## **Preservation Points**

Alameda Architectural Preservation Society (AAPS) By Randy Horton

Windows: Restoring or Replacing (First in a series)

Windows are one of the most important parts of a building's architecture. The original windows are an integral part of the design. Changing the type, size or materials of the original windows can often harm the building's architectural integrity.

In this series of articles on windows, AAPS will discuss the importance of the window's design regarding its function, efficiency, aesthetics, maintenance, and restoring or replacing the window.

Double hung, casement and fixed are the three basic window styles associated with Victorian, Brown Shingle, Craftsmen and California Bungalow architecture. Each style is an important design element to the overall character and appearance of the building.

**Double hung** windows are comprised of an upper sash that slides downward over a lower sash that slides upwards. The combination of these two sashes allows for air circulation, even in a room that has only one window.

**Casement** windows open outward and are hinged to the frame along the vertical edge. Used in combination with other casement windows this style of window also allows for air circulation.

**Fixed** windows do not open. They are usually a single pane of glass or contain a decorative element such as leaded or stained glass. As with windows that open, the fixed window is proportioned to the mass of the building and it adds a decorative element to the facade.

\*Preservation Point: Original windows are an integral part of the buildings architecture.

The materials used in these three types of windows play an important role in the overall aesthetics of the building. Wood was the primary building material during this period of architecture. The malleability of wood allowed the architect to easily incorporate the window's detailing into the overall design.

The basic components of a window are the stiles, rails and muntins. Vertical stiles and horizontal rails make up the sash, which holds the pane of glass. The pane of glass can be divided into a grid. The dividers that make up the grid are known as muntins. The scale, proportions, and decorative detailing of these components are an integral part of the overall construction and appearance of the window. All of these elements make the window a vital part of the building's integrity.

Many replacement windows on the market today are made of vinyl and aluminum. The appearance of these materials looks very different from the original windows and can be inconsistent with the character of older buildings. Also, mass-produced, "off the shelf" windows may not conform to the existing opening of the original window. Reducing or enlarging the window opening to accommodate a mass-produced window will change the character of the building's design. This may possibly alter the effectiveness of the window's use for light and air circulation. The scale and proportions of the stiles, rails, and applied grids of vinyl and aluminum windows may not conform to the original design integrity. Vinyl and aluminum windows are also limited in color choices, and can discolor, crack or corrode.

\*Preservation Point: Vinyl and aluminum windows can be out of character with older buildings.

When considering replacing existing wood windows, consider the following: Are they original? Do they reflect the original design intent of the building? Do they reflect the period or regional styles? Are they examples of exceptional craftsmanship or design?

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 <a href="https://www.alameda-preservation.org">www.alameda-preservation.org</a>.