WINDOWS: REPAIR, REPLACEMENT & NEW CONSTRUCTION

CITY OF SAN ANTONIO
OFFICE OF HISTORIC PRESERVATION

CITY OF SAN ANTONIO
HISTORIC DESIGN GUIDELINES
SUBSTITUTE MATERIALS POLICY GUIDE

DRAFT
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WHY ARE WINDOWS IMPORTANT?

A value of a historic home is equal to the sum of its parts. As original materials are removed from a historic property, it begins to lose its integrity and ultimately its historic value. Historic windows greatly contribute to a property in terms of character and craftsmanship. They were expertly designed and constructed from high-quality materials. Preserving historic windows in place keeps original, high quality materials with the property and out of the landfill.

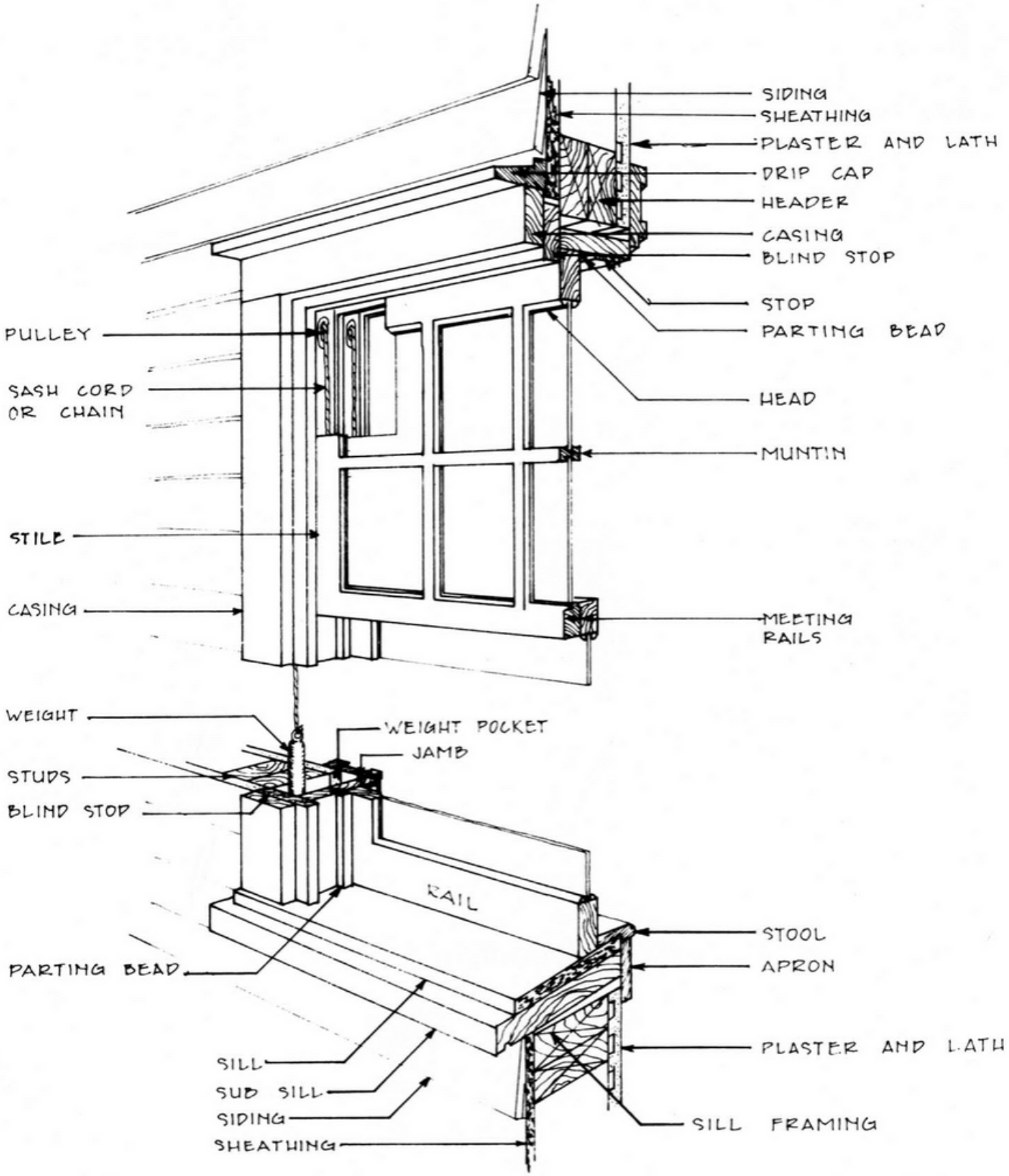
In historic homes, the windows are an integral part of the design. They were designed to not only be aesthetically pleasing, but were necessary as a functioning component to the building by providing light and ventilation. The loss of original windows also has great potential to negatively impact the appearance of a historic home. Building facades lose proportionality and depth as modern replacements are introduced.

Historic wood windows can certainly be maintained or restored to working order. Preservation of original architectural features, including windows, is encouraged in the City of San Antonio Historic Design Guidelines. Nevertheless, there is an abundance of replacement window products that are too often used by historic home owners seeking to “upgrade” their aging properties.

Did you know?

Even windows in the best condition can be made more energy efficient. Heat gain/loss through windows occurs in three different ways: air infiltration, heat transfer (conduction) and solar gain (radiation). There are a number of low cost, reversible and historically appropriate strategies that can be used to reduce heat gain/loss.

WOOD WINDOW PARTS

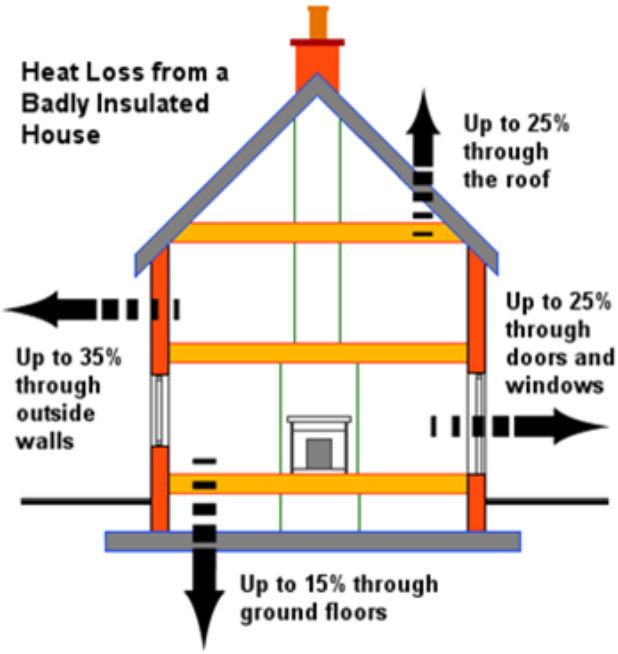


ENERGY EFFICIENCY & WOOD WINDOWS

In an age where energy reduction is at the forefront of every homeowner's mind, windows are often blamed as the leading culprit of heat gain/loss. The criminalization of "drafty old windows" is nothing new; window manufacturers have long been pointing out the faults of old windows while promoting attractive solutions (their products). New low-e, gas-filled and triple pane replacements may seem like an exciting solution for homeowners coping with their monthly energy bill. Walk into any home-improvement store, and you may be feeling the pressure to replace. Door-to-door window salesmen have also been reported in historic districts in San Antonio.

In reality, heat gain/loss occurs evenly throughout the home, with windows only accounting for 25% of waste. Poorly insulated walls and attics are the greater culprit, especially locally. The San Antonio climate offers many days of full sun. While we enjoy these sunny days in the winter, during the hot summer months that same sun bears down on rooftops, turning attics into ovens.

Trying to solve an energy problem by only addressing the windows is like trying to hold water in a leaky bucket and only patching a few of its holes!



Consider the use of the following to increase your historic structure's energy efficiency.

- Weather stripping
- Storm windows (interior and occasionally on the exterior provided they are thin framed and used with a decorative screen that does not obscure architectural elements)
- Shades, shutters and screens
- Interior window film

REPAIR OR REPLACE?

In most cases, window repair is not only the more affordable solution upfront, but offers a much greater return on investment than replacement. Repairing and maintaining an old wood window may seem like a daunting task, but remember that historic windows were intended to be taken apart. If one piece fails, then only that piece may be replaced. By educating themselves on these practices, repairs can become something that any homeowner can tackle one window at a time (although feel free to obtain the services of a professional!)

REPAIRABLE WINDOWS

- Glass missing or broken
- Meeting rails not aligning
- Cords broken or hardware missing
- Sill or frame rotted
- Partially rotted rails and stiles which require patching

BEYOND REPAIR

- Missing components or units such as sashes
- Extreme wood rot
- Where 50% or more of a window's components must be reconstructed

Historic wood frames are restored, and prepped for reglazing.

Did you know?

That porches main feature architectural elements that are not original, but may still be contributing? When identifying the porch's character defining features, keep in mind that elements from different decades may be contributing to the structure's historic significance.

SELECTING AN APPROPRIATE REPLACEMENT

Wood replcement

Aluminum replacement
(to replace non-historic windows)

Vinyl replacement

Replacement windows standards:

MATERIALS: If full window replacement is approved, the new windows must feature primed and painted wood exterior finish. Clad, composition, or non-wood options are not allowed unless explicitly approved by the commission.

SASHES: Meeting rails must be no taller than 1.25”. Stiles must be no wider than 2.25”. Top and bottom sashes must be equal in size unless otherwise approved.

DEPTH: There should be a minimum of 2” in depth between the front face of the window trim and the front face of the top window sash. This must be accomplished by recessing the window sufficiently within the opening or with the installation of additional window trim to add thickness.

TRIM: Original trim details and sills should be retained or repaired in kind. If approved, new window trim must feature traditional dimensions and architecturally appropriate casing and sloped sill detail. Window track components such as jamb liners must be painted to match the window trim or concealed by a wood window screen set within the opening.

GLAZING: Replacement windows should feature clear glass. Low-e or reflective coatngs are not recommended for replacements. The glazing should not feature faux divided lights with an interior grille. If approved to match a historic window configuration, the window should feature real exterior muntins.

COLOR: Replacement windows should feature a painted finished. If a clad product is approved, white or metallic manufacturer’s color is not allowed, and color selection must be presented to staff.

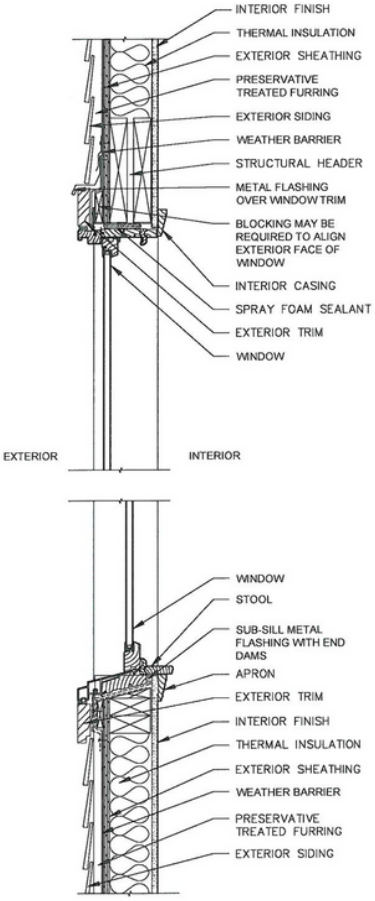
INSTALLATION: Replacement windows should be supplied in a block frame and exclude nailing fins. Window opening sizes should not be altered to accommodate stock sizes prior to approval.

STEEL CASEMENT WINDOWS

WINDOWS FOR NEW CONSTRUCTION & ADDITIONS

Aluminum clad wood window block frame

Vinyl window - flush flange)



Window standards for new construction and additions:

GENERAL: New windows on additions should relate to the windows of the primary historic structure in terms of materiality and overall appearance. Windows used in new construction should be similar in appearance to those commonly found within the district in terms of size, profile, and configuration. While no material is expressly prohibited by the Historic Design Guidelines, a high quality wood or aluminum-clad wood window product often meets the Guidelines with the stipulations listed below. Whole window systems should match the size of historic windows on property unless otherwise approved.

SIZE: Windows should feature traditional dimensions and proportions as found within the district.

SASH: Meeting rails must be no taller than 1.25”. Stiles must be no wider than 2.25”. Top and bottom sashes must be equal in size unless otherwise approved.

DEPTH: There should be a minimum of 2” in depth between the front face of the window trim and the front face of the top window sash. This must be accomplished by recessing the window sufficiently within the opening or with the installation of additional window trim to add thickness.

TRIM: Window trim must feature traditional dimensions and architecturally appropriate casing and sloped sill detail. Window track components such as jamb liners must be painted to match the window trim or concealed by a wood window screen set within the opening.

GLAZING: Windows should feature clear glass. Low-e or reflective coatings are not recommended for replacements. The glazing should not feature faux divided lights with an interior grille. If approved to match a historic window configuration, the window should feature real exterior muntins.

COLOR: Wood windows should feature a painted finished. If a clad product is approved, white or metallic manufacturer’s color is not allowed, and color selection must be presented to staff.

INSTALLATION: Wood windows should be supplied in a block frame and exclude nailing fins. Window opening sizes should not be altered to accommodate stock sizes prior to approval.

RESOURCES

Office of Historic Preservation Staff. Consult with a historic preservation specialist to receive property-specific guidance on landscaping plans and the Historic Design Guidelines.

www.sapreservation.com | (210) 207-0035 | info@sapreservation.com

Your neighborhood association. Your registered neighborhood association can provide guidance on landscape characteristics, assistance in design and contractor referrals, and more. To find your association, visit **www.sanantonio.gov/nhsd/neighborhoods** or inquire with Office of Historic Preservation staff if you live in a historic district.