

**Limestone Properties Thematic Nomination**  
**Part 4**  
**Preservation Program and Design Review Guidelines**



*Joseph Brings House (Photo: Minnesota Historical Society)*



# 1 Introduction

The City's Legislative Code, Chapter 73 creates the Saint Paul Heritage Preservation Commission and grants powers and duties that include the review of city permits for work at designated sites and districts. Specifically, §73.04(4) states the commission shall protect the architectural character of heritage preservation sites through review and approval or denial of applications for city permits. The following guidelines for design review will serve as the basis for the Heritage Preservation Commission's design review decisions for properties designated under the Limestone Properties Thematic Nomination. The guidelines define the most important elements of the Site's unique physical appearance and state the best means of preserving and enhancing these elements in rehabilitation. Their purpose is to assure that design review will be based on clear standards rather than the tastes or opinions of individual commission members. When applying the guidelines, the Commission, in clearly defined cases of economic hardship, will also consider deprivation of the owner's reasonable use of property. Decisions of the Heritage Preservation Commission are subject to appeal to the City Council (§73.06(h)).

## 2 General Intent

The City of Saint Paul, a Certified Local Government in the National Historic Preservation Program, has agreed to conduct its design review of locally designated heritage preservation sites and districts according to the *Secretary of the Interior's Standards for Rehabilitation (2014) (The Standards)*. The Standards are applied to projects in a reasonable manner, taking into consideration economic and technical feasibility. *The Standards* provide general information to determine appropriate treatments for historic properties. They are intentionally broad in scope in order to apply to a wide range of circumstances. The Standards have been designed to enhance the understanding of basic preservation principals and may be applied to one historic resource or a variety of historic resource types such as Districts, Sites, Buildings, Structures, and Objects. The Standards identifies four primary treatments: preservation, rehabilitation, restoration, and reconstruction.

**Preservation** is defined as the act or process of applying measures necessary to sustain the existing form, integrity and material of an historic property. Improvements generally focus on the ongoing maintenance and repair of historic materials, rather than extensive replacement or new construction.

**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 or cultural value. The Standards for Rehabilitation have been codified in 26 CFR 67.

**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 time by the removal of features from other periods in its history and reconstruction of missing features from the restoration period.

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



Although there are components that may include restoration and preservation treatments, it is the Standards for Rehabilitation that is emphasized when reviewing proposals. The ten Standards for Rehabilitation are:

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.
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.
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.
4. Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.
5. Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a historic property shall be preserved.
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.
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.
8. Significant archeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.
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.
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.

### **3 Description**

#### **3.1 Boundaries and Sites**

*3.1.1 Anthony Waldman House: 445 Smith Avenue, inventory # RA-SPC-3406*

*3.1.2 Christian Reinhardt House: 383 Goodhue Street, inventory # RA-SPC-8334*

*3.1.3 Justus Ramsey House: 252 West Seventh Street, inventory # RA-SPC-5296*

*3.1.4 Martin Weber House: 202 McBoal Street, inventory # RA-SPC-4353*



## 4 Guidelines for Repair and Rehabilitation of Sites

Although the ways we use buildings have changed over the years, we can still appreciate the historical and visual values that historic buildings present. To insure that succeeding generations can also appreciate them, the goals of rehabilitation and repair of historic buildings are twofold. The first is to maintain the appearance of age (patina). The second is to maintain the authenticity of the historic building and its materials.

### 4.1 Limestone Masonry

Limestone is a product of natural forces, and varies in its physical properties. All limestones contain calcium carbonate, but vary in the amount of calcium magnesium carbonate (dolomitic limestones), clay minerals (argillaceous limestones), or other minerals they contain. Natural variation can lead to stones that appear similar but differ significantly in actual composition. Even if aggressive treatments have been successful on other masonry surfaces, for limestone, they should be used only in cases of extreme need. Also, water will slowly dissolve limestone. Treatments which seal the surface can trap water inside the limestone and lead to its dissolution and should not be used.

*4.1.1 Cleaning:* Limestone and other masonry should be cleaned only when necessary to halt deterioration or to remove graffiti. Cleaning should never be undertaken if freezing temperatures are expected within two (2) weeks of the cleaning. Cleaning should always start with the gentlest method possible; unpressured water and soft, natural or plastic bristle brushes.

Only if more gentle methods do not work, low pressure water can be considered to remove problem stains. This type of cleaning should be used sparingly and very carefully. The pressure should be low (under 400 psi), and wide-angle (35- and 45-degree) nozzle tips should be used. The nozzle should be kept a minimum of 36 inches from the surface of the masonry.

If detergents are necessary, water soluble, non-ionic cleaners are preferred because they rarely have chemical interactions with masonry. Chemical cleaners should be a method of last resort, and they should not be used except for removing oil or solvent stains. Corrosion stains (rust, verdigris, etc.) should be removed with a product specifically designed for the stain. Acid-based cleaners should never be used because they dissolve limestone. Muriatic (hydrochloric) acid, other mortar removers, and many “restoration” masonry cleaners contain acid and must not be used on or near limestone. Brick and stone surfaces shall not be sandblasted with dry or wet grit, ice, soda, or other abrasives. Abrasive cleaning methods generally erode the surface of the material, which will alter the appearance and can increase the speed of decomposition.<sup>1</sup>

*4.1.2 Paint and Whitewash:* Limestone masonry is usually a durable exterior material, but there are cases where masons historically covered soft stones and bricks with sacrificial coatings to improve their durability. Masonry that has not been painted or whitewashed

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<sup>1</sup> See Mack & Grimmer (2000). “Preservation Brief 1: Assessing Cleaning and Water-Repellent Treatments for Historic Masonry Buildings.” <http://www.nps.gov/tps/how-to-preserve/briefs/1-cleaning-water-repellent.htm>.



should not be painted. If the masonry coating existed historically, this coating should be maintained or re-applied.

Whitewash, limewash, color wash and mineral paints are a class of materials that are designed to be used on masonry. They also do not inhibit the evaporation of water vapor from the masonry. If masonry was historically painted with one of these materials, then it should be maintained with the coating. Whitewashes, limewashes, and color washes are inexpensive and easily removed if necessary. However, they require frequent (every 1-5 years) reapplication. Mineral paints are expensive and difficult to remove, but durable.

Paints, historically, were made of oils that dried through oxidation. They limited the evaporation of water from the masonry and altered its color even after the paint was gone. The vast majority of current paints are made from latex polymers that trap water inside masonry. Because they can cause problems with moisture, paint should not be applied to masonry unless it is required to solve a specific technical problem that has been studied and identified and determined to comply with applicable design guidelines.

The removal of paint or other coatings from masonry surfaces should only be attempted if unpainted surfaces are historically appropriate and if removal can be accomplished without damage to the masonry. An appropriate paint removal product, especially for the removal of graffiti, shall be applied on inconspicuously sited test areas to determine its effect on the masonry and its effectiveness in removing the paint.

*4.1.3 Stucco:* Stucco, also known as parging or rendering, is basically a thin coat of mortar applied to the exterior of masonry. Historically, it was used as a sacrificial coating or for improving the exterior appearance of rubble masonry. Stonework that was historically visible should not be stuccoed. Existing stucco should be maintained by periodic re-application or covering with a thinner sacrificial coating (see whitewash above). If necessary, new stuccos should not contain latex or other non-mineral ingredients and should be as vapor permeable as possible (type O or softer) to encourage water vapor to evaporate from the masonry. New stucco shall match historic applications in color and texture and should not alter the profile of openings and details. Skim coats should not alter openings or other details, such as architraves, belt courses, quoins etc. The addition or repair of stucco should be performed by experienced professionals using craftsmanship similar to the levels described in the guides described in repointing (below).

*4.1.4 Other Coatings:* Chemical coatings can accelerate deterioration of the masonry, and are frequently expensive and / or unnecessary. Waterproof or water repellent coatings or surface consolidation treatments should not be applied unless required to solve a specific technical problem that has been studied and identified and determined to comply with applicable design guidelines. In rare cases where a consolidant or paint coating is determined to be historically and structurally appropriate, the color and finish is subject to review.

*4.1.5 Repair:* Limestone is usually a durable material, but all masonry systems need periodic maintenance. Unpredictable events can lead to damage to the masonry system. Both of these situations will require some repair. For any repair, original masonry and mortar shall be retained whenever possible without the application of any surface treatment.

Repointing (tuckpointing) is periodic maintenance for exterior masonry that is usually performed on a 50 year cycle for exposed joints and much less frequently for protected joints.



Repointing should only be done on areas that need repair. Usually, this is on those mortar joints where mortar is missing to a depth that is at least equal to the width of the joint, or the mortar has completely detached from the masonry units. Any repointing work should be done by experienced professionals and should conform to standards of craftsmanship laid out in guides to repointing.<sup>23</sup>

Deteriorated or damaged mortar, when necessary, shall be repaired or replaced with a flexible mortar that maintains a good bond with the masonry but allow the exit of water vapor from the core of the wall. This is usually a type O or softer, but a type N can be used in cases of durable masonry. New mortar joints should resemble the original in size, shape, color, texture and profile, if known. New mortar joints should be flat and minimally recessed if the original joint profile is not known.

Deteriorated stone should be maintained unless it has lost more than two inches of its exterior face or can no longer bear weight. The deteriorated stone and all surrounding mortar should be carefully removed so that the new stone fits in the same area and the new mortar bonds to the surrounding stone. Replacement stone should match the removed stone in size, color, and veining.

*4.1.6 Insulating Historic Masonry Walls:* Current standards for comfort and energy efficiency often require improving the thermal performance of the exterior envelope of a building. However, contemporary insulation can damage a solid masonry wall because of the potential of interstitial condensation.<sup>4</sup> Usually, it is simpler to find efficiency gains in other parts of the building envelope, such as the addition of storm windows or attic insulation (see Energy Efficiency below).<sup>5</sup> The addition of insulation to solid masonry should be used only as a last resort. Plaster and lath interior walls have effective insulation in the form of an air gap behind, and they should be maintained. Any new insulation system should be vapor-permeable in both directions and should not use steel studs. No vapor barriers should be added, and the insulation should allow the movement of moisture. Because they are vapor barriers, spray foam insulations, polystyrene boards (Styrofoam), foil-backed bats or boards, asphalt-paper-backed bats or boards, and polyethylene sheets should not be used.<sup>6</sup>

*4.1.7 Resources:* The following National Park Service publications contain more detailed information about masonry.

*Preservation Brief #1: The Cleaning and Waterproof Coating of Masonry Buildings.*

*Preservation Brief #2: Repointing Mortar Joints in Historic Brick Buildings.*

*Preservation Brief #6: Dangers of Abrasive Cleaning to Historic Buildings.*

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<sup>2</sup> See Mack & Speweik (1998). "Preservation Brief 2: Repointing Mortar Joints in Historic Masonry Buildings." <http://www2.cr.nps.gov/tps/how-to-preserve/briefs/2-repoint-mortar-joints.htm>

<sup>3</sup> See Frew (2007). "Pointing with Lime." <http://www.buildingconservation.com/articles/pointing/lime-pointing.htm>

<sup>4</sup> See Hutton (2004). "Condensation." <http://www.buildingconservation.com/articles/condensation/condensation.htm>

<sup>5</sup> See Hensley & Aguilar (2011). "Preservation Brief 3: Improving Energy Efficiency in Historic Buildings." <http://www2.cr.nps.gov/tps/how-to-preserve/briefs/3-improve-energy-efficiency.htm>

<sup>6</sup> See Jenkins & Curtis (2014). "INFORM: Improving Energy Efficiency in Traditional Buildings." <http://conservation.historic-scotland.gov.uk/publication-detail.htm?pubid=6947>



*Preservation Brief #22: The Preservation and Repair of Historic Stucco.*

*Preservation Brief #39: Holding the Line: Controlling Unwanted Moisture in Historic Buildings.*

## **4.2 Siding and Shingles**

Historic stone buildings may have areas of siding or shingles in gable ends, or there may be wood frame additions on the building that are historically significant. Historic wood materials are of equal importance as masonry, and should be treated accordingly.

*4.2.1 Repair:* Original wood and metal siding and shingles should be retained whenever possible without the application of any surface treatment. A similar material should be used to repair or replace, where necessary. New siding and shingles added to the structure or site should be compatible with the material, color, texture, size, design, and arrangement of the original materials.

*4.2.2 Vinyl, Aluminum and Composite Materials:* Avoid covering architectural features with new materials that are inappropriate to the historic nature of the building, including vinyl, aluminum and hard-board siding. Buildings originally clad in wood siding shall not be resurfaced with brick, stucco, artificial stone or brick veneer, hardboard, or vinyl or aluminum siding. The commission may consider the following exceptions to the installation of synthetic siding on a case-by-case basis: A) In cases where existing asphalt, asbestos, aluminum or vinyl siding are to be removed and where the underlying original siding and decorative features are found to be significantly deteriorated. Commission staff must conduct a site visit during the removal process and advise on appropriate treatment. B) In the resurfacing of a noncontributing building. C) In the resurfacing of existing or new construction of garages, particularly when the garage is inconspicuously sited. If synthetic siding is used as described in A-C, it must be of a width and texture appropriate to the style of the building, and all architectural details including window trim, wood cornices and ornament must remain uncovered.

*4.2.3 Decorative Siding Treatments:* Wooden shingles used for cladding material or decoration, such as in the gable ends, shall be conserved and retained. If replacement is necessary, shingles should replicate the original in material, width, pattern, thickness, profile, texture and weather (lap). Decorative siding treatments, such as paneled patterns used in the gable ends, on bays or around openings shall be retained and repaired. If replacement is necessary, the new shall match in material, size, pattern, profile and texture.

*4.2.4 Painting:* Wood shingles or siding may have been painted or whitewashed for practical and aesthetic reasons. Paint should not be indiscriminately removed from wooden surfaces as this may subject the building to damage and change its appearance. Exterior wooden surfaces shall be maintained with appropriate paint or stain. Color is a significant design element and exterior paint colors should be appropriate to the period and style of the historic building. Building permits are not required for painting, and although the Heritage Preservation Commission may review and comment on paint color, paint color is not subject to Heritage Preservation Commission approval.

*4.2.5 Resources:* The following National Park Service publications contain more detailed information about wood.

*Preservation Brief #9: The Repair of Historic Wood Windows.*



*Preservation Brief #10: Exterior Paint and Problems on Historic Woodwork.*

*Preservation Brief #17: Identifying the Visual Aspects of Historic Buildings as an Aid to Preserving Their Character.*

*Preservation Brief #32: Making Historic Properties Accessible.*

*Preservation Brief #37: Appropriate Methods for Reducing Lead-Paint Hazards in Historic Housing.*

*Preservation Brief #39: Holding the Line: Controlling Unwanted Moisture in Historic Buildings.*

### **4.3 Roofs, Chimneys, Cornices and Parapets**

The roof of any building is a critical part of keeping water out of the walls. The roof, detailing, and water conveyance systems (gutters, downspouts, etc.) should be checked annually and repaired immediately if any problems occur.

**4.3.1 Roof Structure:** The historic structure of a roof for masonry buildings must be maintained. Truss roofs must not be replaced with rafter roofs, and any horizontal roof members, including tension rods, must not be removed. Masonry walls are weak in tension, and the horizontal thrust of rafters can distort and collapse walls unless the walls are designed to counter the forces.

**4.3.2 Roof Shape:** The original roof type, slope, overhangs and architectural details shall be preserved. The size, shape and original roof features such as dormers, cupolas and parapets shall also be preserved. New roof features may be acceptable if compatible with the original design and not conspicuously located.

**4.3.3 Materials:** When the roof is visible from street level, the original material should be retained if possible, otherwise it should be replaced with new material that matches the old in composition, size, shape, color, and texture. When partially re-roofing, deteriorated roof coverings should be replaced with new materials that match the original in composition, profile, size, shape, color and texture. When entirely re-roofing, new materials which differ to such an extent from the original in composition, size, shape, color or texture that the appearance of the building is altered shall not be used. The predominant roof materials on the residential buildings in the Jacob Schmidt Brewery Historic District are asphalt shingles. When asphalt shingles began to be used in the 1890s and early twentieth century, the most common colors were solid, uniform, deep red and solid, uniform, dark green. Dark brown, dark gray and weathered-wood colors may also be acceptable for new asphalt shingles.

**4.3.4 Alterations:** The roof shape of buildings shall not be altered except to restore it to the original documented appearance. The additions of architecturally compatible elements like dormers may be considered by the HPC on a case-by-case basis. Documentation includes pictorial or physical evidence of the former appearance of the building, or, in the case of pattern book houses, those of similar period and style.

**4.3.5 Skylights:** New skylights and vents should be behind and below parapet level for flat roofs. Skylights and vents shall not be installed on principal elevations for sloped roofs. Modern skylights are a simple way to alter a roof to admit light and air without disrupting its plane surface. Skylights should be flat and as close to the roof plane as possible. They



should not be placed on the front or highly visible roof planes. "Bubble"-type skylights shall not be installed.

**4.3.6 Chimneys, Stovepipes and Smokestacks:** Chimneys and smokestacks should be preserved or restored to their original condition. In the absence of historical documentation on the original design, chimney design should be in keeping with the period and style of the building. New chimneys and stovepipes should not be installed on front roof planes.

**4.3.7 Cornices, Parapets and Other Details:** All architectural features that give the roof its essential character should be preserved or replaced in kind. Similar material should be used to repair/replace deteriorating or missing architectural elements such as cornices, brackets, railings and chimneys, whenever possible. The same massing, proportions, scale and design theme as the original should be retained.

**4.3.8 Resources:** The following National Park Service publications contain more detailed information about roofs.

*Preservation Brief #4: Roofing for Historic Buildings.*

*Preservation Brief #19: The Repair and Replacement of Historic Wooden Shingle Roofs*

*Preservation Brief #29: The Repair, Replacement, and Maintenance of Historic Slate Roofs.*

*Preservation Brief #35: Understanding Old Buildings: The Process of Architectural Investigation.*

#### **4.4 Windows and Doors**

Windows and doors are a character defining architectural feature of any building, and they establish the visual rhythm, balance and general character of the facades. Any alteration, including removal of moldings or changes in window and door size or type, can have a significant and often detrimental effect on the appearance of the building. It is important to note that in most cases, the historic windows can be affordably repaired and made to perform as well as modern windows. Historic windows that are easily repairable are often replaced at greater cost because homeowners only contact companies that replace windows.

**4.4.1 Openings:** Existing window and door openings should be retained. New window and door openings should not be introduced into principal or highly visible elevations. New openings may be acceptable on secondary or minimally visible elevations so long as they do not destroy or alter any architectural features and the size and placement is in keeping with the solid-to-void (wall-to-openings) ratio of the elevation.<sup>78</sup> Enlarging or reducing window or door openings to fit stock window sash or new stock door sizes shall not be done.

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<sup>7</sup> See Staveteig (2000). "New Openings in Secondary Elevations or Introducing New Windows in Blank Walls." <http://www.nps.gov/tps/standards/applying-rehabilitation/its-bulletins/ITS14-Adding-NewOpenings.pdf>

<sup>8</sup> See Grimmer (2001). "Adding New Openings on Secondary Elevations." <http://www.nps.gov/tps/standards/applying-rehabilitation/its-bulletins/ITS21-NewOpenings-SecondaryElevations.pdf>



*4.4.2 Panes, Sashes and Hardware:* Historic windows should be preserved, and repair of historic windows shall be considered before replacement.<sup>9</sup> If replacement is warranted, windows should be replaced in-kind. Window panes should be two-way glass. No reflective, spandrel, or opaque glass is permitted. The stylistic period or periods a building represents should be respected. Missing or irreparable windows should be replaced with new windows that match the original in material, size, general muntin and mullion proportion and configuration and reflective qualities of the glass. Replacement sash should not alter the setback relationship between window and wall. Heating and air conditioning units should not be installed in the window frames when the sash and frames may be damaged. Window installations should be considered only when all other viable heating and cooling systems would result in significant damage to historic materials. Window installations may be acceptable in secondary facades.

*4.4.3 Trim:* Historic window casings and exterior trim should be retained wherever possible. If replacement is necessary, the original profile shall be replicated. Historic trim should not be covered with metal or synthetic coverings (wrapping or panning).

*4.4.4 Lintels, Arches and Sills:* Lintels, sills, architraves, pediments and hoods are an important part of the structure and water protection of the window. They should be retained or repaired if possible. If repair is not feasible, then replacement elements should be crafted with the same materials, profiles, scales, details, and craftsmanship. Historic colors, if determined, and textures should be matched when repairing these elements.

*4.4.5 Storms and Screens:* Storm windows and doors are an important first line in making a building energy efficient. They should be compatible with the character of the building and should not damage window and door frames, or require removal of original windows and doors. Exterior storms should be appropriate in size and color and resemble historic wood storms. Combination storm windows should have wood frames or be painted to match trim colors. If combination metal storms are installed, they shall have a baked-enamel finish, be attached to the exterior (blind) stops, and have an exterior surface flush with the adjacent brick molds. Storm windows should resemble the inner window and should not have vertical or horizontal divisions which conflict with the divisions of the inner sash. Storms and screens should not pan or wrap the opening or casing.

*4.4.6 Shutters:* Shutters were a feature of some historic buildings, and they functioned as climate control, security, and sometimes as windows. Exterior shutters should not be added to a building unless there is evidence that they existed historically. Where appropriate, shutters should be, or appear to be, functional and should be mounted to the window casing. Shutters should be constructed of wood and should be simple (paneled wood) unless evidence proves otherwise.

*4.4.7 Security Measures:* There are situations where visible security features for window and door openings are useful, but they should be installed so that they can be removed later with minimal damage to the historic building. Historic trim or other architectural features shall

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<sup>9</sup> See Myers (1981). "Preservation Brief 9: The Repair of Historic Wooden Windows."  
<http://www.cr.nps.gov/tps/how-to-preserve/briefs/9-wooden-windows.htm>



not be removed for the installation of security bars or grills. Interior shutters are a traditional option that sensitively add security and insulation to existing windows.<sup>10</sup>

*4.4.8 Awnings and Canopies:* Some historic buildings employed awnings for climate control and as a form of decoration. Awnings and canopies should not be used when they conceal richly detailed entries and windows. Aluminum or plastic awnings shall not be used. Surface design elements should not detract from or conflict with the related structure's age and design. Awnings should have a traditional shape such as a tent shape or be rounded when the opening is arched. Awnings should be used in a traditional application for shading window or door openings.

*4.4.9 Resources:* The following National Park Service publications contain more detailed information about windows and doors.

*Preservation Brief #3: Conserving Energy in Historic Buildings.*

*Preservation Brief #9: The Repair of Historic Wood Windows.*

*Preservation Brief #10: Exterior Paint and Problems on Historic Woodwork.*

*Preservation Brief #17: Identifying the Visual Aspects of Historic Buildings as an Aid to Preserving Their Character.*

*Preservation Brief #37: Appropriate Methods for Reducing Lead-Paint Hazards in Historic Housing.*

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<sup>10</sup> See Crow and Historic Scotland (2010). "Inform: Timber Window Shutters." [http://www.historic-scotland.gov.uk/inform\\_timber\\_window\\_shutters.pdf](http://www.historic-scotland.gov.uk/inform_timber_window_shutters.pdf)



## **4.5 Porches and Steps**

Porches were a significant part of a house in the nineteenth century and reflected the social development of the US.<sup>11</sup> Porches should be considered one of the most significant architectural features of a building and treated as such.

*4.5.1 Preservation:* Porches and steps which are historic or appropriate to the building and its development should be retained. Porches and additions reflecting later styles of architecture are often important to the building's historical evolution and should be retained. Infilling of porches should be avoided. The treatment of historic materials of porches should follow the guidelines for masonry or wood trim above.

*4.5.2 Reconstruction:* If porches and steps removed from the building are to be reconstructed, the new work must be based upon photographic documentation, physical evidence, and historical research. Simple designs should be used if evidence is lacking in order to avoid speculation. A professional can help create a design that is compatible in design and detail with the period and style of the building. In replacing porch railings, it is important to maintain the original spacing, section and profile of the balustrades.

*4.5.3 Decorative Features:* Decorative architectural features such as cornices, brackets, railings, and those around front doors and windows should be preserved. New material used to repair or replace, where necessary, deteriorated architectural features of wood, iron, cast iron, terra-cotta, tile and brick should match the original as closely as possible.

*4.5.4 Additions and Infill:* If new materials must be added for necessity or compliance, the old materials should be preserved in place. Taller railings should be slim in profile and mounted behind existing balustrades. Infilling should be avoided, but infill panels should not displace or obscure porch columns, knee walls, and balustrades.<sup>12</sup> Deck and fire stair additions and new balconies may be acceptable in some cases, but should be kept to the rear of buildings where they will be the most inconspicuous and detract the least from the historical context. The detailing of decks and exterior stairs should be compatible with the period and style of the building.

*4.5.5 Resources:* The following National Park Service publications contain more detailed information about porches.

*Preservation Brief #10: Exterior Paint and Problems on Historic Woodwork.*

*Preservation Brief #17: Identifying the Visual Aspects of Historic Buildings as an Aid to Preserving Their Character.*

*Preservation Brief #32: Making Historic Properties Accessible.*

*Preservation Brief #45: Preserving Historic Wood Porches.*

## **4.6 Fencing, Enclosures and Retaining Walls**

Many houses have small walls and other enclosures that are part of the historic fabric of the building site. Existing fencing and retaining walls that are identified as contributing

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<sup>11</sup> Sullivan and Leeke (2006) "Preservation Brief 45: Preserving Historic Wood Porches."  
<http://www.cr.nps.gov/tps/how-to-preserve/briefs/45-wooden-porches.htm>

<sup>12</sup> Sullivan and Leeke (2006).



elements to the Site or District should be appropriately maintained and preserved. Mortar should not be added to stone walls that were historically dry-laid (i.e. built without mortar). Otherwise, the elements of walls should be treated as elements of historic buildings.

#### **4.7 Mechanical Systems**

Historically, buildings from the frontier era had few amenities. Modern standards of comfort can require the installation of many systems that could disrupt the visual and material integrity of a building. The installation of climate control systems should be carefully considered and designed by professionals.

*4.7.1 Location and Siting:* Mechanical related equipment should be sited in such a way that they do not block or disrupt principal elevations and prominent views, especially on roof tops. Mechanical related equipment that is sited on grade should be inconspicuously sited. In some cases, appropriate screening such as low hedges, may be necessary. Any equipment that must be attached to the exterior of a wall should be done in an unobtrusive location and into mortar joints only. If mechanical attachments, such as water or cooling line sets must cut through a historic masonry wall, the installation should damage as few stones or bricks as possible. It is preferable to extensively damage one stone than to moderately damage four stones. The installation of modern equipment should be carefully planned to avoid damage and removal of historic materials from the interior.

*4.7.2 Grills, Exhaust Fans, etc.:* Grills, vents, exhaust outlets for air conditioners, bath and kitchen exhaust fans should be incorporated into filler panels or exhausted through the roof, if possible. They may be painted the same color as the filler panel.

*4.7.3 Resources:* The following National Park Service publications contain more detailed information about mechanical systems.

*Preservation Brief #24: Heating, Ventilating, and Cooling Historic Buildings—Problems and Recommended Approaches.*

#### **4.8 Energy Efficiency**

Historically, the frontier era houses of Saint Paul were fully “off the grid” (i.e. no electricity, no city water). The introduction of modern conveniences and comforts has required the addition of many electrical and fuel-burning mechanicals into these houses. Frontier-era houses will never function in the same way as contemporary houses, and some energy-efficiencies designed for contemporary houses will damage historic houses. Improving efficiency in historic houses should be performed with an overall plan; not piecemeal improvements without consideration for unintended consequences.

*4.8.1 Energy Audit and Planning:* Both the homeowner and the house will be best served if an audit is performed to try and identify where inefficiencies exist in the house. The audit will identify which parts of the building are causing the most energy loss. It is the research that will give the homeowner the most return for a given investment, and it will also minimize the loss of historic fabric. A plan for step-by-step improvement is obtained by using preservation guidelines and the energy audit.

*4.8.2 Upgrading Building Performance:* Before altering historic materials, there are steps that can be taken to greatly increase system efficiency; from closing off rooms that are not in use to upgrading heating and cooling systems and other appliances. Upgrades that minimally



alter the materials and appearance of the building should be considered only if system improvements do not achieve significant savings. The following steps are minimally-invasive to the authenticity of the building and are less likely to damage historic fabric.<sup>13</sup>

- 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.

Other, more invasive alterations should be avoided because they can alter or destroy the historic integrity of the building through removal of materials or long-term moisture problems.

*4.8.2 Resources:* The following National Park Service publications contain more detailed information about energy.

*Preservation Brief #3: Conserving Energy in Historic Buildings.*

*Preservation Brief #24: Heating, Ventilating, and Cooling Historic Buildings—Problems and Recommended Approaches.*

## **5 Guidelines for Signage, Awnings and Accessories**

### **5.1 General.**

Few of the buildings covered in this thematic group would have had signs in the period of significance, but might now. Signs should blend with the character of the structures on or near which they are placed. Signs should not conceal architectural detail, clutter the building's image, or distract from the unity of the facade but, rather, should complement the overall design. Signs, graphics and lighting should be designed as part of the facade. A master plan for signage is encouraged with multiple tenant properties.

### **5.2 Materials.**

Sign materials should complement the materials of the related building and/or the adjacent buildings. Surface design elements should not detract from or conflict with the related structure's age and design in terms of identification symbol (logo), lettering, and related patterns or pictures. Materials used should be the same as those used for signs during the period of the building's construction, such as wood, wrought iron, steel, and metal grill work. Newer materials such as extruded aluminum and plastics may not be appropriate.

### **5.3 Types.**

The sign type should enhance the building's design and materials. There are a number of types of signs which may be used: (1) single-faced; (2) projecting, double-faced; (3) three-dimensional; (4) painted wall signs; and (5) temporary signs.

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<sup>13</sup> See Hensley & Aguilar (2011). "Preservation Brief 3: Improving Energy Efficiency in Historic Buildings." <http://www2.cr.nps.gov/tps/how-to-preserve/briefs/3-improve-energy-efficiency.htm>



#### **5.4 Location and Method of Attachment.**

Signs should be appropriately sized and complement the building exterior; roof-top signs are inappropriate except in cases where physical or pictorial documentation shows they were present and reconstruction is considered appropriate. There should be no sign above the cornice line or uppermost portion of a facade wall.

Signs should not disfigure or conceal architectural details. Painted signs may be permissible on glass windows and doors. The facade should not be damaged or altered in sign application, except for necessary attachment points. Any attachment points on masonry surfaces should be in mortar joints only. The method of attachment should respect the structure's architectural integrity and should become an extension of the architecture. Projecting signs should have a space separating them from the building. (Protection of architecture in method of attachment shall be regarded as a basis for granting variance of the normal zoning code prohibition against guy wire supports for projecting signs.)

#### **5.5 Illumination.**

If illumination is necessary, signs should be lit from on the site (not internal illumination). Because they are historically inappropriate, there should be no flashing, blinking, moving, or varying intensity lighting. Subdued lighting is preferred. Backlit fluorescent or exposed neon are generally inappropriate.

*5.6 Resources:* The following National Park Service publications contain more detailed information about signs and awnings.

*Preservation Brief #11: Rehabilitating Historic Storefronts.*

*Preservation Brief #25: The Preservation of Historic Signs.*

*Preservation Brief #44: The Use of Awnings on Historic Buildings: Repair, Replacement and New Design.*

## **6 Guidelines for New Construction, Additions and Alterations**

### **6.1 General**

In general, historic properties should be used as their historic intended purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment. There are cases where small additions or detached new construction will not materially impair the historic or architectural character of the building or its site. New construction can be detached structures on the same property of the historic structure or an addition that is physically attached to the historic structure. Guidelines for new construction focus on general rather than specific design elements in order to allow for architectural innovation. Existing historic buildings and landscape features should be retained and rehabilitated. New construction should reinforce the historic architectural and visual character of the site. The subject of new additions is important because a new addition to a historic building has the potential to change its historic character as well as to damage and destroy significant historic materials and features. A new addition also has the potential to confuse the public and to make it difficult or impossible to differentiate the old from the new or to recognize what part of the historic building is genuinely historic.

### **6.2 Location**



New construction on the site should not detract from the primary historic building and should be subordinate in massing to the historic structure. Therefore, additions to the primary historic building should be on the rear of the building and visually set back from the side elevations. New, separate buildings generally should be set in the rear of the property and should not obscure the views to the historic building from the public right-of-way. Proper placement of new detached buildings and even additions require an understanding of the development of the property over time and the surrounding area so that new construction is consistent with historic development patterns.

The massing, volume, and height of any new construction should be subordinate to the massing, volume, and height of the existing historic structure on the site. Additions or new buildings on the site that “dwarf” the historic buildings will not comply with these guidelines.

### **6.3 Roofs and Cornices.**

New roof, and cornice designs should be compatible with the primary building on the site. It is more important for roof and roof edges to relate in size and proportion, than in detailing.

### **6.4 Materials and Details.**

The materials and details of new construction should relate to the materials and details of the primary building on the site, but should not be slavishly imitative. In other words, new masonry should be mortared to the exterior, but rubble stone construction is not required. Contemporary, cement-backed “dry stone” construction is not appropriate except for retaining walls. Later additions to early modest limestone houses were often wood frame and reflect the changes in materials, economic conditions and trends in architecture. New masonry additions to the limestone buildings are usually not appropriate.

### **6.5 Windows and Doors.**

Windows, doors, and openings should relate to those of the primary building on the site in the ratio of solid to void, distribution of window openings, and window setback from the exterior wall plane. The proportion, size, style, function and detailing of windows and doors in new construction should relate to that of existing adjacent buildings. Window and door frames should be wood, but imitative materials can be considered on a case-by-case basis.

*6.6 Resources:* The following National Park Service publications contain more detailed information about additions and new construction.

*Preservation Brief #14: New Exterior Additions to Historic Buildings: Preservation Concerns.*

*Preservation Brief #17: Architectural Character—Identifying the Visual Aspects of Historic Buildings as an Aid to Preserving their Character*

## **7 Guidelines Concerning Site Considerations**

### **7.1 General.**

The traditional pattern of streets, curbs, boulevards and sidewalks in the area should be maintained. Distinctive features of spaces in the area such as fences, retaining walls and steps that are important in defining the context should be preserved. The relationship of buildings to open space and setbacks of buildings is important to preserve. New street



furniture and landscape improvements such as benches, bus shelters, kiosks, sign standards, trash containers, planters and fences should be compatible with the character of the Sites. The historic urban pattern of grid plan streets should be retained and enhanced in improvement projects.

### **7.2 Fences and Retaining Walls**

Fences which are low and allow visual penetration of front yard space are preferable to complete enclosure. Fences of wrought iron or wood which enclose the front yard should be no higher than three and one-half (3 1/2) feet. Cyclone fences should not be used to enclose front yards or the front half of side yards. Stone, brick and split face concrete block are preferable to landscape timber for the construction of retaining walls.

### **7.3 Lighting**

The location and style of exterior lights should be appropriate to the structure's age and original design intent.

### **7.4 Hardscaping and Landscaping**

New landscaping should respect the historical and architectural character of the existing property.

## **8 Guidelines for Demolition and Moving Buildings**

Proposals for demolishing structures, partial or whole, while reviewed with special care by the Heritage Preservation Commission, are not necessarily in conflict with the guidelines. When reviewing proposals for demolition of structures, the Heritage Preservation Commission will consider the following:

1. The architectural and historical merit of the building. This includes consideration of the integrity of the structure and whether it was constructed during the Period of Significance.
2. The effect of the demolition on surrounding buildings, the effect of any proposed new construction on the remainder of the building (in case of partial demolition) and on surrounding buildings.
3. The economic value or usefulness of the building as it now exists in comparison with the value or usefulness of rehabilitating the building or structure for a new use.
4. The physical condition of the structure and the feasibility of continued use with considerations of maintenance, safety, and compliance with codes.

Proposals for moving structures off of designated sites shall be reviewed as a demolition and proposals for moving structures onto the designated sites shall be reviewed as new construction.



## Glossary

**Adaptive Reuse** Conversion of a building originally designed for a certain purpose to a different purpose.

**Ashlar** A stone that has been dressed (see dressing) on four or more sides. Ashlar stones are square and regular in the wall. The outside face can be dressed or left rock-faced. Ashlar stone is usually laid in full courses (see course).

**Balustrade** A row of upright posts (balusters) which support a railing.

**Bay** A structural division of a building defined by projections, columns, pilasters or window groupings.

**Belt Course** A horizontal, decorative band around a building, often of a projecting, contrasting material.

**Bracket** A support element under eaves or other overhangs that is often decorative.

**Clapboards** Narrow overlapping wooden boards, often tapering in thickness, nailed horizontally and used as siding.

**Clerestory** An upper fenestrated section of a building designed to provide natural light to a high-ceilinged room.

**Coping.** That capping member of a wall or parapet, usually sloped to shed water.

**Corbel.** A brick or stone support produced by extending successive courses out from the wall surface.

**Cornice.** Projecting ornamental molding which crowns a wall or an entablature.

**Course.** In masonry, coursing describes the built levels of the masonry units. A full course is a level that is horizontally constant and of even thickness (height). All brick and ashlar stone masonry are fully coursed. Stones that are less dressed (see dressing) can be semi-coursed or random (uncoursed).

**Crenellation.** Typically found on a castle or fortification, the term refers to a parapet with alternating openings and raised sections. The raised portions are called merlons, and the openings are called embrasures.

**Dentils.** A row of small rectangular blocks forming a molding that resembles teeth, usually part of a cornice.

**Dormer.** A roofed structure, usually housing a window, which is vertically set on a sloping roof.



**Dressing.** Dressing is the process of cutting and chiseling that gives stone its shape and final appearance. The surfaces of the stone are usually flattened and left with or without tool marks, or they can be left rock-faced.

**Eaves.** The underpart of a roof that extends beyond the structure's wall.

**Fenestration.** The arrangement, proportions, and pattern of windows and door opening in a wall.

**Finial.** A decorative, pointed ornament on the top of a spire, gable, or pinnacle.

**Flashing.** A sheet, usually metal, used to make an intersection of materials watertight.

**Frieze.** An ornamental band immediately below the cornice.

**Gable.** The triangular upper portion of an end wall under a pitched roof.

**Integrity.** The authenticity of a historic building, site, or resource as evidenced by its location, design, setting, materials, workmanship or association.

**Keystone.** The central stone of an arch.

**Light.** An individual pane of glass between mullions and muntins on a window.

**Lintel.** A horizontal beam spanning an opening and supporting construction above.

**Mansard Roof.** A pitched roof having two slopes on all four sides, the lower one being steeper than the upper.

**Massing.** The combination of height, volume, and scale of a building in relation to its surroundings.

**Mortar.** A mixture of minerals mixed as a workable paste that then sets to a hard material. It keeps masonry units in the location where the mason placed them, fills the gaps between the units, protects the wall interior from liquid water, and absorbs the expansion, contraction, and movement of the building. Mortar is traditionally sand and / or small gravel with lime and possibly other binders such as cement, clay, or pozzolana.

**Mullion.** A vertical member dividing (and often supporting) a series of windows or panels: mullions are wider than muntins.

**Muntins.** A narrow bar dividing a window onto individual lights.

**Parapet.** A low projecting wall at the edge of a roof.

**Pilaster.** A shallow pier attached to a wall, sometimes having a capital and base to resemble a classical column.



**Pinning Stone.** In stone masonry, a pinning stone is used when coursing to help level the next course and reduce the amount of mortar used. Repointing work should keep pinning stones to help reduce cracking and shrinking in new mortar.

**Preservation.** The act or process of applying measures necessary to sustain the existing form, integrity, and materials of an historic property. It reflects a building's continuum over time, through successive occupancies, and the respectful changes and alterations that are made.

**Principal Elevation.** The exterior face of a building which is considered an architectural front and/or facing a public right-of-way.

**Property.** Any land, building, structure or object, surface or subsurface area, natural or landscape feature.

**Quoins.** Bricks or stones used to define the corners of masonry buildings.

**Reconstruction.** 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 in its historic location.

**Rehabilitation.** 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.

**Repointing.** The process of removing the old mortar and applying new mortar between brick and masonry joints.

**Restoration.** 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.

**Rhythm.** The relationship of buildings to open space along the street and between structures, the relationship of solids to voids and the repetition or pattern of features on building facades and landscapes.

**Rubble.** Rubble stone is stone that is dressed only on the top and bottom or completely undressed (see dressing). Rubble that is dressed on top and bottom is usually laid in courses (see course). Undressed rubble is usually uncoursed or "random".

**Sandblasting.** The operation of forcibly propelling a stream of abrasive material, such as sand, against a surface under high pressure to smooth a rough surface, roughen a smooth surface, shape a surface, or remove surface contaminants.

**Secondary Elevation.** Generally, the sides and rear of a building which are not considered the architectural front and/or not facing a public right-of-way.



**Setback.** The distance of the primary façade from the street.

**Sill.** In windows, the horizontal member below the window that projects from the wall surface. The sill is sloped to direct water away from the surface and interior of the wall.

**Site.** The location of a significant event, a prehistoric or historic occupation or activity, or a building or structure, whether standing or ruined, or vanished, where the location itself possesses historic, cultural, or archeological value.

**Storm Windows.** Windows which are mounted on the outside of the main windows of a building.

**Structure.** Anything constructed or erected with a more or less fixed location on or in the ground or in or over a body of water. A structure shall include, but not be limited to, buildings, fences, walls, signs, canopies, decks, patios, antennas, piers, bridges, docks, and any objects or things permanently attached to the structure.

***The Secretary of the Interior's Standards for Rehabilitation.*** The most recent standards for rehabilitating historic buildings established by the National Parks Service, United States Department of the Interior.

**Transom window.** A small operable or fixed window located above a door or other window.

**Veneer.** Exterior facing of brick, stone, etc. that provides a decorative, durable, non-load-bearing surface.

**Water Table.** A projecting ledge above the foundation sloped to direct water away from the structure.