

Preservation Points
Alameda Architectural Preservation Society (AAPS)
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Patching Plaster Walls and Ceilings

Plaster was the universal interior wall surface for old structures until the 1930's and 40's. Providing a plain background that offset architectural details, plaster was easy to clean and could be applied to flat and curved surfaces. Plaster could be treated in a number of ways; it could receive stenciling, decorative painting, wallpaper or whitewash.

Original plaster walls and ceilings may seem fraught with problems where its total removal may seem the only alternative. This process cannot only be expensive, but may also lose the character and architectural details that may be applied. This article will discuss minor repairs that can be done by the homeowner. Major repairs will require a professional plasterer.

Preservation Point: Plaster walls and ceilings help prevent the spread of fire

Plaster is a rigid material applied over a flexible framework. In a typical application, a thick basecoat is applied over wood strips, spaced approximately 1/2" apart, called lath. The lath is nailed to the structural studs of the wall. As the basecoat is applied, excess plaster is pressed between the lath strips forming a "key" which holds the basecoat to the lath. A smooth finish coat of plaster is then applied over the basecoat. As a structure settles or moves, the structure shifts, including the lath strips; however, the plaster does not move. This movement will often result in cracks and in some instances will break the "key" holding the plaster to the lath.

Special spackling compounds made to match plaster are available for filling surface cracks. Cracked plaster walls can also be corrected with a special wallpaper called "liner paper" that has more flexibility than plaster and can stretch and compress to absorb the structural movement that causes plaster to crack. Liner paper is available at paint stores.

Where larger repairs are necessary, such as replacing a section of loose plaster on a wall or a sagging ceiling, other steps must be taken. When replacing a section of plaster that has come loose from the lath, remove the loose section and **carefully cut** away the lath. Measure the depth of the opening and purchase a board thickness as close to the depth as possible. Insert a piece of gypsum board (sheetrock or drywall) in the opening. Use sheetrock screws to attached the board to studs. **Avoid nailing**; this may cause further cracking to the surrounding area or may break the "keys" holding the plaster to the lath. Apply drywall or fiberglass tape over the gap between the gypsum board and plaster. Apply a finish coat of spackle over the gypsum board and tape. Sand the spackle until it is flush with the adjacent plaster. This process may take two or three applications.

Preservation Point: When hanging pictures on plaster walls, **drill** a pilot hole before nailing into the wall.

Another process of reattaching plaster to lath is with plaster washers. This process entails screwing plaster washers directly into the sagging or loose plaster. Screw the washers directly into the plaster and lath. Cover the washers with fiberglass mesh or sheetrock tape. Apply special spackling compound as described above.

Most home repair books include a section on patching and repairing plaster walls and ceilings. An excellent source is The Old-House Journal, December 1973 through March 1974 or more recently in selected issues in 1984 and 1985.

The Alameda Architectural Preservation Society is dedicated to the preservation of Alameda's historic structures and neighborhoods. For further information on AAPS, phone 510-986-9232; write P.O. Box 1677, Alameda Ca. 94501 or Visit www.alameda-preservation.org.

