Window Elements (Interior Views)

A. Wall Frame
B. Head Trim
C. Frame Head
D. Top Rails
E. Parting Bead
F. Glazing
G. Muntin/Mullion
H. Meeting Rails
I. Jamb Trim
J. Side Rails
K. Bottom Rails
L. Sill
M. Stool
N. Trim

WINDOW

DESIGN GUIDELINES

W1 Replace severely deteriorated historic windows with new windows that convey the same visual appearance. Replacement windows may either be accurate reproductions using historical, pictorial, and physical documentation or be a new design that is compatible with the historic character of the building and the district. Use of vinyl- and aluminum-clad wood window systems on primary elevations may be permissible if the proportion and detail closely match the original.

Windows are given a heightened presence through the use of ornamental stone lintels, sills, and terra cotta sculptural elements.

W2 Select windows that match the historic sash dimension, muntin configuration, reveal depths, glass-to-frame ratios, glazing patterns, frame dimensions, trim profiles, and decorative features when repair of original windows is impossible.

W3 Evaluate the option of using appropriate salvage materials when replacing windows that are deteriorated beyond repair.

W4 Do not use replacement sash that does not fit historic window openings. Original openings should never be blocked-in to accommodate stock windows.

W5 Do not install contemporary picture, glass block, or jalousie windows in exterior window openings.

W6 Do not install synthetic replacement windows (vinyl, etc.) on primary facades.

W7 Install replacement windows that operate in the same way as the original windows—double-hung windows are replaced with double-hung, and casement windows are replaced with casements.

W8 Do not replace multi-pane windows that have true divided lights with thermal glazing windows that have false "snap-in" or applied muntins on primary facade elevations.

W9 Do not apply reflective or insulating film to window glass.

W10 Do not use smoked, tinted, low-E, or reflective glass on building facades that can be seen from a public way.

W11 Use large sheets of clear glass when replacement of storefront display windows is required.

W12 Do not block-in or back-paint transoms or sidelights.

W13 Use surviving prototypes to reconstruct missing window elements, such as architraves, hoodmolds, sash, sills, and interior or exterior shutters and blinds. The reconstructed element should be constructed of materials for which there is a historic precedent or a compatible substitute material if that is not possible.

W14 Do not alter the number, size, location, or shape of original windows seen from a public way by making new window openings or permanently blocking existing openings. If windows are no longer needed, they should be shuttered if original shutters exist. If shutters do not exist, a temporary closure should be prepared, leaving the window frame intact.

W15 Locate any new windows openings that may be required for a new use on a facade that cannot be seen from a public way. Newly-installed windows should be compatible with the overall design of the building.

**W16** Do not obscure historic window trim with metal or siding materials.

W17 Do not install new floors or dropped ceilings that block the glazed area of historic windows. If such an approach is required, the design should incorporate setbacks that allow the full height of the window to be seen unobstructed.

W18 Install exterior storm windows that duplicate the shape of the original window. Storm windows should be painted to match the color of the window frame.
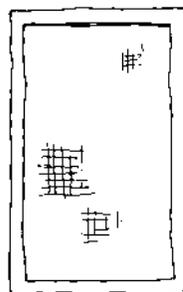
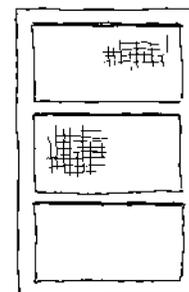## STORM WINDOWS AND SCREENS SHOULD ALIGN WITH SASH
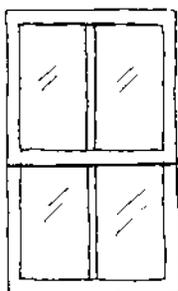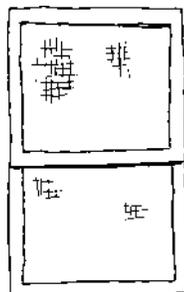
| Historic Window | Appropriate | Appropriate | Inappropriate |

Window forms such as a fleur-delis (left) and Palladian (below) enliven the facades of many of Louisville's historic buildings.
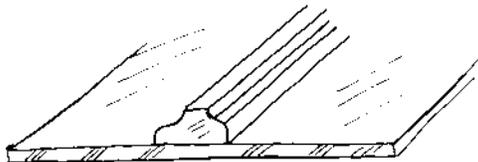

MUNTINS GIVE DEFINITION

True muntins hold individual panes of glass and help define a window's character. False muntins are applied over a large sheet of glass and are imitative, not functional.
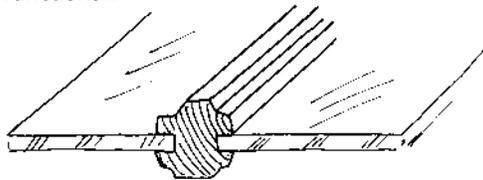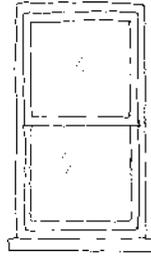

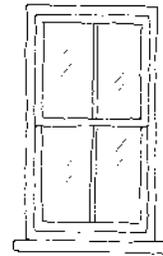True muntins provide depth, profile, and relief.

False muntins are flat and featureless unless attached to the outside.
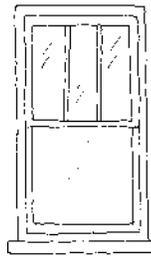
WINDOW TYPES
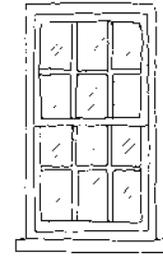

One Over One   Two Over Two
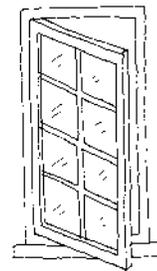

Three Over One   Six Over Six

Casement Window   Decorative Window

Windows are often described by the number of panes of glass they possess.

W19 Do not install exterior storm windows or screens that damage or obscure historic windows or frames. Mount storm windows on the blind stop within the window frame. Storm window or screen rails should always match the rails of the windows behind. They should have either wood or narrow, metal frames that are painted to match the color of the building trim.

W20 Do not install window air conditioning units on a primary facade if installation on a secondary facade can address the same need. If this is not an option, do not alter the window sash to accommodate the air conditioning unit.

W21 Install any security bars in such a way that they do not obscure the architectural character of original windows or damage historic fabric. Commercial security grills should retract out of sight during business hours.

W22 Design awnings to complement existing architectural features. They should not overwhelm the facade.

W23 Install awnings made of weatherproofed canvas of a traditional form. Fiberglass, metal, plastic, and back-lit awnings that have contemporary shapes are inappropriate and visually intrusive.

Awnings Offer Shelter and Signage in Historic Commercial Districts
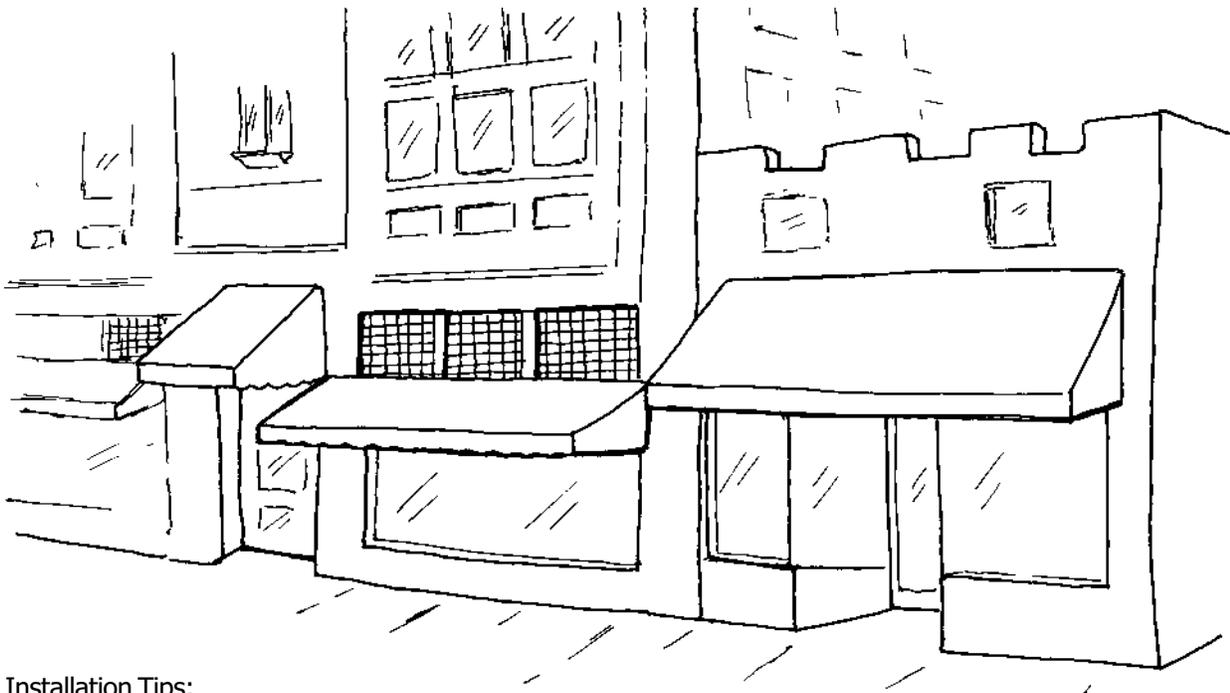
Installation Tips:
- Select awnings of weatherproofed canvas in a traditional form.
- Choose a solid or striped color.
- Attach at the cornice line (right) or below reflective-glass transoms (left).
- Do not damage the wall during attachment.
- Limit signage to the bottom flaps.

Get the Proper Fit

If you must replace a window, make sure it fills the original opening.

Original Window

Inappropriate Alterations

Historic windows should not be removed in order to install air conditioning units.

W24 Select an awning color that complements the building, with solid colors and narrow or wide stripes running perpendicular to the building being the preferred patterns.

W25 Install awnings in a way that does not harm the building. Hardware installation should be limited to that which is required for structural stability and should be driven into mortar joints rather than into masonry.

W26 Attach awnings between the window display area and the signboard or second-floor window sills. Awnings should be attached below the transom line where historic prism glass is present and building scale allows.

W27 Install awnings so that the valance is no lower than 7'6" above the sidewalk.

W28 Repair shutters with in-kind materials. If damage is so extensive that they cannot be repaired, replacement shutters should match the visual appearance of the originals.

W29 Install shutters only where there is historic evidence for them. Replacement shutters should be or appear to be operable, measure the full height and width of the windows, and be constructed of a historically-appropriate material. Solid shutters are appropriate for the ground floor, and solid or louvered shutters are appropriate for upper floors.

HISTORIC SHUTTERS ARE FUNCTIONAL, NOT MERELY ORNAMENTAL

Appropriate

Inappropriate
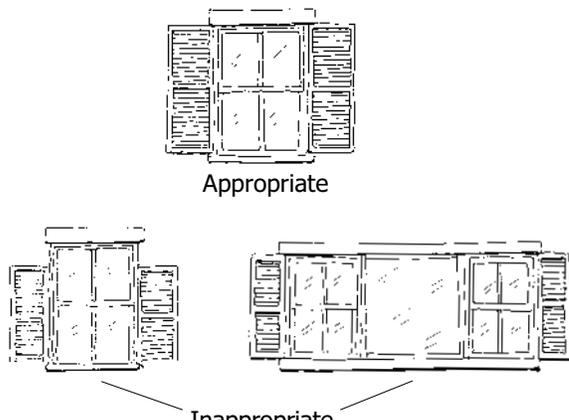
Historically, people used shutters to regulate light and heat and for security. They were intended to open and close. Make sure that replacement shutters at least appear to be functional and are sized to fit the window.

TRIM HELPS WINDOWS STAKE THEIR CLAIM

At Least 4"Width

With Historic Trim

Historic Trim Removed
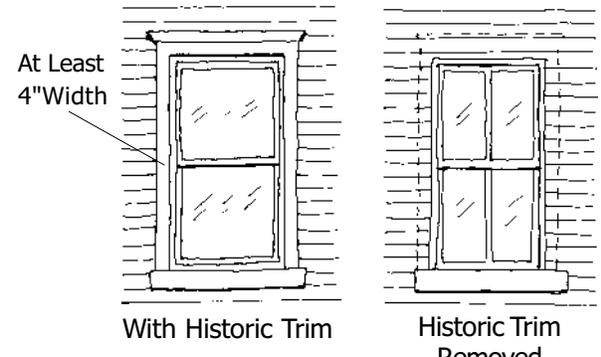
Have you ever seen a window that seems too small for the wall? One reason could be that it lacks sufficient trim. Trim helps visually affix a window within the facade, so that it stands out from the wall plane rather than receding into it.

W30 Mount replacement shutters so that they partially cover the vertical trim of the window frame. This gives shutters the appearance that they are indeed operable, even if in truth they are not. Shutters should not be applied to the masonry or cladding on either side of the window.

W31 Do not install aluminum or vinyl shutters.

W32 Photographically document architectural features that are slated for reconstruction prior to the removal of any historic fabric.

Fixed shutters are one design solution to disguise a window opening, which is no longer desired.

Trim helps this window to stand out from the surrounding clapboards.

Although inherently functional by nature, windows possess a vast range of decorative potential and are valuable tools in architectural design. Above—A collage of upper-story facade windows express the regular rhythm of the West Main streetscape. Far Right— Three window types establish a tripartite facade arrangement. Near Right— Tall, multi-pane casement windows along with a massive chimney are typical Tudor-Revival traits.
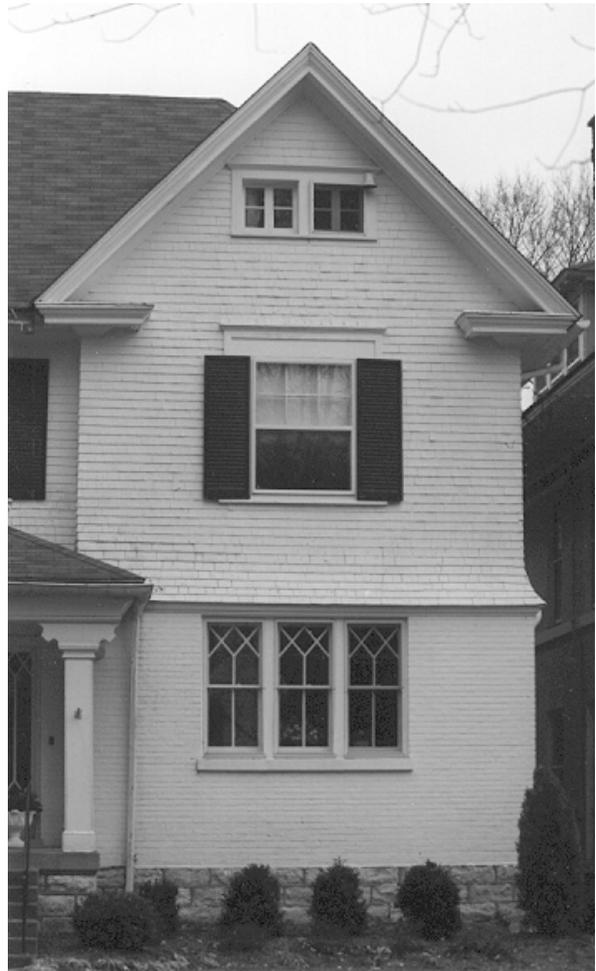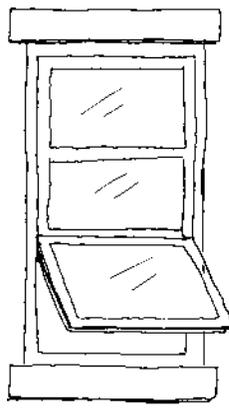
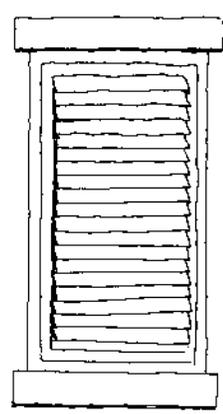## SASH CONFIGURATION DEFINES HISTORIC WINDOW CHARACTER
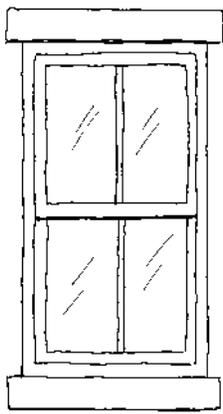
Original Window
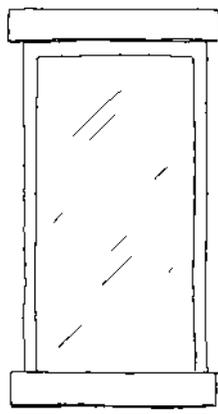
Inappropriate Replacement

Inappropriate Replacement

Inappropriate Replacement

Technological limitations, and later aesthetic preference, determined the types of windows used during different architectural periods. In order to maintain a building's character, replacement windows should match the glazing pattern, size, and technology of the original to the greatest extent possible.