



Building with conscience.

StoCast Wood

Repair & Maintenance Guide

Facades



Interiors



StoCast Wood are thin, lightweight, flexible, resin cast, wood planks, for use with Sto engineered wall cladding systems. StoCast Wood creates an authentic wood grain appearance for the decoration and protection of facades, and can be top coated in a wide range of colors.



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Maintaining, Restoring or Changing StoCast Wood Appearance

Cleaning StoCast Wood

StoCast Wood 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 Wood to a "like new" condition. Cleaning is also necessary before recoating or resurfacing to ensure good adhesion of any top coats over StoCast Wood. These instructions provide guidance on cleaning materials and methods. Always follow precautions on labeling for use, handling and disposal of cleaning materials. 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.¹
 - b) Wash Down™ by Demand Products.²
 - c) EIFS Clean 'N Prep by Prosooco.³
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 Wood 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 Wood.
 - b) Use steam cleaning or other high temperature cleaning methods, as it could damage StoCast Wood.
 - c) Use excessive scrubbing, stiff bristle brushes or wire brushes, since this type of abrasion can damage StoCast Wood.
 - d) Use high pressure washing (over of 500 psi [3.4 MPa]) or sandblasting as StoCast Wood 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
2. Demand Products, Inc., 1055 Nine North Drive, Alpharetta, GA 30004
Tel: 1-800-325-7540
Web: www.demandproducts.com
3. Prosooco, 3741 Greenway Circle, Lawrence, KS. 66046
Tel: 1-800-255-4255
web: www.prosooco.com



Coating StoCast Wood

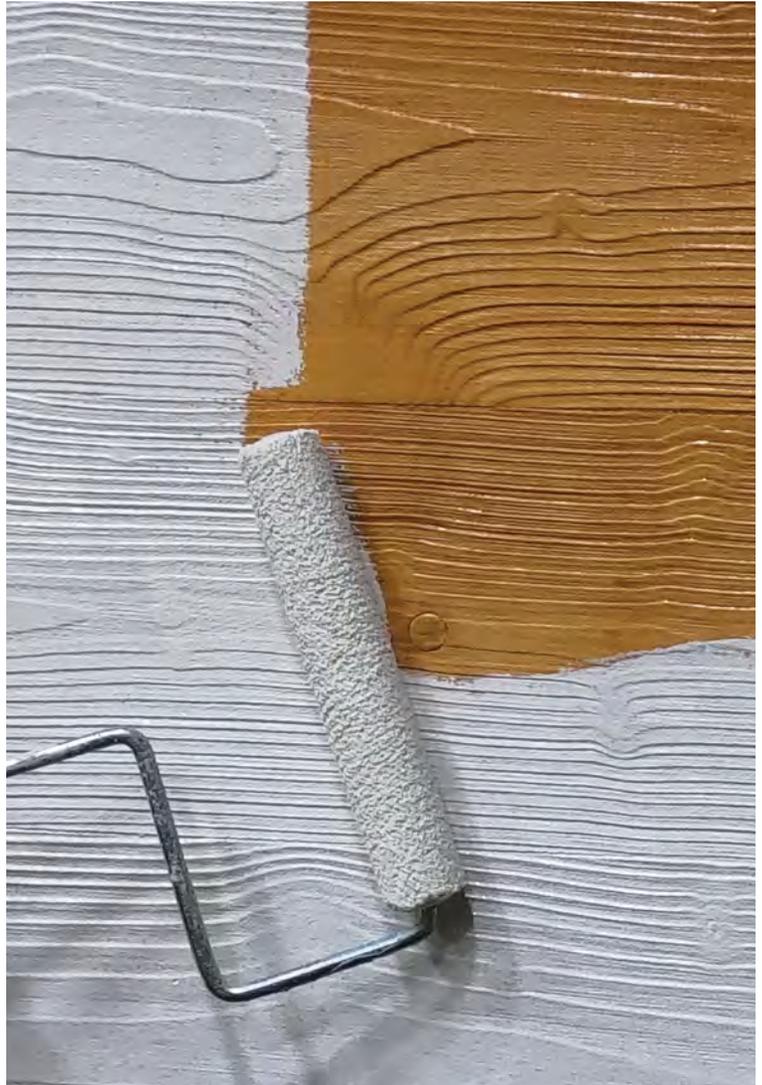
StoCast Wood can easily be coated to refresh the look of the cladding or change the color. Sto produces many opaque coatings engineered specifically for this purpose that will completely hide the StoColor® Wood Stain. StoColor® Lotusan® and StoColor® Dryonic® are the preferred coatings for this application. 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 finished surface of StoCast Wood 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 Wood," 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 Lotusan, StoColor Dryonic, StoColor Acryl Plus or any exterior opaque StoColor coating
- Masking tape, plastic sheeting, etc. for overspray protection.



Procedure:

1. Scuff entire surface with #00 or #000 steel wool.
2. Repair and clean the StoCast Wood surface to be recoated (include caulk inspection and replacement as needed).
3. Protect adjacent areas against overspray, splatter, etc.
4. 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.



Restaining StoCast Wood

StoCast Wood can easily be restained to refresh the look of the existing stain or to change the color. Before staining, the finish surface of the StoCast Wood 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 Wood," 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.
- Steel Wool #00 or #000.

Materials Required:

- Sto Coating: StoColor® Acryl Flat Color tinted to color #VT212224.
- StoCast Wood Stain in desired color.
- Masking tape, plastic sheeting, etc. for overspray protection.

Procedure:

1. Scuff entire surface with #00 or #000 steel wool.
2. Repair and clean the StoCast Wood surface to be stained (include caulk inspection and replacement as needed).
3. Protect adjacent areas against overspray, splatter, etc.
4. Apply StoColor Acryl Flat material in one single coat to 3–5 wet mills. Avoid lap marks. Protect installed coating from rain and freezing until completely dry (Fig. 1). **Note: Applying too heavily could diminish texture of wood grain.**
5. Apply StoColor Wood Stain by 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 (Fig. 2).

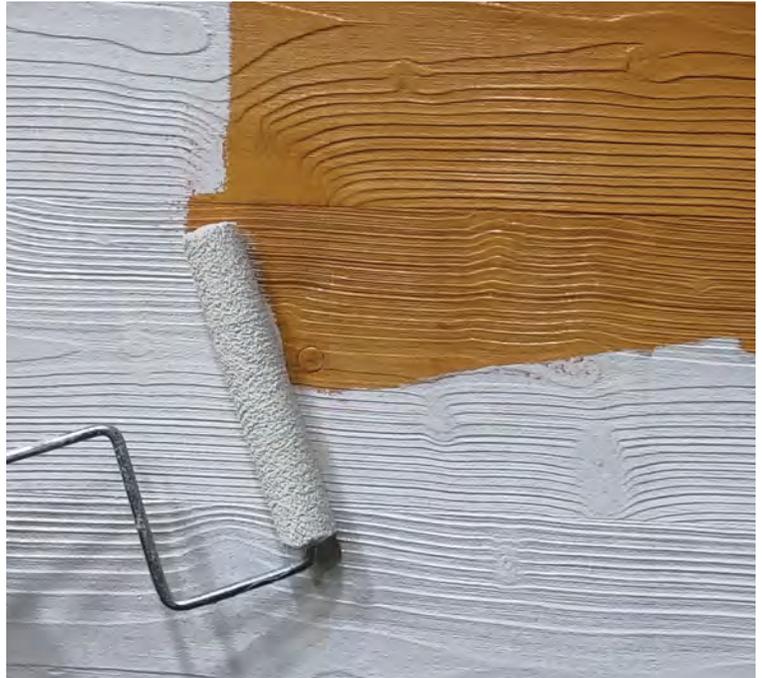


Fig. 1



Fig. 2



Resurfacing StoCast Wood

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

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

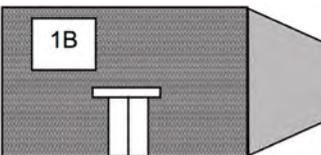
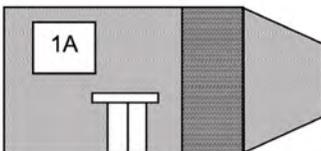
Tools Required:

- Stainless steel trowel
- Paddle type mixer

Materials Required:

- Masking tape
- Sto RFP (or other Sto Base Coat material)
- Sto Mesh
- Sto Finish
- Clean empty buckets

1. 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. Apply recoating material by spray, roller or brush.



Note: Do not resurface an area up to an arbitrary line as 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).

2. Remove dirt, algae or any other surface contamination. A trisodium phosphate detergent will remove most dirt, but the addition of bleach is necessary to remove algae or mildew. Refer to "Cleaning StoCast Wood". After applying the cleaning solution rinse the surface thoroughly with clean water and allow to dry.

3. Apply Sto base coat to the surface with a stainless-steel trowel to a uniform thickness of approximately 1/8 inch (3 mm). Work horizontally or vertically and immediately embed Sto Mesh into the wet base coat. Overlap mesh no less than 2 1/2 inches (64 mm) at mesh seams and feather seams and edges. Allow to dry (Fig. 1 & 2).
4. Apply Sto finish.



Fig. 1



Fig. 2



Minor Repair

Repair of Surface Damage in StoCast Wood

Surface damage is defined as small surface defects such as chips, spalls, or cracks that do not penetrate beyond the StoCast Wood.

Tools Required:

- Detail tools
- New stiff bristle paint brush or artist brush

Materials Required:

- Masking tape
- StoCast Wood Adhesive
- Sand paper (100-150 grit)
- Steel wool (0-000)
- StoColor Wood Stain
- Clean empty buckets

Procedure 1



1 Clean to remove surface dirt. Use paint brush to apply StoColor Wood Stain into the scratch or defect



2 Gently wipe edge of stained area to blend into existing stained area.



3 It may take multiple coats of StoColor Wood Stain to achieve the desired color. Blend application into existing stain.

Procedure 2



1 Clean area to remove surface dirt. Using a detail tool and your finger, fill gouged area with StoCast Wood Adhesive. Build flush or just above existing surface. **Note: this may take multiple coats.** Allow to dry.



2 Using sand paper or steel wool, sand the repair area so that it matches closely to the wood graining next to it.



3 Wipe sanded area with damp sponge to remove any dust from sanding process. Allow to dry.



4 Use a small stiff bristle paint brush to apply StoColor Wood Stain onto the repaired area.



5 Blend application into existing stain. It may take multiple coats of StoColor Wood Stain to achieve the desired color.



Repair of Damaged StoCast Wood

Puncture damage is defined as any damage to StoCast Wood that requires removal and replacement of StoCast Wood pieces.

Note: This is repair for StoCast Wood only. Any damage to the underlying system, refer to the appropriate Sto Repair Guide.

Tools Required:

- Stainless steel trowel and margin trowel
- Detail tools
- ¼" x ¼" V-Notched trowel or V-Notched margin trowel
- Paint brush
- Paddle type mixer
- Sharp scoring knife
- Scraper
- Sponge

Materials Required:

- StoCast Wood
- Masking tape
- Sto RFP (or other Sto base coat material)
- Sto Mesh or Sto Detail Mesh
- StoCast Wood Adhesive
- StoColor Wood Stain
- Clean empty buckets



Clean the area around the damage.



Clean edges to make repair area as square as possible.



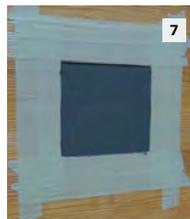
Mark the section to be removed. Make sure this is at least 2-1/2 inches (64mm) each side of the puncture in the section of this StoCast Wood plank that is being replaced.



Mask around removed section to protect existing surface.



With a sharp knife, cut through StoCast Wood being careful not to cut through base coat below.



Apply Sto basecoat and mesh to removed area and allow to dry. Do not apply too thickly as this could cause the replacement StoCast Wood to protrude from existing surface.



With a stiff scraper, carefully remove area of StoCast Wood. **Note: Inspect and repair any damage to underlying substrate at this time if needed.**



Measure and cut a piece of StoCast Wood to fit the cut-out area. It may be necessary to sand the edges to ensure a tight fit.



9 Apply StoCast Wood adhesive to dried basecoat.



10 Apply a coat of StoCast Wood Adhesive to the back of the replacement piece, then notch using a 1/4" x 1/4" V-notched trowel.



11 Insert new StoCast Wood piece into the repair area firmly pushing from side to side for full bedding in the adhesive. Adhesive should squeeze out of the joints. This will help with sealing the repair.



12 Remove masking tape and wipe off excess adhesive with a damp sponge. Be careful not to remove adhesive out of joint. Allow to dry.



13 Using a brush, apply StoColor Wood Stain to replaced piece as per installation instructions.



14 Blend the stain from the new to existing section. It may take multiple coats to get to the desired shade. Allow each coat to dry before the application of additional coats.



15 Due to the wood grain texture and color, the repaired section may be visible in critical lighting.

Note: protect the repair area from weather (rain, hail, snow, or freezing conditions) for minimum 24 hours, allowing the repair to dry sufficiently after each step.



Repair of Signage Bolt Holes in StoCast Wood

Removal of signage can leave open holes in StoCast Wood. 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:

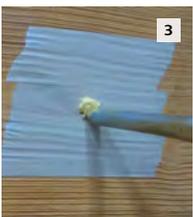
- StoCast Wood
- Masking tape
- Sto TurboStick®
- StoCast Wood Adhesive
- StoColor Wood Stain
- Clean empty buckets



1 Clean the area around the damage.



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



3 Place additional masking tape to protect existing StoCast Wood. Fill the hole with Sto TurboStick® foam and allow to dry.



4 After TurboStick® foam is dry, shave off excess foam flush with StoCast Wood.



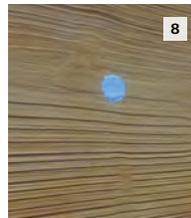
5 With the head of a nail, push in the TurboStick® foam just below the surface of the StoCast Wood. This will allow room for adhesive and patch material.



6 Using scissors, cut a circular piece of StoCast Wood around a knot texture. It may be necessary to sand the edges to ensure a tight fit.



7 Apply StoCast Wood Adhesive to the back of the repair piece.



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



With your finger, use some StoCast Wood Adhesive and fill in any voids around patch.



With damp sponge, lightly wipe off any excess adhesive being careful not to remove adhesive from joint. Allow to dry.



With small paint brush, apply StoCast Wood Stain to repair.



Lightly blend new stain into the existing surface. It may take multiple coats to get to the desired shade. Allow each coat to dry before the application of additional coats.

Sto Americas

Sto Corp.

3800 Camp Creek Pkwy
Building 1400, Suite 120
Atlanta, GA 30331
USA

Phone 1-800-221-2397
www.stocorp.com

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