

## Window replacement guidelines

Although the Springfield Historical Commission (SHC) recommends that historic windows be restored and supplemented with unobtrusive storm windows, it recognizes that there are situations where homeowners desire to replace original windows.

When considering the replacement of windows on a structure located in a Springfield Historic District, the primary concern of the SHC is the look of the replacement window, specifically how well it matches both the existing windows and the historic architectural nature of the building.

Although these guidelines offer direction on changes that are appropriate for a property in a historic district, a homeowner must still apply to the SHC for approval of any change. Failure to do so will result in the homeowner having to undo any inappropriate changes.

There are three categories under which to apply for a proposed change in your property. The following explains the differences between them, as well as the guidelines that the Commission follows for each.

A glossary is attached to explain the technical terms used.

### **Non-applicability.**

Select this category if you are proposing to replace your windows with **exact** duplicates. **Nothing** should be different, including material of the window (usually wood), grid pattern (no change in the number of divided lights), window style (usually double-hung), grid style (true divided lights will be replaced with true divided lights), grid widths, sash widths, glass treatment (single-pane), or frame type. This category is for windows that are *completely indistinguishable from and identical to the originals*.

### **Appropriateness**

Select this category if you are planning on restoring non-original replacement windows to the style that was originally on the house, or if you are proposing to replace your windows with something that does not exactly replicate the existing window, but the change is either substantially similar or appropriate for a period building in a way that does not detract from the character of the district.

Please review the following features when determining the difference between the original window and the new window:

- ❑ Window Style: The style of the window should not change (i.e. going from double-hung to casement).
- ❑ Permanent Color: If the proposed window is in a material that is not designed to be painted (aluminum with baked-on powder coat finish, vinyl), then the permanent color of the material must be historically appropriate. For most buildings in Springfield's historic districts, this would be a dark color. If the proposed window is made of a material that is designed to be painted (wood or fiberglass), then the homeowner's choice of paint color is not controlled unless the property is in a district that specifically controls paint color.

- ❑ Grid Style: If the original window has grids, the grids on the new window must be permanently fixed on the exterior and should not appear substantially different from the originals. The width/thickness/depth of the grids should be substantially similar to the original. Changing to simulated divided lights is considered appropriate. Grids between the glass or interior-only grids are not considered appropriate.
- ❑ Grid Pattern: The new window should have a grid pattern identical to the grid pattern on the original window. The number of lights in the sash should be identical, and the dimensions of each light should be substantially similar to the originals.
- ❑ Sash: The area of the window devoted to glass should be substantially similar to the original window. The dimensions of the sash frame, particularly the width at both the meeting rail and the bottom of the lower sash, should be substantially similar to the original window.
- ❑ Frame: The size of the window opening should be identical to the original window. No spacers should be added to the frame to allow installation of a stock window size. The lower sash should rest upon the original windowsill, and not on a spacer or replacement sill.
- ❑ Glass Type: Double-paned or thermal glass is considered appropriate, but the glass should not appear bowed or warped due to inferior frame construction, nor should the glass appear tinted or colored.
- ❑ Wrapping or encasing the windowsills or trim in any material is not considered an appropriate change.
- ❑ It is recommended that exterior screens be half-height instead of covering the entire window.

## Hardship

The law establishing Springfield’s historic districts allows for inappropriate alterations to be considered when a property experiences “*conditions especially affecting the building or structure involved, but not affecting the historic district generally*”<sup>1</sup>.

An application for hardship may be granted if “*failure to approve an application will involve a substantial hardship, financial or otherwise, to the applicant and whether such application may be approved without substantial detriment to the public welfare and without substantial derogation from the intent and purposes of this chapter.*”<sup>1</sup>

You should select this category if you are proposing a change in design from the original window in a way that is not appropriate for the district or the structure, but the windows are creating a condition that is specific to your property and causing you a *substantial hardship* (not merely an inconvenience). The commission will determine if this condition is something that is specific to your property, and will balance the hardship to you against the detriment that the change would cause to the district, and will explore other options to remedy any hardship.

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<sup>1</sup> MGL 40C, Section 10, Paragraph c.

**The following factors are considered by the SHC to be generally prevalent in the district and not specific to the property, and therefore do not qualify as a hardship:**

- ❑ Energy efficiency.
- ❑ Common maintenance issues (broken glass, broken ropes, glazing).
- ❑ Age of existing windows.
- ❑ Convenience of replacement windows.
- ❑ Conditions of sills and trim unrelated to the sashes.
- ❑ Maximization of profit for investment properties.

**Other factors that the SHC reviews:**

- ❑ Condition of *each* existing window proposed for replacement.
- ❑ Number of original windows that require immediate replacement.
- ❑ Urgency to replace windows – the hardship if some or all are not immediately replaced.
- ❑ Exploration of measures taken to fix the problem.
- ❑ Prominence of property within the district.
- ❑ Prominence of windows that are being replaced (front vs. side vs. rear).
- ❑ Economic viability of structure.
- ❑ Financial situation of petitioner.
- ❑ If financial hardship is claimed, the financials of the proposal, including comparisons of the cost of more appropriate alternatives.

Hardship for windows is determined on a window-by-window basis; if you have a few seriously deteriorated windows this does not qualify you to replace all the windows in your house in with an inappropriate design.

Since all hardship petitions are reviewed individually, the commission does not use the presence of other inappropriate windows in a neighborhood to determine the merits of a proposal. The SHC looks at each proposal independently and balances a number of factors to determine both the hardship to the petitioner and the detriment to the district. Although cost to the petitioner is considered, the lowest cost to the petitioner is not the overriding factor in the decision.

When deciding the detriment to the district, the following are inappropriate window features that the Springfield Historic Commission looks at, ranked in order of desirability. Generally speaking, less variance from an appropriate window to the replacement window will be viewed as more desirable.

- ❑ Grid style.
  - **Most desirable:** True divided lights.
  - Simulated divided lights.
  - Grids between the glass.
  - **Least Desirable:** Interior grids only
- ❑ Grid pattern.
  - **Most Desirable:** Exactly replicate existing pattern, including widths of muntins.
  - Change to different but still appropriate pattern.
  - Complete removal of grids.
  - **Least Desirable:** Change to inappropriate pattern, including non-historic widths of muntins.

- Materials/Permanent Colors.
  - **Most Desirable:** Replacement with wood or original material (if other than wood).
  - Replacement with paintable material (such as fiberglass).
  - Replacement with non-paintable material in color that matches the historic color of the window (usually dark).
  - Replacement with tan or cream non-paintable material.
  - **Least Desirable:** Replacement with white non-paintable material.
- Sash.
  - Sash widths that replicate the original window are most preferred.
  - Meeting rail (where upper and lower sashes meet) should be appropriately sized, not thin, like a storm window.
  - It is preferred that the lower sash rest upon the original windowsill, rather than resting on top of a spacer or replacement sill.
- Frame.
  - Window openings should not be dramatically reduced to accommodate stock replacement sizes.
  - Fixed exterior screens are recommended to be half-height.
- Glass type.
  - Double pane glass is usually not a problem unless the glass appears bowed.
  - Low-E coatings are not a problem unless the glass appears tinted.

## Window Glossary

- ❑ **Window Style:** There are several styles of windows; double-hung, casement, picture, slider, etc.
- ❑ **Sash:** The movable part of a window. Most windows have both an upper sash and a lower sash.
- ❑ **Meeting rail:** The part of the window where the upper and lower sash overlap.
- ❑ **Materials:** What the window is made from, for example, wood, fiberglass, steel, vinyl.
- ❑ **Spacer:** a piece of trim that is installed between the original window frame and the new window to facilitate installation.
- ❑ **Muntin (sometimes called mullion):** A bar that divides a sash into multiple smaller pieces of glass.
- ❑ **Light:** A separately framed piece of glass in a window.
- ❑ **Divided light:** a sash that is divided into multiple smaller panes of glass with muntins.
- ❑ **Grid/grill pattern:** The design of the divided lights on a sash. These are typically referred to in terms such as “2 over 1” (meaning that the upper sash has two panes of glass divided by a muntin, the lower sash is a single pane of glass) or “6 over 1” (meaning that the upper sash has six panes of glass divided by a muntin, the lower sash is a single pane of glass). More divided lights are considered more ornate.
- ❑ **Grid/grill Style:** Whether a sash is True Divided Lights, Simulated Divided Lights, Grids Between the Glass, or Interior Grids.
  - **True Divided Lights** are how historic windows were made. This means that each smaller pane of glass is a separate piece and is glazed separately. It was originally done out of necessity, since large panes of glass were difficult to manufacture, but it was later adopted as an ornamental decoration.
  - **Simulated Divided Lights** is a technique to simulate divided lights. This is done by permanently affixing grids to the outside of the window, placing a spacer bar between the glass, and affixing grids on the inside of the window.
  - **Grids Between the Glass** is another technique to simulate divided lights, but instead of placing the grids on the exterior of the window they are sandwiched between the two panes of glass.
  - **Interior Grids** is a technique that attempts to simulate divided lights, but this is usually not preferable because the interior grids often fall out or get misplaced, resulting in a mish-mash pattern of grid styles.
- ❑ **Glass type:** The type of glass used in the window.
  - Single versus multiple pane. Original windows have one pane of glass; most modern windows have two panes of glass for improved energy efficiency.
  - Some windows are coated with materials in an attempt to improve their performance, for example, “Low-E” Glass. This often causes a visual change – Low E glass can appear multicolored, as if an oily film is on them.