



Building with conscience.

# StoCast Brick

## Repair & Maintenance Guide

Facades



Interiors



StoCast Bricks are thin, lightweight resin cast bricks for the decoration and protection of facades. They offer limitless design possibilities with a multitude of colors, textures and size options and can be used in Sto engineered wall cladding systems.



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# Maintaining, Restoring or Changing StoCast Brick Appearance

## Cleaning StoCast Brick

Periodically StoCast Brick may need to be cleaned to remove dirt, algae, or mildew that can accumulate on the surface. A good cleaning can often restore the appearance of the StoCast Brick to a "like new" condition. Cleaning is also necessary before recoating or resurfacing to ensure good adhesion of top coats that may be applied over the StoCast Brick. This instruction provides guidance on cleaning materials and methods. Always follow precautions on labeling for use, handling and disposal of cleaning materials, and always test clean an inconspicuous area to be sure of desired results..

### Tools Required:

- Soft/medium bristle brush
- Garden hose
- Pressure washer

### Materials Required:

- Trisodium phosphate detergent
- Household bleach
- Clean, warm water
- Clean empty buckets

### Procedure:

1. Depending on the size of the area to be cleaned and the tenacity of the dirt, algae or mildew accumulation, the tools used for cleaning will vary, for example:
  - a) Hand cleaning with a soft/medium bristle brush for isolated surface spots.
  - b) A garden hose for a full elevation.
  - c) Pressure washing for entire buildings and/or difficult to remove accumulations.
2. A generic cleaning solution consists of:
  - a) 1–2 cups (0.24–0.47 L) trisodium phosphate (TSP) detergent.
  - b) 1 gallon (3.8 L) of warm water.

Add 1/2 to 1 quart (0.47–0.95 L) of bleach to remove algae (green stains on the surface of the finish) or mildew (black stains that look like dirt). Bleach is necessary to kill micro-organisms that create the algae or mildew on the finish. If bleach is not used or not allowed sufficient time (about 15 minutes) to sit on the surface and kill the micro-organisms, algae or mildew can recur.

Other commercially available surface cleaning solutions that can be used are:

- a) General Cleaner by Wind-lock Corp.<sup>1</sup>
  - b) Wash Down™ by Demand Products.<sup>2</sup>
  - c) EIFS Clean 'N Prep by Prosoco.<sup>3</sup>
3. Apply the cleaning solution to the wall surface by brush or spray and allow to soak for 15–20 minutes. For heavy deposits, lightly scrub the affected area with a soft/medium bristle brush. If a pressure washer is used, keep the pressure at approximately 200–500 psi (1.4–3.4 MPa), and keep the nozzle several feet from the surface. Do not exceed 500 psi (3.4 MPa) pressure as the StoCast Brick surface integrity may be damaged. Some variation of these instructions may exist for proprietary brand cleaners. Always read the label and follow directions.
  4. After the cleaning solution has soaked the surface, rinse the surface thoroughly with clean water and allow to dry.
  5. Do Not:
    - a) Use solvent-based cleaners (acetone, gasoline, ketones, mineral oils or turpentine) as solvents can penetrate and damage StoCast Brick.
    - b) Use steam cleaning or other high temperature cleaning methods, as it could damage StoCast Brick.
    - c) Use excessive scrubbing, stiff bristle brushes or wire brushes, since this type of abrasion can damage StoCast Brick.
    - d) Use high pressure washing (over of 500 psi [3.4 MPa]) or sandblasting as StoCast Brick can be damaged with excess pressure or abrasion.
  6. Always check local regulatory requirements for disposal of cleaning solution and wastewater.

### Notes:

1. Wind-lock™ Corp., 1055 Leisz's Bridge Road, Leesport, PA 19355

Tel: 1-800-USA-LOCK (872-5625)

Web: [www.wind-lock.com](http://www.wind-lock.com)

2. Demand Products, Inc., 1055 Nine North Drive, Alpharetta, GA 30004

Tel: 1-800-325-7540

Web: [www.demandproducts.com](http://www.demandproducts.com)

3. Prosoco, 3741 Greenway Circle, Lawrence, KS. 66046

Tel: 1-800-255-4255

web: [www.prosoco.com](http://www.prosoco.com)



## Coating StoCast Brick

StoCast Brick can easily be coated to refresh the look of the cladding or to change the color. Sto produces many opaque coatings engineered specifically for this purpose that will completely hide the existing StoCast Brick Color. StoColor® Lotusan® and StoColor® Dryonic are the preferred coatings for this application. StoColor Lotusan® and StoColor Dryonic® are high quality exterior wall coatings designed to resist mold, mildew and algae growth and provide excellent color retention. StoColor Acryl Plus and StoColor Acryl Flat are other Sto coatings that can be considered for this purpose. Before recoating, the finish surface of the StoCast Brick must be sound and free of defects such as peeling, blistering, cracking or delamination. Surfaces must be thoroughly cleaned to remove contaminants including dirt and mildew that might affect adhesion of the coating. Refer to procedure, "Cleaning StoCast Brick," for detailed cleaning recommendations. Select colors with light reflectance value of 20 or greater if EIFS is the substrate.

### Tools Required:

- Spray equipment and/or paint roller and/or high quality paint brush.
- Roller screens, etc. as needed.

### Materials Required:

- StoColor Acryl Plus
- Masking tape, plastic sheeting, etc. for overspray protection.



### Procedure:

1. Repair and clean the StoCast Brick surface to be recoated (include caulk inspection and replacement as needed).
2. Protect adjacent areas against overspray, splatter, etc.
3. Apply recoating material by spray, roller or brush in accordance with Sto recommendations (refer to appropriate specifications and product bulletins). Protect installed coating from rain and freezing until completely dry.



## Resurfacing StoCast Brick

Resurfacing of StoCast Brick is sometimes done for cosmetic reasons, for example, to change texture or appearance. It may also be a more economical way to fix excess or repetitive surface defects that exist in an area of the facade, rather than repairing each defect individually.

This repair illustrates a method of resurfacing the StoCast Brick. It does not cover the analysis of defects such as cracks, which should be properly diagnosed and repaired prior to resurfacing.

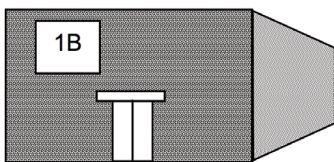
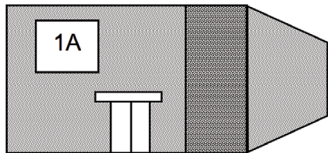
### Tools Required:

- Stainless steel trowel
- Paddle type mixer

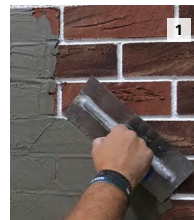
### Materials Required:

- Masking tape
- Primer/Adhesive-B, BTS Plus (or other Sto Base Coat material)
- Sto Mesh
- Clean empty buckets
- Appropriate Sto Finish option

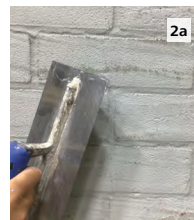
Generally, one should resurface up to an architectural break in the wall such as an aesthetic reveal, change in plane, or change in elevation, to minimize any change in appearance of the resurfaced area compared to an adjacent area (Fig.1)



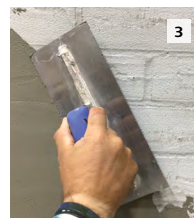
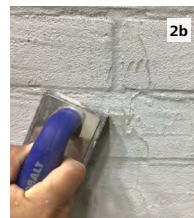
Note: Do not resurface an area up to an arbitrary line, since it will not match the adjacent area (1A). Resurface up to an architectural break in the wall or resurface the entire elevation for a uniform appearance (1B).



Remove dirt, algae or any other surface contamination from area of StoCast Brick to be resurfaced. Refer to "Cleaning StoCast Brick". Skim a tight layer of Sto Base Coat over the surface of StoCast Brick, filling the mortar joints and recesses.



After base coat has dried, scrape off or remove any high spots or trowel lines with a rubbing stone.



Apply Sto base coat to the surface with a trowel to a uniform thickness of approximately 1/8 inch (3 mm). Working horizontally or vertically, and immediately embed the Sto Mesh into the wet base coat.



Overlap mesh not less than 2-1/2 inches (64 mm) at all mesh edges and feather out. Allow to dry. Apply one of Sto's many finishing options



## Repair of Damaged StoCast Brick

Damage is defined as any damage to StoCast Brick that requires removal and replacement of StoCast Brick units.

Note: This is repair for StoCast Brick only. In the event of any damage to the underlying system, refer to the appropriate Sto Repair Guide.

### Tools Required:

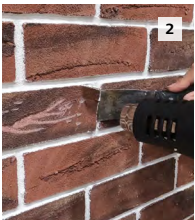
- Stainless steel trowel & margin trowel
- Detail tools
- Detail sander
- Artist style paint brush
- Paddle type mixer
- Sharp scoring knife
- Scraper
- Heat gun

### Materials Required:

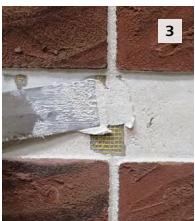
- StoCast Brick units
- Masking tape
- Sto Bonding & Pointing Mortar
- Sand paper (60-80 grit)
- Clean empty buckets



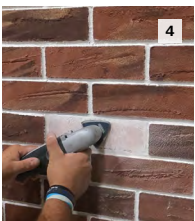
Clean the area around the damage.



With a heat gun slowly heat the StoCast Brick unit to be removed while gently scraping under the StoCast Brick. Be careful not to heat area too much as it could damage the underlying substrate. **Note: Inspect and repair any damage to underlying system.**



Exposed undamaged mesh should be coated with a layer of Sto Bonding & Pointing Mortar and allowed to dry.



Gently sand any high spots of Sto Bonding & Pointing Mortar.



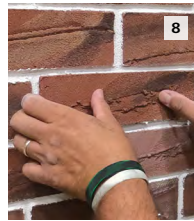
Make sure repair area is flat and solid before adhering replacement StoCast Brick.



Using a margin trowel, apply Sto Bonding & Pointing Mortar to the back of StoCast Brick replacement unit.



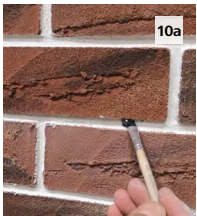
Sto Bonding & Pointing Mortar should cover the entire back of the replacement StoCast Brick unit.



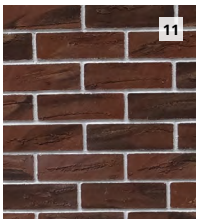
Push the StoCast Brick into place, aligning it to create proper mortar joint spacing.



Press firmly allowing excess Mortar to squeeze out the edges.



Using an artist style paint brush, brush around the edges of the StoCast Brick and into the joint, making sure the Sto Bonding & Pointing Mortar seals all sides. This will help prevent moisture from getting in behind the StoCast Brick. Smooth out the excess Sto Bonding & Pointing Mortar.



Protect from weather (rain, hail, snow, or freezing conditions) for minimum 24 hours, allowing repair to dry.



## Repair of Signage Bolt Holes in StoCast Brick

Removal of signage can leave open holes in StoCast Brick. Repair of these holes is necessary to keep water from entering the system.

### Tools Required:

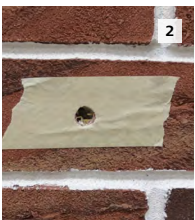
- Scissors
- Detail tools
- Paint brush
- Sharp scoring knife
- Sponge
- Nail

### Materials Required:

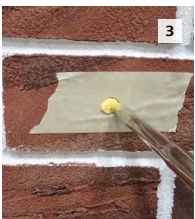
- StoCast Brick
- Masking tape
- Sto TurboStick®
- Sto Bonding & Pointing Mortar
- Clean empty buckets



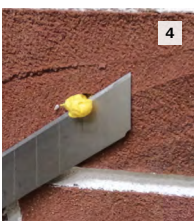
Clean the area around the damage.



Place a piece of masking tape over the hole and trim out the hole with a sharp knife.



Fill the hole with Sto TurboStick® foam and allow to dry.



After Sto TurboStick foam is dry, shave off excess foam flush with StoCast Brick.



With the head of a nail, push in the Sto TurboStick foam just below the surface of the StoCast Brick. This will allow room for adhesive and patch material.



Using scissors, cut a circular piece of StoCast Brick around an area of similar color. It may be necessary to sand the edges to ensure a tight fit.



Apply Sto Bonding & Pointing Mortar to the back of the repair piece.

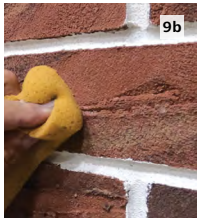


Adhere piece in repair location assuring you have a tight fit.

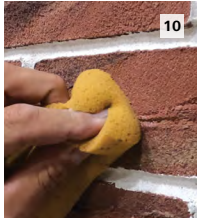


9a

With a damp paint brush, lightly brush any excess mortar and fill in any voids around patch.



9b



10

With damp sponge, lightly wipe of any excess adhesive.



11

Keep protected from weather for 24 hours, allowing repair to dry.

## Sto Americas

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