CITY OF NEW ORLEANS

Vieux Carré Commission

Guidelines for Windows & Doors

WINDOWS & DOORS

Windows and doors typically comprise at least one quarter of the surface area of an exterior wall of most historic buildings. Windows and doors, including their shutters, trim and associated features, are important elements of a historic building because they:

- Define the character of each individual building and provide a visual feature on the streetscape
- Contribute to the visual character of the area
- Help define architectural style and building type
- Help date the age of construction
- Provide natural light and ventilation
- Act as a transition from the building's exterior to the interior
- Act as the "eyes" of a building
- Welcome visitors

SECTION INDEX

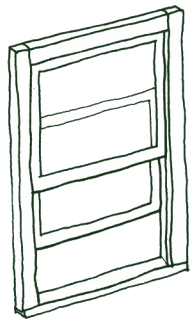
The Vieux Carré Commission (VCC) reviews each window or exterior door alteration or replacement. This section includes:

All applicants must obtain a Vieux Carré Commission (VCC) permit as well as all other necessary City permits prior to proceeding with any work. Reviewing and becoming familiar with these *Guidelines* during the early stages of a project can assist in moving a project quickly through the permit approval process, saving an applicant both time and money. Staff review of all details is required to ensure proposed work is appropriate to a specific property.

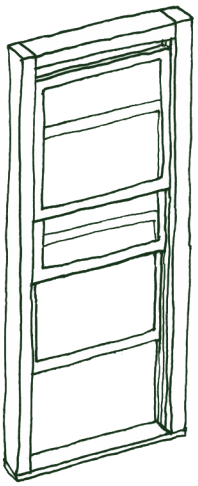
Guidelines addressing additional historic property topics are available at the VCC office and on its website at www.nola.gov/vcc. For more information, to clarify whether a proposed project requires VCC review, or to obtain a property rating of significance or a permit application, contact the VCC at (504) 658-1420.

The first step in using these *Guidelines* is to understand a property's color rating. The rating corresponds to the historical and/or architectural significance and then determines what type of change will be permitted and the review process required for each property under the jurisdiction of the VCC.

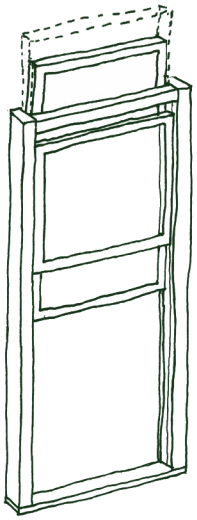
Review boxes provided throughout the *Guidelines* indicate the lowest level of review required for the specified work. Staff can forward any application to the Architectural Committee (AC) and/or the Commission for further consideration.



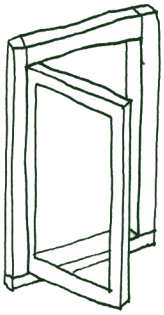
a. Single-hung



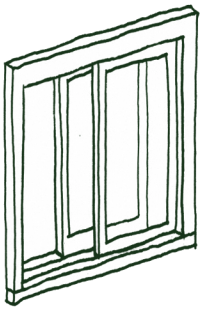
c. Triple-hung



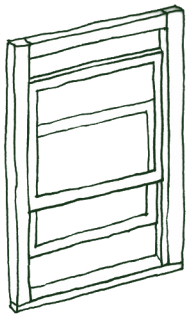
e. Slip Head



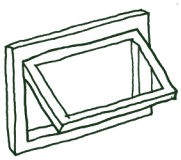
g. Casement



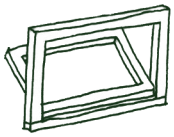
j. Sliding



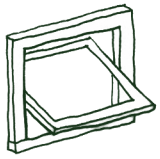
b. Double-hung



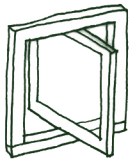
d. Awning



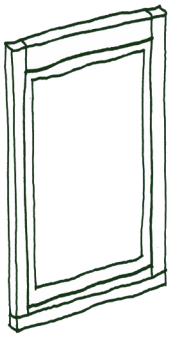
f. Hopper



h. Horizontal pivot



i. Vertical pivot



k. Fixed

COMMON WINDOW TYPES

All of the window types pictured above can have different proportions as well as muntin profiles, patterns and/or configurations. (Refer to *Definitions,* page 07-3.) Window type is closely linked to building style. As a result, not all window types are appropriate for all buildings. Double-hung windows, which were popular in post-Colonial building styles after 1825, are the most common type of window found in the French Quarter.

A benefit of the double-hung, triple-hung and slip head window types is that the top sash can slide down. Lowering the top sash allows heat within a room to escape and promotes cross ventilation. Maintaining operation of the top sash can be very beneficial in New Orleans' climate.

a. Single-hung: Fixed upper sash above a vertically rising lower sash – Generally not appropriate in the Vieux Carré

b. Double-hung: Two sashes, generally of the same size that can be raised and lowered vertically – The most common window type in the Vieux Carré

c. Triple-hung: Three multi-light sashes, generally of the same size, that can be raised and lowered vertically and extend to the floor to allow passage through the window – Limited to buildings constructed in the early-19th century

d. Awning: Hinged at the top and projects out at an angle

e. Slip Head: Two sashes that can be raised and lowered vertically with a taller bottom sash that can be raised into a pocket in the head (top) of the window allowing passage through the window

f. Hopper: Hinged at the bottom and projects in at an angle

g. Casement: Hinged on one side and swings in or out – Typical in French-influenced architecture before 1830 when casement sashes were multi-light, always hung on the inner face of an exterior wall, made to swing inward, and includes exterior shutters – Rarely used in 20th century buildings and should be avoided in new construction

h. Horizontal pivot: Pivots horizontally along a central axis

i. Vertical pivot: Pivots vertically along a central axis

j. Sliding: Either a fixed panel with a horizontally sliding sash or an overlapping horizontally sliding sash – Generally not appropriate for a Vieux Carré building

k. Fixed: Non-operable framed glazing – Generally only appropriate in a storefront as a display window or when infilling a historic opening without a sash

Some early buildings and service buildings have openings that were protected only with a shutter, without a window or door. If this is not practical, a fixed window with a single sheet of tempered or laminated glass can be installed at the interior side of the jamb, preserving the exterior sense of the opening and shutter operation.

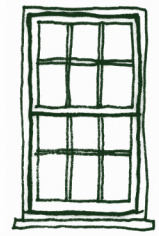
OTHER WINDOW TYPES

Storefront Windows & Doors: Refer to *Storefront Components, Guidelines for Storefronts,* page 13-4 to 13-7.

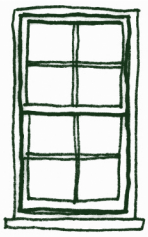
Gallery Enclosure & Screening: Refer to *Guidelines for Site Elevations & Courtyards,* page 10-3.

WINDOW CONFIGURATIONS

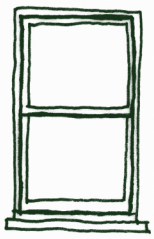
Different window configurations are associated with specific architectural periods and styles. Altering the window type, style, shape, material, size, component dimension, muntin pattern or location can dramatically alter the appearance of a building.



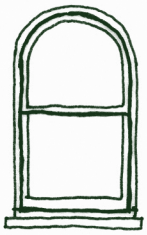
6/6 (six-lights over six-lights) Double-hung Window – Creole, Greek Revival



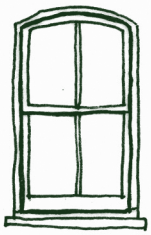
4/4 Double-hung Window – Italianate, Eastlake



1/1 Double-hung Window – Queen Anne, Colonial Revival, Neoclassical



1/1 Round-head Window – Italianate, Neoclassical



2/2 Arched-head Window – Italianate, Eastlake

6/1 Double-hung Window – Mediterranean, Craftsman

WINDOW STYLES

Window patterns and configurations are linked to a building's period of construction and style. Pre-1850 buildings, such as a Creole cottage or an early townhouse, were constructed with small individual pieces of glazing within an operable sash.

As technology developed during the Industrial Revolution towards the end of the 19th century, smaller pieces of glazing were replaced with larger pieces of glass allowing for a more expansive view. This coincided with the Victorian period, which encouraged varied shapes of windows and more elaborate frames, casings, applied ornament and trim than can be found at a Queen Anne, Italianate or Eastlake building. When the Colonial Revival style was popularized at the beginning of the 20th century, the use of multi-light windows with a more simple frame and casing was more prevalent. Because all of the components and details of a window are essential to defining a building's period and style, the pattern and configuration of a proposed replacement window should be historically appropriate for the building. (For guidance on window and building styles and periods of construction, refer to the *Guidelines for Building Types & Architectural Styles.*)

DEFINITIONS

Glazing: Glass

Light (window): Pane of glass, typically in a window or door

Mullion: The vertical framing element separating two window or door frames

Multi-light: Having many glass panes, as a window or door

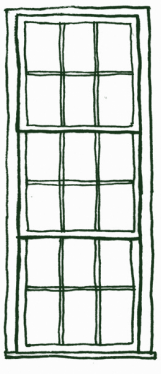
Muntin: The narrow molding separating individual panes of glass in a multi-paned window sash or door

Sash: The part of the window frame that holds the glazing, especially when movable

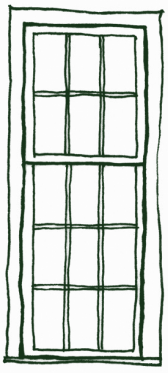
Simulated Divided Light (SDL): A window or door in which muntins are applied to a larger piece of glass at the exterior, interior and/or between layers of insulated glass

Single-light: Having one glass pane, as a window or door

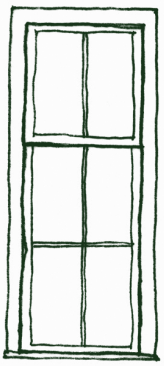
True Divided Light: A window or door in which the glass is divided into several small panes



6/6/6 Triple-hung Window – Greek Revival



6/9 Slip Head Window – Greek Revival, Italianate



2/4 Slip Head Window – Italianate, Neoclassical

Window Type; Configuration; Style Review

Replace an existing window with a true divided light window with a type, configuration, style, proportions, material and profiles to match existing

1 2 3 Staff

Replace an existing window with a true divided light window that does not match existing in all aspects

1 2 Architectural Committee

3 Staff

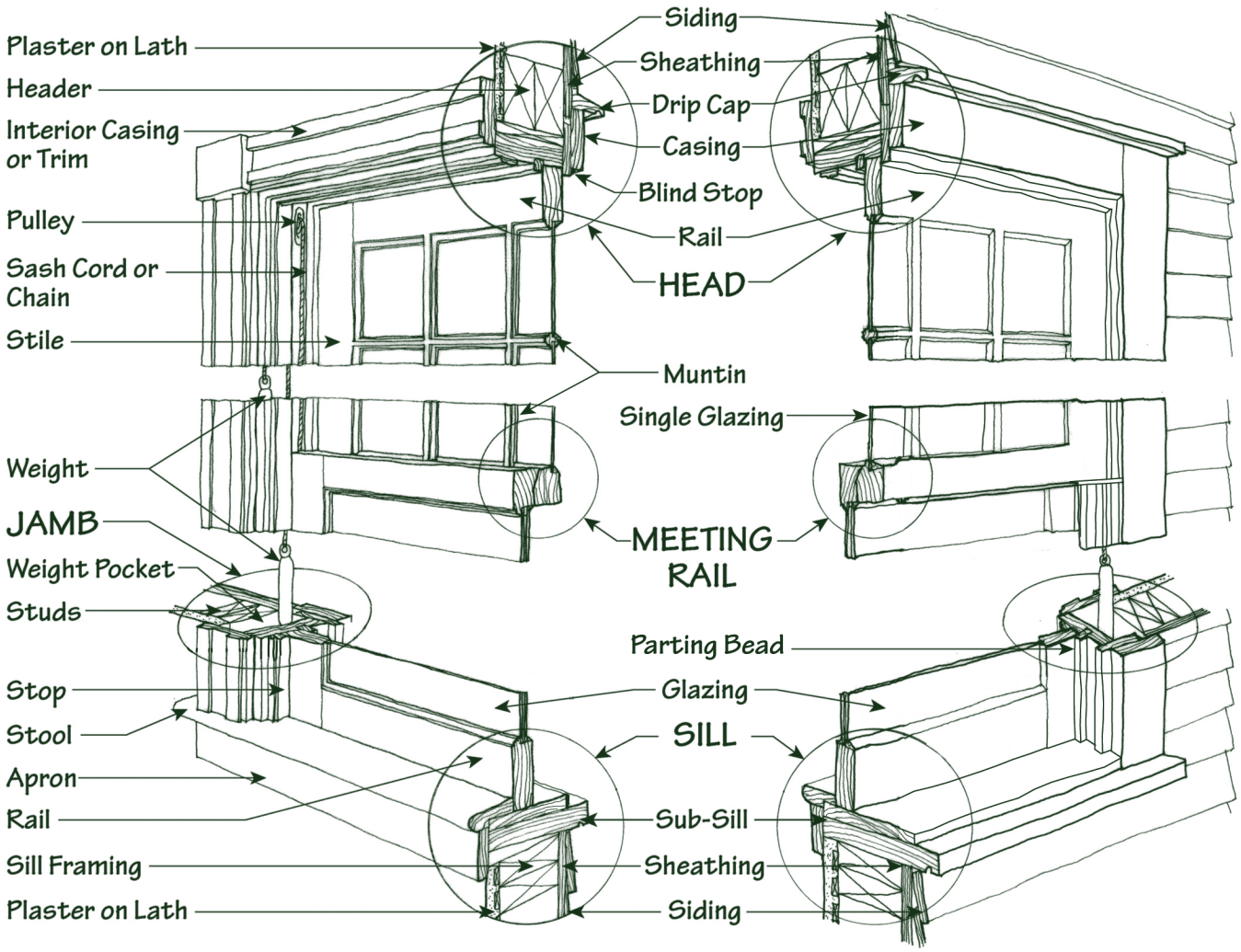
Install another window type, configuration or style

1 2 Commission

3 Architectural Committee

FRIEZE WINDOW

A small window located in the frieze of a Greek Revival building, at times including an ornamental grille, providing light and air to the attic.



(Viewed from Interior) *(Viewed from Exterior)*

HISTORIC WINDOW PROBLEM SOLVING

Property owners do not generally pay attention to their windows until a problem occurs. Typical concerns include operation, reducing air infiltration, reducing solar heat gain or loss and maintenance.

The appearance of a window that has not been properly maintained can seem significantly worse than its actual condition. Replacement of an entire wood window because of one deteriorated component, typically the sill or bottom rail, is rarely necessary. In most instances, selective repair or replacement of the damaged part and the implementation of a regular maintenance program is all that is required. Generally it is possible to repair and improve the function of a window in fair or good condition relatively economically.

To Improve Operation:

- Verify that sash cords, chains and weights are functional
- Remove built-up paint, particularly at jambs
- Repair or replace any deteriorated components such as hardware or parting beads that separate the window sash

To Reduce Air Infiltration:

- Install weather stripping snugly between moving parts (quality metal weather stripping can last 20 years)
- Replace broken glass (glazing)
- Re-caulk perimeter joints (Refer to page 07-17)
- Remove and replace missing or cracked glazing putty
- Add a sash lock to tighten the window
- Add an interior storm window (one that can achieve similar R-values to a new thermal window)
- Insulate weight pockets if no longer in use

To Reduce Solar Heat Gain or Heat Loss:

- Install and utilize operable exterior shutters
- Install an interior blind, curtain or UV window shade
- Plant deciduous trees at the south and/or west elevations to block summer sun and allow in winter sun
- Install clear, transparent low-e film or glass

To Maintain a Window:

- Regularly review, repair and repaint the window

WOOD WINDOW REPAIR

Given the significance windows play in defining the architectural character of a building, **the VCC strongly encourages the repair of all existing windows**. If a portion of a window is deteriorated, it is often possible to replace only the deteriorated portion or component of the window. Replacement of the entire component or unit might not be necessary. (Refer to the *Wood Repair Options, Guidelines for Exterior Woodwork,* page 05-06.)

A property owner wishing to pursue historic window replacement will be required to demonstrate that the existing window is beyond repair and replacement is warranted.

When evaluating window repair versus replacement, the following guidelines can be helpful:

1. **Perform Routine Maintenance**: Replace a broken or missing component such as trim, glazing or a sash cord. Verify that the caulk, glazing putty, parting beads and weather stripping are applied securely, and repaint the window.
2. **Treat or Repair a Deteriorated Component**: At the earlier stages of wood deterioration, it is possible to complete in-place treatments that do not necessitate component replacement. These include treating wood for insects or fungus, consolidating with epoxy, applying putty at holes and cracks and/or re-painting.

The lower sash is not secure in its frame. The opening along the bottom sill can allow storm water and drafts into the building. An unsecured sash is more likely to be pulled out of its frame by a high storm wind. Replacement of damaged parting beads and window hardware, as well as repainting, are recommended.

DEFINITIONS

Millwork Drawings: Detailed, scaled, dimensioned drawings depicting the components, profiles and joinery for wood elements such as doors, windows, built-in cabinetry and paneling

Shop Drawings: Detailed, dimensioned drawings produced by the fabricator or manufacturer of a particular building element, typically reviewed and approved by the architect

3. **Replace a Deteriorated Component:** Replace either the deteriorated portion of wood with a "Dutchman" or the entire component if the majority is deteriorated. (A Dutchman is a repair with a piece of the same material in a sharp-edged recessed cut. Refer to photograph below.) The replacement piece should match the original in design, shape, profile, size, material and texture. A new wood sill is usually easily installed, while a complete sash replacement might solve the problem of broken muntins and/or deteriorated rails.
4. **Replace a Window:** If the majority of the window components are deteriorated, damaged or missing and in need of replacement, installation of a new window that matches the original window might be warranted with appropriate documentation of existing conditions.

One of the advantages of a historic wood window over a modern prefabricated unit is repairability. This photo demonstrates a Dutchman repair at the corner of a historic wood window. Also note the new glazing putty.

WOOD WINDOW REPAIR GUIDE

THE VCC REQUIRES:

- Comprehensive photographic documentation of the deterioration of an existing window sufficient to guide repair efforts
- Retaining, maintaining and repairing the original window

THE VCC RECOMMENDS:

- Replacing a contemporary, inappropriate window with a historically appropriate window

THE VCC DOES NOT ALLOW:

- Removing a historic window sash without detailed documentation of deterioration and dimensioned millwork or shop drawings of a proposed window and the existing window to be replaced, including all profiles
- Removing or encapsulating historic wood trim

WINDOW MATERIALS PAST & PRESENT

Historically, wood windows were manufactured from durable, close, straight-grain hardwood of a high quality uncommon in today's market. The durability of the historic materials and relative ease of repair has allowed many well-maintained wood windows to survive from the 19th century or earlier.

A replacement window and its components tend to have a significantly shorter life span than a historic wood window, necessitating replacement in a shorter interval. Selecting a replacement window is complicated by product variations between manufacturers, who tend to offer different grades of windows with varying types and qualities of materials and warranties.

Today, a wide variety of materials are used in window production. Lower cost wood windows typically are made from new growth timber, which is much softer and more likely to deteriorate from moisture or termite damage than hardwoods of the past. Vinyl and PVC materials, now common for replacement windows, break down in ultraviolet light, have a life span of approximately 15 years, and are not appropriate in the Vieux Carré. The great variety and combinations of other materials and finishes for replacement windows, including aluminum, continue to be tested to determine projected life spans and performance in various climates.

Other areas of concern with replacement windows, beyond the construction materials used in the frame and sash, are the type and quality of the glazing, seals, fabrication and installation. Double glazing or insulated glass, used in most new window systems, is comprised of an inner and outer pane of glass sandwiching a sealed air space. The air space is filled with an inert gas, such as argon, with a perimeter seal. In lower quality, often vinyl windows, this perimeter seal can fail in as few as 10 years, resulting in condensation between the glass layers, necessitating replacement to allow for clear visibility. Many of the gaskets and seals that hold the glass in place have a limited life span and deteriorate in ultraviolet light.

Significant problems with replacement windows result from poor manufacturing or installation. This is particularly true if the existing window opening is not square or plumb (straight). A twisted or crooked frame can make a window difficult to operate. An open joint can allow air and water infiltration into the wall cavity or building interior.

A replacement window often lacks the depth, character and detailing of a historic window.

REPAIR OR REPLACEMENT WINDOW OPTIONS

Repair or Replacement of an Existing Component: A deteriorated sill, sash and/or muntin can be repaired by a skilled craftsman using a wood consolidant (epoxy) or replacement part, to retain original fabric and function. (Refer to *Wood Repair Options, Guidelines for Exterior Woodwork,* page 05-06.) An in-kind replacement sash or sill can be custom-made to replace a deteriorated section if necessary. **The VCC strongly encourages that all repair and selective replacement part options be explored prior to considering a complete replacement of a sash or frame.**

Repair and selective component replacement benefits:

- Original building fabric and historic character remain
- Historic profiles, dimensions and proportions can be retained and matched
- Repairs can be completed by a skilled local carpenter
- Timber used in a historic window can last substantially longer than a replacement unit

SALVAGED WINDOWS

The best quality replacement window can often be found in an architectural salvage store. Because of the traditional craftsmanship and high quality of wood used in historic French Quarter windows, a salvaged and repaired window will often outlast a new replacement window. A salvaged window should match the size, shape, type, configuration, proportions and profiles of the historic window where it will be installed.

REPLACEMENT WINDOW QUALITY

Reputable mill shops, lumber yards and window specialists typically provide a better selection and higher quality replacement window options than does a company that advertises with bulk mailings or flyers. Local companies and craftsmen are often familiar with the unique attributes of window detailing for building types and periods in the Vieux Carré and are often a much better option for matching historic detailing.

Sash Replacement Package: Some manufacturers offer replacement jamb liners and new sash for installation within an existing window casing. (A jamb liner is the vertical, internal facing between the window sash and structural frame.) **Because of the loss of the historic sash, this option is discouraged by the VCC.**

Sash replacement package disadvantages:

- A stock replacement sash is often inappropriate to the size, profiles and proportions of the existing opening and detailing
- A replacement sash has a limited warranty, likely needing partial or full replacement again in 10 to 25 years as seals and joints open
- Modification of the jambs are necessary
- Liner is made from vinyl or other inappropriate material
- The jamb liners do not always work well in an existing window opening and might need more frequent replacement
- An out-of-square (racked) opening can be hard to fit, making the window sash hard to operate, and seals might not be tight
- Historic sash is removed and becomes landfill debris

Frame and Sash Replacement Unit: A frame and sash replacement unit is a complete frame with a pre-installed sash for installation within an existing window frame opening. **Due to the total loss of the sash and modification of the frame, frame and sash replacement units are not allowed by the VCC for a historic building.** It might be an option in new construction, based upon the specific circumstances.

Frame and sash replacement unit disadvantages:

- A stock replacement sash is often inappropriate to the size, profiles and proportions of an existing opening and detailing
- The surrounding frame is modified, alteration of built-in surrounds might be required and both the original and new frame and sill are typically visible from the exterior
- The size of the window sash opening and glass panes are reduced due to the new frame is within the old frame
- Infill might be required for a non-standard size
- Can require modification of existing casing and sill
- Historic sash is removed and becomes landfill debris

Because of the importance of a window as part of a building's character, the loss of historic fabric associated with any level of proposed replacement, and the change in overall appearance, the VCC encourages and supports the retention of the historic window.

METAL WINDOWS

Some early warehouses and commercial buildings had metal windows. Replacement of those windows should match the historic condition in all aspects including materials, configuration, operation and details.

Although aluminum clad windows can include exterior muntins, the profiles do not have the same refinement as a historic wood window.

VINYL & ALUMINUM WINDOWS

One of the claims of vinyl and aluminum window vendors is that their replacement windows do not require maintenance. However, considering the relatively short life span of many of the materials and components, they will need continual replacement. Disadvantages include:

- As joints or seals in a replacement window deteriorate, openings can be formed that allow air and water to enter into the window frame, wall cavity and/or building interior, causing additional damage. Repair of these openings requires replacement of the deteriorated parts. This can present a problem if the manufacturer has modified the design or is no longer in business, necessitating custom fabrication of a deteriorated element or replacement of the entire window.
- The perimeter seal of double-glazing deteriorates over time. In addition, if the glazing unit is cracked or broken, it will require full replacement. This is complicated further when the double-glazing includes an applied or internal muntin grid which must be duplicated as part of the replacement.

In contrast, a good carpenter or handy homeowner can generally repair a historic wood window with single pane glazing and install an interior storm window to improve thermal performance. **The VCC will only consider the use of an aluminum or aluminum clad wood window for an Orange or Brown rated building or new construction.**

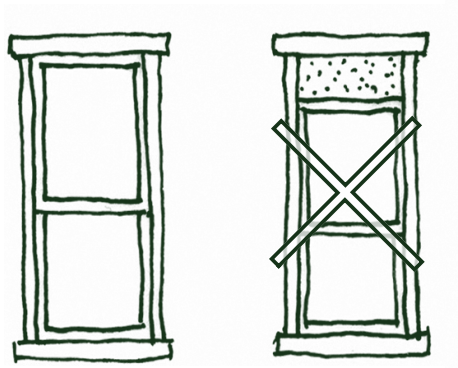
REPLACEMENT WINDOW COSTS

The costs that should be anticipated when considering installation of a replacement window include:

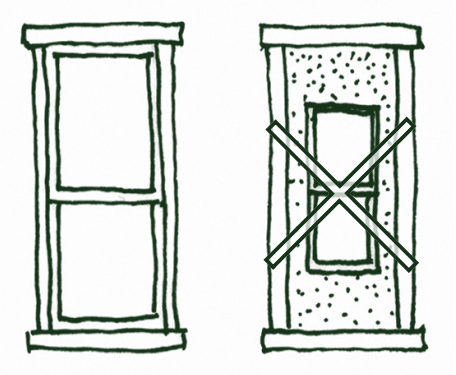
- Labor to remove the old window and any disposal fee
- Purchase price and delivery of the new window
- Labor and materials to modify the existing frame for the new window
- Labor to install the new window
- Life-cycle costs associated with more frequent replacement of deteriorated components and window

INAPPROPRIATE REPLACEMENT WINDOWS

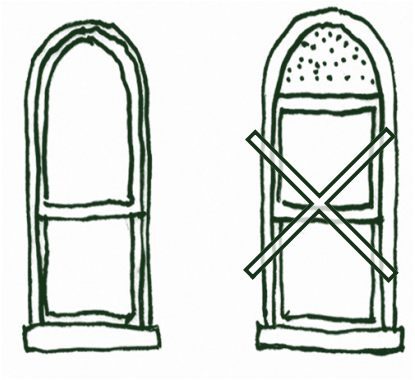
The following diagrams indicate historic windows with **inappropriate** examples of replacement windows. When considering a replacement window, the size, operation, configuration, shape and proportions of the existing window must be replicated and historic trim must be retained or replicated.



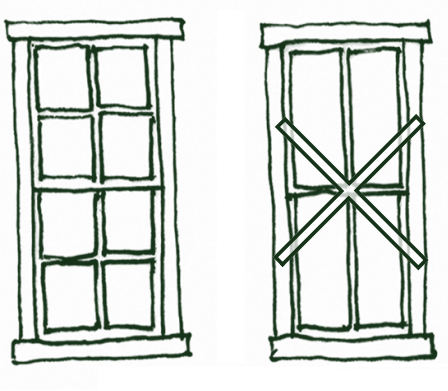
Size*: The replacement window should be sized to fit the window opening – An infill panel should not be installed*



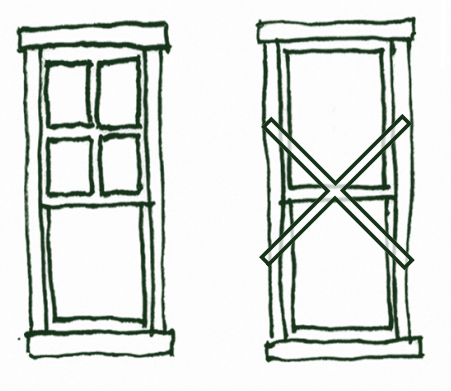
Size: *The replacement window should be sized to fit the window opening – An infill panel should not be installed*



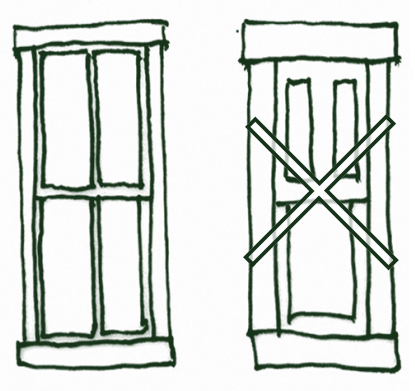
Shape: *The replacement window should be shaped and sized to fit the window opening – An infill panel should not be installed*



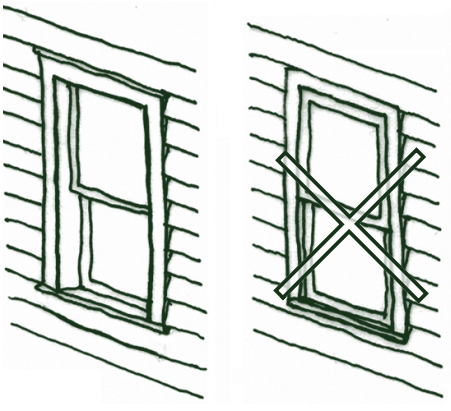
Configuration: *The replacement window should have a 4/4 light configuration to match the historic window*



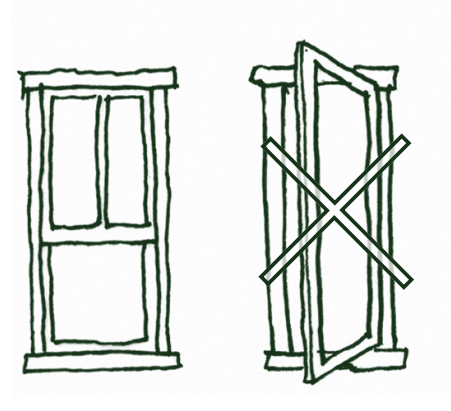
Configuration: *The replacement window should have a 4/1 light configuration to match the historic window*



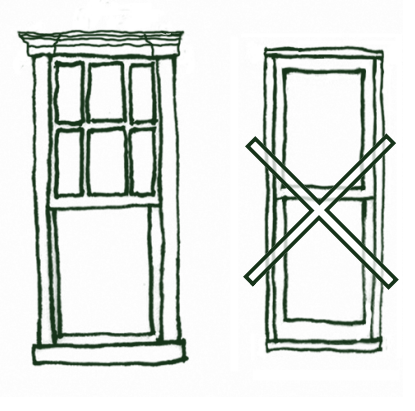
Proportions: *The proportions of window components should match the historic window including the size of the frame and muntins*



Depth in Wall: *The location of replacement window should be set back into the wall the same distance as the historic window*



Type: *The replacement window should match the type of historic window*



Decorative trim: *Decorative trim should be retained or replaced to match the historic trim*

This Greek Revival building has classically inspired granite surrounds at the windows and small, bracketed projections with decorative railings.

WINDOW REPLACEMENT GUIDE

The VCC will only consider the use of an aluminum or aluminum clad wood window for an Orange and Brown rated building or new construction. For all other rated buildings and their additions, new windows must be compatible with the appropriate window for the historic building style and period of construction in material, type, configuration, proportions and profiles. **The VCC does not permit the installation of a vinyl window.** Each replacement window must have exterior, profiled muntins and, if double-glazed, a black spacer bar between the panes of glass.

THE VCC REQUIRES:

- Matching the original size, shape, configuration, type, operation, materials, muntin pattern, dimensions, profiles and detailing with a salvaged or new replacement window
- Installing clear glass at all openings unless replacing historic colored, beveled or frosted glass in-kind
- Retaining historic design elements and trim, especially a rare or unique example

THE VCC RECOMMENDS:

- Installing a replacement window in a less visible area
- Installing a quality wood replacement window
- Reusing serviceable trim, hardware and components or using appropriate salvaged materials

THE VCC DOES NOT ALLOW:

- Replacing a window component or unit if repair and maintenance will improve its performance and preserve a historic element
- Decreasing a window's size or changing its shape with infill to allow for installation of stock unit size
- Installing an inappropriate window type, such as a casement in a former double-hung window location, creating a false sense of history
- Increasing a window size or altering the shape to allow for a picture or bay window, or a garage or carriageway door

Window Repair & Replacement Review

Dimensioned millwork or shop drawings of a proposed window including all details and finish information must be submitted and approved by the VCC prior to any installation

Repair or replace a historic window exactly in-kind

1 **2** **3** Staff

Replace an existing window with a historically appropriate window that does not match the existing in all aspects

1 **2** Architectural Committee

3 Staff

Install another window type, configuration or style; Modify or install a new non-historic window opening

1 **2** Commission

3 Architectural Committee

KEEP IN MIND…

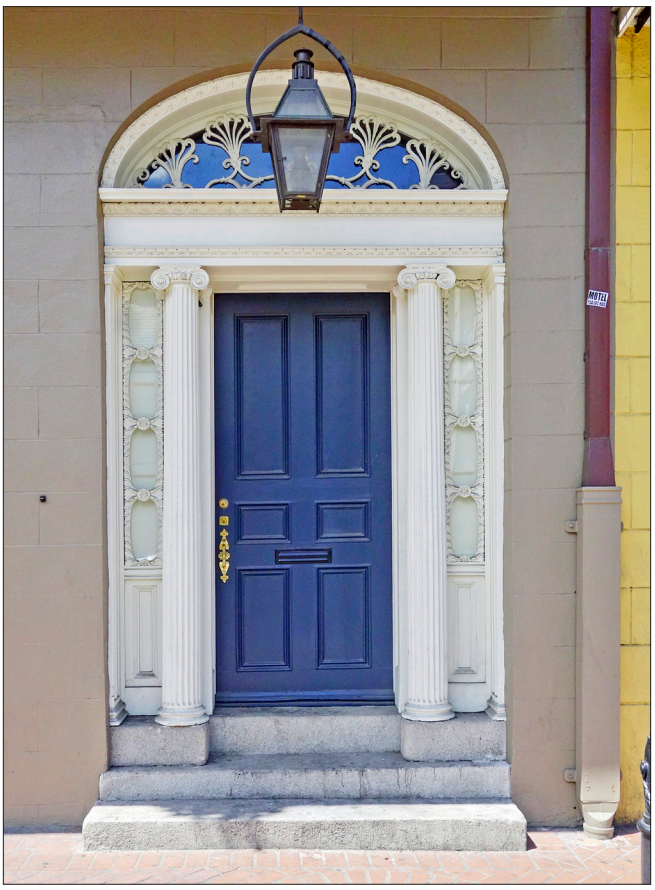
- A stock window is rarely appropriate for a historic building – They generally use stock moldings that do not replicate historic profiles and detailing
- Carefully review various grades of windows offered by manufacturers
- Utilize quality materials throughout the installation process for the greatest life span
- Verify that contractors are experienced in meeting VCC requirements and will obtain required approvals and permits
- Determine pricing, availability and installation cost for replacement glazing
- Install weather stripping and caulk appropriate to the installation (Refer to page 07-17)
- Understand the limits of the warranties for all components and associated labor for replacement
- Select a reputable manufacturer and an installer who are likely to remain in business and respond if there is a future problem

DOORS

An entrance door serves an important role in regulating the passage of people, light and air into a building, as well as providing a threshold separating the exterior and interior. Historically, most doors were wood and varied stylistically with the building design, providing a grand formal appearance or one more informal and welcoming. Doors were hung at the interior of the jamb, allowing the wall thickness to be experienced on the outside of the building. Where stylistically appropriate, doors included functional exterior shutters. Traditionally, a door's hardware and trim complemented the overall building style. When selecting hardware for a door, it is important to complement the historic style. (Refer to *Hardware,* page 07-18.)

Traditional doors are constructed of numerous parts. In some of the earliest examples, doors were constructed of vertical boards nailed to horizontal boards, similar to batten shutters of Creole buildings. By the early-19th century, elaborate paneled doors became more prevalent and represent the most common door type in American-style residences. Paneled doors can be constructed in a variety of configurations that reflect the style of the building. Later doors often included single- or multi-light glazed panels.

Door styles tend to correspond to the architectural style of the building, with some examples being more "high-style" while others are a more simple interpretation. (See examples below.) As a result, doors are considered an important feature and the VCC recommends the retention, maintenance and repair of a historic door.

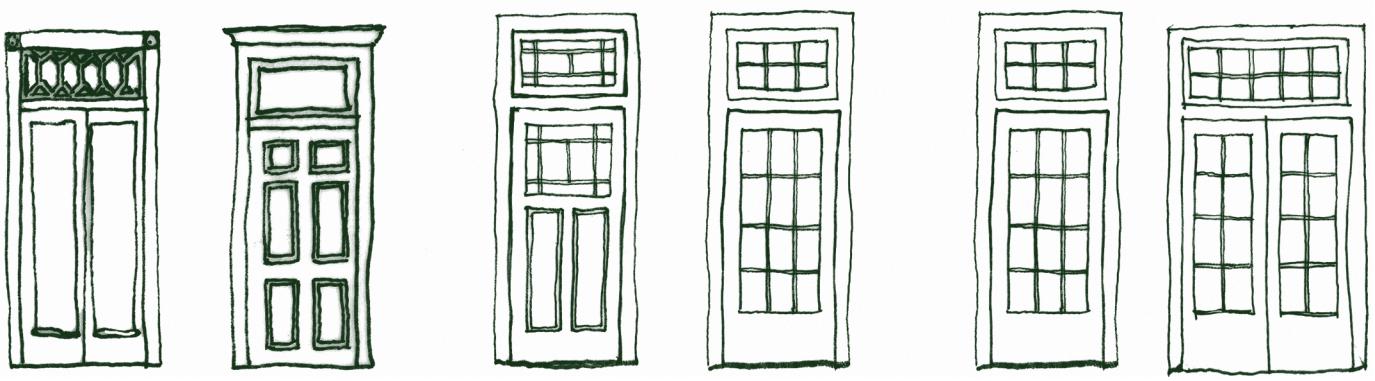


This high-style door includes an ornate fanlight and sidelight as well as classical pilasters and detailing.

Creole

Classical Revival
(Greek Revival, Neoclassical)

Victorian
(Italianate, Eastlake, Queen Anne)



Neoclassical (Edwardian)

Arts & Crafts / Bungalow

Mediterranean Revival

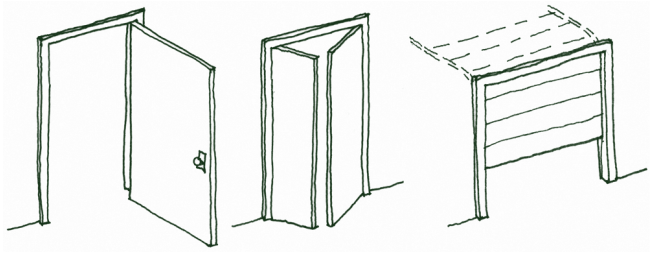
COMMON DOOR TYPES

All of the identified door types can have different patterns or configurations.

a. Hinged: Swings to close at opposite jamb – Almost always mounted at interior thickness of wall swinging inward

b. Double or Paired: A pair of swinging doors that close an opening by meeting in the middle – The most common door type in the Vieux Carré, includes French doors, historic store doors and carriageway doors

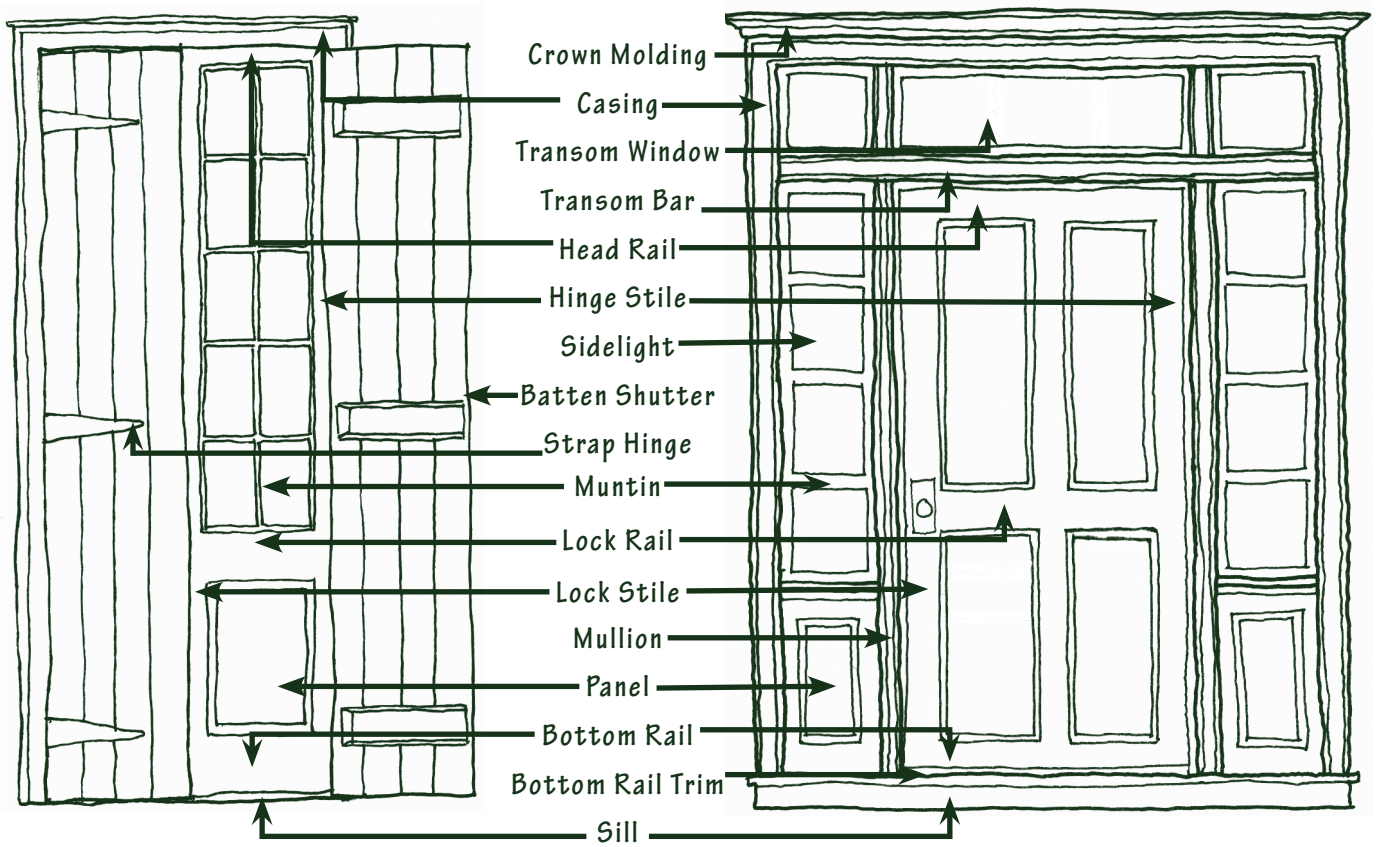
c. Overhead: Horizontal sections that slide on tracks opening upward – Most often found at a warehouse or garage



a. Hinged b. Double or Paired (a.k.a. French) c. Overhead

COMMERCIAL DOOR TYPES

Refer to *Guidelines for Storefronts* for more information on doors for a commercial or institutional building.



French Doors

French doors are the most common door type in the Vieux Carré. They consist of a pair of doors, each having one or two narrow panels at the bottom and a glazed section at the top. French doors constructed before 1830 generally were made with a single bottom panel with many small panes of glass above. As the size of available glass increased during the mid-19th century, later examples often featured large panes of glass over two vertical wood panels. French doors of various forms were used in buildings of virtually all styles, types and dates. The specific design, including the arrangement of glazing and panels, as well as the proportions and hardware, relate to the design, style and period of construction of the building on which they are located.

Paneled Wood Doors

Paneled wood doors are common on American-style townhouses and center-hall building. Paneled wood doors consist of rails and stiles which form a framework in which solid wood panels, or a combination of solid wood and glazed panels, are held in place with moldings. The width of the various rails and stiles, their arrangement, the profiles of panel moldings and panels are all determined by style, type and date. Late-19th century examples often included one large glazed panel above the lock rail. More ornate examples often were constructed with an operable transom window and/or sidelights to provide interior light and ventilation, as well as a grander appearance to a building's entrance.

HISTORIC DOOR PROBLEM SOLVING

Because doors tend to be one of the most operated elements on the exterior of a building, they are more likely to deteriorate from wear or damage and generally require regular maintenance, such as painting. If deterioration occurs, selective repair or replacement of damaged parts and the implementation of a regular maintenance program are often all that is required to retain a historic door.

If the level of deterioration warrants replacement, the replacement door should be appropriate for the architectural style and character of the building. (Refer to *Doors,* page 07-10*, Replacement Door Options,* page 07-13, the *Guidelines for Building Types and Architectural Styles* and VCC Staff for additional information.)

The lower portions of the jambs have rotted and can be repaired with wood Dutchmen. Wood checking (splitting) and peeling paint are visible on the lower portions of the door. Repair and maintenance can prolong the serviceable life of this historic door and improve its appearance.

Doors at shotgun residences often include glazing and a transom window above. They typically have operable paired louvered shutters that match shutters at adjacent windows, reducing solar heat gain and allowing ventilation.

To Improve Operation:

- Verify that the door fits properly in its frame and joints are tight
- Verify that hardware is operational, particularly that hinges are tight and hinge pins are not worn
- Remove built-up paint at door and jambs
- Repair or replace a deteriorated component such as trim or a stop (the moulding inside a door frame that stops a door from swinging)

To Reduce Air Infiltration:

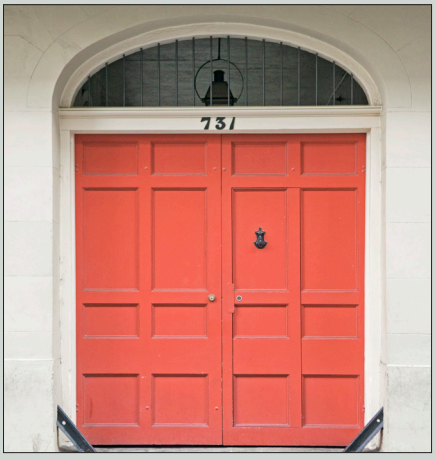
- Install weather stripping snugly between the door and frame (quality metal weather stripping can last 20 years)
- Replace broken glass (glazing) and missing or cracked glazing putty
- Caulk perimeter joints around casing and frame
- Install an interior storm door

To Reduce Solar Heat Gain or Heat Loss:

- Install and utilize operable exterior shutters
- Install clear, transparent low-e film or glass

To Maintain a Door:

- Inspect, repair and repaint the door regularly



CARRIAGEWAY DOORS

Carriageway doors can be found at some early buildings, such as Creole townhouse, to allow access to the courtyard. They are usually a pair of heavy wood doors hung on strap hinges, swinging inward, that sometimes include a small door for pedestrian use within the larger gate. Gates often include lower panels, with iron security grilles in upper panels. An arched carriageway opening typically includes iron bars set vertically between the transom bar above the operable gate and arch of the opening above.

HISTORIC DOOR GUIDE

THE VCC REQUIRES:

- Retaining a serviceable original wood door, transom and sidelights unless irreversibly deteriorated
- Retaining serviceable trim and hardware unless irreversibly deteriorated or non-operational
- If the original door does not survive, replacing it with a new or salvaged door that matches the original door
- If original door style is unknown, replacing the door with one that is appropriate to the building's period and style
- Installing a wood door that fits fully within the historic door opening without infill panels

THE VCC DOES NOT ALLOW:

- Installing an inappropriate door type, i.e. a single door in a former double-door location, increasing a door size or altering the shape to allow for a larger entrance unless it is the only alternative to meet accessibility requirements
- Replacing a door or component if repair and maintenance will improve performance or preserve a historic element
- Decreasing a door size or shape with infill or increasing a door opening to allow for installation of a stock door size
- Removing or encapsulating historic wood trim
- Increasing a door size or altering the shape to allow for a garage or carriageway door

NEW OR REPLACEMENT DOOR GUIDE

IF A NEW OR REPLACEMENT DOOR IS WARRANTED, THE VCC REQUIRES:

- Mounting the new door at the interior thickness of the wall swinging inward unless an outward swing is required by the building code
- Understanding the limits of the warranties for all components and associated labor for replacement
- Selecting a reputable manufacturer and installer who are likely to remain in business and respond if there is a future problem
- Installing a quality wood door that is appropriate to the building
- Matching the original materials, type, size, shape, configuration, muntin pattern, dimensions, profiles and detailing
- Selecting a true divided light, single-glazed door with matching muntin profiles and dimensions as appropriate when allowed by Code
- Retaining and reusing serviceable trim, hardware and components or using salvaged materials
- Installing clear glass at a glazed opening unless replacing historic colored, beveled or frosted glass in-kind

REPLACEMENT DOOR OPTIONS

Similar to a window, a replacement door should match the historic door in material, type, size, shape, configuration, panel pattern, glazed window type and pattern, proportions, profiles and details. Commercially available stock doors are typically not appropriate in the Vieux Carré. They are not sized or proportioned to the existing door opening and the detailing is not historically appropriate to the French Quarter. Often a salvaged door will be more appropriate than a new door. A salvaged door must match the size, shape, type, configuration, proportions and profiles of the original door.

Door Repair & Replacement Review
Dimensioned millwork or shop drawings of a proposed door, including all details and finish information, must be submitted and approved by the VCC prior to any installation
Repair or replace a historic door exactly in-kind **1** **2** **3** Staff
Replace an existing door with a historically appropriate door that does not match the existing in all aspects **1** **2** Architectural Committee **3** Staff
Install another door type, configuration or style; Modify or install new non-historic door opening **1** **2** Commission **3** Architectural Committee

KEEP IN MIND…

- A stock door is rarely appropriate for a historic building – They generally do not fit the size and proportions of a historic opening and use inappropriate stock moldings
- Doors in the Vieux Carré generally open inward, hung on the inner wall surface, allowing the thickness of the wall surface to be expressed at the exterior
- Patio doors, often referred to as French doors by contemporary door manufacturers, are either paired or sliding doors with a single or multiple panes of glass and no panels, and are not appropriate in the Vieux Carré
- Use quality materials throughout the installation process for the greatest life span
- Verify contractors are experienced in meeting VCC requirements and will obtain required approvals and permits
- Install weather stripping and caulk appropriate to the installation (Refer to page 07-17)
- Understand the limits of the warranties for all components and associated labor for replacement
- Select a reputable manufacturer and installer who are likely to remain in business and respond to problems

Breaking shutters were solid and used in the 1820s-40s to protect large, arched, ground-floor street openings of shops. Each shutter is set back 8- to 10-inches into the opening, and has double-knuckle hinges that allows the small section to open parallel to the jamb and the larger section to fold back against the building wall. Each breaking shutter includes panels at the building face and vertical boards at the jambs.

SHUTTERS

Historically, exterior shutters were used as a shielding device for windows and doors, providing privacy and protection from intruders and storms. Batten, vertical board/rail and stile, and paneled shutters were installed to provide a solid barrier when closed. Louvered shutters, the most common shutter type in the French Quarter, allow the control of light and air. Shutters were not used on all buildings or in all locations. Their design, detailing and use were often dependent on a building's style and period of construction. It is possible to determine if shutters previously existed by looking for hardware, such as hinges or tie-backs, or evidence of their attachment, such as former screw holes in the window casing.

SHUTTER TYPES

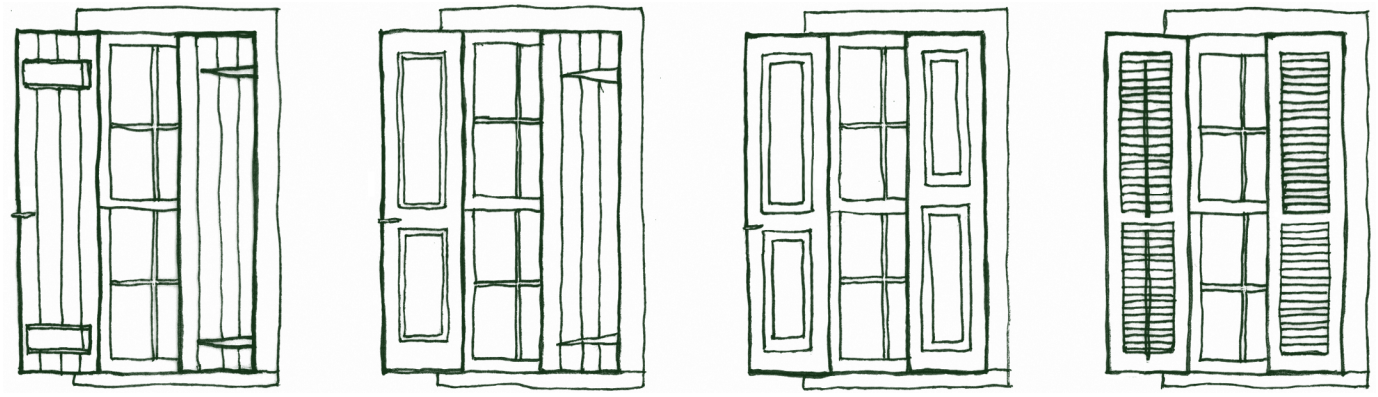
All of the identified shutter types can have different construction methods and configurations. In many instances, the interior of the shutters, the side facing the inside of the building when closed, will have a different appearance than the outside face of the shutter. **It is important to note that not all shutter types are appropriate for all buildings.**

a. **Batten Shutters**: The vertical boards are approximately 4- to 5-1/2 inches wide, fastened with horizontal boards (battens) at the inside face. The outside face of the vertical boards are usually grooved at the edges. The shutters are hung on wrought iron strap hinges, about two-thirds shutter width. They are generally appropriate for pre-1840 buildings, Creole cottages and the ground floor of commercial buildings with residential (and louvered shutters) above.

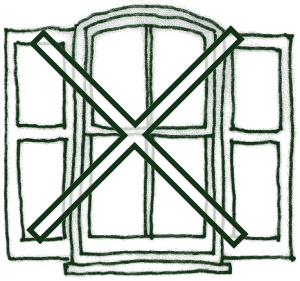
b. **Vertical Board/Rail and Stile Shutters**: The outside face of the vertical boards looks like batten shutters with grooves at the edges. The inside face has a paneled appearance with stiles and rails with molded trim detailing. The interior paneled area can be flat, recessed or the diagonal boards flush with stiles and rails. The shutters are hung on wrought iron strap hinges, about two-thirds shutter width. These shutters are generally appropriate for pre-1840 buildings, Creole cottages and at the ground floor of commercial buildings with residential (and louvered shutters) above.

c. **Paneled Shutters**: Frames of rails and stiles which support panels of wood held in place by moldings. Hung on strap hinges, "Clark's Tip" or "Acme, Lull & Porter" hinges (refer to *Hardware,* page 07-18) depending on the building type, style and construction date. Often installed at the ground floor with louvered shutters above. These shutters are generally appropriate for 18th century through the mid-20th century buildings. (For night blinds in commercial doors, refer to *Guidelines for Storefronts,* page 13-6.)

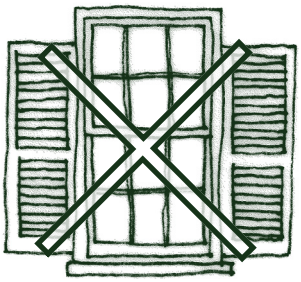
d. **Louvered Shutters**: Louvered shutters, also known as blinds, are the most common shutter type in New Orleans' historic buildings. Frames of rails and stiles support either fixed (earlier) or operable (later) wood slats. The are hung on "Clark's Tip" or "Acme, Lull & Porter" hinges and are generally appropriate for mid to late-19th century styles such as Greek Revival and Italianate.



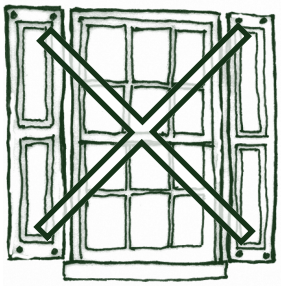
a. Batten Shutter b. Vertical Board / Rail & Stile Shutter c. Paneled Shutter d. Louvered Shutter



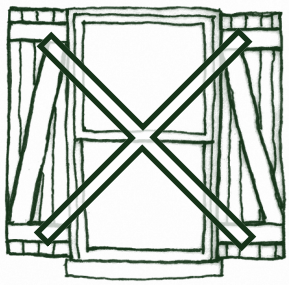
The 2-panel shutters do not fit the arched opening



The louvered shutters are the incorrect size for the window



The screwed-in shutters are inoperable and all shutters should be the correct size



Z-shutters are not appropriate in the Vieux Carré

SHUTTERS BY STYLE

The type and detailing of a shutter should be appropriate for the age, type and style of the building on which it is hung. It is helpful to consider that all buildings constructed prior to the 1820s had solid shutters, not louvered. Over time, the upper panels in solid shutters were often replaced with louvers, increasing interior light and ventilation. However, the VCC generally does not approve the modification of a historic shutter to add louvers or to create multiple sections. The only exception is when the shutter exceeds 12-feet in height.

French Colonial *(18th century)*

- Batten shutters, including vertical board rail and stile shutters

Creole *(early-19th century)*

- Batten shutters, including vertical board rail and stile shutters
- Louvered shutters, especially fixed louvered on upper stories

Greek Revival *(mid-19th century)*

- Any variation of louvered shutters
- Paneled shutters

Italianate *(late-19th century)*

- Louvered shutters, especially operable louvers

Gothic Revival *(late-19th century)*

- Paneled shutters, custom fit to pointed arch openings
- Louvered shutters, operable or fixed

Queen Anne *(late-19th century)*

- Louvered shutters, usually operable

Neoclassical *(early-20th century)*

- Typically without shutters or with operable or fixed louvered shutters on side façades only

Bungalow/Craftsman/Arts and Crafts *(early-20th century)*

- Typically without shutters or with shutters on side façades only
- Operable louvered or paneled with Arts and Crafts motif cut-outs

For more information regarding appropriate shutter styles for buildings, refer to the *Guidelines for Building Types & Architectural Styles* or contact the VCC Staff to discuss appropriate shutters for specific locations.

SHUTTER GUIDE

THE VCC REQUIRES:

- Installing shutters that are operable with the ability to open and, when closed, fill the entire door or window recess
- Installing period appropriate shutter hardware

THE VCC RECOMMENDS:

- Retaining, maintaining and repairing a historic wood shutter
- Retaining and reusing historic shutter hardware

THE VCC DOES NOT ALLOW:

- Cutting an existing shutter into separate upper and lower sections unless the shutter is over 12-feet in height
- Modifying a shutter to include the attachment of a screen or plastic panel
- Cutting an opening in a shutter for mechanical or ventilation equipment (with the exception of a modest mail slot opening)
- Installing louvers in a shutter where they did not exist historically
- Installing a shutter that does not replicate the dimensions and proportions of historic wood shutter
- Installing a fixed, Bermuda or roll-down hurricane shutter (Refer to *Storm Protection,* page 07-16)
- Installing shutters in a location where they would not have existed historically

Shutter Review	
Install or replace an operable wood shutter, sized to opening and appropriate to building style with stylistically compatible hardware	
1 2 3	Staff
Install shutters where none exist; Install an inappropriate shutter or shutter hardware	
1 2	Architectural Committee
3	Staff

Fastening shutters and blinds provides protection from hurricanes and additional security.

STORM PROTECTION

For many homes in the French Quarter, one of the most traditional forms of hurricane protection is shutters or blinds. Additional protection can be obtained by fastening pre-fitted plywood panels onto closed shutters. These forms of protection allow historic windows to remain in place, retaining the historic character of building.

When new buildings are constructed, the *International Building Code* and *Residential Code* requires hurricane protection for windows. A historic building might not be required to meet the same stringent requirements. Hurricane-rated windows and doors can provide additional protection; however, they do not necessarily prevent a window or door from breaking during a storm or preventing the building's interior from being damaged. Hurricane resistant windows and doors tend to have very wide frames and muntins and shallow profiles that do not match historic proportions and are not appropriate for a historic building.

Another hurricane protection option is fabric storm panels that can protect windows and doors from flying debris in the event of a storm. Fasteners can be pre-installed in locations that are minimally visible and painted to match the adjacent surface. Fabric storm panels are lightweight, easy to install and allow light to enter a building in the event of a storm. Another benefit is that they have little to no impact on the historic character of a building if installed only when a storm threatens.

Manufacturers continue to develop new options for hurricane protection. The VCC encourages innovative solutions that do not require removal of or damage to historic fabric and have minimal physical or visual impact when not in use.

Permanently attached plastic storm protection panels are not appropriate in the Vieux Carré.

Discretely placed fasteners can allow fabric storm panels to be installed quickly and are often visually unobtrusive when installed at a secondary building elevation.

Storm Protection Review	
Install visually unobtrusive fasteners to allow quick installation of protection prior to a storm	
1 **2** **3**	Staff
Install visually obtrusive storm protection or remove historic building fabric	
1 **2**	Commission
3	Architectural Committee

KEEP IN MIND…

- Maintain all window, door and shutter hardware in good working order to allow an opening to be easily secured – Verify locks, fasteners and tiebacks are well anchored into the wall or frame, install interior, long throw, slide bolts at the top and bottom of each double door leaf
- Hurricane resistant glazing, film, windows and doors may break in the event of a storm – They only potentially reduce interior damage during a storm (Refer to *Storm Preparedness for a Large-Scale Door*, page 07-20)
- Clips and fasteners can be installed on existing window trim to allow a pre-cut plywood panel, fabric storm panel or other hurricane protection to be installed quickly in the event of a storm
- Permanently installed track systems, panels, roll-up or accordion shutters are not appropriate in the Vieux Carré, although night blinds and shutters can be effective for both security and storm protection (Refer to *Guidelines for Storefronts*, pages 13-6 and 13-10)

Exterior screens obscure the view of historic window and door features. The air conditioner unit and an infill panel have replaced the former transom window. Obscuring or removing a historic element or feature is not appropriate in the Vieux Carré.

SCREENS

In an effort to maintain the historic character of the Vieux Carré, the VCC does not permit the installation of an exterior screen window or door, or the modification of shutters or blinds to include screens. If a property owner would like to install an insect screen, it is encouraged to install the screen at the interior of a window or door, where it would not be subject to VCC review.

If considering the installation of an interior screen, one available option is using a hurricane window or door screen. A hurricane screen is similar to an insect screen, except it is manufactured with a heavy-duty frames and mesh, making it much stronger and sturdier. In the event of a storm, the screen can provide additional protection from wind-blown objects and debris.

Screen Window & Door Review
Installing an exterior screen window or door or modifying an existing shutter with screening 1 2 3 Architectural Committee

HVAC UNIT

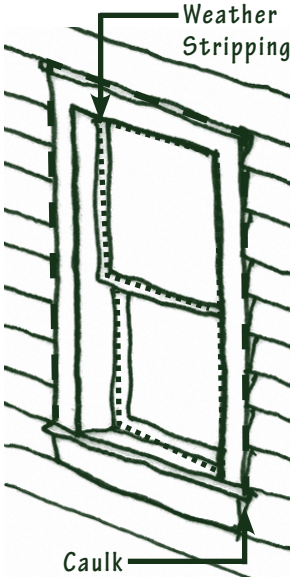
A small heating, ventilating or air conditioning (HVAC) unit tends to need access to outside air. As a result, they are manufactured to be installed in a window opening or through a wall. An air conditioner unit installed seasonally in a window opening is not appropriate. **The removal of a transom or other window for an HVAC unit is not allowed, nor is the installation of a through-wall HVAC unit.**

WEATHER STRIPPING & CAULK

Proper application of weather stripping and caulk around a window or door can greatly reduce air infiltration and drafts. When selecting weather stripping or caulk, it is important to choose materials appropriate for each location and to follow the manufacturer's installation recommendations for best results.

Because weather stripping is used between the moving parts of a window or door, it can easily become damaged, loose, bent or torn. Inspect weather stripping on a regular basis, preferably every fall, and replace as needed. For a heavy-use installation such as an entrance door, install more durable weather stripping, such as spring metal or nailed felt.

The installation of caulk or other sealant should occur throughout the exterior of a building to minimize interior drafts and to protect a building's wall system from wind-driven rain. Locations where caulk is recommended include where two dissimilar materials meet, where expansion and contraction occur, and where materials are joined together. Select a caulk or sealant that can be sanded and/or painted to minimize its visual appearance. It is important to select the appropriate type for each location and exercise care when removing old caulk as it might contain lead. (Refer to *Safety Precautions, Guidelines for Exterior Maintenance,* page 03-16, for lead information and *Guidelines for Exterior Painting.*)



Recommended weather stripping locations:

- Behind window sash track
- Between window meeting rails
- At perimeter of a door or window

Recommended caulk locations:

- Between window or door frame and adjacent wall
- Between abutting materials such as a corner board and siding, or porch and wall surfaces
- Between dissimilar materials such as masonry and wood, or flashing and wall surface

DEFINITIONS

Weather Stripping: A narrow compressible band used between the edge of a window or door and the jambs, sill, head and meeting rail to seal against air and water infiltration; made of various materials including spring metal, felt, plastic foam and/or wood with rubber edging

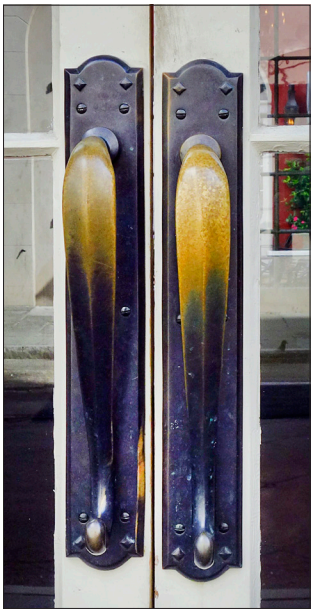
Caulk: Flexible sealant material used to close the joint between materials; made of various materials including tar, oakum, lead, putty and modern elastomerics such as silicone and polyurethane

Originally, strap hinges were handmade of wrought iron. On a historic building, strap hinges should be simple in design, approximately two-thirds the width of the shutter, without decorative detailing. Strap hinges should be painted to match the shutter, with the mounting pintel painted to match the frame.

HARDWARE

Hardware (hinges, hooks, locks, etc.) forms an important part of the character of a historic opening. The selection of specific hardware types should carefully be related to the type of window, door or shutter that the hardware is intended to serve. Until the mid-19th century, hardware was made by hand and very simple in design. These simple designs included the strap hinges found on early doors and shutters. In the mid-19th century, the design of hardware became more detailed and elaborate, typically selected to complement the specific style of a building. A simple building would have simple hardware and a more high-style design would have a more elaborate design. As a result, the VCC encourages careful consideration of the design and finish of replacement hardware and matching it with a historic sample as closely as possible.

As brightly polished brass hardware is rarely found in historic architecture, its use is discouraged. If a property owner wishes to have a bright finish, they are encouraged to polish the hardware.



The bronze door hardware complements the style of the building.

"Acme, Lull & Porter" and "Clark's Tip" hinges hold shutters open and closed, eliminating the need for a shutter dog.

A doorbell, keypad, intercom system, mailbox and other element found near a building entrance should be as visually unobtrusive as possible and installed in an orderly fashion. To minimize wiring and damage to historic materials, wireless technology is recommended whenever possible.

Wood trim and ornament is linked to a building's style and period of construction and should be retained.

WOOD TRIM & ORNAMENT

Exterior wood trim frames windows and doors and serves as the transition to the adjoining wall surface. Functionally, it provides protection at the perimeter and corners of an opening, creating a weather-tight building enclosure.

Historically, wood trim and ornament profiles, details and sizes varied with a building style, period of construction and whether the building is "high-style" or simple, all of which are integral to the historic character. As a result, wood trim and ornament are considered an important building feature. On a building where some of the wood trim or ornament has been removed, it should be replaced in-kind. On a building where all original moldings have been removed, salvaged or stylistically and period appropriate examples from buildings of similar style and age should be used and historic photographs consulted.

Hardware; Wood Trim & Ornament Review	
Install appropriate hardware, wood trim or ornament	
1 **2** **3**	Staff
Install inappropriate hardware, trim or ornament	
1 **2**	Architectural Committee
3	Staff

The installation of a metal security grille is not appropriate on the exterior of a window in the Vieux Carré. If a metal bar or grille is installed on the interior, it should be sized to fit the opening and aligned with frames and muntins with a simple barrier grille and no decoration.

WINDOW & DOOR SECURITY

Traditionally, one of the best means of securing a property in the Vieux Carré was to close its shutters or install night blinds. Closed louvered shutters provide an additional level of security and privacy while allowing a window to be opened for light and ventilation. More recently, re-glazing, particularly with tempered glass, has been used as a deterrent, providing a barrier that is difficult to break. An electronic security system that includes cameras and/or warning device, such as a motion sensor, can be installed at a door or window without altering the historic appearance of a building's exterior. When installing an exterior device, it should be as small and discrete as possible and wiring should be concealed and not mounted to the face of the building, and wireless.

Refer to *Security at Walls, Fences & Gates, Guidelines for Site Elements & Courtyards*, page 10-6; *Security Cameras, Guidelines for Lighting & Security Cameras*, page 11-10; and *Storefront Security, Guidelines for Storefronts*, page 13-10.

An exterior metal grille is only permitted at a doorway with an exterior vestibule at least 18-inches in depth. The VCC does not allow the installation of a metal grille on the exterior of any window or any door alcove with a depth of less than 18-inches. If a property owner would like to install a metal grille on a window or a door, it must be installed at the interior of the window sash or doorway and it is recommended that the bars or grille should be properly sized to fit the opening and align with the frame opening and muntin configuration.

Abandoned security tape on windows should be removed.

The security gate is sized to fit the opening and aligns with frames and muntins with a simple barrier grille and no decoration. The decorative fanlight transom remains visible.

WINDOW & DOOR SECURITY GUIDE

THE VCC RECOMMENDS:

- Utilizing historic security devices such as shutters and night blinds
- Minimizing the size, number and visibility of modern exterior security devices
- Removing an abandoned modern security device such as reflective metal security tape at a window

THE VCC DOES NOT ALLOW:

- Installing an exterior metal security grille on a window or door (except a door with an exterior vestibule or alcove at least 18-inches deep)
- Exposing exterior wiring, conduit or junction box associated with a security or similar device

Window & Door Security Review	
Install an appropriate or unobtrusive security device	1 2 3 Staff
Install an exterior bar, grille or other security device	1 2 3 Architectural Committee

NON-HISTORIC DOOR TYPES

Occasionally, a modern function requires an opening not found in historic architecture. Examples include a garage door, loading dock door, a door that must swing outward to meet safety or code requirements, a door with a specialized vent or grille, etc. The goal of the VCC is to integrate a non-historic type of opening into a building in a sensitive manner to maintain the historic character of the building and the surrounding neighborhood.

If an opening can be made that copies another opening type which could have reasonably existed on a particular building, then it may be desirable to do so. In some cases it may be impossible to make a certain desired change, such as adding a garage door opening, simply because the style or type of building does not lend itself to such a modification. Where an existing addition or modification does not fit the pattern of historic development in the French Quarter, every effort should be made to minimize its impact rather than making the intrusion more prominent.

Doors and/or openings should not be modified to install a new non-historic door type. In this case, two door openings were combined and jambs infilled for the installation of the large central door.

CARRIAGEWAY & SERVICE DOOR GUIDE

THE VCC REQUIRES:

- Retaining a historic carriageway or service door (Refer to page 07-12)

IF A NEW CARRIAGEWAY OR SERVICE DOOR IS APPROPRIATE, THE VCC RECOMMENDS:

- Installing a wood garage or carriageway door appropriate to the building style and period of construction, designed to completely fill the existing opening
- Installing a single-bay door that does not require removal of a decorative feature or modification of the opening

THE VCC DOES NOT ALLOW:

- Modifying an existing window or door opening to accommodate a new carriageway or garage door

MODIFYING OR ADDING AN OPENING

The arrangement, size and proportions of window and/or door openings are key components of a building's style and character.

As a result, the modification or addition of window or door opening, is discouraged, particularly on a more prominent building façade. This includes the infill of all or part of an opening to make it smaller or to remove it. It also includes increasing the size of a door opening to provide a larger opening for a display window, garage or other use.

STORM PREPAREDNESS FOR A LARGE-SCALE DOOR

A large-scale door, such as those found at a carriageway, stable, garage, fire house or warehouse, is more vulnerable to hurricane-strength winds than a standard door or window because of its size. Damage can occur from high winds or impact from wind-blown debris, which can result in the door twisting off its supports and becoming airborne.

The interior of a historic door can often be modified to be more resistant to the effects of high winds with no visible change at the exterior. In the case of paired carriageway style doors, slidebolts with deep throws can be installed sliding down into the ground and up into the structure of the opening or the transom at each leaf.

Overhead door frames can be retrofitted to include an interior steel track system that is well anchored into the wall that allows the historic door and exterior trim to remain. In addition, steel wind braces can be added to each horizontal panel system to improve the door's rigidity.

Given the importance of understanding all of the conditions associated with storm preparedness for a large-scale door, consultation with an architect or engineer is recommended. He/she can assess the specific circumstances found at a property and provide an appropriate recommendation.

Non-Historic Door Types; Modifying or Adding an Opening Review	
Install a non-historic door type in an existing opening	
1 **2** **3**	Architectural Committee
Install a door or window in a new opening or modified opening	
1 **2**	Commission
3	Architectural Committee

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