

Introduction to SOI Standards

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FLORIDA DEPARTMENT *of* STATE



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Historical Resources

Secretary of the Interior Standards for Treatment of Historic Properties

- A set of rules used by the National Park Service to regulate preservation and rehabilitation in accordance with federal tax programs
- Four sets of rules regarding historic buildings:
 - Preservation –strictest, preserve as much as possible
 - Restoration—used when backdating a building to a specific time period
 - **Rehabilitation**—**most flexible, preserve while facilitating reuse**
 - Reconstruction—used when rebuilding historic buildings



Secretary of the Interior Standards for Preservation

- **Preservation** is the appropriate treatment when the objective of the project is to retain the building as it currently exists. This means that not only the original historic materials and features will be preserved, but also later changes and additions to the original building.

Standards for Preservation

1. A property will be used as it was historically, or be given a new use that maximizes the retention of distinctive materials, features, spaces and spatial relationships. Where a treatment and use have not been identified, a property will be protected and, if necessary, stabilized until additional work may be undertaken.
2. The historic character of a property will be retained and preserved. The replacement of intact or repairable historic materials or alteration of features, spaces and spatial relationships that characterize a property will be avoided.
3. Each property will be recognized as a physical record of its time, place and use. Work needed to stabilize, consolidate and conserve existing historic materials and features will be physically and visually compatible, identifiable upon close inspection and properly documented for future research.
4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.
5. Distinctive materials, features, finishes and construction techniques or examples of craftsmanship that characterize a property will be preserved.
6. The existing condition of historic features will be evaluated to determine the appropriate level of intervention needed. Where the severity of deterioration requires repair or limited replacement of a distinctive feature, the new material will match the old in composition, design, color and texture.
7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.



Secretary of the Interior Standards for Restoration

- **Restoration** is defined as the act or process of accurately depicting the form, features, and character of a property as it appeared at a particular period of time by means of the removal of features from other periods in its history and reconstruction of missing features from the restoration period. The limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate within a restoration project.

Standards for Restoration

1. A property will be used as it was historically or be given a new use that interprets the property and its restoration period.
2. Materials and features from the restoration period will be retained and preserved. The removal of materials or alteration of features, spaces and spatial relationships that characterize the period will not be undertaken.
3. Each property will be recognized as a physical record of its time, place and use. Work needed to stabilize, consolidate and conserve materials and features from the restoration period will be physically and visually compatible, identifiable upon close inspection and properly documented for future research.
4. Materials, features, spaces and finishes that characterize other historical periods will be documented prior to their alteration or removal.
5. Distinctive materials, features, finishes and construction techniques or examples of craftsmanship that characterize the restoration period will be preserved.
6. Deteriorated features from the restoration period will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture and, where possible, materials.
7. Replacement of missing features from the restoration period will be substantiated by documentary and physical evidence. A false sense of history will not be created by adding conjectural features, features from other properties, or by combining features that never existed together historically.
8. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
9. Archeological resources affected by a project will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.
10. Designs that were never executed historically will not be constructed.



Secretary of the Interior Standards for Reconstruction

- **Reconstruction** is defined as the act or process of depicting, by means of new construction, the form, features, and detailing of a non-surviving site, landscape, building, structure, or object for the purpose of replicating its appearance at a specific period of time and in its historic location.

Standards for Reconstruction

1. Reconstruction will be used to depict vanished or non-surviving portions of a property when documentary and physical evidence is available to permit accurate reconstruction with minimal conjecture and such reconstruction is essential to the public understanding of the property.
2. Reconstruction of a landscape, building, structure or object in its historic location will be preceded by a thorough archeological investigation to identify and evaluate those features and artifacts which are essential to an accurate reconstruction. If such resources must be disturbed, mitigation measures will be undertaken.
3. Reconstruction will include measures to preserve any remaining historic materials, features, and spatial relationships.
4. Reconstruction will be based on the accurate duplication of historic features and elements substantiated by documentary or physical evidence rather than on conjectural designs or the availability of different features from other historic properties. A reconstructed property will re-create the appearance of the non-surviving historic property in materials, design, color and texture.
5. A reconstruction will be clearly identified as a contemporary re-creation.
6. Designs that were never executed historically will not be constructed.



Secretary of the Interior Standards for Rehabilitation

- **Rehabilitation** is defined as the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values.

Standards for Rehabilitation

1. A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces and spatial relationships.
2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces and spatial relationships that characterize a property will be avoided.
3. Each property will be recognized as a physical record of its time, place and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.
4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.
5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.
6. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.
7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.
9. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.
10. New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.



Secretary of the Interior Standards for Rehabilitation: Standard 1



A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.



Secretary of the Interior Standards for Rehabilitation: Standard 2



The **historic character** of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.



Secretary of the Interior Standards for Rehabilitation: Standard 3



Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.



Secretary of the Interior Standards for Rehabilitation: Standard 4

Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.



Secretary of the Interior Standards for Rehabilitation: Standard 5



Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a historic property shall be preserved.



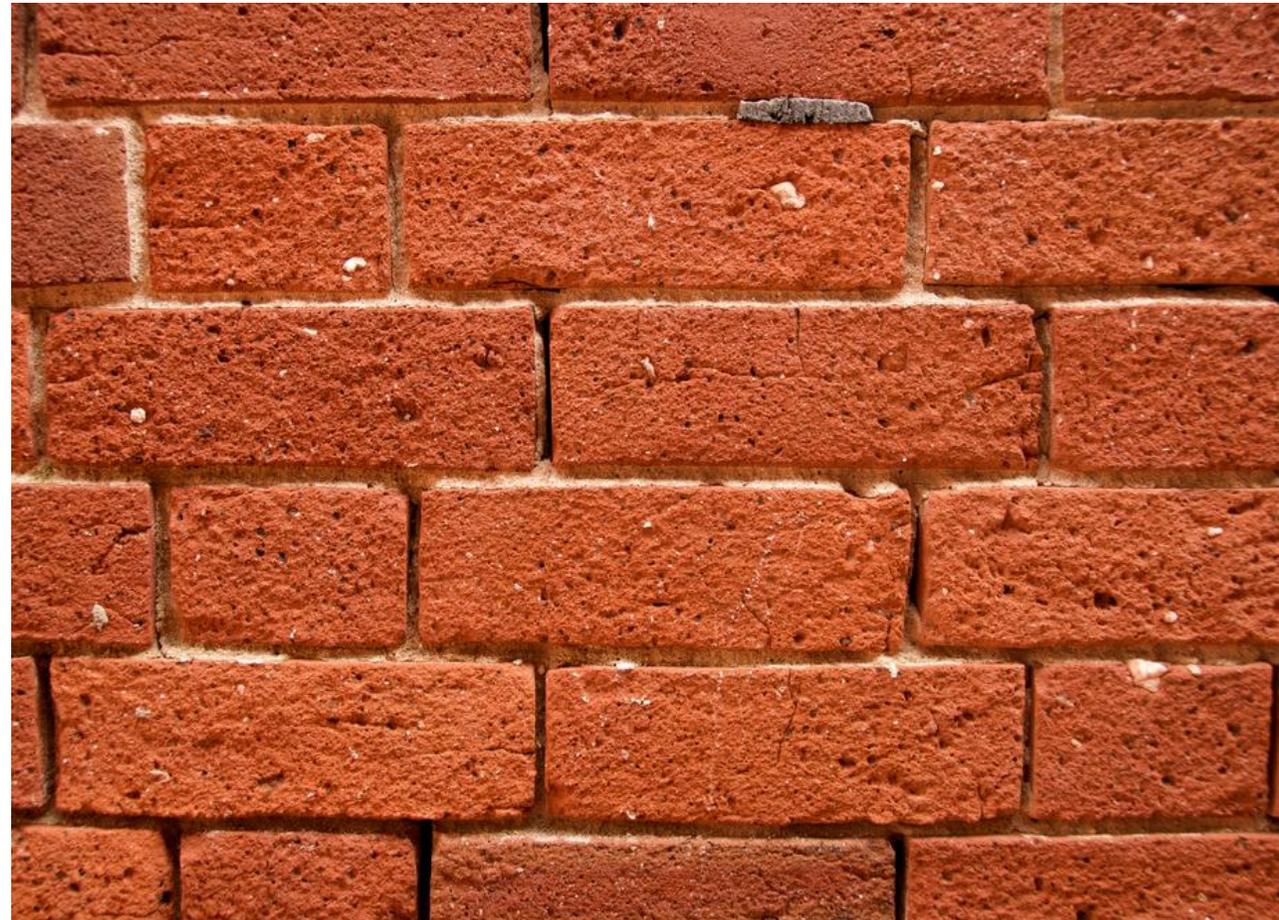
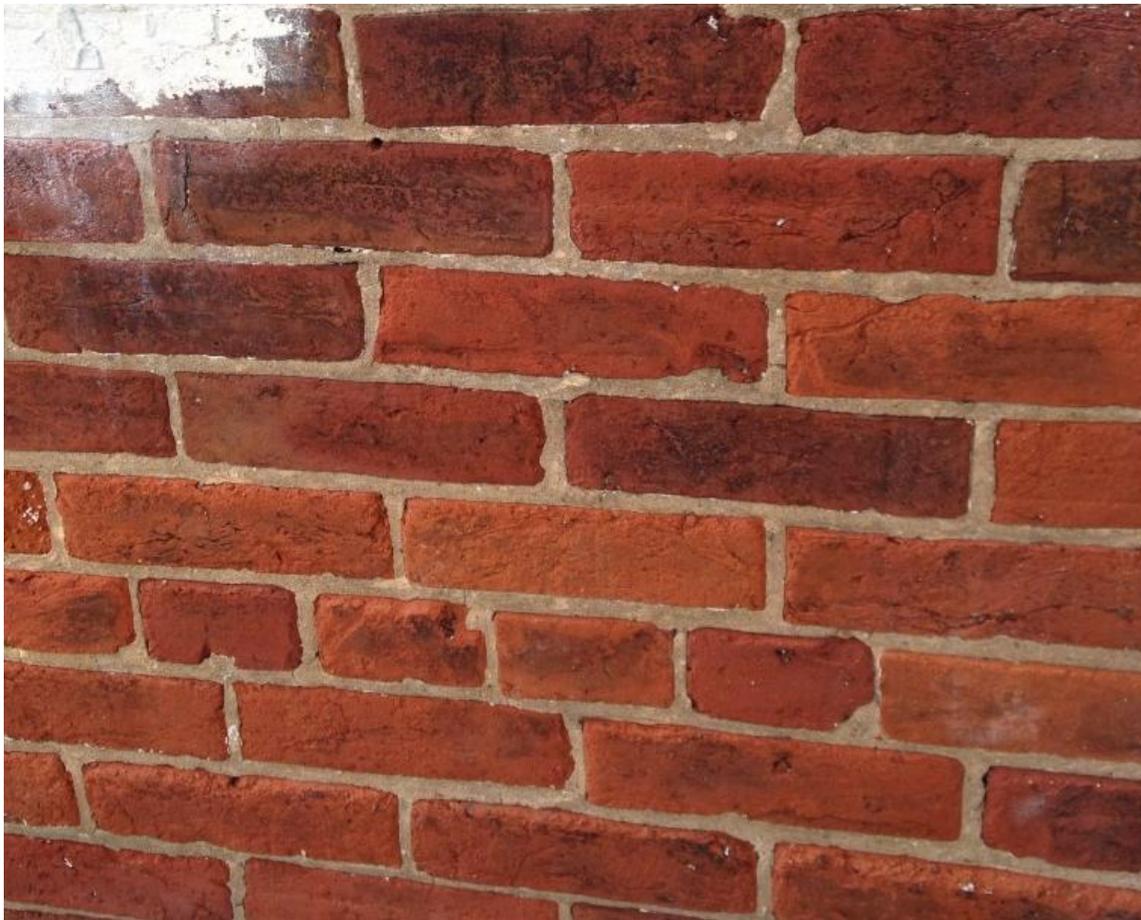
Secretary of the Interior Standards for Rehabilitation: Standard 6



Deteriorated historic features shall be **repaired rather than replaced**. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.



Secretary of the Interior Standards for Rehabilitation: Standard 7



Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.



Secretary of the Interior Standards for Rehabilitation: Standard 8



Significant archeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken



Secretary of the Interior Standards for Rehabilitation: Standard 9



New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.



Secretary of the Interior Standards for Rehabilitation: Standard 10



New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.



Preservation Briefs

- [Making Historic Properties Accessible.](#)
- [Building Codes for Historic and Existing Buildings: Planning and Maximizing their Application.](#)
- [The Use of Substitute Materials on Historic Building Exteriors.](#)
- [The Repair of Historic Wooden Windows.](#)



ADA Ramp 22 South Ninth Street, Fernandina Beach

32 PRESERVATION BRIEFS

Making Historic Properties Accessible

Thomas C. Jester and Sharon C. Park, AIA



U.S. Department of the Interior
National Park Service
Cultural Resources
Heritage Preservation Services



[Preservation Brief 32: Making Historic Properties Accessible \(nps.gov\)](https://www.nps.gov/preservation/briefs/32-making-historic-properties-accessible)

Accessibility (ADA)

- Accessibility must be considered early in the planning process for rehabilitation projects.
- Historic buildings, like other buildings, must meet minimum requirements for accessible routes, entrances, and restrooms.
- A qualified historic building is a building(s) that is(are) listed or eligible for listing in the NRHP or designated as historic under appropriate local preservation ordinances.

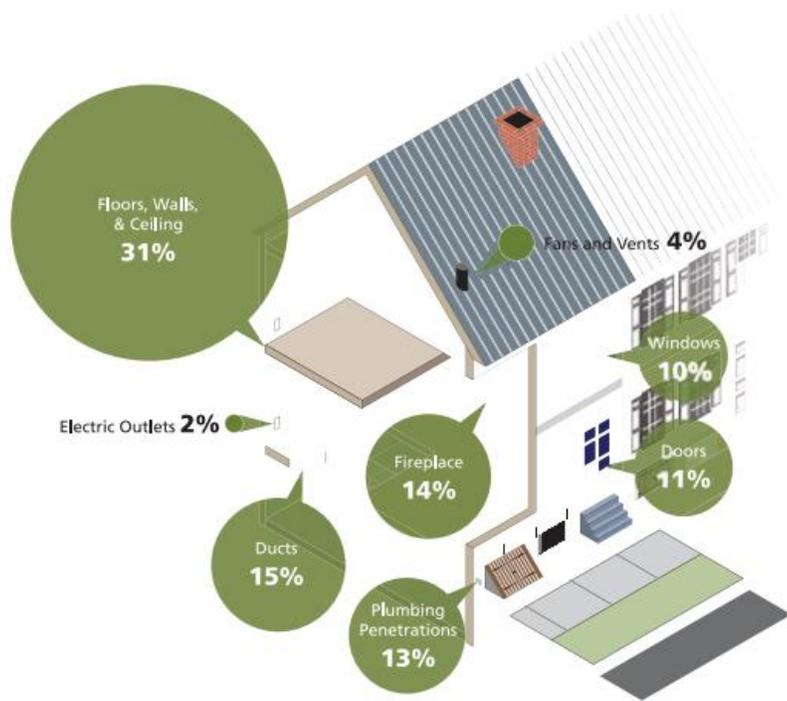


Fig. 8. *Where Air Escapes From a House (by percentage)* – Image based on data from *Energy Savers*, U.S. Department of Energy. Illustration: Blank Space LLC.

Requires Minimal Alteration

- Reduce air leakage.
- Add attic insulation.
- Install storm windows.
- Insulate basements and crawlspaces.
- Seal and insulate ducts and pipes.
- Weather strip doors and add storm doors.
- Add awnings and shading devices where appropriate.

Examples from [NPS Preservation Brief 3](#)

Energy Retrofitting

- Improvements to energy efficiency can be made with minimal alteration to the historic structure.
- The improvements that are less intrusive, and are often easily reversible, provide the highest potential for energy savings.

INHERENT ENERGY EFFICIENT FEATURES OF HISTORIC BUILDINGS

Operable windows, interior courtyards, clerestories, skylights, rooftop ventilators, cupolas and other features that provide natural ventilation and light can reduce energy consumption. Whenever these devices can be used to provide natural ventilation and light, they save energy by reducing the need to use mechanical systems and artificial lighting.

ENERGY AUDIT

Before implementing any measures to improve the thermal performance of a historic building, an energy audit should be undertaken to evaluate the current energy use of the building and identify deficiencies in the building envelope or mechanical systems.

ACTIONS TO IMPROVE ENERGY EFFICIENCY

1. *Establish Realistic Goals* - Balance energy efficiency measures against loss of historic materials.
2. *Operational Changes* - Reduce energy demand through use of physical and electronic controls.
3. *Upgrade Equipment and Appliances* - Upgrade efficiency of air-conditioning, water heating and appliances.
4. *Upgrade Building Components*

Requires Minimal Alteration - Upgrades with the least potential to negatively impact the historic fabric of a building. They tend to be less intrusive, are often reversible, and offer the highest potential for energy savings. Figure 1.

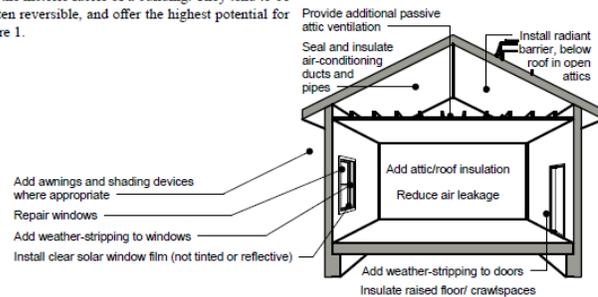


Figure 1

Example from [St. Petersburg Design Guidelines](#)

TECH TIP: WINDOWS

A common misconception is that replacing windows alone will result in major energy savings. This argument, often used to sell replacement windows, is simply not true. Although it varies from building to building, the U.S. Department of Energy (DOE) has documented that air loss attributable to windows in most buildings is about 10% of the total air loss. Studies have shown that window replacement does not pay for itself in energy savings in a reasonable amount of time. Moreover, there are ways to improve the performance of historic windows that do not require replacement. In addition, historic windows can usually be repaired and are, thus, sustainable, while most new windows cannot be repaired, or even recycled, and may end up in landfills.

Requires More Alteration - Upgrades that may pose technical problems and damage to historic building materials and architectural features. Their installation costs may also outweigh the anticipated energy savings and must be evaluated on a case-by-case basis with advice from professionals experienced in historic preservation and building performance. Figure 2.

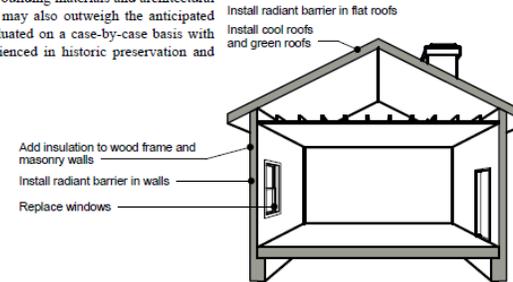


Figure 2

5. *Alternative Energy Sources* - Devices that utilize solar, geothermal, wind and other sources of energy to help reduce the consumption of fossil fuel-generated energy can often be successfully incorporated in historic building retrofits. The use of most alternative energy strategies should be pursued only after all other upgrades have been implemented to make the building more energy efficient first, because the initial installation cost is usually high.

- Solar Energy
- Geothermal energy
- Wind Energy

KEY CONSIDERATION:

Adding technology to historic buildings, however, must be done in a manner that has a minimal impact on historic roofing materials and preserves their character by placing them in locations with limited or no visibility.

SUMMARY

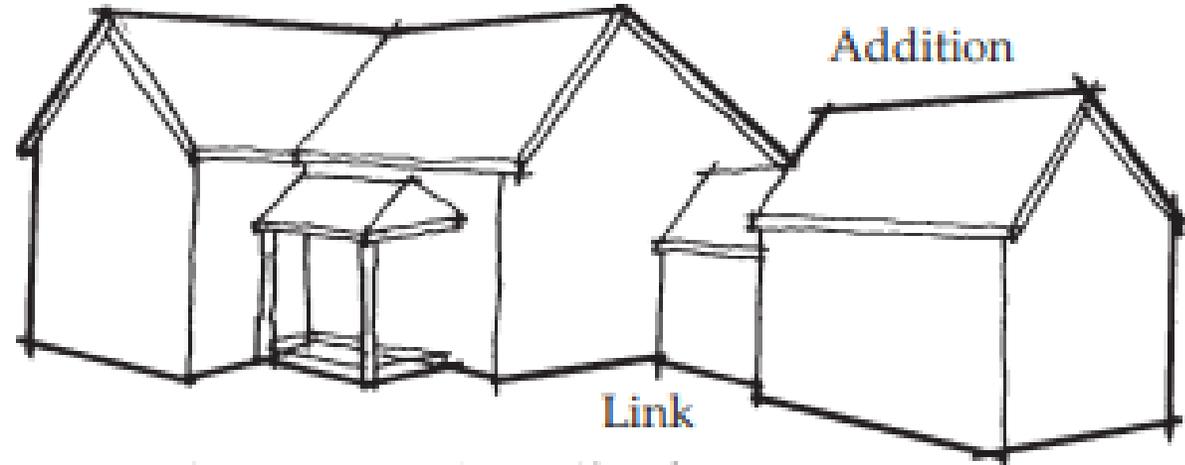
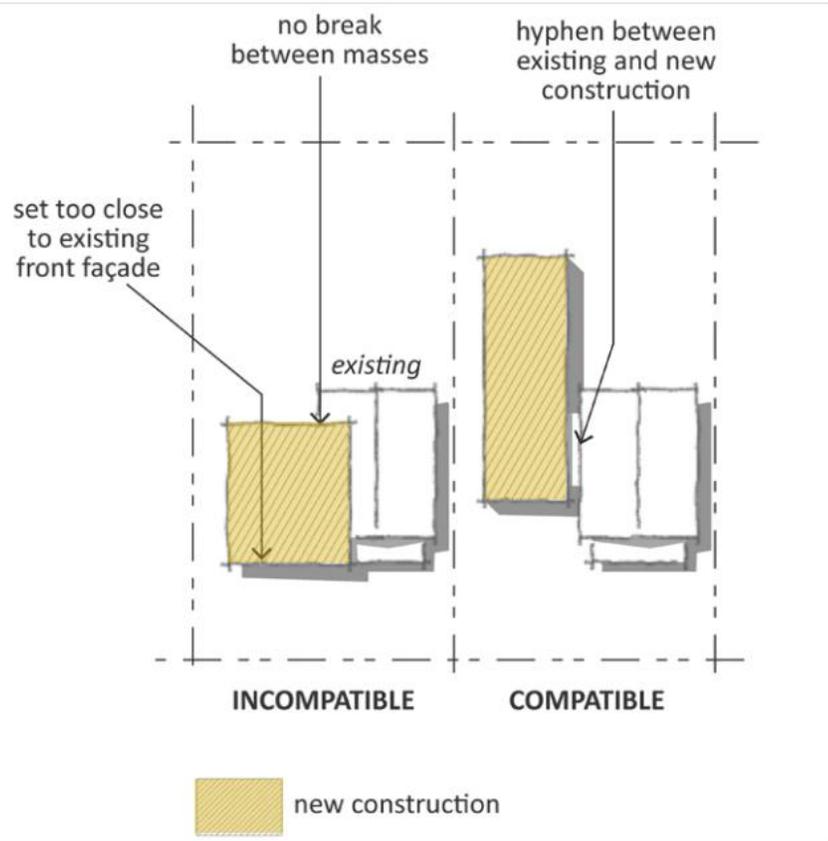
With careful planning of energy efficiency upgrades, you can ensure that the character-defining features of your property are preserved, while employing property specific cost-effective measures to save energy.

RECOMMENDED

- + Alterations should do as little damage or change as possible.
- + Alterations should not remove character-defining features or key spaces.
- + Alterations should be reversible.

Energy Retrofitting

- An existing building is a sustainable building
- Historic buildings were designed for the regional climate
- New technology can improve sustainability, but projects must consider the historic character of the property



Additions

- ✓ Keep historically important architectural features and character.
- ✓ Compatible in size and scale to main building
- ✓ Add addition to the rear or set back from the front
- ✓ Slightly differentiated from historic portion
- ✓ Preserve established massing and orientation

3.4.1 Additions to Existing Buildings in Residential Historic Districts

In order to retain their functionality, it is sometimes necessary to enlarge historic buildings. It is important that these changes do not radically alter or obscure the character-defining features of the building, especially in the areas of massing and scale, materials, features, and finishes. Additions to historic buildings should also be reversible, meaning that they could be removed in the future with minimal impact to the historic fabric. Owners of historic buildings should only consider the construction of an addition after they have determined that an alteration of the interior spaces within the building cannot meet their needs.

Individuals wishing to construct an addition to their building should consider the overall character of the site, the impact on neighboring buildings, and the district as a whole. Alterations that attempt to create a false sense of historic development are discouraged; however, with proper historical documentation, it is possible to restore a feature long since removed or destroyed.

3.4.1.1 Guidelines for Location, Massing, Scale, and Application of Additions to Historic Buildings

Although it is preferable to retain the original design and layout of a historic building, it is sometimes necessary to create additional space. When making additions to historic buildings, it is important to keep in mind the overall massing and scale of the original, in addition to its relationship with adjacent buildings. Additions should be designed in such a way that their size and location will not visually enlarge the building in comparison with its neighbors. Massing of additions should be in keeping with existing buildings to maintain the visual rhythm of the altered building in comparison with its neighbors.

RECOMMENDED

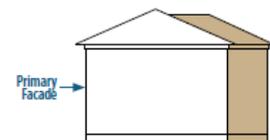
1. Location of an addition at the rear of the building so that it cannot be seen from the primary façade and has as little impact as possible on a building's character-defining features

- An addition should generally be made to the rear of the building because a properly located rear addition can provide the desired increase in interior space without significantly changing the character of the structure.

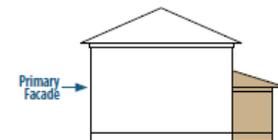
APPROPRIATELY LOCATED AND SCALED ADDITION



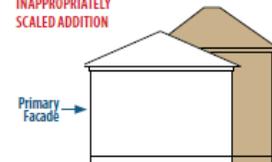
APPROPRIATELY SCALED ADDITION



APPROPRIATELY SCALED ADDITION



INAPPROPRIATELY SCALED ADDITION



2. Construction of an addition that has an equal or lesser number of stories above grade than the main building

- An addition should be secondary to the original building. It should not overpower the original building with its size, either in floor area or in height.

3. Construction of an addition in a manner that protects the character-defining features and materials of the original building

- New additions should be considered only after all other options, such as altering non-character-defining interior spaces, has been explored.

- New additions should be designed and constructed so that the character-defining features of the historic building are not drastically changed, obscured, damaged, or destroyed during the construction process.

- Additions should be attached to the original building in a manner that results in the least amount of loss of historic materials.

Reversibility of the addition is an important consideration. An addition should be constructed in a manner in which it could be removed at a later date without severe damage to the architectural character of the historic structure.

NOT RECOMMENDED

1. Construction of an addition to the front façade of the principal building

2. Construction of an addition to a historic building that extends above its roofline or that changes the original roof form

- Generally, the roof shape and pitch of the original building should be repeated in the addition.

3. Construction of an addition that is wider than the original building

- Side additions or additions that are wider than the original building should be constructed with caution because many architectural styles rely on balance and symmetry.

3.4.1.2 Guidelines for Materials of Additions to Historic Buildings

Additions should be compatible in design, but distinguishable from the original building. It is often advisable to use exterior materials to achieve this distinction. Natural historic building materials exude a warmth, patina, and texture that modern, synthetic materials struggle, and usually fail, to achieve. When creating additions to historic buildings, it is important that the exterior materials are similar in scale, texture, and composition.

RECOMMENDED

1. Construction of an addition that is clearly differentiated from the historic portion of the building so as not to give a false historic impression

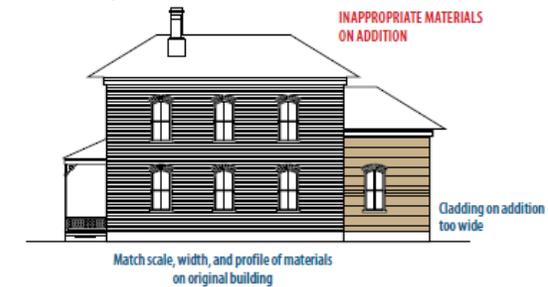
2. Use of exterior materials that are similar to what was used on the historic portions of a building

- The finish of an addition should be consistent with that of the original building; for example, siding should be the same width, and new brick should be painted if the historic brick is painted.

3. Using fiber cement or other siding that is similar to historic wooden siding in texture, appearance, and reveal dimension

NOT RECOMMENDED

1. Construction of an addition that results in the unnecessary loss of historic materials



3.4.1.3 Guidelines for Windows and Doors on Additions to Historic Buildings

In order to create an addition that is compatible with a historic building, it is important to include window and door openings that are appropriately placed and in scale with the original design.

RECOMMENDED

1. Construction of additions with fenestration (door and window openings) that are in proportion with window and door openings on the original building

- An addition should reflect the established fenestration pattern of doors and windows on the original building.

2. Use of windows and doors that are compatible with those on the historic portion of the house in terms of materials, size, and design

3. Use of windows that have true divided lights (TDL) or simulated divided lights (SDL) that reflect the design of historic windows

NOT RECOMMENDED

1. Construction of an addition with large, unbroken expanses of wall (without windows and doors) that are out of character with the original structure

2. Use of windows with flat grilles or muntins sandwiched between panes of glass

ADDITION WITH COMPATIBLE FENESTRATION



ADDITION WITH INCOMPATIBLE FENESTRATION



Questions?



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