



Sto Corp. | Exterior

Stucco Renovation

Proven Products That Work

Most often owners will employ a variety of repair tactics to keep their facades looking good and performing problem-free. An obstacle many run into is that previous repairs may not be effective for the long-run and can actually create more problems than they solve. Make sure that all stucco repairs are performed by trained and experienced professionals using high-quality compatible repair materials for an effective long-term solution.

Recognizing Deteriorated Stucco:

Finding the Problem Behind the Problem

Stucco deterioration is often the result of water infiltration into the structure. This can occur at the roof, around window and door openings, around chimneys, or through stucco wall penetrations. It can also be hidden below grade. Freeze-thaw cycles and extremely harsh weather conditions may also be contributing factors of deterioration. Visible signs of deterioration may be exhibited in the form of cracks, spalls, delamination of the stucco coating, efflorescence (a type of white chalking) flaking, or peeling of the stucco itself. Once identified, a custom-specified renovation program can carefully outline procedures and products that will address your home's/building's unique stucco conditions.



Damage due to cracking or moisture getting below the surface



Efflorescence/Chalking

► Condition: Color fade, minimal efflorescence -----► Solution: Clean and re-coat

Light repairs and re-coatings are only needed when there is normal surface fading and discoloration which is typical of most exterior surfaces. Minimal efflorescence (chalking) can also happen.

Possible reasons for the problems:

- UV exposure
- Moisture getting behind the coating
- Inferior coatings or finishes

Once the surface has been cleaned with high-pressure washing and thoroughly inspected, it can be re-coated with any one of several options including:

- Stolastic
- StoSilco® Lastic

Additional sealing or repairs may be required around windows, doors, and other rough openings.

► Condition: Excessive cracking, blistering, peeling -----► Solution: Clean, repair, patch, and re-coat

Heavier repairs are needed with these problems. They can be caused by any number of things, including any combination of:

- Moisture getting below the surface due to cracking, improper caulking or flashing, or not treating non-vertical surfaces properly
- Inferior coatings or finishes
- Harsh weather conditions including freeze-thaw cycles

The problem areas must first be thoroughly cleaned with high-pressure washing then repaired using any one of many options including:

- Clearing out cracks and delamination mechanically
- Completely removing the existing coating (if necessary)
- Filling and patching problem areas with Sto repair products:
 - Sto Leveler
 - Sto Flexyl
 - or Sto Skim Coat
 - or Sto Watertight Coat
 - Sto Flexible Crack Filler
 - Sto RFP
 - or Sto Flexible Skim Coat
 - Sto Mesh

The surface can then be finished with a smooth Sto Coating or Textured Finish such as:

- Stolastic
- Sto Powerflex® Silco
- StoPowerwall™ Finish
- or StoSilco® Flex
- Sto Powerflex® or Sto Flexfinish
- StoSilco® Lastic

Sto Primer is recommended for more color uniformity. If the current stucco and coating go below grade, it may be necessary to dig a trench around the perimeter to reveal below-grade areas that need treatment.

Additional sealing or repairs may be required around windows, doors, and other rough openings.

The best total solution is to fully cover the surface with a base coat, with mesh embedded, and then use a high-quality Sto elastomeric coating or finish.

Parapets and other non-vertical areas:

Some of the most problematic areas occur around non-vertical areas such as parapet caps or decorative shapes, where there is a tendency for water to collect and cause serious deterioration over time. To address this issue, Sto manufactures a product called Sto Flexyl. When applied, it becomes a flexible waterproofing membrane that creates a watertight seal. It is coated with Sto Primer and then the same coating or finish used for the rest of the building.



1. Coating the surface with a repair and base-coat product such as Sto Flexyl to fill cracks and waterproof



2. Embedding mesh to keep the repair strong and long-lasting



3. Making sure the mesh is fully covered by the base-coat



4. Smoothing out the surface so the repair is not visible after the finish coat is applied

Sto Corp. is an experienced leader in the manufacturing of exterior claddings including products that create effective solutions for stucco repair. Since they are manufactured to the highest quality standards, you can be confident that using Sto products will meet your specific project needs. Our products are supported by factory warranties and have been developed for the stucco renovation market throughout North America.

After using Sto products, your faded, cracked, or discolored stucco walls will take on new and vibrant life and help protect your project from reoccurring problems that can plague many stucco buildings. Imagine your home or building looking as good or even better than it did when it was first built.



Planning the Repair with Confidence

Once the extent of damage has been determined and options are considered, use a trained professional to complete the renovation. Since this phase is critical to a lasting and durable repair, it is prudent to seek the advice of a design professional in the planning stages of your renovation project.

Take comfort in the fact that Sto has a history with high quality stucco repairs. As a global company and industry leader, Sto has been at the forefront in the manufacturing of exterior wall system products and coatings for more than 40 years. Specified by design professionals, our exclusive product line is the direct result of rigorous research, development and testing. Each of the products in our stucco renovation group, for instance, has been field proven from the southwest to the northeast, on their respective types of geographic architecture. The result is a group of products that can handle just about any stucco repair challenge.



Sto Product Information

Most of the Sto coatings and finishes in the stucco renovation product group are formulated with elastomeric polymers. In effect, they create a protective skin that expands and contracts with the building, providing superior protection.

Sto coatings are available in both smooth and textured finishes. A smooth coating is a high quality smooth paint type product used when the existing texture is satisfactory and just needs re-coating. A textured finish is similar but has an aggregate for a sanded appearance, and is available in several different textures.

- ▶ **Good: Stolastic** - A flexible smooth coating for bridging hairline cracks. It can be tinted to any color to make your building look like new.
- ▶ **Good: StoPowerwall™ Finish** - A flexible textured wall coating that bridges hairline cracks and is weather resistant. It is available in a variety of textures and can be tinted to any color.
- ▶ **Better: Sto Powerflex®** - An acrylic-based textured elastomeric finish that is weather resistant, breathable, and bridges hairline cracks. Available in a variety of textures and can be tinted to any color.
- ▶ **Best: Sto Powerflex® Silco** - The top of the line textured finish that has the same benefits as Sto Powerflex, but is formulated using a silicone emulsion. This will make it easier to keep clean and reduce the opportunity for mold and/or mildew growth, and retain it's color longer. In addition, this finish has excellent vapor permeability to allow the wall to breathe.

Primers/Conditioners:

For the best results and a longer lasting finished appearance, it is necessary to use a tinted primer or a surface conditioner prior to the application of the final coating.

- Sto Primer is an acrylic prime coat that is tinted to the same color as the finish coat. It aids in color and texture consistency and durability.
- Sto Plex W is a conditioner used for many purposes including repair of chalking surfaces, and sealing absorptive surfaces.

Repair products:

Since the necessary repairs can vary, there are many options when it comes to repair products. Some examples for crack repair are:

- Sto Leveler and Sto Skim Coat are polymer-modified cement based products
- Sto Flexyl and Sto Watertight Coat are flexible waterproofing products
- Sto Flexible Crack Filler and Sto Flexible Skim Coat are polymer based elastomeric products specifically designed for crack repair
- Sto Mesh is a fiberglass mesh used in conjunction with one of the other repair products to provide reinforcement over the affected area

Additional detailed product information can be found on our website at www.stocorp.com.



Ten questions to consider before restoring your home or building

1. Is this a renovation system that uses compatible products from a single source supplier?
2. Is the applicator experienced in stucco repairs?
3. What type of history do the repair products have . . . are they specified by design professionals?
4. Is there a recent completed project list available from the manufacturer?
5. Are the repair materials and finish coatings formulated to perform in the intense climates of North America?
6. What types of manufacturer suggested surface preparation methods are included in the system?
7. Do the repairs to my home/building include a waterproof parapet cap treatment?
8. Do the paints and stucco finish coats offer crack prevention, breathability, water and dirt resistance?
9. What varieties of colors and textures are available with this system of products?
10. Is a factory warranty available and what are the terms?

Areas of Business

Headquartered in Atlanta, Georgia, Sto Corp. offers the following outstanding product systems to meet the new construction and renovation needs of residential, commercial and institutional markets in North America:

- A complete line of Stucco products
- Air and Moisture Barrier products
- A complete line of Insulated Wall Claddings
- Architectural coatings
- Integrated concrete and masonry repair systems

Sto's Added Value: Innovation, Experience, Performance, Customer Service

Sto adds value to residential and commercial properties with:

- Most comprehensive product line
- Experienced independent applicator base
- Proven warranty program
- Local sales & technical representatives
- Technical Service Hotline (1-800-542-3057)
- Established local distribution network for timely delivery
- Regional manufacturing support
- Local, regional, and national building code recognition
- Provider: AIA Continuing Education
- Sto Studio: a service for color renderings and architectural treatments
- Sto Institute: Sto educational unit, providing practical seminars and training courses for industry professionals
- StoMachine Technology: better wall cladding solutions by combining product and equipment innovation with superior service and support

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