

Preservation Points
Alameda Architectural Preservation Society (AAPS)
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Masonry Repointing

As indestructible as they may appear, masonry chimneys, foundations, stairs and walls can often become the most problematic when it comes to maintenance and restoration.

The most common problem is the deterioration of the mortar. Deterioration is due to exposure of the mortar to the elements and the expansion and contraction caused by temperature changes. Contrary to one's belief that mortar is a permanent material, it actually is meant to be an expandable and flexible component that does have to be replaced periodically.

Preservation Point: Never use new bricks to repair old masonry

The process of replacing missing or deteriorating mortar is called "repointing". As simple as the process may sound, executing the work to achieve a "close match" to the existing surfaces is not. Improper repointing can leave a wall or chimney visibly marred with brick polka dots and a limited life span.

The following are a few points to be aware of if you have masonry that needs repointing.

- Over the years, the edges of bricks will become worn and rounded. If care is not taken to recess the mortar to the same width as the surrounding mortar, the finished look will be wider and out of character.
- If the original mortar had tooled joints that have weathered, do not try to match the original tooling, but match the weathered look of the surrounding mortar.
- Remember that the composition of mortar today is greatly different than a century ago. The lack of uniformity and purity of the ingredients results in the color and texture variations seen in old mortar today.
- Old bricks can range in hardness, size, color and texture. Try to match replacement bricks with "like kind". Searching out used brick distributors can do this. You can also reuse some of your own old brick from basement walls or other inconspicuous places. Be aware though that some builders used cheaper bricks in areas that were not highly visible.
- Never use new bricks to replace or repair existing masonry.
- Never use power tools such as masonry saws to remove mortar. This may damage the existing brick edge and widen the mortar space changing the joints characteristic.
- Do not sandblast. This will permanently change the characteristic of the brick and accelerates the deterioration process.
- Smearing mud, soot, ashes and other substances on the finished mortar may disguise the repair temporarily, but will not provide a permanent solution.
- Repointing bricks and mortar in the hearth is different than walls. Bricks and mortar for this use are made with "fire clay" that is resistant to high temperatures.

Preservation Point: Match existing mortar size and texture.

All one can hope for is to match the repair as close as possible to the existing surfaces with regards to the brick and mortar size. Try to minimize the overall difference in appearance of the patch by carefully choosing like materials, but accept the fact that a visual difference will be inevitable.

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.

