STANDARDS & RECOMMENDATIONS

WINDOW REPLACEMENT

San Francisco Planning

San Francisco PLANNING DEPARTMENT
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Photo by SF Planning

Within the City and County of San Francisco, all window replacement projects require a building permit. Windows are an integral part of the design and character of most buildings, and choosing appropriate replacement windows is frequently a critical aspect of any rehabilitation project. Windows have a variety of different window shapes, muntin profiles, methods of operation and configurations; therefore, minor changes may alter the appearance of a building.

In May 2025, the Board of Supervisors passed Planning Code Section 136.2, which states:

The Planning Department shall impose no restrictions related to the replacement material of any window frame or sash that replaces an existing window frame or sash.

This legislation does not apply to historic buildings (Category A / A*) [See *Appendix – Historic Designations in San Francisco*]. In addition, this legislation does not apply to enlarging existing windows or adding new windows openings.

BEST PRACTICES

A Building Permit is required for **ALL** types of window replacement (despite the location on a building).

It's best to talk to the Planning Department **BEFORE** you buy new windows. In some cases, the Planning Department may not be able to approve certain windows depending on your building's historic status—even if you already bought or installed them.

Windows installed without the benefit of a building permit will be reviewed on an individual basis and may require consultation with our Enforcement Division.

Window Replacement for Category A*

Window replacement in City Landmarks buildings and buildings within landmark districts and conservation districts require a preservation entitlement (either an Administrative Certificate of Appropriateness or a Minor Permit to Alter). Most window replacements can be handled at the staff-level (administratively) and should not require a public hearing. Consult with a Preservation Planner.

Window Replacement for Category A: Refer to the *Appendix - Window Replacement for Category A*.

Window Replacement for Category B

The San Francisco Planning Department may not control what materials you use for the window frame or sash when replacing existing windows on Category B properties. However, some Category B properties may contain distinctive windows, which deserve additional consideration and/or care. Please consult with Planning staff on the operation and design of these windows.

To provide additional guidance to property owners on options for window replacement, check out: *Appendix – Frequently Asked Questions – Repair & Replacement of Historic Windows*.

Window Replacement for Category C

The San Francisco Planning Department may not control what materials you use for the window frame or sash when replacing existing windows on Category C properties. Please consult with Planning staff on the operation and design of these windows.

Additional Information

To assist with your window replacement project, the San Francisco Planning Department has compiled a series of resources included as an Appendix:

- Historic Designations in San Francisco (see page 4)
- Window Components (see page 5)
- Window Replacement for Category A (see page 6)
- Frequently Asked Questions – Repair & Replacement of Historic Windows (see page 8)

Process for Window Replacement Projects

Follow this step-by-step guide to help you understand how to get a building permit to replace your existing windows.

STEP 1:

Check if the property is historic

Visit the Property Information Map

- Begin typing an address in the search field at the top of the page – a list of pre-existing properties may appear to choose from, or you can continue entering the address – another option is to click a target location on the map below the search field.
- After results appear, select "Historic Preservation" from the column on the left – the property will be categorized as A, A*, B, or C – to learn what these categories mean, see the Appendix – Historic Designation.
- If the property is Category A* (a City Landmark or in a Conservation District), you are **not eligible** for an over-the-counter approval. Instead, you may need to apply for an Administrative Certificate of Appropriateness or a Minor Permit to Alter.

If you have questions, talk to a Preservation Planner at the Permit Center, SF Planning Counter or email *pic@sfgov.org*.

STEP 2:

Fill out the building permit form

Complete the Over-the-Counter building permit form, also known as Form 8 (the pink form).

If you want to expand an existing window or add a new window to the exterior of your building, you must include building plans and elevations with your Over-the-Counter (OTC) building permit application – see Submittal Guidelines for building plan requirements.

STEP 3:

Describe window replacement on Form 8

In this step, you need to explain your window replacement project on Form 8. Include these details:

- How many windows you are replacing
- Where the windows are located (for example, front of the building, side, or back)
- What the new windows will be made of (wood, aluminum, steel, vinyl, etc.) and how they work (for example, sliding, double-hung, or fixed)

Here's an example of what to write: *"Replacement of two windows on the second floor of the street façade with two new double-hung wood-sash windows."*

It helps if you add specific information about the new windows, such as a product sheet. You can get this from a window supplier or contractor. This can help City agencies review your project.

STEP 4:

Submit to the Permit Center

After you finish your application, bring the application and materials to the Permit Center.

At the Permit Center, you will visit different stations, including:

1. **Permit Center Help Desk.** They will help you get the forms and fill them out if you need help.
2. **Central Permit Bureau (CPB).** They will give you a building permit number, check if your application is complete, and send it to the right City agencies to review.
3. **San Francisco Planning Department Counter.** They will check your window replacement to make sure it follows the Planning Code.
4. **San Francisco Department of Building Inspection (DBI).** They will check your project to make sure it follows the Building Code.

If a City agency has questions or needs more information, you may have to provide more documents.

STEP 5:

Pay fees and start construction

After all City agencies review your permit and you pay the fees, the City will issue you a Job Card. This card lets you start your window replacement project. You will coordinate with the Department of Building Inspection (DBI) to schedule any inspections or follow-up steps. A DBI inspector must do a final onsite inspection to "complete" your window replacement permit. Most window replacement permits stay valid for one year.

APPENDIX

Historic Designations in San Francisco

There are four distinct types of historic designations in San Francisco: Categories A*, A, B, and C.[1] For further information on these historic designation categories and how properties receive them, please reference the Planning Department's Preservation Bulletins.

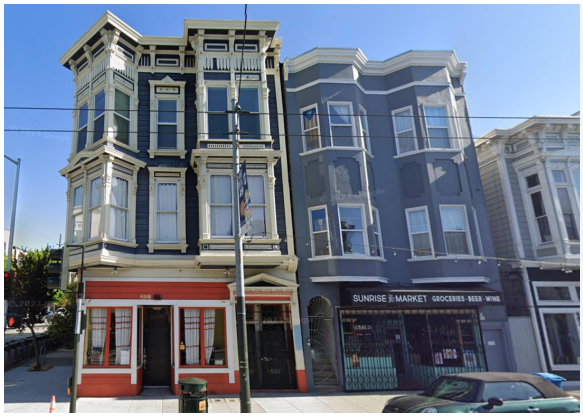
Category A*

Properties designated as City Landmarks, within Landmark Districts or Conservation District under Article 10 or 11 of the Planning Code.

Category A building at 93 Cumberland Street, located in the Eligible Inner Mission Boulevards and Alleys Reconstruction Historic District

Category A

Properties listed on or formally determined to be eligible for the California Register of Historical Resources or the National Register of Historic Places; or properties determined to be historic resources as part of an adopted local survey or historic context statement.



Category B building at 698 Haight Street, constructed circa 1900 but not yet formally evaluated for historic significance by the Planning Department

Category B

Properties that are eligible to potentially be considered historic resources due to their age (more than 45 years old) and require further consultation and review.

Category C building at 50 Barcelona Avenue, determined not to be a historic resource by the Planning Department in 2024

Category C

Properties that are ineligible to be considered historic resources due to their age (less than 45 years old) or that have been determined not to be historic resources through formal evaluation by the Planning Department.

1. Category A/A* properties can either be individually significant buildings or can be located within the boundaries of an identified historic district. Please note that there are many Category A/A* buildings in San Francisco that are within a historic district but have been determined as non-contributing to the historic district. The Preservation Design Standards for Additions and Modifications to Historic Buildings do not apply to non-contributing buildings within a historic district, and do not apply to Category B or C properties.

APPENDIX

Windows Components

Head: the horizontal member forming the top of the frame.

Glazing: an infill material such as glass or plastic. (v): the process of installing an infill material into a prepared opening in windows, doors, TDDs, roof windows, SSPs, or unit skylights.

Muntin (or divider): a member that divides glazing into separate vision areas. Muntins are either structural or decorative. Other common terms are dividers, true divided lite (TDL), simulated divided lite (SDL), grill, grid, or bar-in-glass.

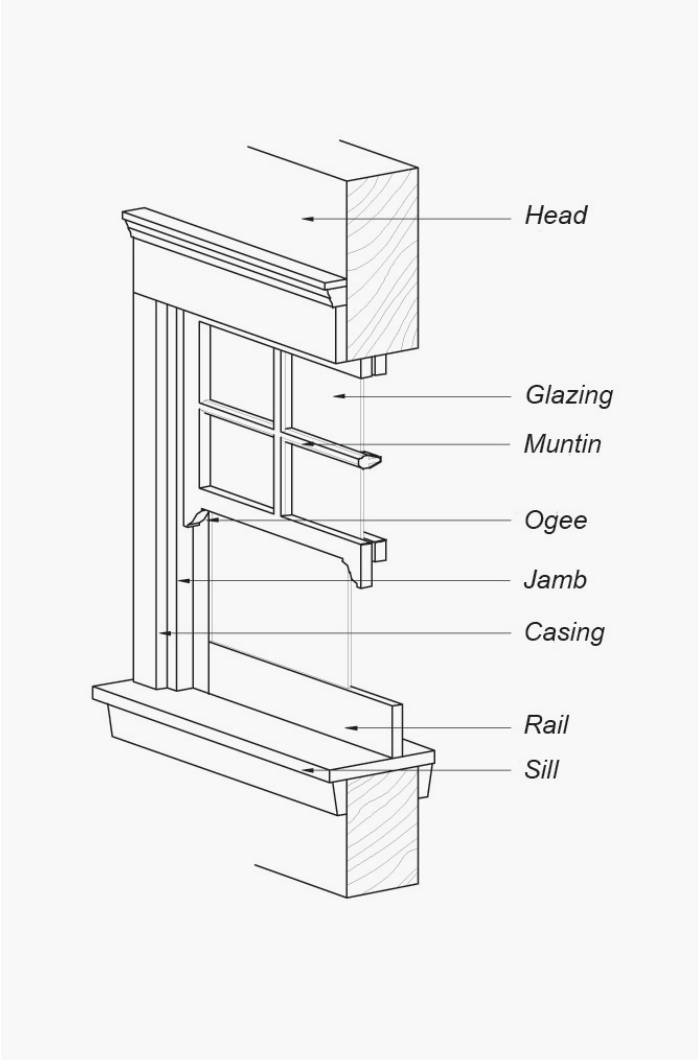
Ogee curve (also ogee molding): reverse flex curve commonly found in window moldings and trim pieces.

Jamb: the upright or vertical members forming the side of the frame.

Casing: a trim. Exposed molding or framing around a window or door, on either the inside or outside, to cover the space between the window frame or jamb and the wall.

Rail: a horizontal member of a window sash, leaf, or panel – comprised of the lower rail, the check rail and the upper rail.

Sill (also sill plate; inside sill; outside sill): a horizontal member at the bottom of the window frame; a masonry sill or sub-sill can be below the sill of the window unit.



Source:
AAMA/WDMA/CSA 101/I.S.2/A440, NAFS — North American Fenestration Standard/Specification for windows, doors, and skylights.
https://www.wdma.com/the-window-glossary

APPENDIX

Window Replacement in Category A

The following information is provided as a guide for window replacements for Category A properties (historic resources) in San Francisco.

Windows visible from the street or other public rights-of-way (e.g. street, alley, park) are an important part of the individual character of a building, as well as the surrounding neighborhood. All windows should ideally achieve a depth of 2-inches from the face of the building to the sash. Replacement windows that are not visible can be of any material and operation. For multi-unit properties (such as condos), if windows are replaced individually, all new windows shall be the same.

For Category A (historic) properties, the Department will require replacements to match original windows as close as possible including their size, glazing operation, material, finish, exterior profiles, details, and arrangement. Buildings subject to **Articles 10 or 11 Landmark** and/or Conservation District (aka. Category A*) will be held to a higher standard and may require consultation with a Preservation Planner.

Window Replacement Matrix

For windows visible from the public rights-of-way, an appropriate replacement window may be found in the matrix below.

	Category A Properties	CURRENT WINDOW				
		Wood / DH or SH	Wood / CS	Aluminum / CS	Aluminum / SL	Vinyl or Other
ORIGINAL WINDOW	Wood / DH	Wood / DH or SH		Wood or ACW [1] / DH or SH [2]		
	Wood / CS	Wood / CS		Wood or ACW [1] / CS [2]		
	Wood / FX	Wood / FX or CS		Wood or ACW [1] / FX or CS [2]		
	Aluminum / CS	AL, ACW or FG / FX or CS				
	Aluminum / SL	AL, ACW or FG / SL				
	Steel / DH	Steel or AL / DH or SH				
	Steel / CS or FX	Steel or AL / CS or FX				

Key (Materials):

Wood
AL = Aluminum
ACW = Aluminum Clad Wood
FG* = Fiberglass
Steel

Key (Operations):

DH = Double-Hung
SH = Single-Hung
CS = Casement
FX = Fixed / Picture
SL = Slider

1. For A* properties, all replacement windows where the original window was wood shall also be wood, and aluminum-clad wood shall not be permitted as a replacement material.
2. For properties constructed before or during 1955 where the original window operation is not known, the replacement windows may have DH, SH, CS, or FX operations

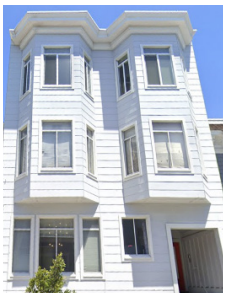
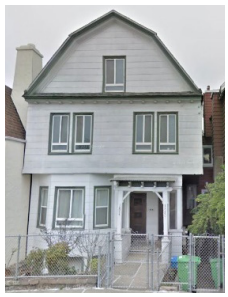
Replacement Windows for 3 Major Types of Windows Found in San Francisco

TYPE 1

Original Windows:

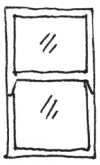

All wood double-hung

Current Windows:

Material (e.g. vinyl, aluminum, wood, etc.)

Appropriate Replacement Windows:



Material:
All wood, when original are existing. Alum-clad wood when original have been replaced.

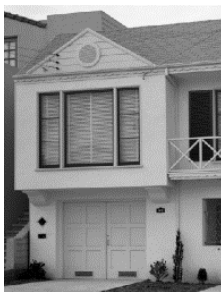
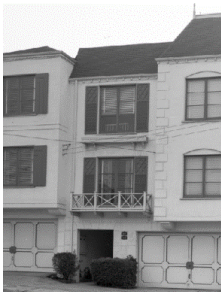
Operation:
Double-hung or single-hung

Ogee Lugs:
Current wood windows on Category A buildings with ogees must be replaced with "integral" ogee lugs.

Snap-on lugs are NOT permitted.

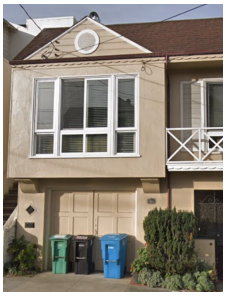
TYPE 2

Original Windows:

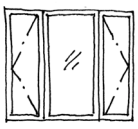
All wood casement

Current Windows:



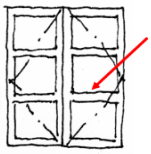

Material (e.g. vinyl, aluminum, wood, etc.)

Appropriate Replacement Windows:

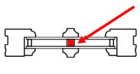


Material:
All wood or aluminum-clad wood

Operation:
Casements, fixed at center



Should be full height.
No horizontal bar.
Wood casements with horizontal muntins must be replicated.



Simulated divided lights must have dark-colored spacer bars.

TYPE 3

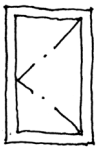
Original Windows:

Thin-profiled aluminum

Current Windows:

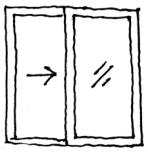
Material (e.g. vinyl, aluminum, wood, etc.)

Appropriate Replacement Windows:



Material:
All aluminum
(or some fiberglass)*

Operation:
Casements or sliders, match original design.



Should be full height.
No horizontal bar.
"Thin-profiles."

* Contact PIC for more information.

APPENDIX

Frequently Asked Questions – Repair & Rehabilitation of Historic Windows

The information listed below can assist an owner in determining what replacement windows are appropriate for their property.

Replacement of wood windows with vinyl, fiberglass, or aluminum

Wood windows were originally installed on the majority of residential buildings constructed up until World War II. In San Francisco, where most buildings are viewed at close range from the street, the differences between wood windows and substitute materials are usually detectable. Particularly with older buildings, these alternate materials usually may stand out visually, and often do not match existing windows in the immediate the neighborhood.

Vinyl, fiberglass, and aluminum windows do not look similar to painted wood windows for a number of reasons. The primary reason is that these windows have exterior profiles, depth, and dimensions are not designed to match the dimensions of most common wood window sashes and moldings. In addition, windows of substitute materials have very little or no reveal between the face of the sash and the glass, have visible seams, have multi-faceted tracks, and in some windows the upper sash is often larger than the lower sash. Furthermore, most aluminum or vinyl windows cannot be painted, and have an overall finish that is flat in appearance.

In accessing the difference in appearance between vinyl, fiberglass, or aluminum, and painted wood windows, it is recommended to walk around the neighborhood and inventory the buildings that have wood windows and compare them to the ones that have used substitute materials. You may notice differences in the profile and depth of the window. Often, in older structures with a more elaborate architectural style of the building, new vinyl, fiberglass, or aluminum windows will look out of place. (Please note that many windows may have been installed without benefit of a permit or before the current window replacement standards).

Do wood windows cost more and require more maintenance, as compared to vinyl and aluminum windows?

It depends. The highest quality custom-made wood windows by major manufacturers may be more expensive than windows of other materials. But there are a number of manufacturers and local craftsmen that produce quality, double-paned, architectural grade, painted wood replacement windows that are competitive in price and also provide real painted wood sashes and assemblies.

In terms of maintenance, wood windows typically require painting every ten years, depending on their location, sun exposure, water exposure, paint quality, priming, wood quality, etc. Although vinyl, fiberglass, and aluminum windows do not require painting, they are rarely maintenance free. Economy grade vinyl and fiberglass windows can fail within a few years. Finishes on vinyl and fiberglass can deteriorate through UV exposure and become brittle and deform. Aluminum windows can also oxidize and dent. Quality wood windows can last significantly longer, depending on maintenance and the quality of wood used. Double-hung painted wood windows can also be installed with metal or vinyl tracks, making them easier to open and close as they age.

Use of wood windows with vinyl, fiberglass, or aluminum clad exteriors

A clad window is a window constructed primarily of wood but has an additional material layer, such as aluminum, applied to the exterior for maintenance purposes. If a clad product is used, snap-on ogee lug replacements are not recommended and are not required. Aluminum and fiberglass finishes can come in a variety of colors and often have a finish that more closely resembles a painted surface. There are a number of windows constructed of substitute materials that strive to match the styles and profiles of wood windows.

Information regarding true divided lite (TDL) and simulated divided lite (SDL) windows

Older windows are often made up of two sashes that include smaller panes of glass. These windows are referred to as "divided-lite windows." The panes of glass are separated by thin wood members, or moldings referred to as a "muntin." A true divided-lite (TDL) window is defined when the muntin separates individual panes of glass. Most TDL windows are single-paned; however, a simulated divided-lite (SDL) window often contains an insulated unit of glass with an applied exterior grid that mimics the appearance of a divided-lite window. The majority of simulated divided-lite windows do not reflect the depth and the profile of a true divided-lite window.

If a property owner chooses to use an SDL window to replace a window that has true divided lites, the Planning Department recommends the replacement window utilize the following criteria:

Criteria for using SDL windows in place of TDL windows:

- The SDL should match the existing window muntin in profile and depth to the greatest extent possible. This width may vary; however, the most common width for a TDL window muntin is 7/8" including glazing putty on either side of the division. The SDL muntin must have a depth of at least 1/2".
- There should be an interior space bar, preferably of a dark color, within the insulated unit that visually divides the interior and exterior grilles.
- The SDL should be integral to the window sash – snap on grilles or grilles placed between an insulated glass unit are not recommended Specifically, vinyl-clad window systems are typically clad with vinyl strips on the outer surface – these systems are discouraged.

Repairing windows prior to replacing

Deterioration of poorly maintained windows usually begins on horizontal surfaces and at joints, where water can collect and saturate the wood. Wood windows, when repaired and properly maintained, will have an extended life while contributing to the architecture of the building and the neighborhood. Property owners should use a high-quality paint coating system and conduct regular maintenance of window frames and sashes to achieve the longest life possible.

Many wood windows constructed during the late 19th- and early 20th- centuries still perform very well and may not require replacement. This is largely due to the fact that these windows were constructed out of Heartwood (or the center of a tree). This durable old-growth wood is denser and more resistant to fungi, insects, and rot than new wood farmed to manufacture windows today. For this reason, it is suggested to always explore the possibility of repairing the historic windows on a building before replacing them. There are a number of professional window replacement companies who can help you determine if your windows can be repaired, or if some or all need to be replaced.

Be sure to evaluate ALL of the existing windows and conduct a condition assessment to avoid spending money on windows that don't need replacement. It may be that only certain windows on your building need replacement, while some may only need repairs or other minor refurbishments, thus significantly reducing costs. One solution for replacing deteriorated windows on visible elevations is to consolidate other windows from the rear and sides of the building that are still in good condition and relocate them to the primary façade.

In summary, take these tips into account:

- Evaluate what windows may only need repairing rather than replacing.
- Survey all windows on your buildings to determine which ones need replacement.
- Windows on eastern and northern facades often last longer and need less frequent replacement than windows with southern or western exposure.

Energy conservation and sustainablilty

Windows don't always require replacement to reduce energy usage; however, energy conservation and sustainability is one of the primary reasons for replacing windows that are considered to be obsolete, particularly replacing single-glazed sashes with double-glazed sashes. Retaining and repairing existing windows conserves embodied energy (i.e. the sum of the energy required to extract raw materials, manufacture, transport, and install building products). Replacement window materials – primarily aluminum, vinyl, and glass possess some of the highest levels of embodied energy of all building materials.

Older windows are renewable and repairable; however, newer thermal windows are not repairable and once the dual glazing seals are broken, the entire window unit must be replaced. While the advantages of double-paned windows are well known, a properly weather-stripped, single-glazed sash window can greatly reduce or eliminate noise and air infiltration (where most energy is lost). Replacement of glass for a single-pane window is typically simple process. Some older windows, if they have sufficient thickness in the sash, may be rehabilitated from single-pane glass to double-pane or laminated glass (two pieces of glass with a plastic layer in between for noise reduction). Changing out glass types requires a building permit. To explore these options, consult with a historic window repair contractor to determine if this is possible. The cost of weather stripping is nominal when compared to the price of replacement windows. Finally, to add another layer of energy efficiency and/or to help with noise, consider installing an interior storm window, which does not require a building permit.

Mixing window types

Mixing window types and materials creates an inconsistent appearance to a building's façades. This issue becomes particularly important in dealing with condominium and apartment buildings. In general, the Planning Department does not recommend partial window replacement for a building unless the replacement windows are meant to restore the windows to their historic configuration.

In-kind replacement

If a Planner has stated that you should replace your windows "in-kind" this means that a wood double- hung window should be replaced with a wood double- hung window or a metal casement window should be replaced with a metal casement window. All details must match, including muntin profiles and exterior millwork. Please note that replacing a double-hung wood window with a double-hung vinyl window is not "in-kind" replacement.

San Francisco Planning

FOR MORE INFORMATION:
Call or visit the San Francisco Planning Department

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49 South Van Ness Avenue, Suite 1400
San Francisco CA 94103

TEL: **628.652.7600**
FAX: **628.652.1520**
WEB: **www.sfplanning.org**

Planning Counter at SF Permit Center
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San Francisco CA 94103

EMAIL: **pic@sfgov.org**
Planning staff are available by phone and at the PIC counter. No appointment is necessary.

中文詢問請電 Para información en Español llamar al Para sa impormasyon sa Filipino tumawag sa **628.652.7550**