

Preservation: As Green as it Gets

Part II

In Defense of Wood Windows

By Lin Team, HSA Preservation Committee Co-chair

The previous Preservation Reporter article “Preservation: As Green as it Gets,” dealt with the concept of “embodied energy,” that is, the energy resources already invested in existing buildings. Preservationists affirm that the emphasis on saving old buildings is truly a conservation measure, a timely approach to global warming and the need for sustainable living. Any new construction proposed to replace an older structure should be examined carefully in light of the stewardship of resources involved when embodied energy is wasted.

Historic preservation may seem to be focused on the past, but anything that conserves the earth’s limited resources is building for the future. The Heritage Society is at work promoting the conservation of historic homes and other buildings as a matter of stewardship of our environment as well as our history and culture.

Continuing that subject, we report on our participation in the city’s new Energy Efficiency Retrofit Task Force, which was created to “consider, identify and recommend an ordinance to implement the Austin Climate Protection Plan as it pertains to energy efficiency retrofits and upgrades to existing buildings.” The committee will be making recommendations for basic efficiency outcomes for single-family, multi-family and commercial properties. They will look at ordinances adopted by other cities such as Boulder, CO, Berkeley, CA, and Burlington, VT, that require sellers of existing and new properties to invest in modifications for energy efficiencies such as ceiling, pipe and wall insulation, low-flow toilets, and weather-stripping, prior to selling.

Controversy erupted when the city of Boulder’s Historic Preservation policy of retention of historic windows and doors clashed with the suggestion they be replaced with new “energy efficient” products. In the end, the city decided that the purported energy savings weren’t great enough to justify allowing the removal of historic resources. The city conducted an extensive review of energy efficiency studies, and their report can be found at <http://www.ci.boulder.co.us>.

Preservation Economist Donovan Rypkema, speaking at the Heritage Society Awards Luncheon last fall, addressed the specifics of residential energy-efficiency. He dramatically disputed the popular notion that replacing windows is a worthwhile means of conserving energy, stressing these points:

1. The vast majority of heat loss in homes is through the attic or uninsulated walls, not windows.
2. Adding just three and one-half inches of fiberglass insulation in the attic has three times the R factor impact as replacing a single window with the most energy efficient window.
3. Properly repaired historic windows have an R factor nearly

indistinguishable from new, so-called Aweatherized@ windows.

4. Regardless of the manufacturers= Alifetime warranties,@ 30 percent of the windows being replaced each year are less than 10 years old. (NB: This is because the seal between the panes gives way, windows fog up, and there is no way to repair them so they must be replaced.)
5. One Indiana study showed that the payback period through energy savings by replacing historic wood windows is 400 years.

Austin's task force has just begun its work and Executive Director Jacqui Schraad will represent the Heritage Society there. She will encourage a comprehensive approach to energy assessment, one which includes consideration of the value and stewardship of embodied energy in existing buildings, as well as the economic interests of low-income owners and others who might consider demolition more desirable than modification for resale.