

PRESERVATION IS GREEN:

SUSTAINABLE DESIGN AND HISTORIC PRESERVATION

PRESERVATION IS GREEN!

Both the environment and cultural heritage suffer when buildings are treated as disposable.

- Tristan Roberts, *Environmental Building News*, January 2007.

Facts:

1. Every year, Americans generate 124 million tons of debris from demolished buildings alone. – *National Trust for Historic Preservation*
2. Older buildings on average are built with better quality, more materials and longer lasting construction methods.
3. Historic buildings have “embodied energy.”
 - a. Energy has already been expended to make materials.
 - b. Embodied energy may represent as much as 30% of the total energy used to create, operate and maintain a building over its lifetime. – *Environmental Building News*, January 2007.
 - c. The materials and workmanship in existing historic buildings may be difficult or impossible to recreate in today’s economy.

WHAT CAN YOU DO WITH YOUR HISTORIC HOME ?

1. Historic buildings were often constructed with energy saving design features, such as operable exterior double hung and interior transom windows that are designed for cross ventilation, high ceilings, ceiling fans, porches and awnings, etc. In order to reduce energy usage, it is important to maintain and use these features, or uncover them if they have been covered by previous renovations.
2. In older homes, air infiltration may result in greater energy loss than lack of insulation. Prior to insulating your home, take the following measures:
 - a. Insulate at window and door jambs, install weatherstripping, repair trim, install thresholds at doors, and caulk where needed at openings to stop infiltration.
 - b. Install dampers and draft stops in historic fireplaces.
 - c. Install dryer vent seals that open only when your dryer is in use.
3. Other ideas for saving energy without negatively affecting historic value of your home:
 - a. Install water saving plumbing fixtures. If your faucets have historic value, then simply installing a faucet aerator can help save water.

Myths:

1. The LEED certification process is not compatible with historic preservation.

In fact, LEED for new construction awards up to

3 points for reuse of a building. In

order to gain all three points, it is necessary to reuse the building shell and 50% of the building’s non-structural interior.

2. Secretary of the Interior Standards are not compatible with sustainable design practices.

In fact, the Secretary of the Interior Standards for National Register Buildings allow for buildings to be evolving artifacts. An example is adaptive reuse.



741 Lincoln Avenue

- b. Use compact florescent bulbs in lieu of incandescent bulbs in your light fixtures.
 - c. Install high-efficiency appliances (look for the Energy Star rating).
 - d. Install ceiling and whole house fans to help cool the house at night.
 - e. Install wall insulation. This can be blown in from small holes near the top of each stud cavity so that historic plaster and/or siding can be preserved.
 - f. Insulate the attic, basement and crawl space. 20% of a home’s energy costs is a result of heat loss in these areas. – *National Trust for Historic Preservation*
 - g. Insulate duct work that is outside of the insulated envelope of your home (for example, duct work that runs in attics above the insulation).
 - h. Install a programmable thermostat.
4. Tips for the exterior:
 - a. Paint your home a light paint color to reflect heat.
 - b. Plant evergreen vegetation on the north and west for weather protection and deciduous vegetation on the south for sun protection, especially in the summer.

WHY KEEP HISTORIC WINDOWS?

- Most heat loss occurs from ceilings, and from infiltration around frames. Have an energy audit performed on your home to determine sources of energy loss before assuming that removing windows will solve the problem.
- Most wood windows that are greater than 60 years old are constructed with old growth lumber, and are more long lasting than their modern equivalents.
- Vinyl replacement windows give off toxic byproducts when they are manufactured.

- On average, replacement windows take 100 years to pay for themselves in energy savings. -National Trust for Historic Preservation
- 30% of replacement windows are replaced again within 10 years. – National Trust for Historic Preservation
- A properly maintained single pane wood window with a storm window added to it can be just as efficient as a modern double paned low-e glass window.

HOW TO BRING HISTORIC WINDOWS TO MODERN ENERGY STANDARDS

- Keep exterior wood windows properly painted and repair loose or dried out glazing putty.
- Repair and re-glaze broken panes rather than replacing windows.
- Remove old paint if windows stick or are difficult to close.
- Mount storm windows on the interior or exterior. Storm windows mounted on the interior surface maintain the integrity of the home's exterior.



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ASSISTANCE AVAILABLE

The *Historic Preservation Commission's Design Review Committee* is available to offer limited assistance and recommendations on your Old Town home remodel project. Architects on the committee are available to give you advice on addition location, height and massing, second story step-backs, and possible energy saving options.

Committee members are able to give you ideas that may help to maintain your old home's character as you plan your addition.

This assistance is best taken early in your planning process. More limited assistance is available once your design is complete.

To avail yourself of this assistance, please contact Sean McCartney at 303.335.4591 or seanm@louisvilleco.gov.

The Historic Preservation Commission advises the City Council and City staff on preservation issues. In addition, the Commission oversees the process for properties in Louisville to be designated as local landmarks of historical relevance.

To find out about preservation incentives that are available to owners of historic buildings, please contact Sean McCartney at 303.335.4591 or seanm@louisvilleco.gov.

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