HISTORIC HOMEOWNER WORKSHOP

Presented by:



Saturday, March 21, 2015 ~ 10:00 am Library Headquarters, 1201 Caroline Street

FREE Event ~ Open to the Public

For more information - 540-371-4504

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Introduction

Your Home's Historic Value

As the owner of a historic home, you are the **caretaker** for a piece of history. Your job is to maintain the building, so it can be passed on to future generations.

"Not everything that can be counted counts, and not everything that counts can be counted."

-William Bruce Cameron

You may want to change your home for a variety of reasons, but what is best for the house? There is an intrinsic value to a historic home, and you may diminish that value with alterations.

Adapted Definition of Intrinsic Value from Investopedia.com:

The actual value based on an underlying perception of its true value, including all aspects, in terms of both tangible and intangible factors. This value may or may not be the same as the current market value.

When in doubt, ask yourself, "Is this change reversible?" If later owners want to return it to its original form, can they?

Hiring a Professional

Architects

If you are going to be doing a large renovation of your home or building an addition, consider hiring a professional architect. Their insight into design and the rhythm of buildings will be well worth the investment. An architect that is sensitive to historic homes will produce a better product if you yourself are historically minded. See the section, "Additions & Large Repairs" for more information on the design basics of larger projects.

You and your family will be looking at this work everyday, make sure it is the best it can be. Having two professional opinions, the architect and the contractor, can be invaluable.

Contractors

It is best to hire a contractor or company that has substantial **experience** working with historic buildings. Historic buildings have different needs than buildings built today. The materials are different, the building systems are different, and if they are not treated as such, damage and a decrease in historic value can occur.

Contractors that have experience with older homes will know what **resources** to go to for the unique needs of historic homes. They have built connections with suppliers and craftspeople, and have years of experience working with the historic buildings.

Ask anyone doing work on your historic building for references, preferably references corresponding to projects dealing with historic buildings of similar age, materials, or style to your home. Are they familiar with the Secretary of the Interior's Standards? (See link below) Good contractors will happily send you to see their work and talk to prior customers. How do their projects look 5, 10, 15 years later? Have they held up over time? Quality materials and good workmanship will last and should be considered when comparing bids.

Ask potential contractors about a job they did where there was a problem. What did they do to rectify the problem? Was the client happy with the outcome? Ask for the name and contact information of a prior client such as this. Everyone makes mistakes—it is how they fix them that matters the most.

Also ask for:

- Proof of Liability Insurance
- License—What class are they? Is it an appropriate class for the scale of the job?
- Listing with the Better Business Bureau
- Membership in Professional Associations
- Proof of Workman's Compensation (If more than two employees)

If a contractor is licensed, you can go to www.dpor.virginia.gov/LicenseLookup/ to see how long he or she has had a license, when it expires, if there have been any complaints, etc. You can also file a complaint if you have a problem with a contractor.

It is illegal for someone to do work on your home without a license and unwise for you to hire him or her without one.

Before hiring a contractor it is your responsibility to do your research to know what you do and do not want.

Once you hire a quality contractor and begin work on a project let him or her do their job, but it is perfectly acceptable to ask questions. A good contractor should have **no problem** explaining their work or processes to a homeowner.

When hiring a contractor to work on your historic home, be sure to ask the following questions

- What other historic buildings have you worked on?
 - o How long ago did you work on it?
 - Which ones have materials similar to those you are proposing for my home?
- Who are some references that I can contact?
- THE #1 OUESTION TO ASK YOUR CONTRACTOR
 - o "Give me an example of a job you did where there was a problem, and tell me what you did to rectify the problem."
 - If possible, get the name and contact info of this customer to see how it was handled.
- Can you bring me copies of your license and insurance?

Online Resources

Secretary of the Interior's Standards for Rehabilitation codified as 36 CFR 67 http://www.nps.gov/tps/standards/rehabilitation.htm

Virginia Department of Professional and Occupational Regulations http://www.dpor.virginia.gov/consumers/

What Are Your Project Expectations?

Decide on what you expect **before** meeting with contractors and salespeople so you have a firm answer for their questions and cannot be pushed around. Hold true to your project vision. Such planning will also reduce miscommunication.

Do not allow anyone to rush you through the planning process of a project—this is *your* home.

But remember to be realistic. You are sure to be disappointed if you are not.

What is most important to you about the work you are planning to do on your home? What is your goal?

A DISTINCT LOOK

- Historically accurate to a specific time period in the building's history?
- o Has a historical "feel"?
- A modernized version of a historic home?
- o Unique details?
- o Trim, light fixtures, and hardware that aren't commonly seen?
- o Doesn't look like a new home built in the latest building boom?

PRICE

- o Does the project budget matter the most?
- Are you trying to do more than you reasonable have the money to do?
- O Decide what you are willing to spend money on **before** you begin the project.
 - Include an allowance to go over budget. Because you will.
 - Expect the unexpected in older homes.

QUALITY

- Historic buildings have stood the test of time; they have been here for 200, 100, or 75 years. A commitment to continuing quality work will keep them here for many more generations.
- o You get what you pay for. End of story.

Online References

Secretary of the Interior's Standards for Rehabilitation codified as 36 CFR 67 http://www.nps.gov/tps/standards/rehabilitation.htm

Preservation Brief 18—Rehabilitating Interiors in Historic Buildings: Identifying and Preserving Character-Defining Elements by Lee H. Nelson, FAIA http://www.nps.gov/tps/how-to-preserve/briefs.htm

Responsible Re-use of Building Materials

One person's trash is another's treasure.

The light fixture you no longer want may be exactly what someone else is looking for. You may need just one more drawer pull to make a set.

Architectural salvage yards and stores such as Habitat ReStore are just what you need.

*Re-use responsibly. HFFI does not condone the stripping of historic buildings for the benefit of architectural salvage sales.

- Donate fixtures, cabinets, hardware, etc. to Habitat for Humanity's ReStore
 - o Fredericksburg ReStore 4755 Jefferson Davis Highway, Fredericksburg, VA 22408 www.fredhab.org/site/restore
- Visit architectural salvage yards to find unique details and hardware
 - Fredericksburg, VA
 - Salvage Gals 109 Deacon Road 540-310-0001
 - o Richmond, VA
 - Caravati's Inc. Architectural Salvage www.caravatis.com
 - o Front Royal, VA
 - Maggie's House Parts Farm, LLC/Architectural Old www.oldhouseparts.net
 - Orange, VA
 - Salvagewrights, Ltd. www.salvagewrights.com
 - Roanoke, VA
 - Black Dog Salvage www.blackdogsalvage.com
- Post on Craigslist
- Contact HFFI if can't find a home for a no longer needed item; we will try to find a recipient through our Facebook page or newsletter if time permits. 540-371-4504

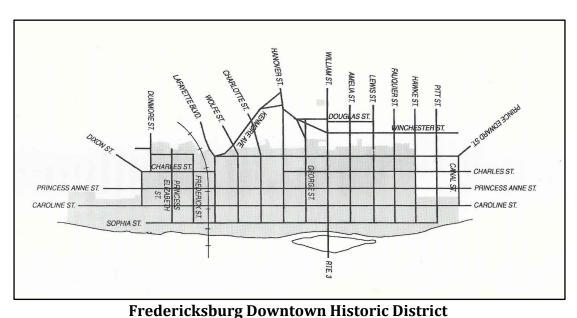
A preservation-minded project always tries repairing before replacing.

Historic Districts

What is an Historic District?

In 1966, Congress created the National Register of Historic Places as part of the National Historic Preservation Act. The National Park Service administers the National Register of Historic Places as an evaluated group of historic properties that are listed as sites, districts, buildings, structures, or objects. Whereas we tend to look at individual buildings and structures, when there is a geographic area with a "significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development," you have a historic district.

Districts may have national, state, or local significance. Their evaluation and recognition should provide some level of preservation and protection for the qualities determined to be historically significant. Historic districts listed in the National Register only receive consideration when projects receiving federal funds effect or impact the historic property. Local recognition and accompanying laws, reviews, and permits must be in place to provide local protection.



Map does not include the Mill Sites District or Washington Avenue District
Image Courtesy of City of Fredericksburg

Fredericksburg (Downtown) & Washington Avenue Historic Districts

Fredericksburg has two National Register historic districts, which are locally recognized as well (See map of historic districts). The City of Fredericksburg Community Planning and Building Department administers the local ordinance that provides protection for some aspects of the districts.

Exterior changes to the primary structure visible from the public right-of-way or sidewalk, may require a Certificate of Appropriateness (COA) from the City's Architectural Review Board (ARB).

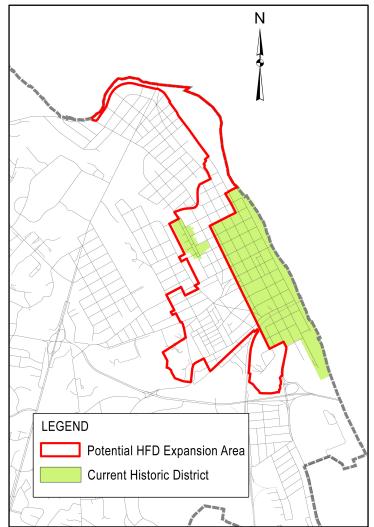
The following changes require ARB review:

- Siding and/or roof replacements with a different material (not replacement-in-kind)
- New windows
- Additions
- Alterations to front porches
- Alterations to decorative details
- Removal of contributing structures in the historic district
- New construction on a vacant lot within the historic district
- Signs
- Change(s) to character-defining features

If in doubt, it never hurts to review your proposed changes with the Fredericksburg Community Planning and Building Department at (540) 372-1179.

You can also get assistance by working with ARB in the early phases your project. If you think you may need a COA, then the best practice is to get approval from the ARB and avoid problems in the future.

Remember: When you bring your project to the ARB early, you will hear from experienced professionals – architectural historians, architects, contractors, and real estate agents, etc. – who have an interest in the value of your home and neighborhood.



Current and Potential Historic Fredericksburg DistrictsImage Courtesy of City of Fredericksburg

Potential National Register Historic District Expansion Areas

In a city as historically significant as Fredericksburg, existing districts may be expanded or new districts considered for nomination. Until then:

• Areas that are eligible for listing in National Register of Historic Places are not subject to review by the ARB or COA, but you may still need city permits, check with city offices.

Historic District Benefits

- Historic districts often experience an increase in property value.
- Owners in historic districts may apply for historic tax credits (if all other criteria are met).
- Increased community awareness of the overall landscape and sense of place.

Other Features to be Aware of in a Historic District

Historic districts are woven together by streets and sidewalks, trees and landscape, fences and streetlights. The uniform or uneven setback of the primary structures, the location and width of front walks, the presence or absence of side yards, all **contribute to the character of the district** and are part of the cultural landscape of the city. Even if there is no official review of these items, be aware of how they contribute to the streetscape and be vocal about their protection. Before removing or changing any of these character-defining features, be considerate of how your yard and property contributes to the entire district.

Online References

National Park Service - National Register of Historic Places Fundamentals http://www.nps.gov/nr/national register fundamentals.htm

City of Fredericksburg Community Planning and Building Department http://www.fredericksburgva.gov/index.aspx?nid=813

Local and National Register Historic Districts – National Trust for Historic Preservation (National Trust)

http://www.preservationnation.org/information-center/saving-a-place/land-conservation/local-and-national-register.html

Advantages of Establishing a Historic District – National Trust

http://www.preservationnation.org/information-center/saving-a-place/historic-districts/what-are-the-advantages-of.html#.VPXlGGZ3p6k

Additions & Major Repairs

As owners of historic homes, what exactly are we protecting and preserving?

Fredericksburg's historic buildings belong to the continuum of history spanning from the 18th century to the present day, and do not belong to a single period or style.

Change is an important part of the record, because tastes and techniques changed, and buildings have been expanded and even embellished over time.

The goal is to *preserve the historic record* (including changes made over time) of the forms, materials, and workmanship, as well as the underlying socioeconomic and cultural history of the town.

Understanding the contributions of your property to the historic record and its "character-defining features" are the first and most critical steps in being a good steward of it.

- Consider the factors that made you purchase your home
 - Convenient location, great neighboring houses, walkable streets, gracious porch, beautiful facades, wood floors, big wide staircase, rich details, big windows, lots of potential
 - These are easily identifiable and are features worth maintaining and preserving.
- Consider, also, some of the "features" you might appreciate less
 - o Small windows, windows where you don't want them and vice versa, small rooms, low ceilings, not enough closets, drafty rooms, no insulation, poor or no mechanical systems, deteriorating wood, missing details, etc.
 - These things you may want to address.
 - Change can keep structures in continuous use and economically viable, but changes should not allow a loss to its historical record.

Context

Your home is a piece of something much larger.

- Start with the neighborhood or block: What do you see?
 - Are the houses/buildings on the block similar in size to one another?
 - Where do residents park their cars?
 - What do the structures have in common with one another?
 - o How do they differ?
 - o Do the buildings seem to have been built at the same time?
 - o Is there a prevalent architectural style?
 - o Can you see a rhythm in how far the buildings are set back from the street?
- Now look closer at the details.
 - o Do they all have front porches?
 - O What kinds of materials are used?
 - What are the windows, doors, railings, shutters, trim like?
 - Is there uniformity?
 - Are there standouts?
 - o Is there evidence of changes made to other buildings on the block?
 - How would you characterize the improvements?

Alterations

Exterior alterations that change a character-defining feature of a building are discouraged; however, creative solutions may be possible. For example, rather than infilling an existing window, exterior shutters may be closed, the sash left in place, and finishes added to close up the window from inside (a "blind window").

Additions

Should you choose to add on to your historic home, these steps are critical:

- Work in context, considering the neighborhood, block, and the house itself.
- Consider the scale and proportions of the existing structure; ideally, the addition should be subservient in form, and set back from and lower than the existing construction.
- Avoid interrupting or obscuring character-defining architectural elements such as roofs, cornices, and chimneys.
- Construct the addition with minimal loss of original material so that the new construction could be removed in the future and the original structure restored.
- Consider the scale and proportions of window and door openings, cladding, and trim.
- Clearly differentiate between the historic structure and the addition, while at the same time, take cues from the original structure for proportions, rhythm of openings, cornice lines, etc.

• New construction methods and materials may and possibly should be modern. Contemporary design aesthetics are often compatible if they are in keeping with the scale, massing, rhythm of openings, etc.

Maintenance and Repairs

Maintenance is critical to protecting any building. There is **no such thing as a maintenance-free building**, and keeping the water out, broadly speaking, requires constant vigilance, from the rooftop to the foundation. In all of its forms, liquid, gas, and solid state, **water is perhaps the largest contributor to decay in homes today**. Anything that compromises a building's ability to keep the water out—whether it's failing roofing, clogged gutters, or ill-fitting or broken windows—needs to be addressed in a timely manner. Typically, wood surfaces are protected by paint, which needs to be maintained.

Materials and finishes have life spans, and there are instances when replacing materials is appropriate. It is important to replace with like materials, particularly on primary facades and main interior rooms, accurately reflecting dimensions and details. It is critical to use tradespeople skilled in the particulars of the material being replaced, especially when the material (slate roofing, wood roofing shakes) is no longer widely used.

Replacing some features can be more nuanced.

- It is possible that the siding on your home has been replaced once before, with wood or imitative wood products.
 - Sometimes these materials were not properly installed or did not hold up to the elements either; sometimes, original trim at doors, windows, and corners was lost.
 - o In these instances, replacement "in kind" may become more complicated, particularly if a clear record of original detail has been lost.
- Replacing glazing putty, sash cords, and paint can repair windows that are even relatively intact. Assuming proper maintenance, the windows will last another 50+ vears.
 - High-quality storm windows can improve energy efficiency and, when installed on the exterior, offer a measure of protection for the old windows.
 - Be sure to not over seal and plug up weep holes. These are necessary to clear condensation.
- When building an addition or replacing non-historic windows, it is possible to purchase or make replacement wood windows with either single pane or insulated glass.
 - Windows with insulated glass are constructed differently than glazed wood windows and are therefore different in appearance; they sometimes have "grilles" applied to the exterior or sandwiched between layers of the glass to mimic wood muntins typically made of aluminum or vinyl.

- Window options also exist that have dimensional muntins (molding pieces that divide individual panes of glass). See "Windows" section of this booklet for more information.
- Replacement wood windows need to mimic the size and proportions of the original windows. Many modern windows boast low-E insulated glass and features to make cleaning and operating them easy, but are unlikely to last as long.

Online Reference

Excellent Website - Highly Recommended

"Walk Through," A step-by-step guide to identify a building's character—National Park Service

http://www.nps.gov/tps/education/walkthrough/

Preservation Brief 14—New Exterior Additions to Historic Buildings: Preservation Concerns by Anne E. Grimmer and Kay D. Weeks http://www.nps.gov/tps/how-to-preserve/briefs.htm

Preservation Brief 17—Architectural Character—Identifying the Visual Aspects of Historic Buildings as an Aid to Preserving their Character by Lee H. Nelson, FAIA http://www.nps.gov/tps/how-to-preserve/briefs.htm

Windows

The removal of historic windows and installation of vinyl replacement windows is a rampant and discouraging problem in the United States—predominantly due to the slick marketing and overblown promises that come from flyers, sales ads, and convincing salespeople. Vinyl replacement windows have a very short lifespan when compared to historic wooden windows. The "savings" that homeowners are promised won't be realized before replacement is likely needed.

Historic windows are an important and contributing feature to a historic home. Remove them and you are decreasing its historic and aesthetic value.

The Numbers

- Only 10 to 12 percent of heat loss in a house is through the windows.
 - o Most is lost through the roof, walls, and fireplaces.
 - See *Energy Efficiency* section for more information.
- It takes 126 times the energy to manufacture an aluminum window as it does to repair an existing wood window.¹
- 30 percent of "lifetime warranty" windows are replaced within 10 years.¹
- Consider what window upgrades will bring you the best value for your money?

Wooden parts of historic windows can be replaced.

Vinyl and aluminum cannot.

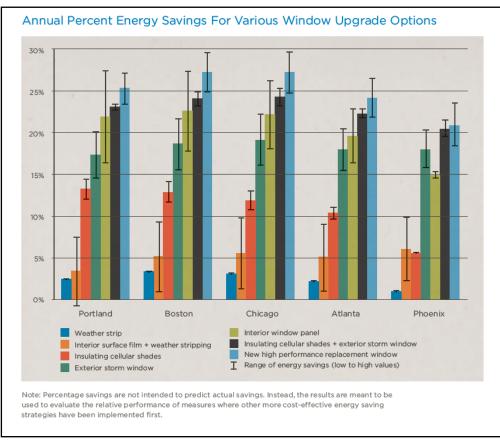


Image credit: National Trust for Historic Preservation/Preservation Green Lab study.

Saving Windows, Saving Money: Evaluating the Energy Performance of

Window Retrofit and Replacement

Green or Not-so-Green?

- Energy efficiency—is it everything it promises?
 - o In 2012, the Federal Trade Commission charged **five companies** that sell and make replacement windows with **deceptive energy efficiency and cost savings claims**.²
- Policies and funding may promote replacement over repairs despite what **research** has proven to be the most effective and economical.
- "Green"—is definitely *not* sending repairable windows to the landfill while replacing them with vinyl windows that are not likely to last more than 35 years!
 - o 30% of our landfills are construction waste.
- Be wary of anything "Maintenance Free"; it often means it cannot be repaired and will end up in the trash.
 - o 80% of current window business done by window replacement contractors is replacing windows that are only 15-20 years old.

Getting Started

- Simple ways to start decreasing window drafts
 - o Caulk any gaps or cracks around the window
 - o Apply weather stripping
 - See **Preservation Green Lab** study for more information (link below).
- Additional ways to reduce drafts without replacing your historic windows
 - Storm windows
 - Interior storm windows
 - Exterior storm windows
 - Be sure to check with the Community Planning and Building Department for any necessary permits and approvals.
 - Custom-made storm windows can be purchased—they are low profile and are made to fit the dimensions of the window (even if its corners aren't "square").
 - Insulating cellular shades
- Reglaze windows
 - Easier to do than you might think!
- Basic wooden window restoration (re-tie weights, repair stops and sash) can be done by most dedicated DIY homeowners. It just takes time. (Window restoration specialists can also be hired to complete the work.)

Online References

Press Release—"New Study Shows Window Retrofits Provide Significant Energy Savings at Less Cost Than Full Window Replacement"

 $\frac{http://www.preservationnation.org/who-we-are/press-center/press-releases/2012/new-windows-study.html \#.VLw_NCd3p6k}{}$

Building Information Center: Windows—National Trust for Historic Preservation http://www.preservationnation.org/information-center/sustainable-communities/buildings/weatherization/windows/#.VLw_Hyd3p6k

"Saving Windows, Saving Money: Evaluating the Energy Performance of Window Replacement and Retrofit"—Study by Preservation Green Lab

http://www.preservationnation.org/information-center/sustainable-communities/green-lab/saving-windows-saving-money/

Preservation Brief 9—The Repair of Historic Wooden Windows by John H. Myers http://www.nps.gov/tps/how-to-preserve/briefs.htm

Historic Wood Windows Tip Sheet—National Trust for Historic Preservation http://www.cityofboston.gov/images_documents/NTHP_RestoringWoodWindowsTipSheet_tc m3-17737.pdf

Historic Windows and Energy Efficiency—Preservation North Carolina by Sarah Donahue Wolff

http://www.presnc.org/historic-windows-energy-efficiency/

Energy Efficiency: Windows—Common Sense Preservation http://www.commonsensepreservation.org/workshops/windows

Custom-madehigh-qualitystormwindows—AlliedWindowhttp://www.alliedwindow.com/index.html

Custom-made high-quality wood replacement windows—Green Mountain Window Co. www.greenmountainwindow.com/

Suggested Books

To learn more about making historic buildings more sustainable, read *Green Restorations*, by Aaron Lubeck.

To learn more about repairing and restoring your historic wooden windows, read *Window Preservation Standards* by the Window Preservation Standards Collaborative.

¹ Lubeck, Aaron. *Green Restoration: Sustainable Building and Historic Homes.* Canada: New Society Publishers, 2010. Print.

² FTC Fines for Deceptive Energy-Efficiency, Cost-Savings Claims." Green Remodeling. National Association of Home Builders. 2015. Web. http://www.nahb.org/generic.aspx?genericContentID=187732

HVAC

When installing a new heating or air conditioning system in a historic building, make sure it is a good fit with the building as well as with your needs. Ask questions to ensure you are getting **exactly** what you need and want.

Be clear about what you want and what your priorities are.

- Each house is unique and has different needs
 - Are the walls, attic, and crawlspace well insulated?
 - o What is the square footage/capacity?
 - o Is the airflow properly set up?
 - How much space is in the walls and between floors for ductwork if using standard duct system?
- General rules of thumb are not the best answer for a historic structure
 - A full study should be done that includes floor plan drawings, wall space, and existing ventilation.
 - Must consider:
 - Use of the space
 - Humidification
 - Air purification (optional)
 - Placement
 - Supply, register, and return air vents
 - Thermostat locations
 - o This isn't an estimate. It is a **study**.
- Priorities: What is most important to you?
 - o Price?
 - The aesthetics of how heating and cooling enters a room?
 - Keeping the temperature at a certain level? 65 70 75 degrees?
- There is a balance to the HVAC system in each building. Remove an intake, vent, or radiator and it will affect the whole system.
 - o Additions or removal of walls may have been done without these things considered. Another reason for a full assessment before starting the project.
- If you have radiator heat in your home—KEEP IT!
 - Very efficient and can be run at a lower cost than most other heating systems when all factors are considered.
 - Do a study to determine what will actually save money before making changes. Will insulation cost less in the long run?

Reducing the Impact on Your Historic Home

If you are installing a new heating system or adding air conditioning, how can it be done without negatively affecting your historic home?

- Is there room for large ductwork in your walls? If not some options:
 - Ductless heating and cooling systems
 - Also referred to as mini-split, multi-split, or variable refrigerant flow (VRF) heat pump systems.
 - May not aesthetically match a historic interior—consider location carefully.
 - o High velocity systems take up less room in walls and ceilings.
 - Be sure to hire someone very experienced with the system.
 - If not designed and installed correctly, it will not work efficiently.
- Historic Integrity
 - o Minimize the intrusion of HVAC equipment and ductwork through careful placement in less historically significant areas of the structure. (Closets and basements can be convenient places for HVAC components without damaging more historically significant areas the structure.)
- Price Considerations
 - o Geothermal
 - Good sustainable option, low monthly cost after a large initial investment.
 - Still requires installation of ductwork and mechanicals, as well as maintenance to keep system in optimal operation.
 - Ground geology impacts installation
 - There are a variety of price levels in heating and cooling equipment, and they are complex electronic systems. Be aware of this if using price as your deciding factor.

Maintenance

- Have your system serviced regularly to ensure there is proper:
 - o Air flow
 - Charge
 - Voltage
- Semi-annual service and cleaning of your system (or annually if only used for heating)
 will keep it working properly and could save you money in emergency repairs or
 operating costs.
 - Most HVAC contractors provide discounted services and repairs to customers participating in a regular maintenance plan.

When hiring someone to work on the heating in your historic home, be sure to consider the following items.

- If doing a complete heating system replacement, ask whether they will do an assessment of the complete space.
- Make sure they listen to your priorities.
- If they come back with a price too fast, they may not have properly assessed their approach or your home.
- Select a contractor with experience installing HVAC systems in historic homes. Ask for and follow up on references.

Online References

Preservation Brief 24—Heating, Venting, and Cooling Historic Buildings by Sharon C. Park, AIA http://www.nps.gov/tps/how-to-preserve/briefs/24-heat-vent-cool.htm

Air Conditioning Contractors of America—Homeowner Resources http://www.acca.org/homes/

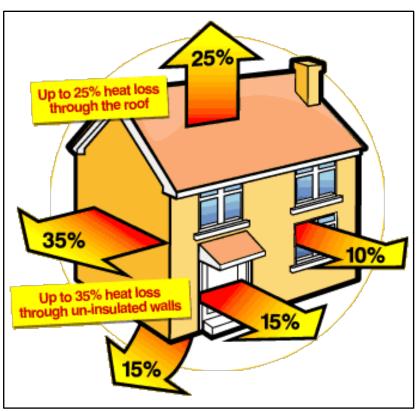
American Society of Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE)—Publications and technical information on HVAC in historic buildings http://www.ashrae.org

Energy Efficiency: Mechanical Systems—Common Sense Preservation http://www.commonsensepreservation.org/workshops/mechanical-systems

Energy Efficiency—Insulation

10 to 12 percent of a home's heat loss is through its windows.

Up to 35 percent can be the result of uninsulated walls.



Building Heat Loss

Image credit: Newcastle-staffs.gov.uk

Getting Started

- Windows are generally not the main culprit causing energy loss in a home
- Blower tests can be done to see where air leaks are located in a building
- Easy fixes to reduce drafts in your historic home
 - Weather stripping around doors and windows
 - o Sealing cracks around doors and window casings
- Effective, but relatively simple, ways to further reduce heat loss
 - Insulate attic
 - o Insulate basements or crawl spaces
- Spray foam insulation is **not good** for historic buildings
 - o It conceals roofing members (necessary to assess building)
 - It isn't reversible
 - o Using a new product on historic material can be problematic
 - o Historic tax credits do not allow spray foam insulation
 - o Acceptable in new construction and additions
- Old cellulose spray-in insulation can be problematic if there is no vapor barrier
 - Dew point can be reached within wall cavity and damp insulation can fall into cavity and potentially rot

General Tips

- Make sure all insulating measures are reversible.
 - Over time, what was once the "best" solution can cause problems in the future.
- Each home is unique. Details, features, materials, and alterations in each building aid or hinder its ability to be energy efficient.
 - There is a balance in each building that if upset will cause problems elsewhere.
 - Consider the larger picture—see how each system affects the others.
 - o Older buildings should **not** be completely airtight. Building are meant to have *some* airflow and to breathe.
 - Lack of airflow can result in moisture/rot and low air quality.
 - Mold can become an issue.
 - Paint can be affected when moisture comes through walls and begins to "bubble" paint layers.
 - Modern building requirements can require air exchanges, even new buildings aren't "air tight", it is just a predetermined airflow.

- "Older and historic buildings are often inherently designed for energy conservation and respond to different regional environments. Overhanging roofs, porches, awnings, and shutters can maximize shade and provide insulation. Thick walls provide thermal mass and buffering. Large, operable windows provide natural light and promote air circulation. All in all, older buildings offer these "built-in" advantages."1
 - o Landscaping and plantings can affect a building's energy conservation as well.

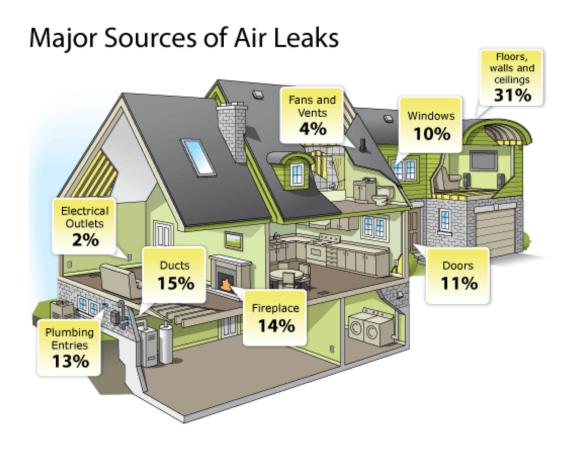


Image credit: Insulationsmart.com

¹ "Weatherization Guide for Older & Historic Buildings." Sustainable Communities. National Trust for Historic Preservation, 2015. Web. http://www.preservationnation.org/information-center/sustainablecommunities/buildings/weatherization/#.VLxbjcZ3p6k

When hiring someone to insulate your historic home, be sure to ask the following questions

- If you think you may have gotten an off-the-shelf "fix" to your home's problems, you probably did. Did the inspection or estimate take into account the age of your home and the current internal airflow?
- If the contractor has proposed to seal up your home "nice and tight," how does he/she suggest the moisture from warm air will escape from the house?
- If insulating walls from the inside, have they taken into account the materials the walls are constructed from? If insulating from the outside, how will that impact the historic material on the exterior of the home? (siding, stucco, etc.)
- Is the proposed insulation compatible with historic materials? (New products placed on historic materials can be a poor choice.)
- Is the process reversible?

Online References

"Saving Windows, Saving Money: Evaluating the Energy Performance of Window Replacement and Retrofit"—Study by Preservation Green Lab

http://www.preservationnation.org/information-center/sustainable-communities/green-lab/saving-windows-saving-money/

Preservation Brief 3—Improving Energy Efficiency in Historic Buildings by Jo Ellen Hensley and Antonio Aguilar

http://www.nps.gov/tps/how-to-preserve/briefs.htm

Building Information Center: Insulation—National Trust for Historic Preservation http://www.preservationnation.org/information-center/sustainable-communities/buildings/weatherization/insulation/#.VLxcMsZ3p6k

Weatherization Guide for Older & Historic Buildings—National Trust for Historic Preservation

http://www.preservationnation.org/information-center/sustainable-communities/buildings/weatherization/#.VLxaJcZ3p6k

Energy Efficiency Basics—Common Sense Preservation http://www.commonsensepreservation.org/topics/energy-efficiency-basics

Energy Advice for Owners of Historic and Older Homes—National Trust for Historic Preservation

http://epa.gov/region5/sustainable/pdf/Energy-advice-for-owners-of-older-homes.pdf

The Fifth Fuel—Energy Audits www.thefifthfuel.com/

Building Interiors

Hardwood Floors

- Maintaining old wooden floors
 - o Do not wax them; it can create a build-up
 - o Recommend use of Murphy's Oil Soap to clean without harming the finish
 - o Can also use a mixture of hot water and white vinegar to clean—see link below
- Looking for a new "old " hardwood floor?
 - o Old heart pine floors are available from many companies—often reclaimed and salvaged from historic buildings already slated for demolition
 - Suppliers vary—search online "heart pine + reclaimed"
- Refinishing hardwood floors
 - Only sand if you absolutely have to—older floors are often not even and can only be sanded down so many times.
 - Over-sanding can lead to exposure of the tongue and groove feature.
 - o Adding a coat to an existing finish could cause the finish to "lift" because of incompatible products and/or a large wax build-up
 - o Polyurethane versus shellac versus varnish
 - Polyurethane can withstand the most wear and tear
 - All come in a variety of sheens
 - Matte will look more appropriate in a historic home

Online References

Recipe and details on water and vinegar cleaning solution—Denver Hardwood Flooring http://www.denver-hardwood-flooring.com/vinegar-to-clean-hardwood-floors.html

Online guides to hardwood flooring—Goodwin Company http://heartpine.com/brochure-downloads/

History of heartwood pine and information on the reclamation process—Heartwood Pine Floors

http://www.heartwoodpine.com/

Building Exteriors

A note about permits and historic districts: Please be sure to get all necessary permits before starting any construction work. Consult the Community Planning and Building Department to ensure you have all necessary permits and permissions. (540) 372-1179

If you are located in one of the Fredericksburg Historic Districts (highlighted in green on the previous map) you may also need a **Certificate of Appropriateness** before you begin work.

Think beyond what you see at your local home improvement store.

Many companies provide unique molding profiles, architectural details, and custom order options.

Your historic home is unique—do what you can to keep it that way.

Siding

- Aluminum
 - There may be wooden siding underneath the aluminum if you want to display the historic wooden exterior.
 - Consider this if your home is eligible for historic tax credits—there could be additional benefits to removing it.
 - Be sure to see *Painting Wood Siding and Trim* to properly prepare the transition of your home back to wood siding.
- Wood
 - o To retain the historic integrity of your home's exterior, it is recommended to keep your wood siding and other historic fabric intact.
 - Wood siding creates a more authentic historic appearance.
 - Maintain the historic integrity of the building by retaining the historic materials.
 - When replacing damaged or rotten wood siding consider the following:

- Should only the damaged section be removed to retain as much historic fabric as possible?
- Will the replacement of a small piece look out of place?
- Should the repair be extended to the entire board so it blends better?
- Will the removal of an entire board damage the ones above and below, making for a larger project?
- Always consider how even the smallest repair will affect the surrounding material.
- o Replacement wood for siding
 - Salvaged siding from architectural salvage yards
 - See Reuse of Building Materials
 - If buying new wood, purchase the best you can find/afford.
 - Focus on rot-resistant wood
 - Cedar—rot resistant, but needs special primer or paint may not stick, need stainless steel nails
 - o Fir—good for exterior trim and siding
 - o Yellow Pine—medium price, but quality can vary
 - Cypress—old growth is great, but new growth cypress will rot when used on exterior work
 - (Hot dipped galvanized for woods other than Cedar)
 - When hiring a woodworker or contractor, ask what type of wood he/she will be using for exterior work. Then do your homework.
 - Ensure the profile is an exact match to the original siding. Slight variations and sizes may not be noticeable until the new and old are next to each other.
 - Maintain the original reveal of the siding.
 - Reveal is how much of the board or siding is showing. It does not include what is lapped under the above board.
 - When installing new wooden siding:
 - Prime all six sides of the board—this will discourage any moisture from permeating the board.
 - If the back is left untreated, the board can distort after being exposed to the elements.
 - Option to consider—breathable primer.

Fiber cement board

- Not a historic material, but may be offered by contractors.
- The exterior surface of fiber cement board can be different from most historic wood siding, often more varied and not as smooth.
- The increased weight of cement board should be considered when being placed on a historic frame building.
- Can be a challenging material if not familiar with it. Nails cannot be overset or the board will be compromised—any damage to surface reduces the board's integrity.
- With respect to moisture issues, it has the same limitations as wood.

- If wood is damaged because of its location and water problems, there will be the same issue with fiber cement boards.
- Exposed surfaces if material is cut, it must be primed or moisture can affect it.
- Many other options for manufactured exterior siding are available; although not a historic material, they may be offered by contractors.
 - o Boral brand, TruExterior
 - Fly-ash is enclosed within the board—could be exposed if board is cut.
 - Smoother profile and lighter weight than most fiber cement boards.

Preventative Care for Wood Siding

- Inspect once a year—find **small** problems before they become **LARGE** problems.
 - o Look for cracks, gaps, splitting wood.
 - o Pay close attention to vertical seams in siding.
 - Wood can expand and contract, cause cracking.
 - o Consult a professional or conduct research to do repairs on your own.
 - Fill minor gaps and cracks with a acrylic/latex caulk.
 - Inspect caulk on a regular basis, particularly in areas of intense UV exposure.
 - o Do not over-seal exterior siding. **A building needs to breathe** and you must allow for moisture to evaporate from behind the siding.
 - The underside of lapped siding allows for some breathability, do not caulk this opening.
- To extend the life of a paint job:
 - Every 2 to 3 years, clean dirt and mildew from surface with a gently cleaner.
 - Do **not** power wash.
 - Better options for exterior materials:
 - Clean with diluted TSP
 - o Information and precautions for cleaning with TSP, please read and use with care.
 - www.naturalhandyman.com/iip/infxtra/inftsp.html
 - Clean with a 1:10 bleach to water solution.
- If have a large mold or mildew problem it could be worth investigating the area.
 - o Is there moisture coming up from the ground into the walls?
 - Is there evidence of moisture on the other side of the wall that can be seen from the inside?
 - o Is the wood actually rotting?
 - o Is there enough airflow behind the siding?

- Inspect how water is being moved away from the building. When safe, stand outside in the rain and watch where water is traveling.
 - Water running over from a gutter? Causing damage at gutter as well as splash back on ground below?
 - Leaks in downspouts?
 - Splash back from a road or sidewalk (or gutter located above)?
 - o Rising damp from poor drainage under the building?
 - o How is water getting away from the building?
 - Downspouts
 - Sump pump drainage
 - All surfaces within six feet of the foundation should be sloped away from house at least a ¼" per foot.
 - Are the gutters sloped correctly?
 - Address these problems as well or you will find yourself redoing the repairs soon

Online References

Preservation Brief 8—Aluminum and Vinyl Siding on Historic Buildings by John H. Myers, revised by Gary L. Hume

http://www.nps.gov/tps/how-to-preserve/briefs.htm

Preservation Brief 47—Maintaining the Exterior of Small and Medium Size Historic Buildings by Sharon C. Park, AIA

http://www.nps.gov/tps/how-to-preserve/briefs/47-maintaining-exteriors.htm

Vinyl vs. Wood Siding your House—The Old House Guy http://www.oldhouseguy.com/vinyl-siding/

Siding and Building Trim Materials

Do not allow excessive standing material on historic buildings.		History	Moisture	Weight	What is it?	Other Considerations
Fiber Cement Board Took the place of asbestos cement sheeting in the 1970s-1980s. Boral TruExterior Boral TruExterior Winyl siding Introduced in the late 1950s. Took the place of asbestos cement sheeting in the 1970s-1980s. Properly sealed. Same limitations as wood—do not place near ground. Lighter weight than fiber cement board; varies when compared to wood species. Five years of testing has shown it to be moisture resistant. Lighter weight than fiber cement board; varies when compared to wood species. Vinyl siding Introduced in the late 1950s. Not watertight Not watertight Not affected by Medium weight Composite material made of sand, cement, and cellulose fibers. Composite product, contains fly ash. Has appearance closer to wood than most alternative products. * Pily ash (a coal-combustion byproduct) is encapsulated inside. * Dings easily * Easier to work/carve than most wood alternative products. * Dimensionally stable * Cannot be repaired or it will be compromised. * If wood fibers absorb moisture, it will swell. * Pily ash (a coal-combustion byproduct). * Dings easily * Easier to work/carve than most wood alternative products. * Dimensionally stable * Cannot be repaired or painted. * Not environmentally friendly. * Can trap moisture against wood buildings. * Analysis and contracts substantially * Callular PVC * Not environmentally friendly. * Callular PVC * Passing and contracts substantially	Wood	accurate, has been used for centuries. Often is the original material on historic	properly sealed. Do not allow excessive standing moisture or place		-	
Boral TruExterior S years. Five years of testing has shown it to be moisture resistant. Five years of testing has shown it to be moisture resistant. Five years of testing has shown it to be moisture resistant. Five years of testing has shown it to be moisture resistant. Five years of testing has shown it to be moisture resistant. Five years of testing has shown it to be moisture when compared to wood species. Five years of testing has shown it to be moisture when compared to wood species. Five years of testing has shown it to be moisture when compared to wood species. Five years of testing has shown it to be moisture when compared to wood species. Five years of testing has shown it to be moisture when compared to wood species. Five years of testing has shown it to be moisture when compared to wood species. Five years of testing has shown it to be moisture when compared to wood species. Five years of testing has shown it to be moisture when compared to wood than most alternative products. Five years of testing has shown it to be moisture when compared to wood species. Five years of testing has shown it to be moisture when compared to wood than most alternative products. Five years of testing has shown it to be moisture when compared to wood species. Five years of testing has shown most alternative products. Five years of testing has shown most alternative wood alternative products. Five years of testing has has appearance closer to wood than most alternative products. Five years of testing has have most alternative products. Five years of testing has have most alternative wood alternative products. Five years of testing has have most alternative wood alternative products. Five years of testing has have most alternative wood alternative products. Five years of testing has have most alternative wood alternative products. Five years of testing has have most alternative products. Five years of testing has have most alternative products. Five years of testing has	Cement	asbestos cement sheeting in the	properly sealed. Same limitations as wood—do not	than most wood or Boral	made of sand, cement,	surface of the board or it will be compromised. ◆ If wood fibers absorb moisture, it
Vinyl siding Introduced in the late 1950s. Not watertight Lightweight Vinyl/PVC Output Vinyl/PVC Not environmentally friendly. Can trap moisture against wood buildings. Mutes details on historic buildings. Can be routed and drilled Expands and contracts substantially			testing has shown it to be moisture	than fiber cement board; varies when compared	contains fly ash. Has appearance closer to wood than most alternative	 byproduct) is encapsulated inside. Dings easily Easier to work/carve than most wood alternative products.
Introduced in the Not affected by Medium weight Cellular PVC substantially	Vinyl siding		Not watertight	Lightweight	Vinyl/PVC	 Not environmentally friendly. Can trap moisture against wood buildings. Mutes details on historic buildings
*Eye and lung safety gear should always be worn, particularly when milling any synthetic material.		1980s.	moisture.			 Expands and contracts substantially Can distort in extreme temperatures, depending on installation process

Trim Materials

Keep profile the same!

- Wood
 - Think outside the home-improvement store box! Don't feel limited to what you see on display in these stores. (Applies to wood trim as well as hardware and lighting options.)
 - There are great companies that sell unique profiles of molding and craftsmen that will replicate woodwork.
 - JC Forest Products, Fredericksburg VA
 - http://jcforestproducts.com/
 - Siewers Lumber & Millwork, Richmond, VA
 - http://www.siewers.com/
 - Smoot Building Solutions/ Stock Building Supply—Alexandria, VA
 - http://www.smootlumber.com/
 - Some historic renovation construction companies will mill their own.
 - As with siding, cracks and gaps in wood trim can lead to larger problems with rot and deterioration.
 - Inspect accessible trim annually.
 - Hire a professional to inspect trim, such as the cornice, fascia, and soffit, on upper levels of building to ensure there are no gaps allowing in water, bugs, birds, or wildlife.
 - Finger-jointed pieces of trim are **NOT** appropriate for exterior work.
- When replacing with a non-wood option:
 - o Determine what district you live in—do you need ARB approval?
 - Changing from one material to another on the exterior of your home constitutes an "alteration" not a "repair" and generally requires a permit.

Online References

Preservation Brief 16—The Use of Substitute Materials on Historic Building Exteriors by H. Ward Jandl

http://www.nps.gov/tps/how-to-preserve/briefs.htm

Painting Wood Siding and Trim

Preparing the surface

- The possible presence of lead paint must be addressed. Contracted labor as well as homeowners should use proper safety precautions and appropriate removal methods for any lead-based paints.
 - Lead paint is very dangerous for small children.
- If a large amount of paint is coming loose, the surface is uneven and in poor shape:
 - Old loose paint must be removed before a new coat of paint is applied.
 - If old peeling paint is left on and new paint is placed on top, it will only be as strong as the paint below it.
 - The new paint will expand and contract at a different rate than the old paint, causing it to fail.
 - Use a high-quality primer—not fast-drying latex primer, should use slow-drying oil primer.
 - Use high quality paint—two coats (depends on color of paint).
- If surface was recently painted and in good condition but beginning to dull and wear thin:
 - Do not need to strip down to bare wood every time a building is painted.
 - Just clean wood and do a light sanding to prepare the surface.

• Do it right the first time

- o Thorough preparation of the surfaces will result in a longer lasting paint job.
 - Completely removing old paint, sanding, and priming will extend the life of a paint job.
- Quality paint is worth the investment.
 - But without proper surface preparation even quality paint will not last.
 - Cheap out on paint and you will find yourself painting again sooner than you should need to.
 - Virginia Paint & Decorating Centers—Helpful employees, quality products
 - www.virginiapaintcompany.com/sb.cn
- A large part of the cost when painting a home is the labor, realize this going into the process.
 - Does the cheapest option have the experience, licenses, and skills you need?

• Space out maintenance

 Consider painting one façade or area (e.g., a porch) of your home each year. By doing it in phases, the cost will be spread out over time.

• Proper temperature for paint application

- o Generally not lower than 55 degrees F.
 - The paint can may say otherwise, but attempt at your own risk.
 - Temp needs to stay at a good level until dry. What will the temperature be in 12 hours?
- o Be wary of painting in extreme heat.
 - Paint drying too quickly can be a problem as well.

When hiring someone to paint your historic home, be sure to ask the following questions

- What buildings have you painted in the past few years?
 - o Inspect their work and see how it has held up over time.
- How many coats will you be putting on? (primer and top coat)
- Will you be removing all of the old paint?
 - Loose paint that is left behind when repainting will compromise and decrease the life of the new paint job.
 - How will you be removing the paint?
 - High-pressure methods are not acceptable.
 - Use of an open flame is *not* acceptable.
- Are you an EPA Certified Lead-Safe Renovator?
- If not removing old paint
 - O What type of paint is on the house now?
 - Will it coincide with the new paint being applied?
 - o Will you be cleaning the siding/removing mildew first?
 - Paint cannot properly adhere to wood that is moist or has mildew on it.
- They should have at least a Class C Contractors License.

Things for YOU to consider

- What degree of effort are you willing to pay for?
 - Scraping siding down to the wood costs considerably more than just applying a new coat of paint, but if needed, it will result in a longer lasting paint job.

Online References

Preservation Brief 10—Exterior Paint Problems on Historic Woodwork by Kay D. Weeks and David W. Look, AIA

http://www.nps.gov/tps/how-to-preserve/briefs.htm

Benjamin Moore Paints—Historical Collection

http://media.benjaminmoore.com/WebServices/prod/ColorCards2012/historicalcollection/i ndex.html

Benjamin Moore Paints—Williamsburg Color Collection

http://www.benjaminmoore.com/en-us/for-your-home/williamsburg-color-collection

Brick

The Materials

Machine-made vs. Handmade Brick

- Historic brick—17th–19th century
 - Softer brick that needs to breath
 - Necessitates softer mortar
 - Many variations
- Modern brick—mid-20th century
 - o Harder brick that does not need to breathe as much
 - o Harder mortar is more acceptable

Mortar

Definition—material that distributes the load of the brick or masonry, functions as "an expansion joint and vapor membrane around masonry blocks or brick. The mortar must be weaker and more permeable than brick." 1

- Replacement/repair of mortar
 - Matching the ingredients in the original mortar can avoid further damage to the bricks.
 - Laboratory testing can determine original mortar ingredients.
 - Samples can be mailed to two companies outside of Virginia.
 - Be cautious of any lab results lime or oyster shells that are used as an aggregate in Fredericksburg, will be dissolved by testing process and assumed to be a binder. Leading to a whiter lime mortar.
 - Matched on-site by Eurotech (see link below).
 - o Common ingredients in historic mortar
 - Lime
 - Aggregate
 - Sand (various kinds)
 - Oyster shells
 - Small amounts of brick dust (hydraulic properties)
 - Do not use Portland cement on historic brick
 - Too strong, it will not allow the brick to expand.
 - Spalling will occur (when the face of the brick pops off) and eventually deteriorate the brick.
 - Forces moisture to move through brick (rather than the mortar).

- Mortar, on historic brick, needs to expand and contract; Portland cement does not allow that to happen.
- "A basic principle of historic masonry is that mortar must always be softer than the units it touches." ²
- o Color matching of mortar. An experienced mason who is familiar with historic brick will be able to create a close color match.
 - This color can also be affected by the ingredients (e.g., sand, brick dust).

The Repairs

- Fix the **cause** of the problem not just the **symptom**.
 - Water running over from a gutter? Causing damage at gutter as well as splash back on ground below?
 - Leaks in downspouts?
 - Splash back from a road or sidewalk (or gutter located above)?
 - Rising damp from poor drainage under the building?
 - How is water getting away from the building?
 - Downspouts
 - Sump pump drainage
 - All surfaces within six feet of the foundation should be sloped away from house at least a ¼" per foot.
 - Are gutters properly sloped?
 - Address these problems as well or you will find yourself redoing the repairs soon
- Replacement of mortar
 - o Facing mortar is not meant to last 100s of years—brick is.
 - o If removing the remaining mortar, it must be done very carefully.
 - Mechanical methods in unskilled hands can result in damage to historic brick.
 - Angle grinders and saws should be avoided.
 - o Is the mortar neatly placed and not sloppily spread over the joint?
 - A variety of mortar finishes or strikes can be applied. Flush, weathered, etc. Discuss this with your mason before starting the project.
 - What does the joint look like now?
- Brick sealants
 - o A non-breathable sealant is **not appropriate** for historic brick, it needs to expand and contract as a part of its function in your house's system.
 - Even a 100-percent breathable water repellent option is not necessary if restorations are done correctly.
 - o Be wary of salesmen that offer a "sealant" and assume it is the best thing for your historic home.
 - Your house is unique. Historic brick does not function the same way as modern brick.

- Not all brick surfaces need a sealant of any type, and it should be carefully considered before applying. (See Preservation Brief #1 below.)
- o Sealants can cause moisture to travel up walls, could cause rotting of joists.
- o If your brick has been sandblasted previously, it will need special consideration.
 - Consult an experienced building preservationist.

Other brick coatings

- Not all brick was intended to be exposed. Often softer historic brick had a limebased whitewash to protect it. By removing this whitewash, you are exposing a weaker surface to the elements.
- Painting brick—Painting brick, much like the use of clear sealants, can inhibit the natural expansion and contraction process of the brick. Paint also conceals problems that may exist underneath. Cracks, rising damp, moisture issues can all be concealed by a painted exterior.

Never sandblast!

- The Secretary of Interior Standards calls for non-abrasive methods to remove paint from brick. Sandblasting and abrasive methods removes the protective coating on bricks from when they are originally fired. Once this coating is gone, they are much more susceptible to environmental factors and degrade much faster.
- o To avoid any potential damage with paint removal, allow paint to fail naturally and use a colored limewash to fill in the gaps until it has all been removed.

When hiring someone to repair the brick on your historic home, be sure to ask the following questions

Have you done work on other historic brick buildings?

- What is address? Visit and confirm quality of work.
 - Check for match of mortar color and texture.
 - Are bricks spalling where repairs were done?
- Do you have references I can contact?
- What ingredients do you plan to use for the mortar?
 - o If it is just a standard of "what is used today" then be cautious. If your home contains historic brick, today's mortar can cause *serious* damage.
- How do you plan to remove the remaining mortar in the areas where repairs will be done?
 - o Removal with mechanical tools requires much experience.
- Will you try to match the color? Or do you say that "can't be done"?
 - A test sample can be done to confirm it is a match.
- How will the mortar be finished?
 - See link foistmagescane olescui pvioussbosty pernsored by Janel O'Malley & Robin Marine, Coldwell Banker, Carriage House Realty, Inc.

Online References

NPS Preservation Brief 2—Repointing Mortar Joints in Historic Masonry Buildings by Robert C. Mack, FAIA, and John P. Speweik

http://www.nps.gov/tps/how-to-preserve/briefs/2-repoint-mortar-joints.htm

See also Brief 6—Abrasive Cleaners, 15—Concrete, 38—Graffiti, 42—Cast Stone http://www.nps.gov/tps/how-to-preserve/briefs.htm

Preservation Brief 6—Dangers of Abrasive Cleaning to Historic Buildings by Anne E. Grimmer

http://www.nps.gov/tps/how-to-preserve/briefs/6-dangers-abrasive-cleaning.htm

NPS Preservation Brief 39—Controlling Unwanted Moisture in Historic Buildings by Sharon C. Park, AIA

http://www.nps.gov/tps/how-to-preserve/briefs/39-control-unwanted-moisture.htm

Striking and Pointing Brickwork—DIYData.com

http://www.diydata.com/techniques/brickwork/pointing/pointing.php

Eurotech—Historic Masonry Restoration Information http://eurotechusops.com/historic-masonry-restoration/

¹ Excerpt from, Repairing & Maintaining Historic Brick in the Butte Area, Alex Brown & Kelly Speer.

² Quote from, *A Handbook and Resource Guide for Owners of Virginia's Historic Houses*, Camille Agricola Bowman, Virginia Department of Historic Resources

Fireplaces/ Chimneys

- **Most Important**—Have your chimney cleaned and inspected
 - o Before its first use
 - Yearly
- Dangers of brick chimney interiors (as opposed to ones with a liner):
 - The nooks and cracks in the brick allow places for pitch and creosote (un-burnt hydrocarbons) to build up.
 - This buildup can start a fire.
 - A fire in-between the bricks of a chimney can be disastrous.
- Liners
 - Stainless steel chimney liners
 - Install with appropriate lime insulation
 - Should be correctly sized
 - Installed according to codes and standards
 - Enlist an experienced chimney specialist that has worked with historic brick
 - Poured chimney liners
 - Not appropriate for historic brickwork/chimneys
 - Product can damage historic materials and be very costly to remove
- Do you no longer use your chimney for your fireplace, but still to vent your furnace?
 - o It still needs maintenance!
 - All chimneys used for venting modern equipment, gas, oil or wood burning should be inspected yearly for safe venting and to maintain chimney structure.
- Structural problems with chimneys
 - o May be able to support the chimney while repairing the foundation underneath.
 - May need to take down chimney, repair foundational supports, then rebuild chimney.
 - o If historic chimney is being rebuilt, confirm with the mason or contractor that **historic brick** will be used on the exterior.
 - Additional brick may be needed to ensure it is stable, but historic brick could be used or any new brick could be concealed inside the chimney.

When hiring someone to work on the chimney of your historic home, be sure to ask the following questions

- If rebuilding a historic chimney, confirm what bricks will be used on the exterior.
 - Are there historic bricks that can be salvaged?
 - o Can new bricks be placed inside where they won't be seen?
- Are you sensitive to federally protected "Chimney Swift" bird?
 - See link below
- What "new" products will be used on the historic materials?
- Will the brick be sealed?
 - o "Yes" is the **wrong** answer without further investigation.

Online References

Federally Protected Chimney Swift Information—Eurotech

http://eurotechusops.com/chimney-restoration/chimney-swifts/

Historic Chimney Repairs and Preservation—Eurotech

http://eurotechusops.com/chimney-restoration/chimney-restoration-products/

Diagram of interior chimney system—Fire Safe Chimney Systems, Northern Virginia/ Maryland Area

http://www.firesafechimneypro.com/Chimney-Basics.html

Roofs

Save money in the long run with proper maintenance and timely inspections.

General Tips

- No roofing material is maintenance free.
- If completely replacing your roof, replace with the same material or what was historically on the roof.
- A properly vented attic can reduce heating and cooling costs and extend the life of roofing materials.
- Gutter and downspout maintenance is part of roof maintenance. Water **must** be moved away from the building.
 - o Non-functioning gutters can cause ice damming in the winter.

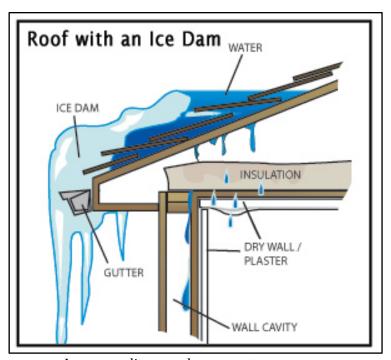


Image credit: www.home-partners.com

- Repair any visible damage detected between inspections as soon as possible—missing shingles, snow guards, faulty flashing, etc.
 - These are opportunities for water to enter and cause larger problems, deterioration, and rotting.
 - Proper installation of flashing is very important. It should be stepped and folded into brick mortar joints and conservatively sealed.

Material Specifics

- Slate roofs
 - O Depending on the slate, the lifespan can be 75-150 years.
 - Though expensive, the lifetime of a slate roof is worth the investment.
 - o Must be properly maintained. Have inspected regularly. (Every 3 to 5 years.)
 - Small repairs caught early will cost much less than large repairs for problems that have been let go.
 - o If you see a piece of slate missing, repair ASAP to prevent further damage.
 - o Ridges need to be resealed (approximately every 5 years).
 - When making repairs to a slate roof, be sure to find a roofer with substantial experience repairing or replacing slate roofs. Not many roofers have this skill.
 - o Faux slate—not a good option, made from low-quality rubber.
 - Within 1 to 2 years it starts to curl and not retain its original appearance.
- Standing seam metal roofing
 - o Lifespan if painted, 70+ years.
 - The ridge of the roof should have a **rolled ridge**, not a cap, to create a more historically accurate appearance.
 - For hipped roofs, this will apply to all ridges.
 - Will need to vent the roof in another manner.
 - Choose a matte finish on the metal, not glossy.
 - o Often a good choice for historic buildings.
 - o Comes with a Kynar or powder coat finish—should not need to paint for 20 to 30 years (still inspect every 3 to 5 years for damage).
 - o A well-maintained coat of paint will keep metal from rusting.

Metal shingles

- o Lifespan if painted, 70+ years.
- Come with a Kynar or powder coat finish—should not need to paint for 20 to 30 years (still inspect every 3 to 5 years for damage).
- o A well-maintained coat of paint will keep metal from rusting.

Fiberglass shingles

- o Depends on exposure to UV, but a quality roof will have a lifespan of 30 years.
 - Less expensive choices will have a lifespan of about 20 years.
- o Depending on the age of your home, this may be the appropriate material.
 - Be wary of salesman trying to convince you that this material will be adequate, due to it being the only roofing material they offer.

- It is not appropriate to replace your slate roof with fiberglass composite shingles (nor does it make sense, slate has a dramatically longer life-span than fiberglass shingles).
- o Fiberglass shingle warranties can be voided if there is a lack of roof ventilation.

When hiring a roofer for your historic home, be sure to ask the following questions

• What work have you done on other historic homes?

- Contact their references.
- Are your workers accredited by the product manufacturer?
 - o Can extend the life of the warranty
- Will you need a deposit?
 - o Do not give a deposit up front without at least the product delivered onsite.
- If roof sheathing must be replaced once the old roofing materials are removed, will you provide photo documentation of the damaged material?
 - o Generally clients are charged per square foot of replaced roof sheathing.
 - Not going to be home while work is done? Ask that the pictures be emailed for approval.

Online References

Preservation Brief 4—Roofing for Historic Buildings by Sarah M. Sweetser http://www.nps.gov/tps/how-to-preserve/briefs/4-roofing.htm

Preservation Brief 19—The Repair and Replacement of Historic Wooden Shingle Roofs by Sharon C. Park, AIA

http://www.nps.gov/tps/how-to-preserve/briefs/19-wooden-shingle-roofs.htm

Preservation Brief 29—The Repair, Replacement, and Maintenance of Historic Slate Roofs by Jeffrey S. Levine

http://www.nps.gov/tps/how-to-preserve/briefs/29-slate-roofs.htm

Preservation Brief 30—The Preservation and Repair of Historic Clay Tile Roofs by Anne E. Grimmer and Paul K. Williams

http://www.nps.gov/tps/how-to-preserve/briefs/30-clay-tile-roofs.htm

Ice Damn Article—Home Partners

http://home-partners.com/articles/ice-dams-quick-fixes-cure

Metal Shingles—Berridge Manufacturing Co. http://www.berridge.com/products/berridge-metal-shingles/

Foundation/General Exterior

- Keep trees and bushes $1\frac{1}{2}$ to 2 feet away from foundation.
 - o Reduces splash back.
 - Allows for air space to avoid biological growth.
 - o Keep roots from undermining foundation.
- Keep water moving away from the building
 - o Check gutters and downspouts see *Siding* and *Brick* sections for more information on water removal specifics.
 - All surfaces within six feet of the foundation should be sloped away from house at least a ¼" per foot.
- Do not allow ivy to grow along or up foundation, house, or chimney.
 - o Brings and holds moisture.
 - Attacks and invades materials.
 - Creates micro cracks, particularly in mortar.
 - Harbors pests and wildlife.
- Check yearly for cracks.
 - Some cracks can be due to settling, others can be structural issues.
 - o Consult a professional if there are any concern about the building's integrity.
- When contracting a company to help with foundation problems or settlement issues, be sure to ask the following questions.
 - How will you raise/adjust the supports in the house?
 - How will you repair the visible outside damage?
 - Consider what is a cosmetic repair and what is an actual fix of the problem.
 - Note—an actual fix will cost you more, but will save you money in the long run when the structure of the building is not compromised.

Always seek professional engineering help with foundation issues.

Online References

Preservation Brief 47—Maintaining the Exterior of Small and Medium Size Historic **Buildings** by Sharon C. Park, FAIA

http://www.nps.gov/tps/how-to-preserve/briefs.htm

Tax Credits

Historic Rehabilitation Tax Credits: A General Overview

What is a tax credit?

Historic tax credits are a financial incentive established to encourage the preservation, rehabilitation, and adaptive reuse of historic buildings, and to help spur community revitalization. It is a **dollar-for-dollar reduction of income taxes** owed for a given year equal to a prescribed percentage of qualifying rehabilitation costs.

The Federal Historic Tax Credit (HTC) Program

The Federal Historic Preservation Tax Incentives program offers **two tax credit options**:

• 20% tax credit for certified rehabilitation of historic structures

The 20% tax credit equals 20% of a qualified project's eligible rehab expenditures. The credit is available only for properties rehabilitated for income-producing purposes, including commercial, industrial, agricultural, rental residential or apartment use. If a portion of a personal residence is used for business, such as an office or a rental apartment, in some instances the amount of rehabilitation costs spent on that portion of the residence may be eligible for the credit.

• 10% tax credit for rehabilitation of non-historic, non-residential buildings built before 1936

The 10% rehabilitation tax credit equals 10% of the qualified rehabilitation expenditures spent to rehab a non-historic, pre-1936 building. The 10% rehabilitation tax credit requires only a single IRS tax form submission without any other federal or state involvement. Owners of buildings located in registered historic districts may claim the 10% tax credit only if they file *Part 1* of the **Historic Preservation Certification Application** with the National Park Service and receive a determination that the building does not contribute to the historical significance of the historic district.

The Virginia State Historic Rehabilitation Tax Credit Program

The Virginia State Rehabilitation Tax Credit was established in 1997. An individual, estate, trust, or corporation incurring eligible expenses in the rehabilitation of a certified historic structure is entitled to claim a credit against their respective Virginia taxes. The credit is equal to 25% of eligible rehabilitation expenses for projects completed in and after the year 2000. The program is modeled on the highly successful federal rehabilitation tax credit and has already helped spur private investments of more than \$315 million and the rehabilitation of more than 264 historic buildings.

The National Park Service (NPS) and the Internal Revenue Service (IRS) in partnership with State Historic Preservation Offices (SHPOs) administer the tax incentives program. Virginia's designated SHPO is the **Department of Historic Resources (DHR)** based in Richmond. **Each** plays a specific role:

SHPO	NPS	IRS
 First point of contact Provides forms, regulations, and other information Maintains records of State's National Register properties Processes forms for listing Assists with information on appropriate rehabilitation treatments and materials Assists with tax credit applications and sends project review to NPS 	 Processes program fees Reviews all applications for conformance with the <i>Standards</i> Issues all certifications (approval or denial) in writing to owner Transmits copies of documents to the IRS Develops and publishes program regulations, the <i>Standards</i>, other publications, and maintains a website 	 Publishes regulations governing which rehabilitation expenses qualify for credits Sets time periods for incurring expenses Has procedural and legal oversight for claiming 20% and 10% credits Publishes audit guide for financial and legal aspects Insures that only qualified parties claim the credits

Historic Tax Credit Programs: Federal vs. Virginia

PROGRAM ELEMENT:	FEDERAL	VA STATE	
Amount of Credit	20% of Eligible Expenses	25% of Eligible Expenses	
Eligible Property Types	Income-producing properties only (Commercial, Industrial, Rental Residential) (i.e., NOT owner-occupied residential)	Income-producing (Commercial or Rental Residential) OR Owner Occupied (owner-occupied = residential)	
Certified Historic Structure	Individually Listed on NRHP <i>OR</i> Contributes to a NRHP Historic District (NOTE: Must actually be listed before credit can be claimed)	has been evaluated as <i>eligible fo</i>	
The Secretary of the Interior's Standards for Rehabilitation	Rehabilitation work must be consistent with the SOI's Standards for Rehabilitation	Rehabilitation work must be consistent with the Secretary of the Interior's Standards for Rehabilitation	
Cost Threshold	Improvements must be more than 100% of owner's adjusted basis in the building (adjusted basis is generally defined as the purchase price minus the value of the land, minus any depreciation already claimed, plus the value of any earlier capital improvements) or \$5,000whichever is greater.	For Owner-Occupied Residential Properties: Expenses must be at least 25% of the assessed value of the building for the year before the rehabilitation was begun. For All Other Buildings: Expenses must be at least 50% of the assessed value of the building for the year before the rehabilitation was begun.	
Eligible Rehabilitation Costs (Capital Expenses)	Include construction costs and some soft costs - does not include the cost of new construction beyond the shell of the building, site work, or personal property.	t of building, site work, or person property. Rehab of historic manmad	
Transfer of Credits	Credits cannot be transferred, but can be syndicated or "passed through" to investors if qualified ownership structure is established.	Credits cannot be transferred, but can be syndicated or "passed through" to investors if a proper/qualified ownership structure is established.	
Allocation of Credits	In a limited liability partnership, credits are allocated according to percentage of ownership.	In a limited liability partnership, credits are allocated according to agreement among partners.	

PROGRAM ELEMENT:	FEDERAL	VA STATE	
Recapture of Credits	If a rehabilitated property is sold, or loses its status as income-producing within 5 years of completion of the rehabilitation, a portion of credits claimed will be subject to prorated recapture by the IRS.	There is no holding period for the state credit. The building may be sold any time after the rehabilitation without recapture of the credit.	
Claiming Credits	· ·		
The PART 1 Application	Part 1 must be submitted before work is completed.	Part 1, as well as Parts 2 and 3, must be submitted within 1 year of the completion date.	
Phasing Plans	The phasing plan must be submitted before the work begins.	The phasing plan may be submitted with the Part 2 application even if the work has already begun.	
10% Tax Credit	Under Federal program, income- producing properties built before 1936 may qualify for a 10% tax credit if not listed on NRHP either individually or as a contributing resource to a NR Historic District.	N/A	

City of Fredericksburg Tax Credit for Rehabilitated Property Program

For additional information, please contact the **Commissioner of the Revenue** by mail (City Hall, 715 Princess Anne Street; Fredericksburg, Virginia 22401) or by phone (540-372-1207).

A partial exemption from real estate taxes for qualifying rehabilitated real estate administered on a sliding scale over a seven (7) year period [See Sections 70-98.1 and 70-99.1 of the City Code for specific details and provisions.]. For qualified projects, the initial increase in the amount of real estate taxes owed resulting from the property's rehabilitation is excused for two (2) years and continues on a declining or sliding scale for five (5) additional years.

Fredericksburg Local Rehabilitation Tax Exemption Program						
PROPERTY TYPE	MIN. AGE REQUIRE D	MIN. INCREASE IN ASSESSED VALUE REQ.	MAX. INCREASE IN SQ FT ALLOWED	DURATION OF TAX EXEMPTIO N	SLIDING SCALE OF TAX EXEMPTION VALUE %	
RESIDENTIAL	40 yrs	20%	15%	7 Years	1st Yr - 100%, 2nd Yr - 100%, 3rd Yr - 83%, 4th Yr - 66%, 5th Yr - 49%, 6th Yr - 32%, 7th Yr - 16%	
COMMERCIAL / INDUSTRIAL	40 yrs	30%	15%	7 yrs	1st Yr - 100%, 2nd Yr - 100%, 3rd Yr - 83%, 4th Yr - 66%, 5th Yr - 49%, 6th Yr - 32%, 7th Yr - 16%	

NOTE: If the property is sold, the exemption remains in effect for the new owner until the expiration date.

Requirements for Classification as a Rehabilitated Structure (City of Fredericksburg)

Residential Structures (Single or multi-family):

- ✓ Structure must be at least 40 years old
- ✓ Property must be either (a) located in the Old and Historic District or (b) eligible for listing or listed on the National Register of Historic Places.
- ✓ The proposed rehabilitation project must increase the base value of the structure by at least 20%
- ✓ The proposed rehabilitation project must not increase the total square footage of the structure by more than 15%

NOTE: Porches, unfinished attics and basements, attached carports or garages, shall be included when computing the square footage of a structure.

- ✓ Improvements made to vacant land are not eligible for the tax exemption
- ✓ Project cannot involve the total replacement of residential structures
- ✓ All appropriate permits must be acquired from the City before or simultaneously with submission of the tax exemption application

Commercial or Industrial Structures:

- ✓ Structure must be at least 40 years old
- ✓ Property must be either (a) located in the Old and Historic District or (b) eligible for listing or listed on the National Register of Historic Places.
- ✓ The proposed rehabilitation project must increase the base value of the structure by at least 30%
- ✓ The proposed rehabilitation project must not increase the total square footage of the structure by more than 15%

NOTE: An existing attached carport, canopy, or similar structure shall be included in the calculation of the original square footage of a commercial or industrial structure. [Basements and attics may be finished-off without invoking the 15% limitation.]

- ✓ Improvements made to vacant land are not eligible for the tax exemption
- ✓ All appropriate permits must be acquired from the City before or simultaneously with submission of the tax exemption application

For more information on local, state, and federal historic tax credits, please contact HFFI for additional guides.

Online References

Economic Impact of Historic Rehabilitation Tax Credits Report—VCU Center for Urban and Regional Delopment

http://www.dhr.virginia.gov/pdf_files/VCU_Historic%20Tax%20Credit%20Report_FINAL_21_-1-2014.pdf

Federal and State [Virginia] Rehabilitation Tax Credits—VA Dept of Historic Resources http://www.dhr.virginia.gov/tax_credits/tax_credit.htm

Frequently Asked Questions about Rehabilitation Tax Credits—VA Dept of Historic Resources

http://www.dhr.virginia.gov/tax_credits/tax_credit_faq.htm

Historic Tax Credits are at Risk—National Trust for Historic Preservation http://www.preservationnation.org/take-action/advocacy-center/policy-resources/historic-tax-credits.html#.VLxTxid3p6k

Secretary of the Interior's Standards for Rehabilitation codified as 36 CFR 67 http://www.nps.gov/tps/standards/rehabilitation.htm

State Rehabilitation Tax Credit Maps List—National Trust for Historic Preservation http://www.preservationnation.org/take-action/advocacy-center/additional-resources/historic-tax-credit-maps/list.html?related_state=VA#.VLxUPid3p6k

Tax Incentives for Preserving Historic Properties—National Park Service http://www.nps.gov/tps/tax-incentives.htm

Easements

What is an Easement?

As defined by the National Park Service, "An historic preservation easement is a voluntary legal agreement made between a property owner (donor) and a qualified easement holding organization (donee) to protect a significant historic property, landscape, or archeological site by restricting future changes to and/or development on the site."

An easement constitutes a partial ownership interest in a historic property; one that empowers the holding organization with the legal authority to enforce certain protective covenants established to ensure the property's long-term preservation. These covenants, which are recorded in a deed of easement, help protect historic buildings and landscapes from demolition, neglect, and inappropriate alterations while keeping the property in private hands and on the tax rolls. The easement and its restrictions are typically conveyed in perpetuity, meaning they remain binding beyond the tenure of the current owner. Certain alterations are permitted, but generally must comply with specific preservation standards and receive prior approval from the easement holding organization.

Why Donate a Preservation Easement?

To Help Protect Historically Significant Properties in Perpetuity

For owners seeking additional protections for their historic properties above and beyond those provided by a local historic zoning ordinance, a preservation easement is definitely an option worth exploring. These legally binding covenants protect against threats such as demolition and inappropriate alterations, and, with technical assistance from HFFI's staff, can help ensure the ongoing maintenance and long-term preservation of your historic properties.

Income, Gift and Estate Tax Benefits

HFFI's status as a 501c3 nonprofit organization allows donors to treat their donations as a charitable contribution under Internal Revenue Tax Code Section 170(h). For eligible owners, this can mean significant tax benefits, as the value of an easement donation may be deductible from Federal income taxes in the same manner as other non-cash charitable contributions.

Technical Support

Owners who donate an easement on their historic property also receive technical support from HFFI's staff and Real Estate Committee. It is HFFI's responsibility, as a preservation easement holder, to make certain each property is being maintained in compliance with its covenant agreement. We conduct annual inspections to monitor each property's condition over time and make recommendations to property owners for maintenance work that will prevent small problems from becoming large problems.

Eligible Considerations

- If you are not located in the Downtown Historic District, but your property is individually listed on the National Register, then you may be eligible to receive certain tax benefits by donating an easement. The Historic Fredericksburg Foundation, Inc., can manage your easement for you, contact them at office@hffi.org for more information.
- If you are in the Local Historic District (highlighted in green), then you probably cannot receive tax benefits, but can still place your building under a Preservation Easement to protect it from future alteration or neglect. The Historic Fredericksburg Foundation, Inc. can manage your easement for you, contact them at office@hffi.org for more information.

Levels of Protection

- An easement can be tailored to an individual property and to address the specific preservation priorities of both the donor and easement holding organization (the donee). They may be designed to preserve an entire property (i.e., all buildings and grounds) or just specific features and elements. *For example*:
 - o Primary façade
 - o Exterior
 - Interior
 - Paint color
 - Landscaping
- Easement agreements also typically include additional covenants and restrictions, like a maintenance requirement and the need for prior review and approval from the easement holding organization before any proposed changes or alterations can be made.

Online References

Historic Preservation Easements – VA Department of Historic Resources http://www.dhr.virginia.gov/easement/easement.htm

Maintenance Reference Chart

Roof	Inspect every 3 to 5 years	Have a certified and insured roofer come to inspect the roof. He/she should keep an eye out for small problems that could become big expenses. Missing shingles, damaged shingles, snow guards that are loose or missing, flashing that needs to be sealed.	Between inspections, look in the attic after a rainstorm and check for evidence of leak. Also look for pinholes that sunlight is coming through.
Heating, Ventilation, and Cooling (HVAC) System	Have inspected two times per year, cleaning, and maintenance before use of heating and of cooling systems.	Have an experienced heating professional perform this service.	Be aware of changes with the system between service visits. Running more often? Increased energy usage?
Wood Siding	Inspect yearly (from ground) Clean every 2 to 3 years (low pressure) Paint as needed, likely every 4 to 5 years (good paint job could last longer)	Inspect for cracks, gaps, splitting wood Pay close attention to vertical seams in siding Fill any gaps or cracks with acrylic/latex caulk Clean gently, do not use high-pressure wash	Do not delay painting; once paint begins to peel, it will degrade quickly.
Other Exterior Cladding	Inspect yearly Cleaning will vary by material.	Inspect for cracks and gaps.	Have any damage repaired as soon as possible. Moisture penetration damage will escalate quickly.
Chimney	Clean and inspect yearly	Have a certified chimney sweep clean and inspect your chimneys.	Be aware of changes in your fireplace during use. Share information with inspector.
Brick work	Inspect yearly (from ground)	Make notes of where mortar is starting to fail and any damaged bricks.	Consult an experienced mason if you find problems. Weather and temperature may affect when work can be done.

Online References

NPS Preservation Brief 47—Maintaining the Exterior of Small and Medium Size Historic Buildings by Sharon C. Park, AIA

http://www.nps.gov/tps/how-to-preserve/briefs/47-maintaining-exteriors.htm

Historic Building Inspection Checklist—Lancaster, PA Dept of Economic and Community Development

http://cityoflancasterpa.com/sites/default/files/documents/inspection-checklist.pdf

Maintaining Your Historic Home—Delaware County Planning Dept, PA (Detailed checklist on page 7 & 8) http://lansdowneyeadon.org/wp-content/uploads/Maintenance_Guide.pdf

Additional Resources

National Park Service Preservation Briefs

Information on 47 different historic materials and/ or topics http://www.nps.gov/tps/how-to-preserve/briefs.htm

"Preservation Briefs provide guidance on **preserving**, **rehabilitating**, and **restoring** historic buildings. These NPS Publications help historic building owners recognize and resolve common problems prior to work. The briefs are especially useful to **Historic Preservation Tax Incentives Program** applicants because they recommend methods and approaches for rehabilitating historic buildings that are consistent with their historic character." (NPS webpage)

Printable versions of various National Park Service publications http://www.nps.gov/tps/education/print-pubs.htm

General Preservation Websites

National Trust for Historic Preservation http://www.preservationnation.org/

Historic New England http://www.historicnewengland.org/preservation/your-older-or-historic-home

Preservation Virginia Web Resources http://preservationvirginia.org/preserve/web-resources

Preservation Green Lab

"Launched in March of 2009, the Seattle-based Preservation Green Lab advances research that explores the value that older buildings bring to their communities, and pioneers policy solutions that make it easier to reuse and green older and historic buildings."

 $\frac{http://www.preservationnation.org/information-center/sustainable-communities/greenlab/\#.VLxa_cZ3p6k}{}$

Learn more about the history of your home

Historic Fredericksburg Foundation, Inc. (HFFI)—A large collection of files on properties in Fredericksburg. Stop by or call to see if there is information on your property. 1200 Caroline Street, Fredericksburg, 540-371-4504. Open 9:00 a.m.–2:30 p.m. M–F. http://hffi.org/

Central Rappahannock Heritage Center—An amazingly diverse collection of pictures, documents, letters, and ephemera connected to the City of Fredericksburg, Spotsylvania, Stafford, King George, and Caroline counties. Access the CRHC archives online or at the center. 900 Barton Street #111, Fredericksburg (Basement of Maury Commons), 540-373-3704. Open 10:00 a.m.–4:00 p.m. Tu/W/Th, 9:00am–Noon on the first Saturday of each month. http://crhcarchives.org/

Central Rappahannock Regional Library (CRRL), Virginiana Room—Books, postcards, newspapers on microfilm, city directories, and a vast collection of documents organized by subject as well as street address can be found in this resource room. Library Headquarters, 1201 Caroline Street, Fredericksburg 540-372-1144. See website for hours, call ahead to check when Virginiana Room is staffed.

http://www.librarypoint.org/

Fredericksburg Courthouse—Deeds, wills, plats, and the court archives are all available in one location. Visitors can search most of the information on their own although most court archives are only available with staff assistance. Generally staff in the archives room is able to help with your search, but the court clerks are prohibited from assisting. Note: no cameras, phones, food, drinks, or large bags are allowed in the new courthouse.

701 Princess Anne Street, Fredericksburg. Open 8;30 a.m.–4:30 p.m. M–F. http://www.fredericksburgva.gov/index.aspx?NID=649

Sanborn Maps—Insurance maps of Fredericksburg from 1886 through 1947 that identify the footprint, use, and other details about buildings within the city. Limited areas available depending on year. Accessible on the CRRL website with library membership number. http://www.librarypoint.org/

University of Mary Washington Fredericksburg Research Resources—Compiled by UMW Professor Gary Stanton, the copious information found on this site is amazing! Census records, tax records (taken from Fredericksburg Court Archives listed above), building permit records, city directories, Embry Index to Wills, newspaper indexes, index of City Council Minutes, miscellaneous images and plats.

http://resources.umwhisp.org/fredburg.htm

Contact locations before visiting to confirm hours have not changed.

Notes

PROUD SUPPORTERS OF HFFI'S MISSION: PRESERVATION, PROTECTION AND REVITALIZATION OF HISTORIC FREDERICKSBURG









OVER 125 HISTORIC PROPERTIES SOLD NITHE FREDERICKSBURG AREA SINCE 1985





Janel O'Malley and Robin Marine. "The Professional Team", are full time Associate Brokers with Coldwell Banker Carriage House Realty in downtown Fredericksburg, Virginia. They are committed to the highest degree of professionalism and integrity to help you achieve all of your real estate goals. Whether you are a seller or a purchaser, you will find that their experience as well as their local knowledge will be invaluable to your needs.

Janel graduated from the University of Texas where she received her Bachelor of Arts in History/Government. Her personal passion for historic preservation has been reflected in her professional and volunteer activities. She has served on the Melchers Advisory Council and has been a board member of Historic Fredericksburg Foundation Inc. and The Fredericksburg Area Museum and Cultural Center. Janel has received the "E Boyd Graves Award" as well as "The President's Award" from Historic Fredericksburg Foundation Inc.

Robin graduated from Virginia Tech in Blacksburg, VA where she received her Bachelor of Arts in Business. She continued her real estate education by receiving her CRS (certified residential specialist), GRI (Graduate Realtors Institute) and ABR (Accredited Buyer Representative) designations. She was the Chairman of the Decorator Show House at the "Doggett House", has served as a hostess for the HFFI Annual Historic Candlelight Tour and is a past board member and current sustaining member of the Fredericksburg Area Service League.

Janel and Robin have completed the former Historic Real Estate Program sponsored by the National Trust for Historic Preservation.





