

Ordinance No. 2018-016.

Window Repair or Replace:

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

The detailing of the window is frequently a key to the characteristic in identifying an architectural style. They were designed to not only be aesthetically pleasing, but were necessary as a functioning component to the building by providing light and ventilation. The loss of original windows also has great potential to negatively impact the appearance of a historic property. Building facades lose proportionality and depth as modern replacements are introduced.

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

In an age where energy reduction is at the forefront of everyone’s mind, windows are often blamed as the leading culprit of heat gain/loss. The criminalization of “drafty old windows” is nothing new; window manufacturers have long been pointing out the faults of old windows while promoting attractive solutions (their products). New low -e, gas-filled and triple pane replacements may seem like an exciting solution for building owners coping with their monthly energy bill. In reality, heat gain/loss occurs evenly throughout the home or building, with windows only accounting for 25% of waste. Poorly insulated walls and attics are the greater culprit.

Even windows in the best condition can be made more energy efficient. Heat gain/loss through windows occurs in Three different ways: air infiltration, heat transfer (conduction) and solar gain (radiation). There are a number of low cost, reversible and historically appropriate strategies that can be used to reduce heat gain/loss. It should be noted that implementing a combination of any of these techniques can be just as effective in arresting heat gain/loss as a brand new window.

Weather stripping is perhaps the cheapest and easiest solution for improving window efficiency. Proper weather stripping drastically reduces air infiltration at meeting points in the window. This can easily be done by any homeowner and offers a great return on investment.

Storm windows can be used to provide an additional transparent barrier between the outside and inside of a historic structure. Their installation creates an insulating air pocket which reduces heat transfer. Storm windows can be hung from the interior of a window and simply clipped or wedged into place (some even use magnets) for easy removal and cleaning. Some exterior storm windows may be appropriate provided that they have a thin frame and are used with either a decorative screen or in a manner that does not obscure any architectural details.

Shades, Shutters and Screens can all be used to prevent solar gain during the hot summer months or seasons where windows receive direct sunlight. Some interior shades also have insulating qualities that can reduce heat transfer.

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There are many resources available for information on window repair and replacement through the Texas Historical Commission and the National Parks service. The City of Paris Historic Preservation office is happy to provide guidance when it comes to historic windows or other elements of the structure.

Guidelines for Restoration of historic windows:

Repairable Window:

- Paint, glaze, glass, missing or broken
- Meeting rails not aligning;
- Cords broken or hardware missing;
- Sill or frame rotted;
- Partially rotted rails and stiles which require patching.

Examples of Repairable Windows:

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

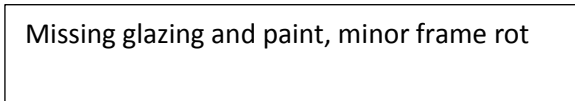
Meeting Rails not aligning



Cords broken or missing hardware



Missing glazing and paint, minor frame rot



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Partially rotted rail and stiles



Beyond Repair:

- Missing components or units;
- Extreme wood rot;
- Where 50% or more of a window’s components must be reconstructed, a replacement may be considered;
- Replacement sashes may also be constructed to fit within the original frame.

Recommended stipulations for replacement:

Individual sashes should be replaced where possible. Should a full window unit require replacement, inserts should

- Match the original materials;
- Maintain the original dimension and profile;
- Feature clear glass. Reflective coatings are not recommended for replacements;
- Maintain the original appearance of window trim or sill detail.

Things to avoid

<p>Vinyl product changes the Material</p>	<p>Sash components do not feature traditional dimensions</p>	<p>Window trim and sill detail not consistent with original</p>
<p>Window is not recessed within frame</p>	<p>Coating that are heavily tinted or reflective</p>	<p>Meeting rails thicker than original</p>
<p>Track insert alters profile</p>	<p>Retrofitting with different size window than opening.</p>	<p>Aluminum anodized</p>

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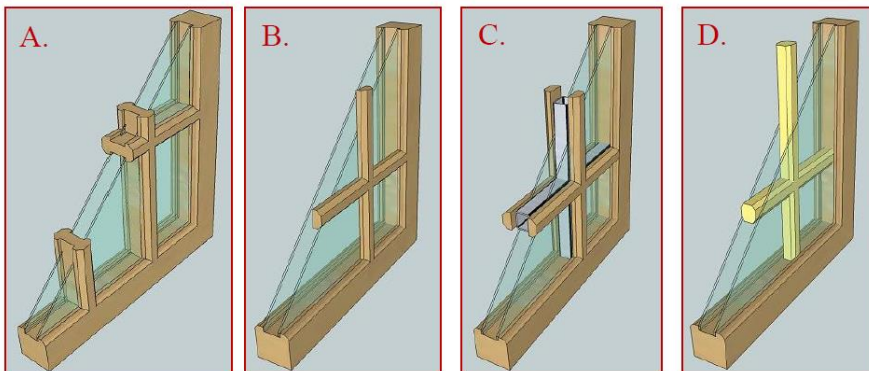


1. Aluminum anodized
2. vinyl windows



3. Retrofitted windows. New window dimensions smaller than original openings.
- Uneven symmetry: meeting rails should mimic original features and symmetry of downtown building.

Glass size and divisions: Historic windows were constructed with single panes of glass held together with wood pieces and glazing compound. These wood pieces formed a grid called a muntin. This construction method (several small pieces of glass held together with muntins) is called a true divided-lite. This is the best option for replacement because it will give the same appearance as the historic window.



- A. True Divided Lite with Double Glazing
- B. Simulated Divided Lite
- C. Simulated Divided Lite with Spacer
- D. Grilles Between Glass

D. Is not appropriate for the district

Acceptable replacement windows can be approved provided they match the original in profile, dimension, configuration, materials, color and finish. (Divided light and size considered).

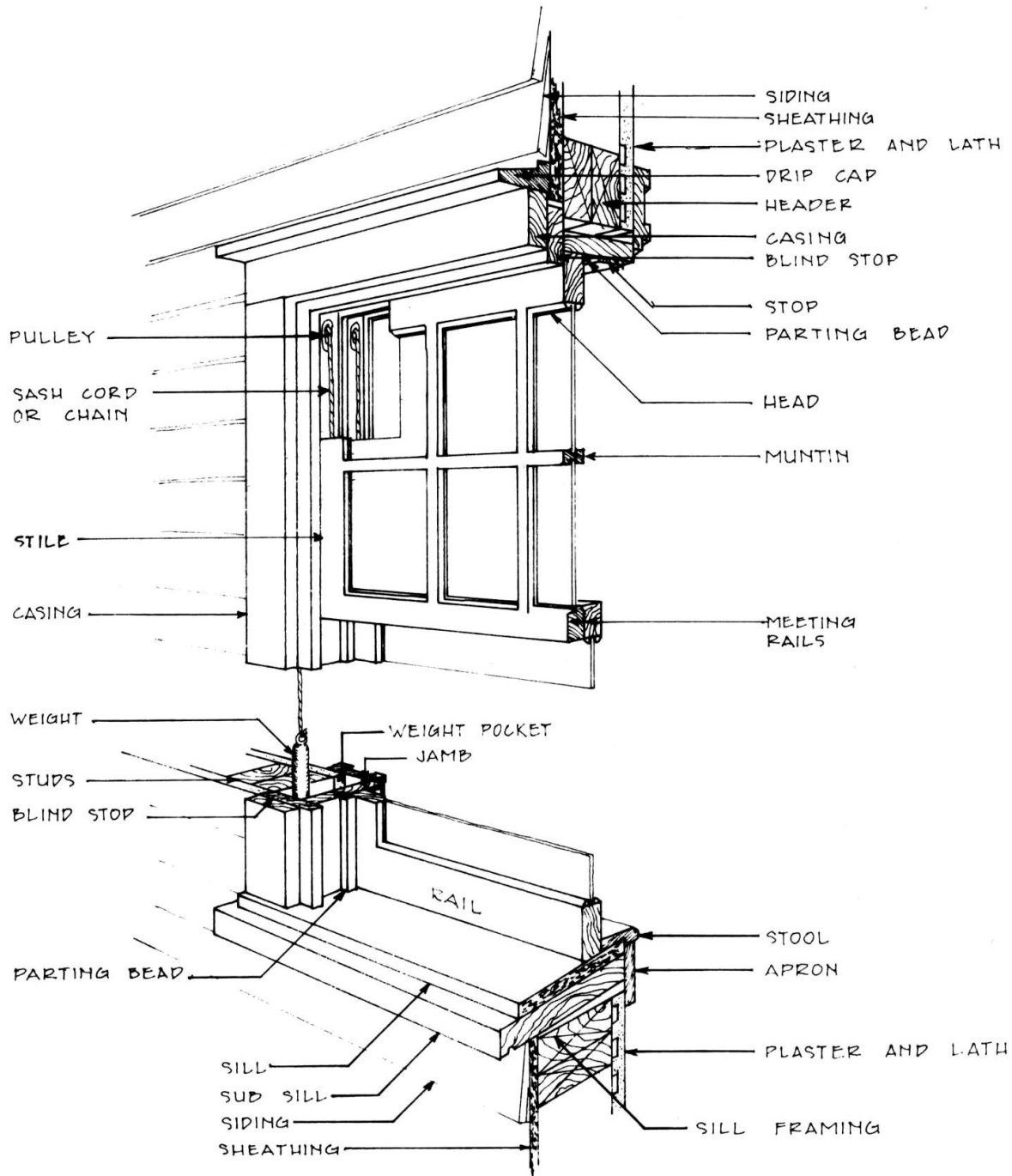
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Powdered coated aluminum clad wooden windows

Fiberglass clad wooden windows

fiberglass windows

For questions, please contact the City of Paris office of Historic Preservation.



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