



Weatherizing Your Historic Home



New Hampshire Division of Historical Resources





Already A Step Ahead!



Older buildings were built to last, and many historic buildings are energy efficient. The U.S. Energy Information Agency has found that buildings constructed before 1920 are more energy-efficient than those built during the rest of the 20th century.





Already A Step Ahead!

In 1999, the General Services Administration examined its building inventory and found that utility costs for historic buildings were **27% less than for more modern ones.**

Built when heating and cooling were more difficult, many older homes incorporate passive energy-saving features, such as south-facing facades for solar gain, deep eaves for summer shade, and cross-ventilating halls and windows.





Already A Step Ahead!

**The energy performance
in these older homes can
be increased even further
with basic, modern
weatherization
techniques.**





Maintaining Value

New Hampshire's historic homes and neighborhoods are familiar and comforting sights for residents and visitors. They are irreplaceable resources, and thoughtful care is needed to preserve them.





Maintaining Value



The craftsmanship and materials - heavy timbers, granite, handmade bricks, old-growth wood – used to construct historic homes are unavailable today, or only available at great cost. When lost to a landfill, they are gone forever.





**Appropriate weatherization measures
can both provide energy savings and
protect a property's historical and
economic values.**





Where to Begin?

- **Where is the most energy lost in your home?**
- **See also “trouble spots” from the US Department of Energy at www.washingtonpost.com/wp-srv/artsandliving/homeandgarden/daily/graphics/escape_routes_012507.pdf**



Energy Saving Tips

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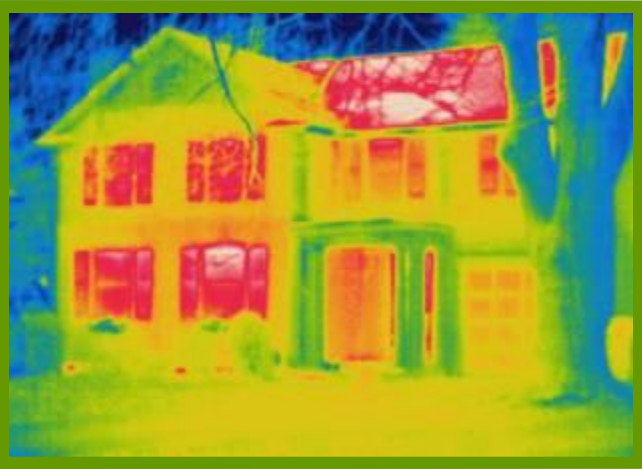
The National Trust for Historic Preservation is a private, nonprofit organization dedicated to saving historic places and revitalizing America's communities.

The Trust has led in promoting the links between sustainability and historic preservation. To learn ten steps to greening your home while maintaining its historic value, visit

www.preservationnation.org/issues/sustainability/green-home-tips



The National Trust: Wood Windows



Research shows that most traditionally designed wood-frame buildings lose more heat through the roof and un-insulated walls than through the windows.

Studies also show that historic wood windows, properly maintained and fitted with a storm window, are just as energy efficient as a new window.



A repaired wood window can easily last more than 100 years. The life of a new window is far shorter.

Manufacturing, transporting and installing replacement windows consumes large amounts of energy.

Many historic wood windows can be repaired, especially those dating before 1940. These were constructed with individual parts, each of which can be repaired or replaced. The wood is more dense and of a higher quality; it is generally more rot and warp resistant.



More Online Resources

The National Trust continually expands its weatherization information at www.preservationnation.org/issues/sustainability.

National Trust Window Tip Sheet

<http://www.preservationnation.org/issues/sustainability/additional-resources/July2008WindowsTipSheet.pdf>.

The latest issue of Preservation magazine is devoted to saving energy and going green. It is available on newsstands or online at

www.preservationnation.org/magazine.

Preservation Brief 3: Conserving Energy in Historic Buildings

www.nps.gov/hps/tps/briefs/brief03.





New Hampshire Preservation Alliance

The NH Preservation Alliance is the state's non-profit preservation organization. Check its web site for more guidance on historical buildings, saving energy and experienced contractors for weatherization projects:
<http://www.nhpreservation.org/html/housefaq.htm>

What do historic preservation, economic stimulus and "green" have in common? Read
http://www.nhpreservation.org/html/news_200.htm





The Role of Recovery Funding

The American Recovery and Reinvestment Act of 2009 provides millions of dollars for income-eligible NH property owners to weatherize their homes.

The NH Office of Energy & Planning is administering this program: (603) 271 2155 or www.nh.gov/oep.





National Preservation Act & Section 106

- **All federally funded, licensed, or permitted projects are subject to review under Section 106 of the National Historic Preservation Act of 1966**
- **The American Recovery & Reinvestment Act of 2009 (ARRA) provides federal funding for weatherization projects.**





What is Section 106 Review?

- **A consultation process that identifies important historic properties so that adverse impacts can be avoided, minimized, or mitigated.**
- **In New Hampshire, the NH Division of Historical Resources (DHR) works with applicants and agencies to complete Section 106 reviews.**
- **All ARRA projects and programs must comply with Section 106.**



Section 106: Four Basic Steps

- 1. Determine whether historical or archaeological resources are located within the project area. If needed, qualified consultants complete surveys for Section 106 projects.**
- 2. The DHR and the federal agency determine whether the project will have an effect on identified resources.**





Section 106: Four Basic Steps

3. DHR and the federal agency determine whether the effect is adverse. If so, they work with the applicant to see whether the project can be changed to avoid or minimize adverse effects.

4. If adverse effects cannot be avoided or minimized, the federal agency and DHR work with the applicant to create a mitigation package to address impacts.





Working with the DHR

**New Hampshire's State
Historic Preservation Office.**

- **To initiate review, Community Action Programs should complete and submit a Request for Project Review Form at www.nh.gov/nhdhr/review.**
- **Early and accurate submissions = quick and efficient reviews.**





Projects that protect historical resources, or create little or no impacts, move very quickly through Section 106 review.





Weatherization measures that protect a historic home's value, rather than present adverse effects during Section 106 reviews:

- **Sealing cracks and adding insulation are the most efficient ways to weatherize your home.**
- **Add weather stripping to all doors and windows and install foam insulation gaskets under cover plates on all outlets and switches.**
- **Seal the basement by insulating bulkhead doors leading to the basement, sealing all cracks in the foundation wall, inside and out.**
- **Add insulation to attic floor and floors above unheated crawlspaces and basements. Vapor barriers should always face the heated space.**



More Measures

- **Seal and insulate all attic door hatches.**
- **Add exterior storm windows to single glazed windows. Make sure they are properly sealed and caulked and have weep holes at the sill to allow moisture to escape.**
 - **Add compatible storm doors.**
- **Wrap all hot water pipes and air ducts. Turn off water to exterior faucets, drain, and cover taps with an insulated cover.**
- **When not in use, shut fireplace flues tightly and fill the throat with insulation if the fireplace is not often used.**





Also to Keep in Mind...

- **Agencies should respond quickly to requests for additional information**
- **For more complicated projects, agencies may need to hire professional cultural resource consultants.**
- **Cultural resource mitigation may be needed if weatherization goals cannot be achieved without adversely affecting historical resources.**





For More Information on Project Review under the American Recovery & Reinvestment Act of 2009

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NEW HAMPSHIRE DIVISION OF HISTORICAL RESOURCES

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