



WINDOWS

in Historic Downtown Montpelier

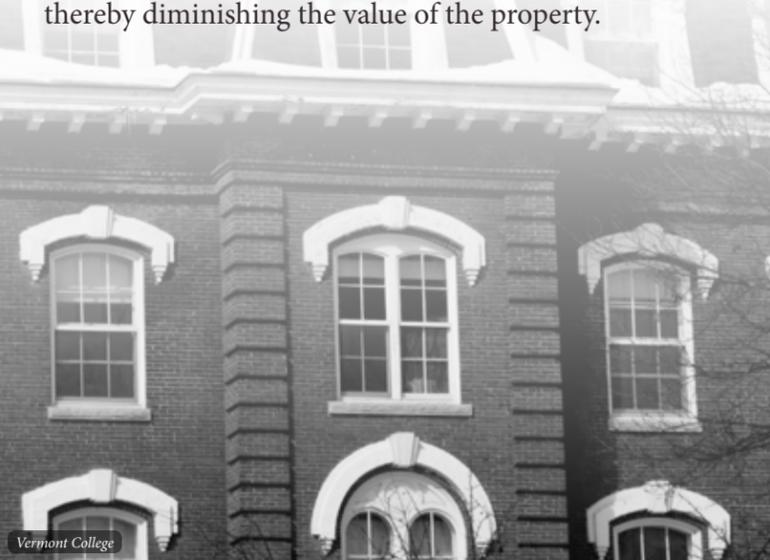
The City of Montpelier believes that ongoing maintenance of historic buildings, such as reasonable repairs and use of quality materials, extends the life of these structures and contributes to the vitality of downtown Montpelier.

In providing this document to local citizens, the Department of Planning and Community Development seeks to encourage the proper maintenance of historic buildings in the City and make information available to property owners well before the final design of a project, thereby saving both the owners and the City valuable time and money.

The Value of Windows

From a functional perspective, windows protect interiors from precipitation, wind, and fluctuating temperatures while providing natural lighting and ventilation. The value of windows is more than practical, however. Like the eyes on a face, they are an important architectural feature as well. Windows provide a sense of rhythm and balance to the exterior of a building, honoring the proportion of the structure. They add decoration and dimension that sets an overall tone for the residence or business.

Since windows play an integral role in the overall design of a structure, to alter them in any significant way - in particular, to change window size or materials - compromises the architectural character of the building, thereby diminishing the value of the property.



Vermont College

This specific Design Review Brochure is intended for the use of property owners within the City of Montpelier's Historic District who wish to add, remove, preserve, rehabilitate, restore, or reconstruct windows on their building.

Windows

Important Design Features of a Window

In addition to the size, location, degree of window recessing, and materials, the following are important features that impact the overall character of a window:

- **Glazing:** The glass portion of the window. Old windows tend to be single glazed (one pane), while newer windows are double glazed (two panes with air in between).
- **Hood:** The top portion of the outer window trim.
- **Light or Pane:** Individual pieces of glass hung within each sash. The reflective quality of the pane impacts the character of the window.
- **Muntin:** The narrow strip of wood that divides panes of glass to create a 'divided light' window. The number and spacing of the frames created by muntins, as well as their width and profile, contribute to the design of each window.
- **Sash:** The moveable frame into which individual panes are set.

The following are different styles of traditional windows that are common in Montpelier.

- **Double Hung:** This window has two independent sashes that move up and down.
- **Fixed or Divided Light:** This window has several muntins holding separate pieces of glass within each sash.
- **Casement:** This window has a single sash that opens from one side.
- **Awning:** This window has a single sash that swings open from the bottom.



17 State Street

Making Plans

Considerations Along the Way

Due to the important design elements discussed above, please consider the following guidelines when preparing to preserve, rehabilitate, restore, or reconstruct the windows on your building:

Appropriate Actions:

1. Maintaining existing windows and frames in their original materials, designs, and dimensions wherever possible. Repairing, reglazing, and weather-stripping old windows.
2. Maintaining consistent window size, style, and detailing across the entire building. This means matching the original design and materials when replacing old windows.
3. Installing wood storm windows or storm windows of other materials that match the color and design of existing windows. If aluminum, painting storm windows using proper surface preparation and colors that blend in with the existing windows and frames.
4. Recessing the new storm windows with the frame of the existing windows.
5. Keeping, maintaining, and repairing wood shutters and fabric awnings that are compatible with the building's historic character.

Inappropriate Actions:

6. Replacing old windows with new windows made from materials that do not match the style or historic character of the rest of the building.
7. Enlarging or reducing the size of old or original window openings.
8. Creating new or enlarged window openings in visible portions of a building, or in ways that clash with the size, spacing, and design of existing openings. Removing old wood shutters or fabric awnings and installing metal awnings or imitation shutters made from vinyl or metal.
9. Using removable, clip-on muntins.

"Green" it Up

Did You Know?

- A historic wood window, properly maintained and fitted with a storm window, can be just as energy efficient as a new window.
- More heat is lost through the roof and poorly insulated walls than through windows.
- Thirty percent of "replacement" windows need to be replaced within 10 years of installation. Historic windows, with care, can last over 100 years as they are designed to be repaired in perpetuity.
- The production of replacement windows containing vinyl or PVC is toxic and creates toxic by-products.
- Old windows, especially those built before the 1940s, are likely made of old growth wood that is much more dense and durable than the wood used today.
- According to some studies, it can take up to 240 years for new windows to pay for themselves through energy cost savings.
- With practice, repairing and maintaining your wooden windows can be both easy and inexpensive.

Rather than buy new windows, here are a few green tips to improve the energy efficiency of historic windows:

- **Check the lock:** The lock ensures that the meeting rails are tightly held together, reducing air flow.
- **Add weather-stripping:** Weather-stripping can increase the window's efficiency by 50 percent.
- **Use storm windows:** These can make your old windows just as energy efficient as new windows.
- **Check for condensation** which could signify a leak: Leaks can be reduced by replacing the weather-stripping, ensuring the sash is tight, and possibly caulking around the exterior of the storm window.

FOR MORE INFORMATION

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