### HISTORIC PRESERVATION

# WINDOW SUPPLEMENT



Planning and Development Department 214 North Hogan Street, 3<sup>rd</sup> Floor Jacksonville, Florida 32202

HistoricPreservation@coj.net

904-255-7800







### Wood Window Repairs

Repairing historic windows should always be attempted before window replacement is considered. When windows have not had maintenance in years, they often require repairs to improve their operability and efficiency.

### **Paint Repair**



If the window has layers of old chipping paint, it should be removed down to a stable layer or bare wood before applying fresh primer and paint to prevent rot.

### **Putty Repair**



If there are gaps around the glass because the glazing putty has dried-up or fallen out, it should be replaced.

### **Wood Repair**

If the wood window is damaged or deteriorated, it should be repaired with wood epoxy or limited wood replacement.



### **Pulley Repair**

If a window sash will not stay in place, the pulley system behind the trim should be checked to ensure the ropes and weights are properly attached or replaced if needed.







# Window Replacements and Installations

Replacing a window can be approved when attempts to repair are unsuccessful or the window is deemed beyond repair by Staff. Window replacement approvals require windows to be traditionally recessed in the wall and the trim to be retained or repaired as needed. Window replacements often require ordering a custom size to fit the opening, since resizing the window is not included in standard approvals

Installing a new window (whether on a historic building or new construction) should complement the historic architecture and reinforce the existing patterns of a historic district. Therefore, new window installations should also be recessed in the wall (not flush with the wall or have permanent nailing fins). The recession of windows on historic structures shall be between 2-4 inches and 1-4 inches on new construction.

#### **Block Frame or Box Unit Windows**

Block Frame or Box Unit Windows are sashes in a frame that can be installed directly into the existing window opening from the inside of the house. This window replacement option preserves the window trim and can be traditionally recessed in the wall, but it can reduce the size of the glass and the sash unless fitted to the rough opening.





#### Window Sash

Window Sash replacements a.k.a. sash packs or kits are the most historically accurate window replacement option. This can also be very cost-effective since you are not buying a full frame.





### **Permanent Nailing Fins**

\*Historic Preservation Staff cannot approve products that require installation with permanent nailing fins.



Windows with **Permanent Nailing Fins** require complete exterior window trim removal, and the windows must be installed on the outside. This results in a window being flush with the exterior wall giving it a non-historic appearance. Products that have removable nailing fins can be installed from the inside and are acceptable; only when the fins are removed, and the window is recessed within the opening.







### Window Trim

The historic window trim should be preserved, repaired, reused, or replicated. Repair is the first approach, and if replacement is necessary, matching the details of the historic trim is required.



### **Repairing Trim**

Repairing historic trim includes patching sections of wood in need of repair or the replacement of trim components that have damage beyond repair.

Reusing the historic trim is possible if it is carefully removed and saved.

#### **Replacing Trim**

Replacing all the historic trim on a window is reserved for windows with most of the components beyond repair.

Replacing good condition trim is acceptable when the trim is not historic, and it is replaced to match the documented historic design. When the historic design is unknown, the trim shall match the architectural style of the building. Staff can provide guidance in selecting an appropriate trim design.



### **Inappropriate Replacement**





### **Appropriate Replacement**





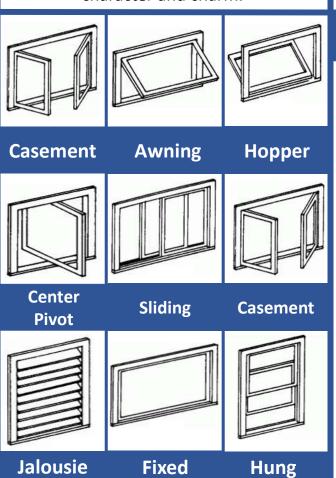


### Window Types

The placement, design, and materials of windows are often a significant part of the architectural character of a building. Windows in the districts are often *important stylistic* elements as well, by including patterned designs. Non-historic windows include awnings, jalousies, and pivot types.

### **Replacing Historic Windows**

Replacing **historic** windows requires replacement windows that match the design details of the historic window being removed. Using a different window type or design is inappropriate as each structure is unique in its architectural character and charm.



### **Replacing Non-Historic Windows**

Replacing **non-historic** windows requires replacements to match other remaining historic windows on the structure to ensure compatibility. If the structure has no remaining historic windows, staff can assist by researching documented evidence to determine the historic window design. If there is no documented evidence, staff will provide guidance to select appropriate options.

#### **Types of Windows**

- Fixed windows can't be opened, and their sole purpose is to see outside and let light in.
- Single Hung windows have two sashes where only one can open, usually the lower sash.
- ✓ **Double Hung** windows have two operable sashes that move up and down in the frame.
- Horizontal Sliding windows have sashes that slide horizontally along the frame.
- Casement windows have hinges that allow them to swing either in or out like a door.
  - Awning windows are a casement window that swings out from hinges at the top.
  - Hopper windows are casement windows that swing in from hinges at the bottom.
- ✓ **Pivot "tilt & turn" windows** rotate on hinges in the middle, vertically, or horizontally.
- ✓ **Jalousie** windows are multiple panes that tilt in or out like awning and hopper windows.





### Window Grids

Traditionally, historic windows within the districts are made of a wooden material.

Many of them have exterior raised muntins (a.k.a. grills) which make different patterns (For example: six over six windows).



### True Divided-Light



True Divided-Light (TDL) windows have multiple small panes of glass that are separated by muntins, a.k.a. grids.

### Simulated Divided-Light



Simulated Divided-Light (SDL) windows have large panes of glass with muntins, a.k.a. grids, attached to the exterior of the glass.

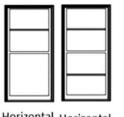
#### **Interior or Sandwiched Muntin**



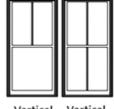
**Interior or Sandwiched Muntin** windows have grids only on the interior or placed between the panes of glass a.k.a. "grills between glass" (GBG).

\*Historic Preservation Staff cannot approve products that only have interior muntin grids between the glass and cannot approve post-manufacturer applied muntins after-the-fact.

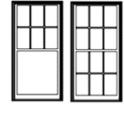
### **Examples of Hung Window Patterns**



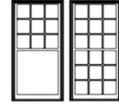
Horizontal Horizontal 2-over-1 2-over-2



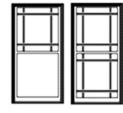
Vertical Vertical 2-over-1 2-over-2



6-over-1 6-over-6

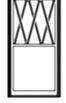


9-over-1 9-over-9



Prairie

Prairieover-1



Diamondover-1

d-Diamond





### Window Energy Efficiency

Addressing
maintenance issues
like replacing
broken glass,
replacing failing
glazing putty, and
repairing rotten
wood can improve
air infiltration, but
there are
additional
measures that can
be done to improve
the efficiency of
historic windows.

### Caulking



Caulking around where the interior trim meets the wall is a simple improvement that is easy to do to help with drafts.

Polyurethane caulk is a solvent-based caulk that creates a bond between materials and is best suited for exterior windows. It is also a paintable caulk that is compatible with masonry and common window materials.

**Silicone caulk** is the best option for rooms with high humidity and moisture.

### **Weather Stripping**

Traditional weather stripping added where the window sash fits into the window frame can help seal air leaks around the moving components. It can also help with rain penetrating through the opening.



#### **Interior and Exterior Storm Windows**



Interior and exterior storm windows can help reduce outside noise, improve condensation issues, and save energy costs from heating/cooling. Exterior storm windows can help protect historic windows.

Storm windows create a tighter seal and additional pane of glass for energy efficiency.

