

Windows for Historic Buildings



Windows: Your Questions Answered Replace or Repair?

If possible, repair the window. Keeping original windows helps maintain the integrity of your historic house, and they are typically more durable than any replacements you can buy today. You can repair a rope-and-pulley assembly fairly easily, for instance.

But if you must make extensive repairs to the sash or muntins (dividing bars), you will probably spend less if you buy a complete new window. Search for windows suppliers and contractors in our [contractor directory](#).

What kind of new window?

If you must buy new, select windows that match the materials and appearance of the original as closely as possible. You can have reproductions made and

reuse the old glass. Besides being vital to the integrity of the building, traditional windows demonstrate a kind of thinking you do not see much anymore: They are actually repairable and are built to last. If the glass breaks, you can simply replace the pane. With a modern window, however, you must replace the whole sash. (That's \$20 for glass and glazing putty from the local hardware store versus \$200 for a complete new clad-wood sash with high performance glass shipped from the manufacturer!)

How can I cut the heat loss?

More heat is lost through air leaks around the window sash and frames than through the single-pane glass of historic windows. Storm windows—which are historically correct—work very well to cut heat loss, and they will protect the window from weather and other damage. Adding weather-stripping—an easy, inexpensive job—will also greatly reduce the infiltration of cold air.

But wouldn't modern, insulated windows be much more efficient?

Actually, if you want to lower your fuel bills, you should not put money into replacing windows. To recoup an investment in new windows through lower fuel bills would take as many as 50 or 60 years! Long before you broke even you would have to replace the new windows. And long before you would need new windows, condensation will have formed between the double or triple panes of glass.

Division of State History architect Don Hartley chose to rehabilitate 21 existing windows in his 1916 house (a combination of double-hung, casement, and fixed "picture" windows) rather than install new replacement windows, because the payback was, in his words, "so dismal."

"I received bids averaging around \$12,000 for replacing the existing windows with a decent-quality clad-wood window with insulating low-e glass. It cost about \$5,000 to refinish and weather-strip my existing windows and install storm windows. The cost difference between replacing and repairing the windows was \$7,000."

"I use natural gas for space heating, water heating, and cooking, and my annual gas bill is around \$1,000. According to the U.S. Department of Energy, space heating accounts for about 36 percent of residential energy use, or \$360 per year in my case."

"Also, according to the Department of Energy, I could reduce my heating costs by about 25 percent by replacing my existing windows with new "energy

efficient” windows. With a savings of only \$90 per year, it would take more than 77 years to recoup the cost of the new windows.”

“By rehabilitating my windows, I saved energy, I saved money, and I maintained an important character-defining feature of my house.”

Some good resources

You can get more information from these links:

Window rehab, including weatherization – <http://www.nps.gov/tps/how-to-preserve/briefs/9-wooden-windows.htm>

<http://kshs.org/resource/windowrepair.htm> (videos on wooden window repair)

Window repair basics – www.oldhouseonline.com/8-tips-for-energy-efficient-old-windows

John Leeke’s inexpensive and VERY thorough “Restoration Reports” – <http://www.historichomeworks.com/hhw/reports/reports.htm>

Proprietary products for improving the performance of wood double-hung wood windows

- Advanced Restoration Technology, New York – <http://www.advancedrepair.com/index.html>
- American Heritage Window Rebuilders, SLC – <http://www.vintagewindows.com/>
- History Wood Window Restoration, Illinois – <http://www.woodwindowrestoration.com/index.html>