

Why you should say 'no' to vinyl windows

by Arrol Gellner

Published: January 13th, 2012



Arrol Gellner

Even in these days of belt tightening, replacement windows remain a virtual mania among homeowners. Take a walk through any suburb built before 1980 and you may find that half of the houses no longer have their original windows.

Alas, the usual replacements – extruded PVC or “vinyl” windows – are dismayingly easy to spot, with their wavy, cellophane-like glass and glaring, white frames.

Considering the impact that a window can have on a home’s appearance, replacing one shouldn’t be taken lightly. To wit: The last big window-replacement fad occurred during the 1960s, when that era’s perceived “modern” upgrade – sliding aluminum windows – were retrofitted in countless traditional homes, from Victorians to bungalows. The aesthetic fallout from this campaign is still painfully obvious in many neighborhoods.

In retrospect, of course, aluminum sliders installed in a traditional home are rightly seen as a glaring anachronism, and frequently hurt resale value.

Today, thanks to the same kind of offhand, insensitive and often unnecessary ways in which vinyl windows are installed in older homes of all eras, they’ve essentially become the modern-day version of the aluminum slider. And with a little historic distance, the aesthetic results will be equally regrettable.

Window replacement is often cannily advertised as a great energy-saving investment, which is probably why so many well-intentioned homeowners choose this route. And it’s true that switching from single-glazed windows to double-glazed ones will save roughly half the energy lost through the glass.

But here’s the catch: In the average house, windows typically account for a relatively small fraction of total heat loss. Hence, dollar for dollar, there are far more cost-effective ways to improve a home’s energy efficiency.

Upgrading attic insulation ranks first among them, because ceilings are typically the single greatest source of heat loss. The current standard for attic insulation is R-30, so if a house has appreciably less than this, adding insulation will be far more cost effective than replacing windows.

The same holds true if a furnace and ductwork predate 1980 or so. Modern furnaces now have thermal efficiencies in the neighborhood of 95 percent, versus typically dismal efficiencies in the 70s and older, gravity ones in the 50s. Because a furnace upgrade addresses the root of inefficiency, energy savings can be truly dramatic.

There is one more thing to consider: Aside from offering double glazing, there’s very little that’s green about vinyl windows.

Vinyl is, of course, the plastics industry’s more euphonious name for polyvinyl chloride, which a number of environmental authorities consider to be the most toxic plastic in the environment. Bury it in a landfill, and it just sits there. Burn it, and it produces dioxin, a toxic chemical compound that is a known teratogen, mutagen and carcinogen.

The bottom line is that homeowners should think twice about replacing windows with vinyl ones for energy-efficiency reasons alone. Chances are good that simpler upgrades without detractive qualities will provide more bang for the buck.

Arrol Gellner is a California architect, college teacher and syndicated columnist who writes about architectural issues.

©2012 Arrol Gellner

Distributed by Inman News