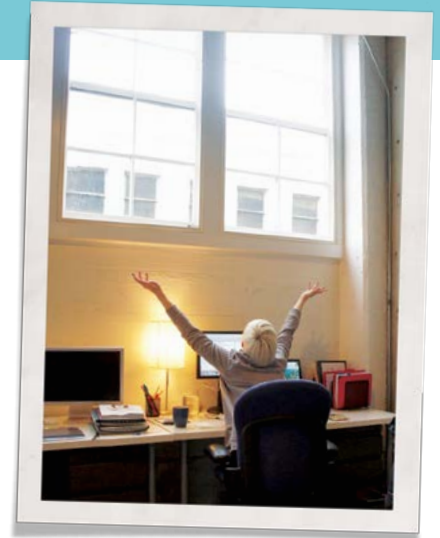




Why Historic Windows Matter

Windows are the soul of a building. They let in light and determine how those who live or work in the space see the outside world. Their placement and design determine the balance and beauty of a structure whether they're pre-revolutionary war casement windows or Queen Anne double-hung sashes.

A historic building with its original windows intact is a gem and can maintain higher property values than one that's had all its windows replaced. ^[1] Sadly, the window replacement industry has done a thorough job of convincing homeowners around the country they need to rip out and replace historic irreplaceable windows in the name of energy efficiency and saving money. People have taken out mortgages to buy new replacement windows they couldn't afford that ultimately hurt the value of their homes.



New Windows Aren't the Answer

Making a drafty home more energy efficient doesn't start with replacing windows. The U.S. Department of Energy has found "weatherization to be a more cost-effective option in decreasing energy bills." ^[2] And a report by the National Trust for Historic Preservation Green Lab determined original windows can be retrofitted to perform like high-end replacement windows, challenging "the common assumption that replacement windows alone provide the greatest benefit to homeowners." ^[3]

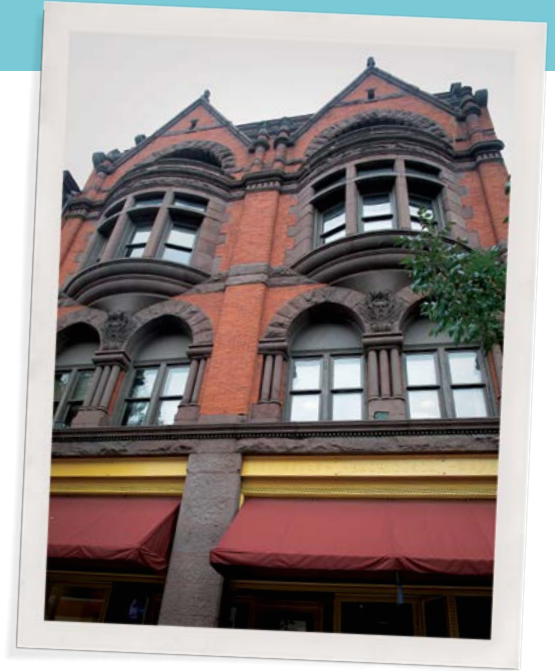
Keeping the original windows also preserves the integrity of historic structures. Since older homes have often settled with age, the windows have settled too and are out-of-square in a way that fits the building. But the reason to keep original windows goes beyond that. Historic windows are made of two extremely rare materials: old-growth lumber and handmade, wavy glass.

Durable Old Growth Lumber

Old-growth wood originates in unharvested virgin forests and can be 200-300 years old. ^[4] The trees grew slowly since there was limited light and competition from other trees, making the wood dense and rot resistant. Old growth wood will have many compact tree rings compared with newer wood that is second-growth or grew quickly in tree farms. If properly cared for, old-growth wood windows will last indefinitely.

The Beauty of Handmade Wavy Glass

Today, windows have optically-perfect machine made “float” glass, which was initially manufactured in the late 1950s. ^[5] Before then, window glass had been made the same way for centuries: it started with glass blown into cylinder form. Glass blowers would alternately blow and swing molten glass into a cylinder that was cut open to form a “shawl.” It was then placed in an oven slit side up where it wilted into a large sheet of glass. The “cylinder” process was mechanized after 1900 but still often had waves, ripples and air bubbles or “seeds.” The most clear top-grade glass was selected for prominent windows and the second-grade for secondary windows.



Restoring Old Windows

Historic wood windows sometimes need to be repaired and restored, which is far better choice than new replacement windows. However, since many contractors aren't schooled in the art of restoring historic wood windows, they may mistakenly advise homeowners their windows are beyond repair. Depending on the level of repair needed, a homeowner with extra time may be able to do it herself. ^[6] If the necessary work is more extensive, there are new resources for finding local window preservation experts. The Window Preservation Alliance lists people from around the country who can repair and restore old growth wood windows so they last into the future.

After Restoration: Preserving Windows into the Future

Improving the efficiency of old windows so they perform like new double panes is not difficult. Window inserts, exterior storm windows, caulking, weather stripping, and window treatments such as blinds and curtains can all add efficiency and comfort. Indow interior window insert are laser-measured to precisely fit out-of-square windows without a damaging track or magnetic system. They are edged in silicone and press into the interior of the window frame, making them nearly invisible.

Indow window inserts are particularly appealing to owners of historic homes because they keep the existing windows completely intact while making them perform like new high-end windows. A U.S. Department of Energy study found that Indow window inserts reduced heating, ventilating and air-conditioning costs in a Seattle home by 20 percent.



[1] Simon Aldridge, In: McKeough, Tim, “Market Ready.” New York Times. September 12, 2012.

<http://www.nytimes.com/2012/09/13/garden/old-windows-worth-keeping-in-a-historic-home-market-ready.html?mcubz=0>

[2] Gil Sperling, In: Wald, Matthew L., “Focus on Weatherization is Shift on Energy Costs.” New York Times. December 30, 2008.

<http://www.nytimes.com/2008/12/30/us/30weatherize.html?mcubz=0>

[3] Preservation Green Lab. Saving Windows, Saving Money: Evaluating the Energy Performance of Window Retrofit and Replacement. National Trust for Historic Preservation. 2012.

<http://forum.savingplaces.org/HigherLogic/System/DownloadDocumentFile.ashx?DocumentFileKey=715cccb6-9a30-d72d-e807-39d18f2cf52f&forceDialog=0>

[4] Sidler, Scott. “Why Old-Growth Wood is Better.” Web blog post. The Craftsman Blog 1 June, 2015. Web. 6 Sept. 2017

<http://thecraftsmanblog.com/why-old-growth-wood-is-better/>

[5] Hewitt, Alan M., Bock, Gordon. The Vintage House: A Guide to Successful Renovations and Additions. New York, 2011. Print.

[6] Myers, John H. The Repair of Historic Wooden Windows. U.S Department of the Interior. 1981. Preservation Briefs: 9

<https://www.nps.gov/tps/how-to-preserve/preservedocs/preservation-briefs/09Preserve-Brief-Wooden-Windows.pdf>