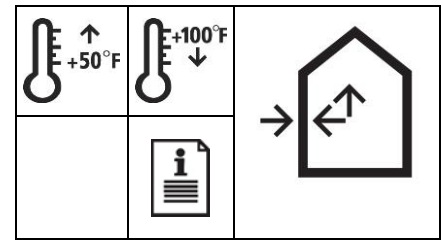


PRODUCT BULLETIN

StoCast Brick

Product Number: 81806



PRODUCT DESCRIPTION

StoCast Brick are thin, lightweight bricks for the decoration and protection of facades. They offer limitless design possibilities with a multitude of colors, textures and size options. StoCast Brick are available in flat, corner and lintel shapes. Use in Sto proprietary wall systems and over prepared vertical above grade concrete, concrete masonry (CMU), and stucco walls, ceilings, and soffits, or over prepared interior gypsum wallboard.

FEATURES	BENEFITS
Wide variety of colors, textures and sizes	Design freedom
Lightweight	Significantly reduced dead load when compared to traditional masonry units.
Flexible	Achieve curved surfaces
Pre-fabricated	Consistent quality and aesthetics, speed of application
Easy to cut and install	Minimal dust, does not require highly skilled labor force, cost effective
Made with acrylic polymers	Durable, Freeze/Thaw and UV resistant, superior flexural strength; resists cracking
Organic mortar	Greatly reduces the risk of efflorescence associated with portland cement-based masonry mortars

Packaging: Cartons

Sheen: Flat

Shelf Life: 3 years in original, unopened, properly stored packaging. See batch no. on carton. First number on carton is year of expiration. Second two numbers are week of expiration (e.g., batch no. 9450013223 expires the 45th week of 2019)

Storage: Store off the ground in shade in a dry area. Store between 50 and 85°F (10 - 29°C). Storage in hot humid conditions will cause bricks to stick together. Do not store below 50°F (10°C) prior to use.

Shapes and Colors

StoCast Bricks are available in 3 different shapes - flats, outside corners and lintels. Custom sizes and colors are available (see colors at www.stocorp.com).



Standard Flat Sizes

Modular: 2-1/4" x 7-5/8" (57 mm x 194 mm)
 King: 2-5/8" x 9-5/8" (67 mm x 244 mm)
 Queen: 2-3/4" x 7-5/8" (70 mm x 194 mm)
 Utility: 3-5/8" x 11-5/8" (92 mm x 295 mm)
 Estate: 3-5/8" x 9-5/8" (92 mm x 244 mm)
 Premier Plus: 3-1/8" x 10-1/8" (79 mm x 257 mm)
 Metric Norman: 2-1/4" x 11-1/2" (57 mm x 290 mm)

Standard Outside Corner Size

Short leg matches dimensionally with selected flat size

Standard Lintel Size

3-5/8" x 3-5/8" x 11-5/8" (92 mm x 92 mm x 279 mm)

SURFACE PREPARATION

Sto Proprietary Wall Systems: StoTherm® ci, StoVentec®, StoPowerwall®, StoQuik® Silver, StoPanel®, and StoLite® systems. Refer to applicable Sto Specification.

Concrete, concrete masonry (CMU), and portland cement stucco: must be constructed in conformance with applicable building code requirements. All surfaces must be structurally sound, clean, dry, and free of frost and surface contamination such as dust, dirt, salts, grease, oils, efflorescence, mold, algae, mildew, and any other contamination that may affect adhesion. Use appropriate repair methods for the substrate to repair pitting, spalls, cracks, peeling, blistering, delamination, weak surface conditions such as laitance, water damage, or other defects that may exist. Skim coat concrete, CMU, and stucco surfaces with Sto BTS Plus up to 1/8 inch (3mm) thick to level/fill the surface or use Sto Leveler and Skim Coat up to 1/4 inch (6mm) in one coat or 1/2 inch (13mm) in two coats. Verify bond to properly prepared surfaces as specified by design professional at 28-day age of the assembly.

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SURFACE PREPARATION (CONTINUED)

Interior Gypsum Wallboard: finish new interior wallboard to a minimum Level 4 finish (wallboard is taped, spotted, and sanded). Remove dust or any other surface contamination, and prime with StoPrime® Sand. If wallboard is painted with latex flat paint no primer is required. If paint is glossy (eggshell, satin, or gloss), degloss the surface by lightly sanding, remove dust or any other surface contamination, apply a skim coat of Sto Bonding and Pointing Mortar, and verify adhesion.

Follow instructions below for installation of StoCast Brick.

APPLICATION:

- Select StoCast Brick from different cartons so brick shades are intermingled as they are installed.
 - Plan the layout carefully, taking into account brick pattern, openings such as windows and doors, and alignment of horizontal mortar joints around the building walls.
 - Use snips or shears to cut bricks to size as needed
 - Curved Surfaces: bricks must be warm to bend them. If necessary, heat bricks and bend to desired curvature. Then install bricks in the mortar. Note: minimum radius for curved surfaces is 4- $\frac{3}{4}$ " (120mm).
 - Always construct a mock-up under actual conditions of use to verify proper surface preparation, coverage, and aesthetics, for approval by the appropriate authority.
 - Apply only when substrate and ambient temperatures are between 50 to 100°F (5-38°C) over prepared surfaces. Do not apply over damp surfaces or during rain, hail, or snow events, or if rain, hail, or snow is imminent.
 - During hot weather keep material in a cool location just prior to use and work in shade. Spread mortar in smaller areas, install StoCast Brick units immediately, and tool mortar before it "skins." If mortar "skins," cracks, or "cakes," remove it and apply fresh material.
1. Establish layout lines for the pattern in use (e.g., running bond, stacked bond) and mark them on the walls.
 2. Place StoCast Brick units from top to bottom in accordance with the planned layout and work from one end to the other, downward, in sequential rows.
 3. Apply Sto Bonding & Pointing Mortar vertically with a $\frac{1}{4}$ x $\frac{1}{4}$ inch (6x6x6mm) square notched trowel. Apply in a small area and immediately install StoCast Brick before a "skin" forms on the mortar.

4. Slide and slightly twist the units into the freshly applied mortar while applying pressure to fully bed the units in the mortar and to ensure no gaps or cavities exist in the mortar. Align units visually while progressing down the wall.
5. As soon as the units are held in place with mortar, work the joint areas with a small paint brush or specialized pointing tool before the material "skins" to compact and smooth the mortar, and to create a joint profile that covers the edges and ends of the units.
6. Remove excess mortar from the face of the units with a damp sponge while the mortar is still wet.
7. After mortar is dry, use a suitable hand brush to clean the surface of the units if needed. Carefully use a utility knife to remove any dry mortar remnants on the surface.
8. After mortar is completely dry, touch-up mortar joints if needed to seal edges or to sharpen aesthetics.
9. If thicker joints are desired, wait 7 days, then point mortar joints with additional mortar, and tool to compact the mortar to a concave profile. Clean the surface as described previously.

Refer to *StoCast Brick Application Guide* for more information.

Clean up

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

Drying

Sto Bonding & Pointing Mortar dries within 24 hours under normal conditions (70°F [21°C], 50% RH). Drying time varies depending on temperature/humidity and surface conditions. Hot, dry conditions accelerate drying. Cool, damp conditions delay drying and may require extended periods of protection from rain and freezing. Protect from rain, freezing and continuous high humidity until completely dry.

Cleaning, Repair and Maintenance

Refer to *StoCast Brick Repair and Maintenance Guide* at www.stocorp.com

LIMITED WARRANTY

This product is subject to a written limited warranty which can be obtained free of charge from Sto Corp.

LIMITATIONS

- Use only when surface and ambient temperatures are above 50 to 100°F (5-38°C) during application and drying period.
- Minimum radius: 4- $\frac{3}{4}$ inches (120 mm)

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Product Number: 81806

LIMITATIONS (CONTINUED)

- Maximum width of grout joints: $\frac{3}{4}$ inch (19mm). May require two passes of mortar to fill the joint
- Do not use on horizontal or below grade surfaces, projecting ledges, sills, or sloped surfaces, or where immersion in water may occur
- Do not use on roofs or roof-like surfaces
- Select colors with Light Reflectance Value (LRV) greater than or equal to 20 when used over StoTherm ci Systems (does not apply to StoTherm ci Mineral)
- Not recommended to clean with abrasive or high-pressure wash methods. Use low pressure (up to 500 psi [3.45 MPa])
- Not recommended for use on walls requiring high scrub resistance or repeated exposure to chemical cleaners such as shower stalls, food preparation areas, hospital operating rooms.

HEALTH & SAFETY

Precautionary Statement: Product is a manufactured article – not a fluid or particle. Under normal conditions of use it does not pose a physical hazard or health risk.

FIRST AID MEASURES: Eye Contact: flush with cool water, like any non-hazardous solid

Skin Contact: if skin is irritated from handling product, wash thoroughly with soap and water, and wear protective gloves. Seek medical attention if condition persists.

Inhalation: None expected

Ingestion: Seek medical attention if a considerable amount has been swallowed

Spills: Not applicable.

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.

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TECHNICAL DATA

REPORT	TEST METHOD	TEST CRITERIA ¹	TEST RESULT ²
Adhesion to Sto base coats	ASTM D1623	> 15 psi (103 kPa)	Pass
Adhesion after freeze/thaw cycling	ASTM E2569 / C297	> 15 psi (103 kPa)	AVG 38 psi (262 kPa)
Water Vapor Permeance of Brick Unit	ASTM E96 Method B	Measure	13.5 perms [771 ng/(Pa•s•m ²)]
Water Vapor Permeance of Lamina	ASTM E96 Method A	Measure	1.21 US Perms [69.2 ng/(Pa•s•m ²)]
Accelerated Weathering / UV Resistance	ASTM E2568 / G155	No deleterious effects after 2000 hours	No deleterious effects after 2000 hours exposure
Salt Spray Resistance	ASTM E2568 / B117	No deleterious effects after 300 hours	No deleterious effects after 300 hours exposure
Freeze/Thaw Resistance	ASTM E2568 / E2485	No deleterious effects after 10 cycles	No deleterious effects after 60 cycles exposure
Water Resistance	ASTM E2568 / D2247	No deleterious effects after 14 days	No deleterious effects after 14-days exposure
Water Penetration Resistance	ASTM E2568 / E331	No water penetration after 2 hours at 6.24 psf	No water penetration after 2 hours water spray at 6.24 psf pressure
Impact Resistance	ASTME2568 / E2486	Standard impact resistance with 1 layer Sto Mesh	Meets medium impact resistance with 1 layer Sto Mesh
Surface Burning	ASTM E84	Flame Spread: ≤ 25 Smoke Developed: ≤ 450	Flame Spread: 0 Smoke Developed: 20
Radiant Heat Ignition ²	NFPA 268	No ignition during the 20-minute test period	No ignition
Multistory Flame Spread ²	NFPA 285	Complies with NFPA 285 Acceptance Criteria	Pass (qualifies for use on noncombustible construction)
Fire Resistance ²	ASTM E119	Achieves hourly rating	Achieves 1 and 2-hour ratings as a component of StoTherm ci
Building Code Compliance ³	Class A Building Material: qualifies for use as an interior finish		
	Meets requirements for use on noncombustible construction as a finish component ² of: <ul style="list-style-type: none"> • StoTherm® ci, StoVentec®, StoPowerwall®, StoQuik® Silver, StoPanel®, and StoLite® • StoVentec® Render Ventilated Rainscreen. Refer to Intertek Design Listing Sto/CWP 30-01 • Code compliant concrete, concrete masonry, and portland cement stucco wall assemblies 		
1. Results are based on lab testing under controlled conditions. Results can vary between labs or from field tests. 2. Results achieved as part of a full wall assembly. Refer to applicable Sto specification for details. 3. Complies as finish component based on rational analysis of fire test data.			

Sto Corp. 3800 Camp Creek Parkway Building 1400, Suite 120 Atlanta, GA 30331 Tel: 404-346-3666 Toll Free: 1-800-221-2397 Fax: 404 346-3119 www.stocorp.com	Revision Number: 007 Date: May 2024	<p style="text-align: center;">ATTENTION</p> <p>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</p>
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