

Windows, Shutters and Storm Windows

Windows

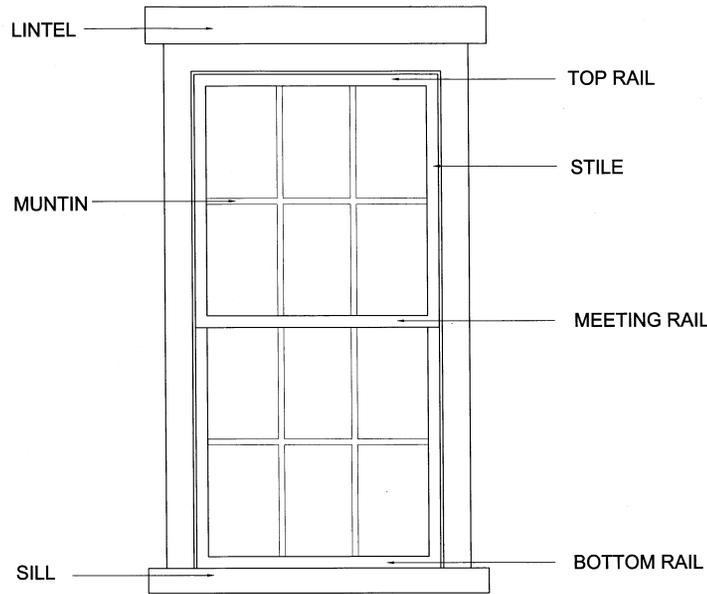
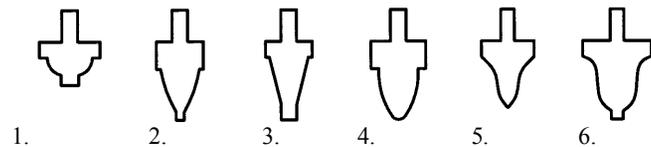


Illustration identifying parts of window. 6/6 double-hung sash shown.



Typical window muntin profiles. 1. *Early 19th century*; 2. *Early-mid 19th century*; 3, 4, & 5. *Mid-late 19th century*; 6. *Late 19th century to Present*.

In many historic buildings, the window sash, frame, and surround are a major character-defining feature of the building. It is important to retain the original window details, such as the size of the opening, type of sash, sills, lintels, and decorative moldings. Buildings in the District feature a wide variety of styles, from small, multi-paned sash on Colonial structures, to large single pane sash on Queen Anne structures. Windows reflect not only the architectural trends of the time but technological advancements as well.

Windows in the district are typically double-hung. The exceptions are large storefront display windows and casement basement or gable windows. In the early 1800s, large panes of glass were difficult and expensive to produce, and windows were constructed with small panes of glass. The earliest homes in the District have double-hung multi-paned sash windows with six, eight, or twelve lights in the top sash and six or eight lights in the bottom, substantial muntins, and simple window surrounds. Windows in Federal houses are larger than those on Colonial houses, with larger panes of glass and thinner muntins and the surrounds have more detail. Windows in Greek Revival houses are usually large, with six over six sash, and can have surrounds incorporating full or partial entablatures.

Double-hung sash remained popular throughout the nineteenth century, and advancements in glass technology allowed the production of larger sheets of glass. Italianate houses featured large, double hung windows with one or two lights per sash. Several Italianate houses in the District have arched surrounds, usually with the addition of brackets, or a decorative surround or hoodmold. A few houses have multiple windows within the surround. Windows in Queen Anne houses are simple in contrast to other details of the structure, with single pane sash and simple surrounds.

Wood window sash was originally constructed so that it could be repaired as necessary. The Commission strongly urges property owners to repair deteriorated wood sash rather than replacing it.

Recommendations

- Historic wood window sash and window surrounds should be retained and repaired if necessary to preserve the historic fabric. Deteriorated pieces of wood sash or surrounds should be replaced in-kind, using wood of the same dimensions and appearance.
- If only the existing sash is too deteriorated to repair, wood replacement sash is recommended, installed in the existing frame or casing. Replacement sash

should duplicate the appearance of the existing sash as closely as possible, matching the number of panes, profile of muntins, and depth of sash sides and rails.

- If existing window units, including the casing, are too deteriorated to repair, wood replacement window units are recommended. Replacement window units should duplicate the appearance of the existing window units as closely as possible, matching the size of the window opening, the number of panes, profile of muntins, and depth of sash sides and rails.
- Alteration of the number, location, size, or glazing pattern of windows by cutting new openings, infilling windows, or installing historically inappropriate replacement sash is not recommended.
- If new window openings are necessary, installation of new windows on secondary elevations is recommended.
- If the existing windows are replacements and the property owner desires more historically accurate windows, the new windows should replicate

historic windows in the architectural style of the house regarding configuration, operation, material, finish, and details. Documentation, if available, should be used to determine the prior style of the window.

- The use of applied, snap-in, or sandwich-type (between two panes of glass) muntins is not recommended.
- Vinyl replacement windows are prohibited on contributing structures.

Shutters

Historically, shutters were used on buildings for practical purposes, including weather protection, ventilation, and security. Mounted on hinges, shutters closed tightly over windows and were fastened with shutter dogs. Shutters should be installed correctly, so that if the shutter is open the slats face upwards.

Recommendations

- Historic shutters should be retained, and repaired using in-kind materials as necessary.
- Shutters should not be installed on a structure unless there is evidence that the building had shutters in the past. If a structure originally had shutters, physical evidence such as hinges, hooks, shutter dogs or ghosts in the window trim usually still exist. Old photographs may also provide clues.
- If new shutters are installed, they should be true operable shutters and sized correctly for the window. The shutter should be mounted on the window surround and cover only the casing. New shutters should be installed correctly, so the slats face upwards.

Storm Windows

Storm windows are useful in both protecting historic windows from weathering and providing insulation against noise. Approximately 70% of heat loss in single-glazed windows is caused by either a lack of, or deteriorated weather-stripping, not thermal loss through the glass as commonly believed. The installation of storm windows detracts visually from a building's historic character, and interior mounted units may be considered as an option.

Recommendations

- Storm windows that detract from the original design of the window are not recommended. Storm windows should be selected with frames that are similar in width and finish to the original window unit, and should fit tightly.
- Storm sash should be set as far back from the plane of the exterior wall surface as practicable.
- Meeting rails should align with the primary sash.
- Color of the exterior frames should match the exterior window frames, and the glass should be clear.



Well proportioned 2/2 light storm window over a 2/2 double-hung sash. In addition, the shutters are appropriately sized and placed.