Technical Services Information Bureau

TECHNICAL BULLETIN 60.102

MARCH 2021

STUCCO PATCHING & REPAIR METHODS
FOR PORTLAND CEMENT PLASTER

CRACKS:

Minor cracking in a stucco assembly is not an automatic indication of an improper stucco application, however there are methods to repair or address cracking if the cracks are unacceptable.

The following methods are recommendations that have been successful for the repair of plaster (stucco) cracks:

- Patching cracks 0.030 inch in width and smaller is not recommended using an aggregate material. Cracks this size will not accept aggregate material, and the resulting patch will detract from the natural beauty of the stucco and will serve no useful purpose. The subsequent "scar" will appear more obtrusive than the hairline crack. If the appearance of the crack is not acceptable, it is recommended to force paint into the crack with a brush. If color uniformity is an issue, the entire panel should be painted. Please be aware the thickness of the paint may affect the stucco texture and may not match an existing integral colored stucco.

- For cracks larger than 0.030 inch in width, patching materials consisting of a slurry coat of stucco finish and a bonding agent should be used. This patching material should be forced into the cracks and any extra material should be brushed from the surface. To prevent the appearance of a scar and depending on what texture is specified, the entire panel should be refinished (rescrubbed) with the finish coat material.

- If the plaster crack appears to occur beyond the finish (cracks through plaster membrane), the crack should be "tooled out" and repaired with a slurry coat consisting of portland cement, plasticizing agent, sand consisting of a #60 grit aggregate and a bonding agent all mixed with water. The slurry mix with the bonding agent will allow patch materials to chemically bond with existing plaster.

  The entire panel should be refinished with the finish coat material to eliminate the appearance of a patch.

- Lamina: This method adds crack resistance to the plaster assembly. Properly remove any potential bond breaking elements off the existing finish and apply a polymer-modified cement base coat over the entire surface and embed into the wet base coat a 4-5 oz. fiberglass mesh. A finish compatible with the polymer-modified base coat is applied as the final decoration.

Note: Crack repair methods listed or otherwise, should not be considered a guaranty cracking will not return or prevent future cracking.

SCAFFOLD TIES:

Scaffolding is often tied to the building with wires or all thread rods. Regardless of the tie system, the attachments must be removed after plastering is complete; this leaves holes in the plaster membrane that must be repaired for both moisture resistance and aesthetics. Patching the hole is best when done in conjunction with tearing down the scaffolding. The following is one recommended procedure:

- Cut the wires as close to the connection source as possible and treat the ends for corrosion resistance.

- Remove all threaded rods (if used).

- Fill the residual hole to below the finish line of plaster with a daub of polyurethane-based sealant (or similar sealant) that can cure in a sealed environment.

- Apply a fast-setting basecoat material above the sealant leaving room for the finish material.

- Use a finish material to match the surrounding texture/color.

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Note: Scaffolding tie patches may never be completely inconspicuous but, should not be so noticeable that the patch is the first thing you see. It is always good practice to include a few scaffolding patches in the jobsite mock-up to allow the architect to review and approve the level of patch the contractor is capable of providing, with the specified texture and color.

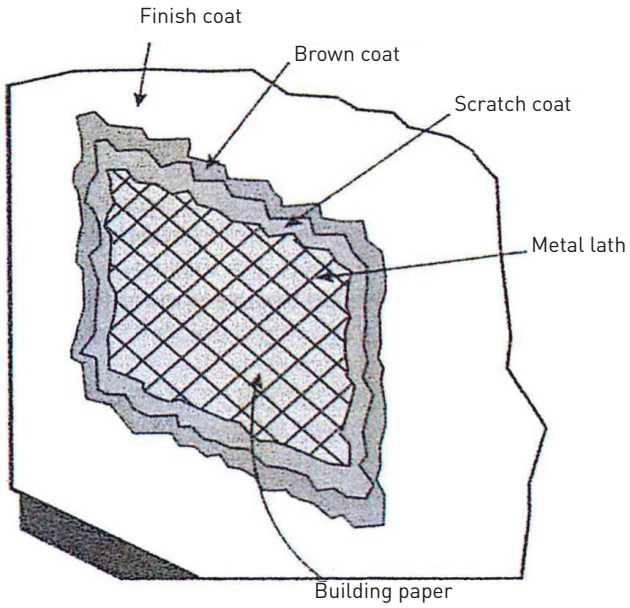
GENERAL PATCHING:

Large cracks, chips and holes can be patched using similar materials to the installed assembly. The severity of the damage will determine the sequence of repairs.

For instance, if the water-resistive barrier (WRB) has been compromised, the entire damaged assembly will be removed in order to integrate new WRB with existing WRB, new lath overlapped with existing lath etc.

The most difficult process is finishing a patched wall so that the patch is no longer visible. Often this process may require the entire plaster panel to be refinished (rescrubbed).

Patching should be performed by a thoroughly experienced plasterer that can consistently achieve good results. They will have picked up their own special methods and "tricks of the trade" where the patched area may "disappear".



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