

Stucco Repair and Maintenance

No. 2.01

These stucco repair and maintenance techniques are intended as a partial guide to repair of stucco walls. They may not be adequate for all situations. When in doubt hire a qualified professional to diagnose conditions and develop a repair strategy.

Condition: Cracking

Stucco by its nature is brittle and some degree of cracking is normal. Sometimes stresses transfer from the supporting structure to the stucco and cause it to crack. In other cases the stucco may crack because of shrinkage shortly after application. For a more extensive list of reasons why stucco cracks consult the references listed below. When cracks are unsightly or when they allow enough water to enter that causes deterioration they can be repaired.

Remedy

Cracks can generally be repaired in a few ways, depending on the severity of the cracks and their root cause. Obtaining a perfect color/texture match is very difficult and isolated crack repair, although effective functionally, may stand out in appearance from the rest of the wall. Therefore resurfacing of the elevation or a portion of the elevation to an architectural break may be necessary to obtain the best possible appearance.

A. Hairline Cracks (up to approximately 1/32" wide)

1. Apply two coats of color-matched smooth elastomeric coating by brush or roller and allow to dry. General application guide is 12-14 wet mil thickness per coat. Refer to Sto product bulletin 212 (Stolastic) or 222 (StoSilco Lastic) for specific information. Apply the coating up to an architectural break or to the full elevation as necessary to obtain a satisfactory aesthetic appearance.

B. Moderate Cracks (up to approximately 1/8" wide)

1. Embed glass fiber reinforcing mesh (920E Sto Mesh) in acrylic base coat (225 Sto RFP). Treat the cracks individually with a 4-6 inch wide strip of mesh centered over the crack. If cracks are spread throughout an area, treat the whole area with mesh. Overlap all mesh seams minimum 2-1/2". Resurface up to an architectural break or resurface the full elevation as necessary to obtain a satisfactory aesthetic appearance.
2. After the base coat is dry, usually within 24 hours, re-apply Sto acrylic elastomeric finish to match the color/texture of adjacent areas.

OR

1. Fill the crack with knife-grade elastomeric crack filler (CR214 Sto Flexible Crack Filler) and follow procedure A or B above.



Photo 1: Cracks that are dispersed across a large area can be repaired with elastomeric coating if narrow in width (1/32" or less), Procedure A, or with glass fiber reinforcing mesh and acrylic base coat, Procedure B. Surface cleaning to remove the efflorescence and any other surface contamination must be done first.

References:

1. Bucholtz, John J., P.E., *The Consumer's Stucco Handbook*, San Jose, CA, 1995.
2. Portland Cement Association (PCA), *Portland Cement Plaster (Stucco) Manual*, Skokie, IL, PCA, 1996.