure by lightly fogging the installed area for at least 48 hours after the stucco takes initial set (usually within the first 1 to 4 hours after installation). Hot, dry, or windy weather requires more frequent moist curing to avoid rapid dehydration of stucco.

Finishing

Allow final stucco application to completely dry before applying primer or finish. Check for pH<10 before installing Sto primer or finish or wait 28 days for full cure of stucco. Alternatively, install Sto Hot Prime minimum 2 days after moist cure of stucco, then install Sto finish after 7 day age of stucco.

Clean Up

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

Health And Safety

DANGER!

Harmful if swallowed. Causes serious eye damage. May cause cancer. Causes damage to lungs through prolonged and repeated exposure.

Precaution

Avoid contact with skin and eyes. Avoid generating and breathing dust. Do not swallow. Good housekeeping is important to prevent accumulation of dust. The use of compressed air for cleaning clothing, equipment, etc. is not recommended. Use only in well-ventilated areas. Handle and open container with care. When using, do not eat, drink or smoke. Launder contaminated clothing before re-use. Wash hands before eating, drinking, or smoking.

First Aid:

Inhalation: If breathing is difficult remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention, if you feel unwell.
Skin Contact: In case of contact immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothes before re-use. Call a physician, if irritation develops and persists.

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes. If easy to do so, remove contact lenses, if worn. Get medical attention immediately.
Ingestion: If swallowed do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Immediately call a poison center or doctor/physician.

Store locked up.

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 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.

Sto Corp.
3800 Camp Creek Parkway
Building 1400, Suite 120
Atlanta, GA 30331

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Revision: A4.0
Date: 12/2018

Tel: 404-346-3666
Toll Free: 1-800-221-2397
Fax: 404 346-3119
www.stocorp.com

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.