Chapter 7:
Rehabilitation Guidelines

In this chapter you will find:

The Secretary of the Interior's Standards for Rehabilitation

General Maintenance

Architectural Materials
- Architectural Metals
- Concrete
- Masonry
- Siding and Trim
- Stucco

Architectural Features
- Roofs
- Gutters and Downspouts
- Storefronts
- Doors
- Windows
- Awnings
- Porches, Decks, & Balconies
- Signage and Historic Markers
- Mechanical Equipment
- Lighting

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- Accessibility
- Retaining Walls
- Fences and Railings

The following guidelines are intended to help property owners choose appropriate rehabilitation treatments for individual elements of their historic building. They are not meant to prescribe the exact action for every situation, but to suggest appropriate approaches that will prevent damage to the historic fabric of the building. As a general rule, preservation standards encourage maintenance of existing historic fabric as the priority, repair when possible, and replacement only as a last resort. However, with any project there will be other factors that play a role in the selection of treatment methods including budget, planned use, access to trades people, owner's preference, and family priorities. These guidelines allow for the flexibility of a range of treatments that are appropriate.

Photograph on cover page:
Example of interior plaster restoration, © Rob Hill & Nicholas Benner, 2008.

In an effort to assist property owners in making sound historic preservation decisions that also meet their needs, the Secretary of the Interior and the National Park Service have developed a set of standards, or general principles, addressing each of the treatment approaches used for historic properties. There are four distinct, but interrelated approaches, for the treatment of historic properties and they are defined as follows:

Preservation is the act of sustaining the changes to the property that have occurred over time and have become historic in their own right due to age and integrity. For example, the approach taken at the Harry S. Truman National Historic Site allows for the retention of changes to the building from its original construction date through the end of Truman's lifetime.

Restoration is the accurate depiction of the 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 features missing from the restoration period. For example, the approach taken at the Vaile Mansion allows only for the retention of features that were seen on the building when it was constructed in 1881.

Reconstruction is the depiction, through new construction, of the form, features, and detailing of a non-surviving site, landscape, building, structure, or object in a specific period of time and in its historic location. For example, if a historic building burned to the ground by fire, the decision to re-build the building as it previously appeared would be considered reconstruction.

Rehabilitation is the re-use of a building through repair, alterations, and additions while preserving features that reflect its historical, cultural, or architectural merits. For example, a property owner purchases a historic church and re-uses the building for a future office. Any of the work required to change the use while maintaining the overall architectural character would be defined as rehabilitation.

The Secretary of the Interior's Standards for Rehabilitation

The Design Guidelines for historic properties in Independence are based on the *Secretary of the Interior's Standards for Rehabilitation*. These principles are applied by Preservation Staff and the Independence Heritage Commission to all projects that require a Certificate of Appropriateness. Additionally, owners that wish to have projects certified for Federal or State historic rehabilitation tax incentives must comply with the Secretary's Standards to qualify. The *Standards for Rehabilitation* are defined as follows:

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.

View from the right-of-way, addition cannot be seen

View from private parking lot at rear

Example: The historic Kritser House (115 East Walnut Street, 2010), once used as a residence, was converted to an office building. A small addition was placed on the rear of the building to accommodate additional office space. The addition placement is appropriate because the original building footprint, brick exterior, gingerbread detailing, and overall appearance from the street is unchanged.

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.

Example: This Queen Anne home is an individually listed local Historic Landmark (409 North Pleasant, 2010). It has numerous architectural elements that make it unique. Alterations such as enclosing the front porch, removing the decorative shingles on the gable end, or covering over the wood clapboard siding would irreversibly change the character and historic appearance of the house.

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.

Example: Adding a wrap-around porch to this historic house (410 W. Farmer, 2010) would be inappropriate as there is no documentation to show that the house ever had a wrap-around porch and would be inconsistent with the building's architectural style. Constructing a porch, even with the same bracket detail and brick on the house, would create a design that was never there, and thus create a false sense of history.

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

Example: The Bullene Choplin House, (702 North Delaware, 2010) was constructed in three phases in 1860, 1890, and finally 1920. Since each alteration is over 50 years old and all tell the story of the evolution of the property, each change is considered historic and should be protected and preserved.

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

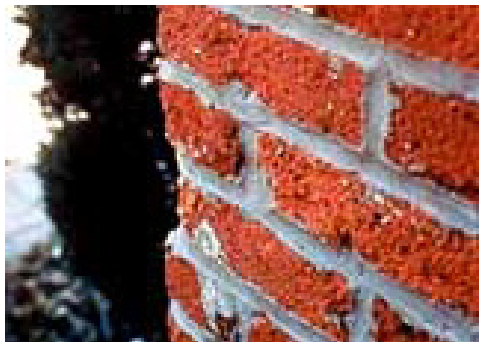
Example: The Vaile Mansion, (1500 North Liberty, 2010) is famous for its Second Empire Architectural Style and ornate details. Removal of one or all of these unique features such as the tower, slate roof, decorative brackets, or porch details, that define the style and craftsmanship of the mansion, should never be undertaken. Refer to the glossary for a definition of Second Empire architectural style. This style is rare in Independence.

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.

***Note: **While colors may be a consideration when replacing metals such as copper flashing or roofing materials, paint colors for architectural features are never regulated in Independence.** Although, the property owner's sensitivity to painting within a historically appropriate color palette will maintain the historic integrity of the property and neighborhood.*

Example: This house on North Spring Street (2010), has many architectural features in repairable condition. However, if there are elements, such as the decorative wood trim and clapboard siding, that are deteriorated beyond saving, reproductions of the wood trim and clapboards should be made to match the original as closely as possible. The reproduction pieces should be made of the same material as the original (if possible), match all dimensions of the original (including thickness, reveal, and tapered edges), and should be placed back in their original location/configuration.

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.



Photographs from the National Park Service Technical Preservation Brief No. 6: Dangers of Abrasive Cleaning to Historic Buildings.

Example: A property owner wishes to remove graffiti from a historic stone foundation. The owner hires an architect with a specialty in historic properties and recommends beginning with the gentlest means possible, low to medium pressure washing the area. If this is not sufficient to remove the stain, a non-corrosive light chemical wash could be used. More aggressive methods should be reserved for last. All cleaning methods should be tested in an inconspicuous area to make sure the process does not damage the building. If the method should start to damage the area, the test should be discontinued and the cleaning halted until a safer alternative is found.

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

Photographs from the National Park Service website.

Example: A property owner is burying power lines at their home when they come across what appear to be pottery chards and bone fragments in the new ditch. The property owner should halt the work and contact local law enforcement. Secondly, the owner should contact the Department of Natural Resources and the Missouri State Historic Preservation Office for additional information on how to proceed. The City of Independence reviews archeology if the project requires Section 106 review, has federal funding, or if human remains are found. The city consults with the Missouri State Historic Preservation Office on matters involving these instances.

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.

Example: Above are photographs of inappropriate changes to the exteriors of these houses which have irreversibly altered their original designs. Inappropriate materials were used to enclose an open front porch, which should be avoided. Windows were added which do not visually resemble the rest of the home, and a large front addition was added, made from an incompatible material. Additions should never overpower the front facade of a building, and cladding should be sensitive to the original materials (brick, wood, stone, etc.).

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.

Example: This new open porch addition (403 North Delaware, 2010) on the back of this historic house could be removed in the future without damaging the original design of the building (original building footprint, traditional wood clapboard siding, or orientation to the street).

General Maintenance

403 North Delaware Street, 2010

Regular maintenance is critical for the upkeep of every building, regardless of age. However, it is especially critical to develop a regular maintenance plan for a historic building. Bi-annual inspections of the exterior and interior should focus on the building envelope and its components. This includes the roof, siding and outer walls, foundation, and window and door openings. Inspections should be completed after winter's freeze thaw cycles are done and after summer's heat, humidity, and rain.

While even the most experienced of property owners cannot be expected to know all of the intricacies of building construction, it is vital for owners of historic property to understand the nature of weathering. Locations where water can enter the building is of particular concern. Property owners should note all locations where wood rot, water, and air infiltration is evident and address those areas immediately. Almost all deterioration is the result of the damaging effects of moisture. In fact, the most visible damage to wooden elements, referred to as "dry rot", is caused by wet conditions.

In order for a house or building to be comfortable for its inhabitants it must remain weathertight. Every structure needs upkeep in order to maintain: a strong foundation to support the weight of the building, structural walls to support the roof and to protect the interior from wind and rain, windows that permit light in while keeping the elements out, doors that allow access but that can be closed tight when necessary, a roof designed to shed rain water and snow, and gutters and downspouts to carry the runoff away from the building.

When a regular plan is adopted by the property owner and basic maintenance is kept up, the owner will find that years can be added to the life of the building. Refer to the sections on architectural features and sitework found within this chapter for additional information.

The following notes on basic maintenance offer important advice on keeping your historic building weathertight:

Roofs and Flashing

• Roofs are the first line of defense against damage to building fabric from water infiltration. Any location where two rooflines intersect, and where the roof meets a chimney or dormer should be inspected on a regular basis. Check the condition of roofing material and flashing, including sealants on stepped flashing. This should be done in the spring after the freeze thaw cycles of winter, and in the fall after summer heat and storms.

• Keep metal roofs painted with proper paint. Do not use asphalt patch or asphalt-based paint on metal roofs.

• Gutters and downspouts should be checked once every season to see that they are clean and free of debris. Be sure to check for deterioration of the covering, mechanical attachments, and flashing. Make sure that the correct type of fastener is used with metal flashing or roofing to prevent galvanic reaction which accelerates corrosion.

Foundations

• Foundations should be checked annually for signs of cracking, water penetration, or mortar damage. Make sure that all water is draining away from the building. Keep all vegetation far enough away from the foundation (at least 24”) to prevent damage from moisture or from the roots. Make repairs in accordance with guidelines for masonry repair.

Windows and Doors

• Windows and doors should be inspected seasonally. Any cracked or broken glass should be repaired. Check for missing or cracked glazing compound as well, and repair if needed. Glass should be cleaned on a regular basis. Inspect painted surfaces of sash, sills, frame, and lintels for signs of paint problems. Sand, prime and touch up areas once a year. Check the condition of weather-stripping and replace if needed.

• Trim around doors and windows should be sound when inspected. If gaps are apparent, apply caulk to any gap less than 1/8” and

re-inspect seasonally. If a gap of more than 1/8" is present, insert foam backer rod into the gap and seal over the backer rod. This prevents both water and air from entering the house at those points. If trim shows signs of wood rot, repair or replace rotted wood immediately with in-kind materials (wood for wood).

Siding and Exterior Walls

• Brick and stone are enduring materials and are associated with buildings of a permanent nature. But masonry buildings require cyclical maintenance. The mortar used should be softer than the brick or stone used. Mortar is meant to take the brunt of damage from the elements before the brick or stone is damaged. Mortar should be inspected and repaired with material matching the original where it has cracked or washed out. Mortar testing is highly recommended.

• Never sandblast a masonry building. Abrasive cleaning of any kind damages and erodes the weathering surface of all masonry. Dirty masonry should be cleaned in the softest possible manner, starting with water and a soft bristle brush. When cleaning with a new chemical or treatment, find an inconspicuous location as a test location (on the back of a building is preferred). If there is no evidence of damage after a few days, proceed with the process.

• Masonry should always be able to breathe; allowing moisture to pass from the inside of the building to the outside. Sealants should only be considered on severely deteriorated brick or stone. Sealants should be breathable in order to ensure that moisture is not trapped on the inside of a building. Sealing of masonry walls may do more damage than good if moisture is trapped, accelerating damage. It is recommended that a property owner contact a qualified professional prior to the application of any sealants.

• All painted surfaces can be cleaned with appropriate chemical products but care must be taken in the selection and the use of chemicals. Always test any material prior to performing large-scale cleaning efforts. Some chemicals will require a neutralizing wash after their use. Avoid high-pressure scrubbing, even on wood surfaces.

• Keeping a good paint surface is necessary to prevent deterioration of wood. The surface must be clean and dry. All flaking or peeling paint must be removed. Tightly bonded paint can be left in place, and light sanding will help prepare for additional layers. With older buildings, an oil based primer is recommended. However, new latex paints have been much improved, so a good quality bonding primer can often be used successfully. Plastic coatings and elastomeric paints should be avoided as they do not allow the substrate to breathe. **Remember, if the building was built prior to 1973, the paint probably contains lead and must be properly handled in scraping, sanding, removal, and clean up. Refer to the National Park Service Preservation Brief No. 37: Appropriate Methods of Reducing Lead-Paint Hazards in Historic Buildings and State and Federal regulations regarding the safe removal of lead paint.

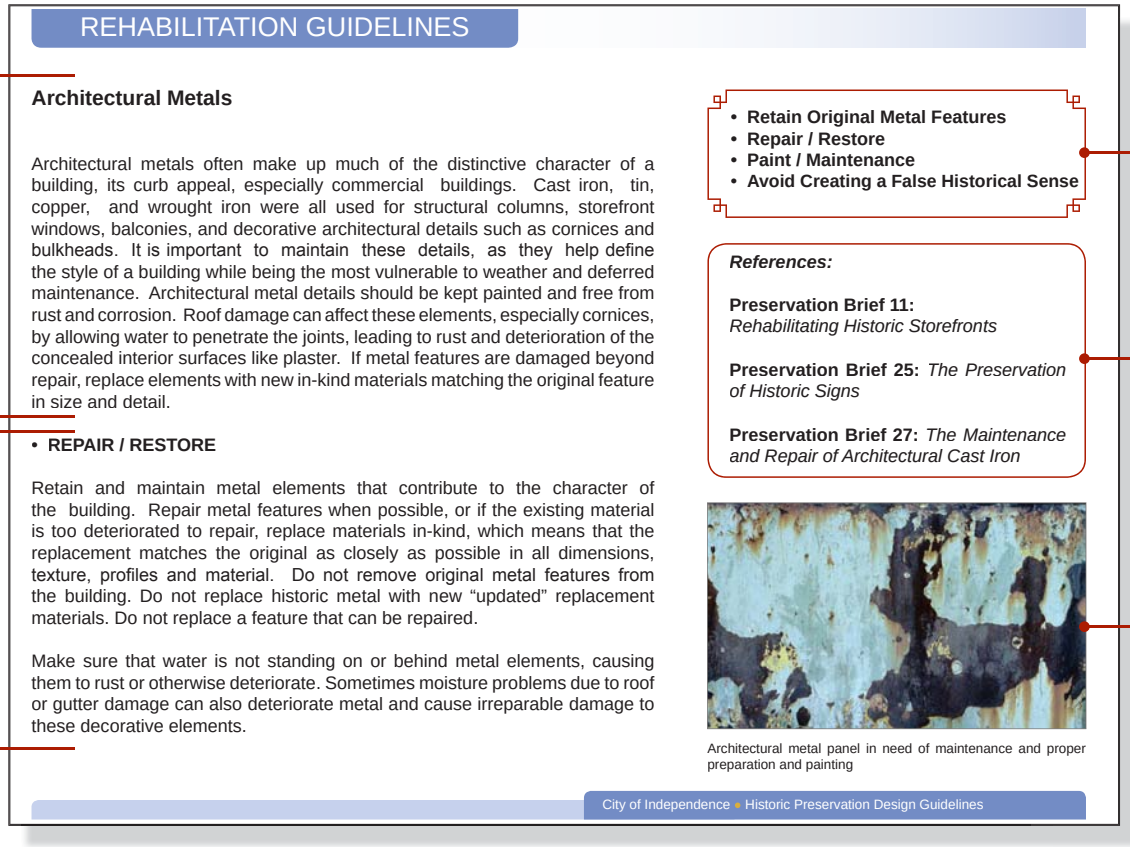
The following is a good maintenance checklist:

- ✓ Check roofing and flashing for areas where water may penetrate.
- ✓ Check seals around windows and doors.
- ✓ Look at all caulked areas and replace caulking if necessary.
- ✓ Look for cracking and peeling paint and apply a fresh coat if needed.
- ✓ Check all wood trim and siding. Repair rotted wood where evident.
- ✓ Clean all gutter and downspouts of debris.
- ✓ Inspect flashing around chimneys.
- ✓ Clear foundation of any overgrown landscaping or groundcover. Be certain that all grading around the building slopes away from the building's foundation to help keep it dry.

How to Use the Rehabilitation Guidelines

The Rehabilitation Guidelines are intended to help property owners choose appropriate rehabilitation treatments for the architectural materials and features of their historic building. Each section has photographs and illustrations to help demonstrate the individual materials/features and has accompanying text that describes recommended rehabilitation treatments. Rehabilitation treatment recommendations are based upon The Secretary of the Interior's Standards for Rehabilitation and the National Park Service Preservation Briefs. When the Heritage Commission or the city's Preservation Division review a potential rehabilitation or new construction project, they utilize the City of Independence, Missouri's Unified Development Ordinance and the Design Guidelines to determine the appropriateness of the proposed project.

Example page of the information presented in each section:



Introduction to the section begins with a definition and overview of the material/feature

Specific information about recommended rehabilitation treatments

Bulleted list of topics covered

Referenced National Park Service Preservation Briefs. These briefs can be found at: http://www.nps.gov/history/hps/tps/briefs/presbhom.htm

Photographs or illustrations demonstrating the principles or recommendations for a material/feature

Preservation design guidelines are intended to help a property owner retain the charm and historic appearance of a historic building. As such, the addition of features that were never apparent on the building and the introduction of materials that do not complement the architectural style is not recommended. Exceptions are made on a case-by-case basis. The preference may be to install different materials on side or rear elevations, or on new construction and additions only.

The following is broken out into easy reference sections: "Repair/Restore," "Replace," etc.. Refer to each section below to learn more about what is and is not recommended on historic properties.

Architectural Materials

- Architectural Metals
- Concrete
- Masonry
- Siding and Trim
- Stucco

One Hawthorne Place in Independence, 2010

Architectural Metals

- **Retain Original Metal Features**
- **Repair / Restore**
- **Paint / Maintenance**
- **Avoid Creating a False Historical Sense**

Architectural metals often make up much of the distinctive character of a building, its curb appeal, especially commercial buildings. Cast iron, tin, copper, and wrought iron were all used for structural columns, storefront windows, balconies, and decorative architectural details such as cornices and bulkheads. It is important to maintain these details, as they help define the style of a building while being the most vulnerable to weather and deferred maintenance. Architectural metal details should be kept painted and free from rust and corrosion. Roof damage can affect these elements, especially cornices, by allowing water to penetrate the joints, leading to rust and deterioration of the concealed interior surfaces like plaster. If metal features are damaged beyond repair, replace elements with new in-kind materials matching the original feature in size and detail.

References:

Preservation Brief 11: *Rehabilitating Historic Storefronts*

Preservation Brief 25: *The Preservation of Historic Signs*

Preservation Brief 27: *The Maintenance and Repair of Architectural Cast Iron*

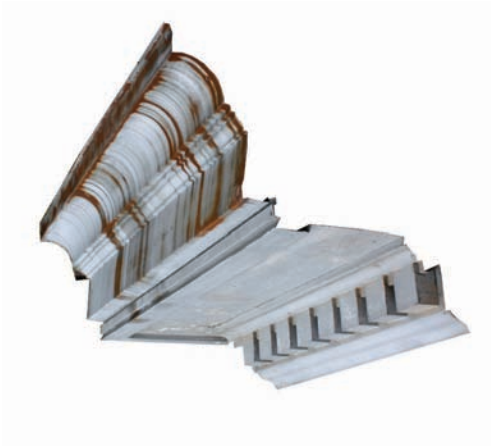
- **REPAIR / RESTORE**

Retain and maintain metal elements that contribute to the character of the building. Repair metal features when possible, or if the existing material is too deteriorated to repair, replace materials in-kind, which means that the replacement matches the original as closely as possible in all dimensions, texture, profiles and material. Do not remove original metal features from the building. Do not replace historic metal with new “updated” replacement materials. Do not replace a feature that can be repaired.

Make sure that water is not standing on or behind metal elements, causing them to rust or otherwise deteriorate. Sometimes moisture problems due to roof or gutter damage can also deteriorate metal and cause irreparable damage to these decorative elements.

Architectural metal panel in need of maintenance and proper preparation and painting, Ames, IA, 2008

Architectural Metals (Continued)



Original architectural metal cornice. The original cornice and wood support structure behind were too deteriorated to effectively repair, Rockport, MO, 2009

Replicated architectural metal cornice. New metal cornice has new structural supports and matches in-kind (all dimensions, profiles, and is made from the same lead coated copper as the original), Rockport, MO, 2009

- **PAINT / MAINTENANCE**

Properly prepare metals before painting.

Avoid leaving metal details exposed if they were originally intended to be painted. Do not use cleaning agents that will harm the finish on the metal, whether it is a natural patina, paint, or sealant. It is typically not recommended to remove patina from metal, as it may be protecting the metal from weather damage.

Remove all corrosion and repair any damage prior to painting. Prime all surfaces with metal primer, if required, and follow paint manufacturer's instructions. Oil-based paint is typically recommended for exterior applications.

- **AVOIDING FALSE HISTORICAL SENSE**

Avoid creating a false historical sense by adding embellishment to a building when it had none before. Do not add features that are not appropriate for the style of the building or are incompatible in size, scale, material, and color.

Concrete

Concrete is often reinforced with metal rebar that corrodes over time due to water infiltration and the freeze/thaw cycle. Find the source of deterioration (typically rusted reinforcement bar) prior to patching concrete or replacing damaged components. Do not patch concrete without removing the source of deterioration.

- **REPAIR / REPLACE**

Avoid using a patching material that does not match original concrete in consistency, texture, or color. Make sure new concrete will bond properly with existing concrete, matching the existing concrete detail in-kind. Preserve concrete features of a building, such as steps, walkways, hexagonal pavers, porches, foundations, chimneys, and details, whenever possible. When looking to replace your hexagonal paver sidewalk, contact the Community Development and Public Works departments prior to initiation of work.

- **DRAINAGE**

Since water is often the source of concrete deterioration, a proper slope should also be used to encourage proper drainage. Always provide a proper slope for drainage so that water does not stand on concrete surfaces which can cause water penetration and cracking/damage, and drains away from concrete foundations.

- **CLEANING**

Cleaning concrete is usually not necessary unless dirt, mildew, and debris are causing damage or is unsightly. Test an inconspicuous area to ensure that no permanent damage will be done. Pressure washing concrete with low-pressure (300-400 psi) using a wide fan tip will likely provide the desired results without damaging or permanently discoloring the concrete.

- **Attempt to Find the Cause of Deterioration and Correct the Problem**
- **Repair / Replace**
- **Drainage**
- **Cleaning**

References:

Preservation Brief 15:
Preservation of Historic Concrete

Example of the hexagonal pavers located within the Truman Heritage District along North Delaware Street, 2010

Concrete sidewalk in need of careful replacement. Care must be taken to provide proper drainage and not to harm the brick pavers, North Delaware Street, 2010

Masonry

Masonry is typically defined as a form of stone or brick. It can be used for exterior cladding, structural needs, or design elements. Brick and limestone were traditionally very common materials to use in Independence. Both can be seen on historic buildings, used as chimneys, retaining walls, porch railings and columns, and as decorative banding on commercial buildings.

Stylistic masonry work is a distinctive feature of the Truman, Benton, Procter, Englewood and Winner Neighborhoods that tells us much about the neighborhoods' development as areas historically associated with the town's most prominent citizens. Early works, including brick homes, stone retaining walls, and masonry steps and walkways, demonstrate the wealth enjoyed by property owners between 1850-1940. Every effort should be made to preserve their historic masonry features. In order to maintain these buildings for future generations, it is imperative that the correct materials and methods are utilized during rehabilitation. Equally important is to hire a mason that has an expertise with historic buildings and a knowledge of historic building techniques.

It is important to understand that mortar serves to take the impact of building movement, weather, and age from the masonry itself. As a result, it is critical to inspect mortar joints for cracking, missing, or deteriorated mortar on an annual basis to ensure the longevity of the stone and brick. Buildings constructed prior to about 1920 did not utilize portland cement as part of the mortar mix. If new mortar is harder than the brick or stone it is applied to, permanent damage could be done to the building. Be sure to consult with a mason who is familiar with traditional mortar mixes, and have a mortar test performed prior to the initiation of work.

- **Repair and Replacement**
- **Mortar - Repointing**
- **Cleaning**
- **Paint / Sealants**

References:

Preservation Brief 1: *Assessing Cleaning and Water-Repellent Treatments for Historic Masonry Buildings*

Preservation Brief 2: *Repointing Mortar Joints in Historic Masonry Buildings*

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

Preservation Brief 7: *The Preservation of Historic Glazed Architectural Terra-Cotta*

Preservation Brief 38: *Removing Graffiti from Historic Masonry*

Preservation Brief 42: *The Maintenance, Repair and Replacement of Historic Cast Stone*

Masonry (Continued)

- **REPAIR AND REPLACEMENT**

Replace only masonry that is deteriorated. Masonry should not be replaced or covered over simply to eliminate evidence of past cracks, repairs, or alterations. When masonry features are damaged, the preferred treatment is to patch them in place with appropriate materials. If the stone or brick is too damaged or is missing, replace them in-kind utilizing salvaged material to match existing historic masonry. Consider reversing a brick to expose its good surface before replacing it with a new brick. If salvaged material is not available, use in-kind masonry units matching: dimension, texture, features, color, and installation of the surrounding historic materials. If it is necessary to replace a large amount of a masonry feature, replacement materials may be used provided they have the same visual appearance as the historic material.

- **MORTAR - REPOINTING**

Repointing is the process of renewing mortar joints in order to restore masonry construction. Tuckpointing is the process of finishing off joints in newly laid masonry. This term, however, is often used interchangeably with repointing but is technically referring only to new masonry.

When repointing masonry construction, old mortar should be removed with a hammer and chisel, if possible, taking care not to damage the masonry edges. Power tools, if not properly handled, can permanently damage the mortar, stone, and/or brick, that can be very costly to repair.

Match original mortar (in color, texture, aggregate, joint profile, and proportion of portland cement to the other materials such as lime) as closely as possible. An appropriate mortar mixture will allow for a proper bond to be made to the brick or stone and ensure that water is kept out of exterior walls. Replacement

Incorrect mortar removal has caused permanent damage to the historic brick, Kansas City, MO, 2009

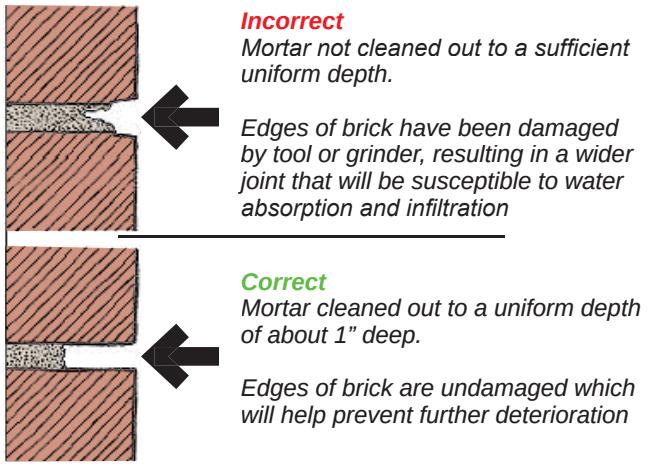
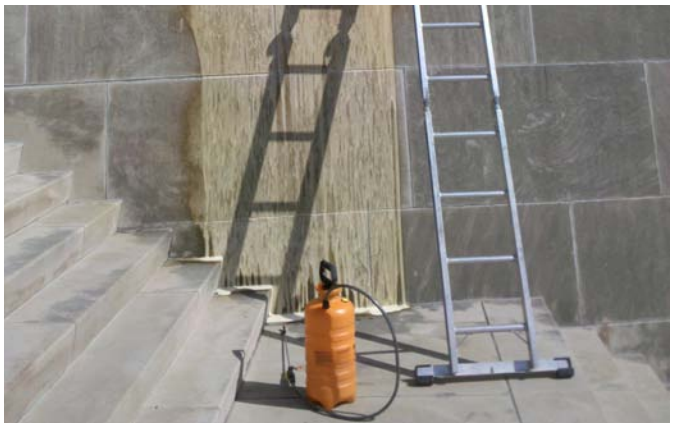


Image from Architectural Graphic Standards, Ninth Edition

Masonry (Continued 2)

Testing the Mortar to ensure the correct recipe is applied, is always recommended. Many older buildings have high lime content in their mortar. Standard portland cement should never be applied to a building constructed prior to 1920 without testing the mortar first. Excessively hard mortar can permanently damage the building.



Cleaning test on limestone, with gentlest chemical cleaner available and low-pressure water rinsed. (Above and Below photographs: Kansas City, MO 2009)

After cleaning test on limestone, gentle cleaner successfully cleaned the stone, no abrasives or high-pressure was used

mortar that does not match the original historic mortar will also be an obvious alteration to the building facade. New mortar should also match the physical properties of the original historic mortar for several structural reasons. If the new mortar is too hard or too soft, it will not adhere to the masonry units. Additionally, mortar that is too hard or too soft may expand and contract at a different rate than the surrounding historic masonry and cause the brick or stone to crack or spall.

- **CLEANING**

Cleaning masonry is usually not necessary unless dirt, mildew, and debris are causing damage or is unsightly. In any case, the goal should not be to make the masonry look new. If necessary, clean masonry using the gentlest means possible, usually with water or other non-abrasive means. Prior to cleaning, select an inconspicuous area to test to ensure that no permanent damage will be done.

Recommended cleaning methods can include low-pressure water pressure washing and non-corrosive chemical washes. The pressure should be less than 300-400 psi to prevent damage to the masonry and mortar. Abrasive methods, including sandblasting or soda blasting, should not be used because they may destroy mortar and damage or remove the protective fire skin of the brick (which prevents water from penetrating the brick). Sandblasting or soda blasting can also leave permanent pock marks on the face of the brick and can unnecessarily force water into the walls of the building. Preventing water from entering walls will result in historic masonry that will last for generations. Once water penetrates an exterior masonry wall, it can cause irreversible damage to the interior of the building, as well as the masonry and/or mortar through spalling (loss of large chunks of the face of the brick or stone), cracking, and severe deterioration.

Masonry (Continued 3)

- **PAINT / SEALANTS**

Painting masonry is never recommended. Most paints trap moisture in the masonry, which causes the paint to peel very quickly. Painting masonry also causes it to crack or spall due to the trapped moisture freezing and thawing each winter.

Sealants are never recommended unless the stone or brick is extremely soft and severely deteriorated. Non-permeable sealants prevent the natural flow of vapors, trapping them inside the masonry, which can crack or erode with freeze-thaw cycles. Additionally, sealing is not generally cost-effective unless water penetration is a serious problem.

Sealants should be used only as a last resort. Other drainage problem causes such as poor flashing, negative ground slope, and inadequate gutters should be explored first to determine if they are the cause of penetration. If recommended by a preservation professional, the sealant should be water permeable, allowing moisture to evaporate through, while maintaining the integrity of the stone or brick exterior.

Examples of commercial and residential masonry work found within Independence, West Maple Avenue, 2010

Example of paint being carefully removed from brick from a home on South Main in Independence, 2010

Siding and Trim

Siding

Siding refers to any exterior cladding including clapboards, board and battens, shakes, brick, and stone. Wood was traditionally one of the most common forms of siding utilized for its durability, ease of use, craftsmanship, and availability. Today, in addition to traditional materials, there are numerous factory-constructed materials that offer an alternative to historic wood, brick, and stone cladding known as synthetic siding.

- **SYNTHETIC SIDING**

Synthetic siding refers to man-made products such as vinyl, aluminum, steel, fiberglass, wood composites, or cementitious products. Contemporary synthetic siding is often applied to update the look of "older" buildings as new trends and styles emerge. Throughout the early to mid-twentieth century, asbestos shingles were used to "upgrade" or "update" traditional wood siding. In the twenty-first century, cementitious composite products such as Hardieboard and SmartSide products serve as alternatives to traditional siding materials.

Synthetic siding offers an alternative to traditional wood siding or masonry but can radically alter the character of the building and can cause permanent damage to the original building materials if not properly installed. Once new siding is applied over the original cladding, it is difficult to assess on-going maintenance and water infiltration issues. Care should be taken when concealing wood siding with synthetic siding materials as moisture may be trapped between the two and create an environment for mold growth and wood rot.

- **Siding**
- **Synthetic Siding**
- **Trim**
- **Repair**
- **Replacement**
- **Removal to Restore Original Siding**
- **Painting**
- **New Siding / Trim & COA Approval Process**

References:

Preservation Brief 8: *Aluminum and Vinyl Siding on Historic Buildings: The Appropriateness of Substitute Materials for Resurfacing Historic Wood Frame Buildings*

Preservation Brief 10: *Exterior Paint Problems on Historic Woodwork*

Preservation Brief 11: *Rehabilitating Historic Storefronts*

Preservation Brief 16: *The Use of Substitute Materials on Historic Building Exteriors*

It is not considered appropriate to apply siding to a building that was not originally sheathed in siding or to cover traditional wood or masonry with new, contemporary siding as it can significantly change the appearance of the facade of a historic building. Once siding is applied to the facade of a historic building, it is difficult to assess on-going maintenance and water infiltration issues related to the historic fabric behind the siding.

It is not appropriate to apply siding to a building that was not originally sheathed in siding. When possible, it is advisable to remove synthetic siding that has been applied to a building inappropriately. When removing siding from a building, first remove a test area in a discreet location. If removal of the siding is not causing harm to the original building, carefully remove the remainder of the siding, taking care not to damage the historic materials beneath. However, it should be noted that in some instances synthetic siding has achieved historic significance, and its removal should be reviewed by the Preservation Division or Heritage Commission. If you have questions about siding and synthetic siding installation or removal, contact the Preservation Division.

Example of the dramatic change removing synthetic siding can have. Left: Before and Right: After Removal, Joplin, MO, 2009

Trim

Trim refers to any ornamentation, embellishment, or individual finish pieces located around windows, doors, in gable ends, fascia, soffits, eaves, corner boards and porch details that enhance the appearance of a building's façade. Trim can be as important to the architectural, character defining features as any other building element. Traditionally, trim was constructed of wood. Today, replacement trim can be fabricated from cementitious composites (Hardieboard), vinyl (such as Azek or Trex), and fiberglass. Care should be taken when choosing alternate materials to make sure they will weather well over time and will match the character of the materials in-kind. For example, some early composite materials would yellow and warp in the sun over time. Technologies have improved however, and most manufacturers can create products that will withstand exposure to the elements, that will match the historic materials in-kind, and most can be painted on site.

Example of colorful, character defining trim: window trim, corner boards, eaves, gable ends and porch details on Waldo Street in Independence, 2010

Siding and Trim (Continued)

Many housing styles are defined by the use of decorative wood shingles, trim, and siding. Tudor Revival, Stick, Queen Anne, and Folk Victorian are just a few of the architectural styles that are defined by their intricate wood details. These character defining features should be maintained throughout the life of the building or property. Substitute synthetic sidings, such as aluminum and vinyl siding, can damage the integrity of a historic property and are therefore, not recommended. The color choices of synthetic siding are often limited and cannot be easily painted, which makes traditional multi-colored paint schemes difficult to achieve.

The Heritage Commission encourages the removal of synthetic siding from a building where possible to return the building to its traditional, historic appearance. When removing synthetic siding, first remove a test area in a discreet location. If removal of the siding is not damaging the traditional siding underneath, carefully remove the remaining siding, taking care not to damage the historic wood, stone, or brick beneath.

While synthetic siding and trim are alternatives to wood, they cannot typically achieve the same detail and dimensions offered by wood. The Heritage Commission will always consider a proposal to utilize synthetic siding or trim on a historic property or building; however, the Commission prefers the use of materials that match in-kind with the original when there is no original siding or trim present. Alternative materials will be considered for new additions and for new construction.

While building permits are not required for the installation of new siding or trim work, approval by the Heritage Commission must be given prior to their installation.

Example of exterior rehabilitation of original siding and trim on North Spring Street in Independence, 2010

Example of exterior decorative trim elements at gable end, soffit and eave, 406 North Pleasant, 2010

Siding and Trim (Continued 2)

Example of a character defining element that can be repaired and used for making replacement pieces, Kirksville, MO date unknown

Example of a character defining corbel in need of repair, 1500 North Liberty, date unknown

- **REPAIR**

Repair with wood rather than with another material. Do not remove character defining elements from a house. Deteriorated siding or decorative elements should be patched, consolidated in place, replaced with in-kind materials, and painted or finished to match the original materials.

- **REPLACEMENT**

Replace only wood that is damaged beyond repair and cannot be stabilized with wood consolidants or epoxies. When replacing materials, match the overall dimension, thickness, profile, scale, and finish of the original material. Synthetics are not encouraged for repair where splicing is required.

Where there is evidence of missing decorative detailing, replacement elements should be reconstructed to match the original. Evidence of missing detail can often be found in old photographs, remnants left on the building, ghost lines or paint lines where parts were removed, nail holes, old notches, and cut-outs in the siding and trim. Observation of the details on another similar historic building should not be relied upon as conclusive evidence.

Use of synthetic materials, in lieu of wood, are acceptable when there is no original siding or trim present, on new additions and for new construction.

Fabrication of new trim work should be created only with photo documentation or where ghost lines (outlines of original trim and location) are present.

Removing elements that were added during a historic remodeling, in an attempt to make the building look older, is not recommended.

Siding and Trim (Continued 3)

(For example: In the early twentieth century, it was a trend for Craftsman style porches to be used during the remodeling of a Victorian home. Where such porches exist, they should be maintained as part of the building's historic fabric).

It is not appropriate to "dress up" a historic building by adding stylistic trim and ornamentation that would have never existed. Doing so will result in a false sense of the history and character of the building.

- **REMOVAL TO RESTORE ORIGINAL SIDING**

Remove existing inappropriate siding that covers original, historic materials. It is not always accurate to assume that historic siding will have to be replaced because it has been covered by insul-brick or asbestos cement shingles. In fact, where water has not been allowed to penetrate between layers, later coverings have usually served as protection for the original material.

Do not install aluminum, vinyl, or synthetic siding to cover original, historic siding or building elements. Over time, the appearance of many properties have been compromised by the addition of asbestos shingles, rolled asphalt, aluminum, or vinyl siding. Covering original siding almost always results in concealing historic character derived from materials, details, and texture and is not recommended.

Example of a house in the process of repairing siding and trim on 412 North Spring Street in Independence, 2011

Detail of repaired siding and trim. Repaired areas blend seamlessly with the original, 412 North Spring Street, 2011

Siding and Trim (Continued 4)

Example of cracked and peeling paint on original siding. Paint will have to be carefully removed prior to priming and painting, Harrisburg, MO, 2008

- **PAINTING**

Preparation of wood surfaces and proper priming will add longevity to paint applications. Utilize high quality exterior paint. Do not apply new paint to existing deteriorated paint that has cracked or has too many layers. Paint stripping should be done by the gentlest means possible and tested first in an inconspicuous area. Avoid high heat paint strippers as they may permanently damage the historic wood.

Although paint selection is not subject to review by the Heritage Commission, it is encouraged to choose a paint scheme appropriate for the time period in which the house was constructed and the architectural style.

New Siding / Trim & the COA Approval Process:

If a property owner wishes to install new siding or trim work using an alternative material to traditional wood siding, the following should be considered before requesting approval by the Heritage Commission:

1. Does the new siding/trim match the original in profile (side view/thickness/taper)?
2. Does the new siding match the original reveal (the space exposed on the front of each board)?
3. Does the texture match the original (for example: no faux wood graining on siding that was originally smooth)?
4. Can the proposed location of the new siding/trim be seen from the public right-of-way (streets and sidewalks)?
5. Is the original siding/trim still on the building? If so, can it be repaired?
6. Has all the original siding/trim been previously removed?
7. Can trim pieces (for example: cornerboards and window trim) be retained if new siding is installed?
8. Will the existing trim appear to be the same (retain its dimensions) after new siding is applied?
9. Is there evidence (ghost lines) of what the original trim looked like and its location?

Stucco

Stucco is a plaster-like mix applied to the exterior of a building. Traditionally it was utilized on Mediterranean-inspired, Art Deco and Moderne architectural building styles, and on both residential and commercial buildings in Independence. Stucco is an important feature of historic buildings and should therefore not be concealed with wood, masonry or synthetic siding. If stucco was added inappropriately and masks historic architectural features or was utilized to create architectural details that were not originally present, the Heritage Commission encourages (but never requires) the careful removal of the stucco in order to expose the historic facade.

Stucco was often applied to historic commercial buildings, either at the time of construction or in later years as a way to "modernize" the structure. If the stucco is important to the historic character of the building (as it is in many residential applications), it is important to maintain the material as one would any other exterior cladding.

- **REPAIR**

Do not remove stucco from a building that was installed to mask damaged masonry, unless it is intended that the underlying masonry will be restored to its original appearance. Existing stucco areas with signs of deterioration should be patched to match original stucco as closely as possible in appearance and texture.

- **Repair**
- **Replacement**
- **Painting**
- **Applying Stucco to an Existing Building**

References:

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

Example of exterior stucco on a historic house along West Maple Avenue in Independence, 2010

Stucco (Continued)

Example of delaminating exterior stucco in need of repair on a commercial building, 315 North Main Street, 2011

Detail of delaminating exterior stucco. Note the thickness and the different layers of the stucco over a masonry substrate, 315 North Main Street, 2011

- **REPLACEMENT**

Install only historically appropriate, lime-based stucco. Use of contemporary stucco systems such as Exterior Insulation and Finish Systems (EIFS) should be avoided.

- **PAINTING**

Always remove loose stucco and repair damaged areas before painting.

- **APPLYING STUCCO TO AN EXISTING BUILDING**

It is discouraged to apply stucco to a building that did not originally have stucco.

According to the COA Approval Matrix, replacement of stucco with new materials or the application of stucco where there previously was none, will require Heritage Commission Review. (This includes the installation of modern synthetic stucco systems.)

Architectural Features

- Roofs
- Gutters and Downspouts
- Storefronts
- Doors
- Windows
- Awnings
- Porches, Decks, and Balconies
- Signage and Historic Markers
- Mechanical Equipment
- Lighting

View looking southwest down West Maple Avenue, 2010

Roofs

Rooflines and roofing materials are important, character defining features of historic properties. These features relate to the style in which the buildings were constructed and should be retained. Roofs on residential buildings sometimes can distinguish the particular style of the house. For example, the use of turrets and towers on a Queen Anne or a curvilinear parapet on a Mission style building define the architectural style. The majority of commercial buildings have flat roofs with parapet walls, which extend above the roof plane. Some commercial structures have decorative features such as cornices or other strong character-defining decorative treatments at the parapet walls. These character-defining features and flat roof shape should be retained on commercial properties.

Major exterior changes such as installation of new dormers, raising or lowering the pitch of a roof, or adding a porch or addition requires approval by the Heritage Commission prior to the issuance of a building permit.

- **REPAIR**

Repairs should be made using the same materials including the color and style.

Annually check around chimneys, dormers, and porch roofs for missing flashing or sealants along flashing.

Apply new sealants along flashing and stepped flashing when needed. Missing or loose sealants around flashing is a major cause of water infiltration in a historic building.

- **Repair**
- **Replacement (Re-roofing)**
- **New Roofing Materials & the COA Approval Process**

References:

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 30: *The Preservation and Repair of Historic Clay Tile Roofs*

Example of a Mansard roof, 916 East Lake Drive Court, 2011

Roofs (Continued)

- **REPLACEMENT (RE-ROOFING)**

Use of new materials (not already found on the building) is discouraged when they are not historically appropriate (i.e. original roof is wood shake shingles and proposed new material is asphalt shingles).

Be sure to maintain existing roof lines when considering a new roof. The shape of the roof is also important to the design of the building. Replace missing or deteriorated flashing and counter-flashing, particularly around chimneys, dormers, porch roofs, etc. during all re-roofs. When installing flashing adjacent to masonry, counter-flashing should always be inserted directly into the mortar joint and affixed prior to installing the roofing materials.

Slopes and overhangs should not be changed and original details such as soffits, fascia, and friezes should be maintained. Additionally, dormers and chimneys should remain intact and in their original locations. For example, combining two dormers (to enlarge an attic space) is not appropriate, as it changes the roof line of the house and can cause a loss of architectural integrity.

It is often not financially feasible to re-roof using original materials such as slate; however, it is important to use appropriate roofing materials according to the style of the building. For example, a metal standing seam roof is not appropriate for a Prairie Style house, although a patterned asphalt shingle roof may be appropriate for a Queen Anne Style house.

Approval by the Heritage Commission must be given prior to the installation of new roofing materials (such as changing slate to asphalt shingles). Approval for re-roofs using the same materials can be obtained administratively by City staff.

The roof is one of the main character defining features of a French Eclectic style, 701 Proctor Place, 2010

Example of flashing at chimney, New Franklin, MO 2009

New Roofing Materials & the COA Approval Process:

If a property owner wishes to install new roofing materials (for instance, replacing an asphalt shingle roof with standing-seam metal), the following should be considered before requesting approval by the Heritage Commission:

1. Is replacing the roofing material with the same historic material cost prohibitive?
2. Can a reasonable alternative be used (simulated slate material vs. real slate)?
3. Does the building currently have the original roofing materials on it?
4. Will the installation of new materials conceal or require changing any historic trim (fascia, soffits, rooflines)?

Gutters and Downspouts

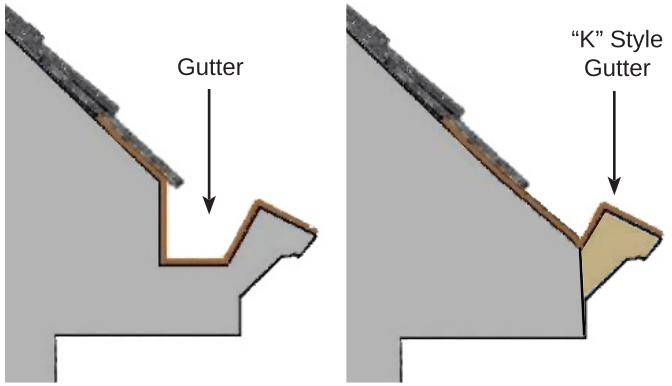
Gutters and downspouts are a key component to the success of a roofing system as they carry water down and away from a building. Many of the City's historic buildings originally used box gutters (refer to illustration) that were an integral part of the roof. As box gutters age, the joints of the metal liners often fail and the metal corrodes. Other historic gutter and downspout materials are half-round gutters and round, fluted downspouts constructed of copper. As an alternative to repairing box gutters, or replacing expensive copper gutters with new copper gutters and downspouts, many property owners have installed contemporary, aluminum "K" style gutters and downspouts which can come in a variety of colors and sizes. While both the traditional and contemporary gutter and downspouts are acceptable, the Heritage Commission encourages the restoration of historic box gutters, and the installation of half-round gutters and fluted round downspouts to match the original.

Maintain gutters by ensuring that they are clear of vegetation and debris at all times. Inspection of the gutters and downspouts should be scheduled seasonally. Do not allow gutters and downspouts to become clogged and overrun with water, allowing water to run down the face of the building. When installing new gutters and downspouts, make sure that the gutter selected will have adequate capacity to carry water from the roof. Hire a qualified roofing contractor with experience on historic buildings.

- **Repair**
- **Replacement**
- **Painting**

References:

Preservation Brief 16: *The Use of Substitute Materials on Historic Building Exteriors*



Left: Integral box gutter

Right: Installation of new gutter concealing the box gutter profile

Illustration courtesy of the City of Independence

Gutters and Downspouts (Continued)

Example of good gutters and downspout installation at One Hawthorne Place in the Englewood Neighborhood in Independence, 2011

- **REPAIR**

When repairing traditional gutters, be sure that all metal seams within the box gutters are sealed and do not allow water or ice to penetrate the soffits and fascia.

When repairing half-round gutters, be sure that the fasteners are secure and the gutters are sloped to flow towards the downspouts.

- **REPLACEMENT**

Box gutters are an integral part of a historic gutter system. The Heritage Commission considers concealing box gutters with decking a reasonable option in order to preserve the option of restoration at a later time.

Be certain to size and install the correct gutters and downspouts to accommodate all the water run-off. Factory-made gutters often do not have the capacity to catch the increased water flow from a variety of roof pitches. If necessary, have a professional inspect the roof to get an accurate measurement.

- **PAINTING**

Paint new aluminum gutters and downspouts a color to match or complement the building.

Avoid painting contemporary gutters and downspouts colors that highlight the new system rather than blends them into the wall plane of the building.

Storefronts

Historic glass storefronts are an important character-defining element of a commercial building. Storefronts were traditionally designed to draw attention to the merchant's goods and services. They served as signage, advertisements and welcomed shoppers into the building. A typical storefront is made up of a series of components including the display windows, doors, transom windows, divided window mullions, signage, and corner posts. Retention of each of these components is key to maintaining the historic look and charm of any commercial building. Examples of historic storefronts can be seen on the Independence Square, Englewood Shopping District, and Maywood and Fairmount commercial districts.

- **PRESERVING HISTORIC STOREFRONTS**

Preserve historic storefronts when possible. If one element of a storefront is damaged, have only that part replaced. Replace any deteriorated materials in-kind. Repairs of broken glass, such as colored Vitrolite, glass block, and large storefront picture-style windows, should be made with the same materials, opacity, reflectivity, and color. When restoring a storefront, use any documentation of the historic storefront that exists to choose materials and methods appropriate for that building.

- **REPLACEMENT**

When replacement is the only option, do not replace storefronts with a system not in keeping with the historic feel of the historic district. Many modern aluminum systems have framing which is too heavy (thick) or too light (thin) in comparison to the appropriate scale of a historic storefront system.

- **Preserving Historic Storefronts**
- **Replacement**
- **Maintenance/Painting**

References:

Preservation Brief 11: *Rehabilitating Historic Storefronts*

Preservation Brief 12: *The Preservation of Historic Pigmented Structural Glass (Vitrolite and Carrara Glass)*

Preservation Brief 25: *The Preservation of Historic Signs*

Preservation Brief 27: *The Maintenance and Repair of Architectural Cast Iron*

Preservation Brief 33: *The Preservation and Repair of Historic Stained and Leaded Glass*

General Storefront Terminology

Graphic by Susan Richards Johnson & Associates, Inc., 2011

Storefronts (Continued)

Example of a well maintained historic storefront in Englewood, 10900 East Winner Road, 2010

Example of a rehabilitated historic storefront on the Independence Square, 104 North Liberty Street, 2010

Do not replace storefronts with a system that gives a false historical appearance or one that is inappropriate for the style or age of the building. Do not replace historic systems that can be repaired.

Replacement glass should have the same reflective characteristics of the traditional historic glass. Tinted or glass with reflective coatings should be avoided. It is not uncommon to find historic storefront transom windows with stained or leaded glass. Restore stained glass and leaded glass windows to match the glass texture, color and luminosity of the original.

- **MAINTENANCE/PAINTING**

Keep storefronts painted and maintained. This will prolong the life of the storefront and will provide a more attractive street level appearance for your building and business.

Doors

Historic doors come in a variety of colors, styles, sizes, and uses. Doors may be constructed of both wood and glass or include transoms and sidelights as part of their decorative features. Often characterized by their use of paneled surfaces and stylized glazing patterns, historic doors add to the overall architectural character of buildings and can be identifying features of a particular style or trend. Doors and the patterns of door openings reflect both architectural style and the structural evolution of historic properties.

Size, shape, style, placement, configuration, and materials, including hardware, are all important aspects of doors. It is often less expensive to repair original doors rather than replacing them in-kind. Original doors were crafted with materials, often no longer available, and detailing through craftsmanship that is difficult to reproduce.

As with siding and trim, synthetic, man-made products such as steel and fiberglass are contemporary alternatives to strictly wood doors. Synthetic materials are intended to provide a “maintenance free” product for a property owner while attempting to replicate traditional historic door patterns.

While alternative materials such as steel and fiberglass are alternatives to wood, they cannot typically achieve the same detail and dimensions offered by wood. Therefore, the Heritage Commission encourages the retention and restoration of wood doors, transoms, and sidelights. The Commission will always consider a proposal to utilize synthetic materials for door replacements. The Commission prefers the use of new wood doors and alternative materials for doors only when the original doors are no longer on the building, on new additions, and for new construction. ***While building permits are not required for the installation of new doors, approval by the Heritage Commission must be given prior to their installation.***

- **Repair / Restore**
- **Replacement**
- **Hardware**
- **Storm Doors**
- **Garage Doors**
- **New Doors & the COA Approval Process**

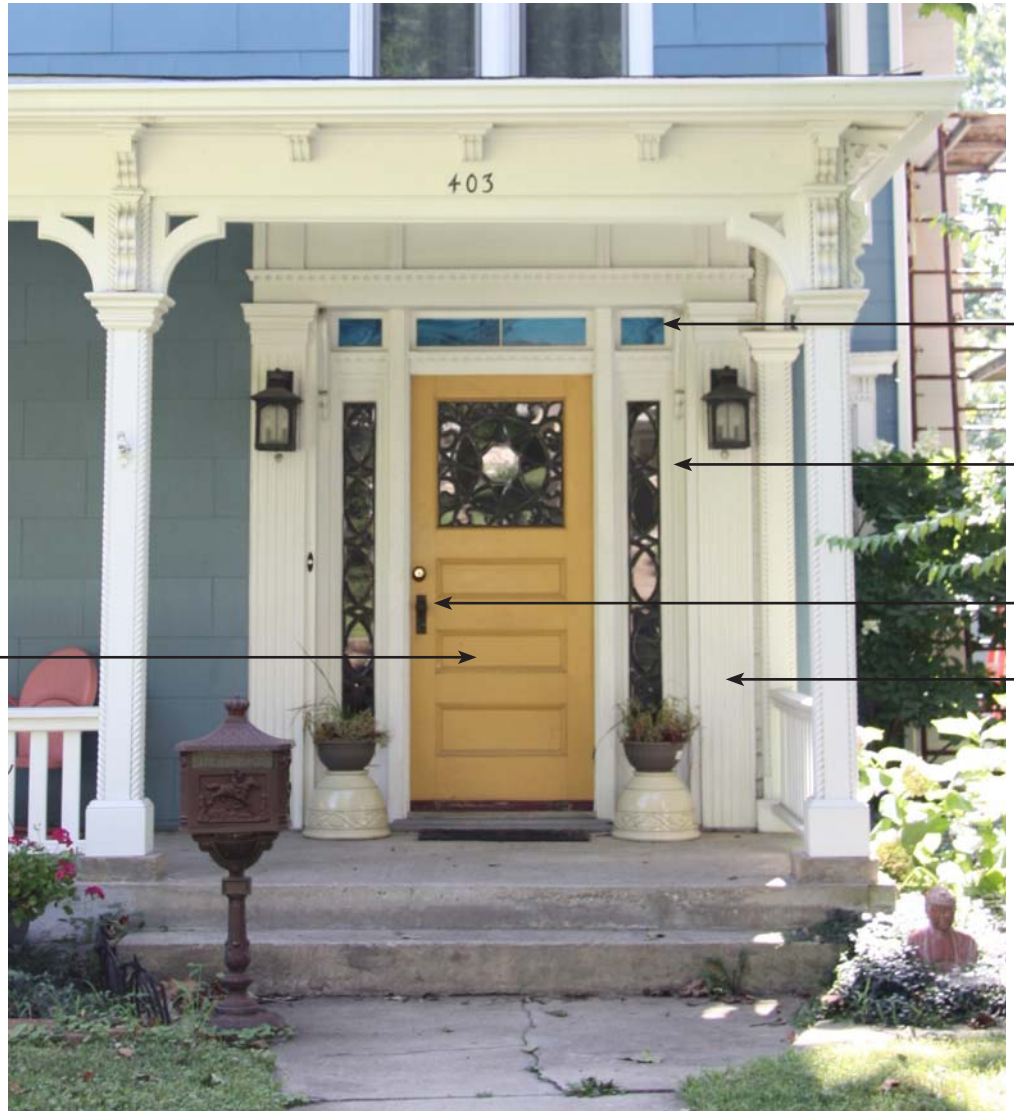
References:

Preservation Brief 10: *Exterior Paint Problems on Historic Woodwork*

Preservation Brief 16: *The Use of Substitute Materials on Historic Building Exteriors*

Example of successful original door replication, Kansas City, MO 2009

General Door Terminology



Graphic by Susan Richards Johnson & Associates, Inc., 2011

Doors (Continued)

- **REPAIR / RESTORE**

Original doors should be maintained and repaired whenever possible. Traditional wood should be protected from the elements through the use of storm doors, and protective paints and sealers such as polyurethane or marine-grade varnish.

Transom windows, sidelights, and door trim are essential components of a door system and should always be retained. If necessary, a custom storm sash can be made for sidelights and transom areas.

Sidelights and transom sash can often be retrofitted with insulated glass units.

Energy-efficiency retrofits for historic entry doors can be made by installing storm doors, caulking and sealing around door trim, and if trim is removed for repair, sealing with low expansion foam around door frames.

- **REPLACEMENT**

When replacement of historic doors is required, new doors should match original features, size, shape, style, placement, configuration, and materials (including hardware) of the original doors when possible. Alternative materials will be considered on a case by case basis.

Do not replace original doors unless they are deteriorated beyond repair. Replacement due to assumed energy inefficiencies should be avoided. A properly fitted and weatherstripped door with a storm door will be just as energy efficient as new units.

It is often less expensive to repair original doors rather than replacing them in-kind. Original doors were crafted with materials and detailing that is difficult to replace.

Example of original door too deteriorated to repair

Example of new replacement door designed to resemble the original door (Above: New Franklin, MO, date unknown, Below: New Franklin, MO 2009)

Doors (Continued 2)

Examples of the various door hardware finishes available for new and/or replacement hardware. Photograph by Susan Richards Johnson & Associates Inc., 2011

If an original door has been removed, its replacement should be a door compatible to the style of the building. Every effort should be made to match the original features as closely as possible including: the original size, shape, design, proportion, lite configuration, and material. For example, do not replace a single-lite wood door with a new solid hollow-metal door. Sidelights and transoms should also be maintained when considering replacement. Overall, replacement doors should not change the proportion of the original openings unless necessary to accommodate the American with Disabilities (ADA) Act. (*Please consult the local building code and the ANSI/ADA Accessibility Guidelines for a full listing of code requirements.)*

- **HARDWARE**

Generally, it is not necessary to replace historic hardware knobs, hinges, handles, knockers, locks, etc. Hardware can be refinished and repaired when in less than perfect condition. Replacement parts such as door knobs, locks, and hinges are readily available through salvage or through companies that specialize in hardware reproductions.

If existing hardware cannot be repaired, or does not provide the security required, replacement hardware should be compatible with the building's style. Replacement hardware that is unobtrusive and appropriate to the architectural design of the building is preferred. New dead bolts and security locks can be added to the existing door system. Care should be taken to minimize damage to the historic fabric when retrofitting security locks to an existing door.

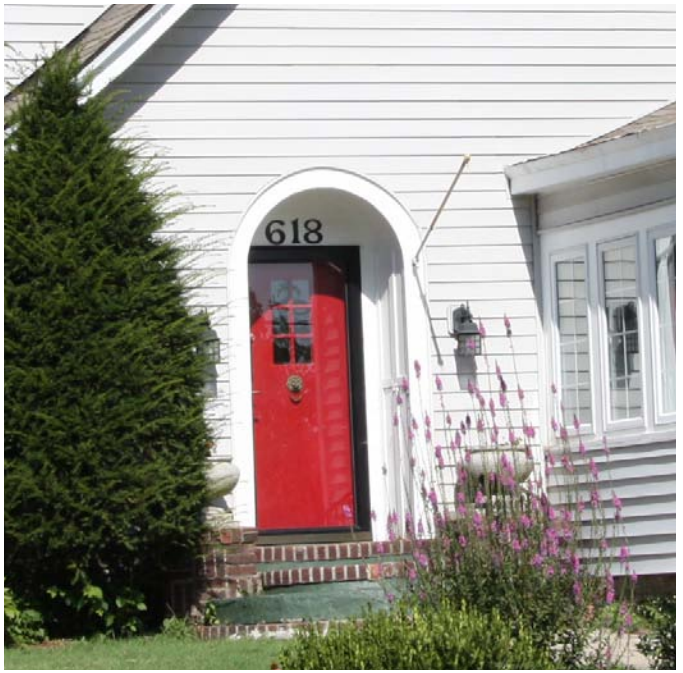
Doors (Continued 3)

- **STORM DOORS**

Storm doors are intended to protect historic doors and are encouraged by the Heritage Commission. Wood storm and screen doors are most compatible with historic buildings. Aluminum or other material storm doors may be considered if the finish is in a color to match the existing door or trim. Full view type storm doors are ideal because they allow the original door to be readily seen from the street.

Do not use highly reflective contemporary storm door units. It is not appropriate to install storm doors in a way that will obscure or damage a historic door and/or door opening.

As storm doors are typically reversible, meaning that the historic material behind the storm door is not damaged by installation when removed, *storm doors are encouraged by the Heritage Commission.*



Example of a full view storm door which allows the original door to be readily seen from the street, 618 North Delaware Street in Independence, 2010

- **GARAGE DOORS**

Original garage doors that add to the character of a garage should be repaired and retained. If beyond repair, the original door should serve as a model for design of a replacement. Overhead garage doors of a compatible design will be considered in the interest of security and safety. When possible avoid altering the size of a historic garage/ancillary building door opening, or replacing the existing doors, unless access into the building is an issue.

New Doors & the COA Approval Process:

If a property owner wishes to install new doors using an alternative material to traditional wood doors, the following should be considered before requesting approval by the Heritage Commission:

1. Does the new door complement the style of the building? For example, is a Mission style door being considered to be installed on a Queen Anne home?
2. Does the new door match the original style (panels, glass, dimensions, etc.)?
3. If a new door is to be installed, can the proposed location of the new door be seen from the public right-of-way (streets and sidewalks)?
4. Is the original door able to be restored?
5. If the original door is being removed as part of the project, can it be salvaged?
6. Can trim pieces around the door be retained?
7. Is a storm door necessary with the installation of a new door?

Windows

Windows, and the pattern of window openings, play an important role in defining the architectural style of historic homes and buildings. While double-hung, wood sash windows commonly provide the basic form, each style differs in its treatment of lite pattern (6 over 1, 3 over 1, 1 over 1, etc.), proportion, size, and placement. Window use (fixed or operable), hardware, and materials are also important elements of design. From a practical perspective, they also serve as sources of light and ventilation, and delineate the divisions of interior rooms on the exterior of the building.

Traditional wood windows are considered a superior product of craftsmanship and material due to their use of old-growth wood. This wood was originally harvested from trees that were decades old, creating a dense and extremely durable material. As this wood is no longer available on the market today, the retention of this quality product is invaluable to a historic property owner. Wood windows that are repaired and in good working order can last for decades. Therefore, an investment in the restoration of wood windows due to its lifespan will often pay a property owner back faster than an investment in replacement windows, not to mention its sustainability for the environment.

Windows are often considered for replacement when thought to be less energy efficient than new. In fact, studies have shown that windows can achieve the same energy efficiency as double-paned windows when fitted with weatherstripping, sashes are tightened, missing glazing is re-applied, and storm windows are installed. It is often less expensive to repair original, wood windows than it is to replace them with high quality, replacement windows of any material, including solid wood.

As with historic doors, synthetic, man-made products such as vinyl, aluminum, composites (such as Fibrex), and fiberglass are contemporary alternatives to

- **Original Windows**
- **Repair/Restore**
- **Replacement**
- **Storm Windows**
- **Window Trim**
- **Shutters**
- **New Windows & the COA Approval Process**

References:

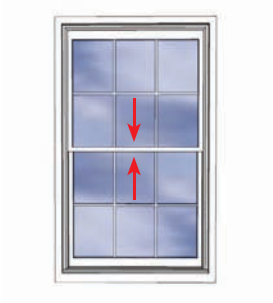
Preservation Brief 9: *The Repair of Historic Wooden Windows*

Preservation Brief 10: *Exterior Paint Problems on Historic Woodwork*

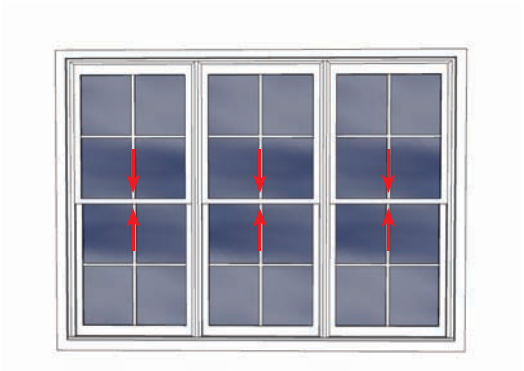
Preservation Brief 13: *The Repair and Thermal Upgrading of Historic Steel Windows*

Example of character defining windows and their importance in a historic building, 618 North Delaware Street, 2010

General Window Types



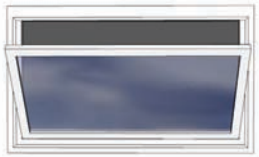
Double-Hung Window



Mulled Double-Hung Window

Casement Window

Double Casement Window



Hopper Window

Awning Window

Picture Window

Fixed Window

Slider Window

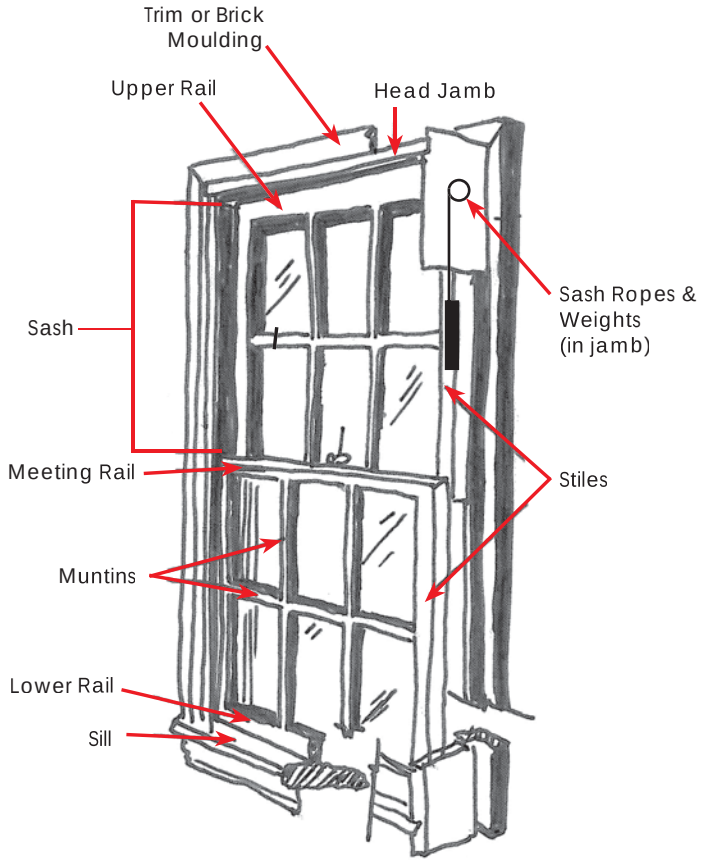
Bay Window

Geometric or Specialty Window

Jalouise or Louvered Window

Graphic by Susan Richards Johnson & Associates, Inc., 2011

Windows (Continued)



General Window Terminology
(Interior View)

Sketch by Susan Richards Johnson & Associates, Inc., 2011

old-growth, wood windows. Synthetic materials are intended to provide a "maintenance free" product for a property owner while attempting to replicate traditional historic window patterns.

While alternative materials such as vinyl, aluminum, and fiberglass are alternatives to wood, they cannot typically achieve the same detail and dimensions offered by wood. For example, replicated muntins between glass panes or snap-in muntins do not have the same dimensional quality or profile as they do with traditional wood windows. Therefore, the Heritage Commission encourages the retention and restoration of wood windows whenever possible.

The Commission will always consider a proposal to utilize synthetic materials for window replacements; however, they prefer the use of similar materials when the original windows are no longer on the building, are proposed on new additions, or for new construction. Windows that are painted shut, have sash cords that are cut, or do not slide easily are not considered viable candidates for replacement. ***While building permits are not required for the installation of new windows, approval by the Heritage Commission must be given prior to their installation.***

- **ORIGINAL WINDOWS**

Original windows should be repaired and retained. New epoxy consolidants and fillers can be used to cost-effectively repair even severely deteriorated sash.

Avoid creating new window openings or eliminating original windows on all principal elevations, or on areas of a historic building that can be seen from a public right-of-way.

Windows (Continued 2)

- **REPAIR / RESTORE**

Again, epoxies, fillers, and consolidants can be used very effectively to repair deteriorated sashes. Cut or worn sash cords should be replaced with cotton cords. Broken glass should be replaced and re-glazed.

Wood windows can be retrofitted with weatherstripping, jamb liners, and caulking to tighten sash and reduce air infiltration. Storm windows should be installed to increase the existing wood window's energy efficiency.

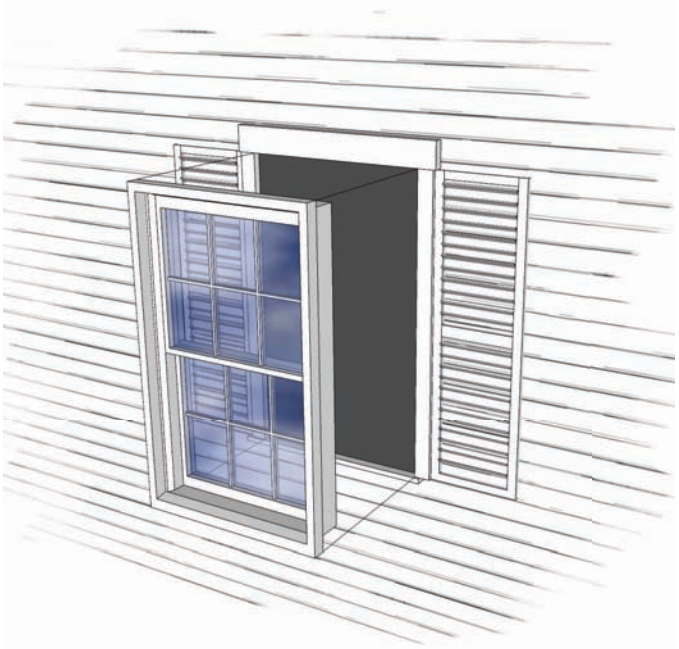
Single pane glass can also be retrofitted with double-pane insulated glass in order to increase energy efficiency. Care must be taken not to alter the muntins or other window elements to the point they no longer retain their proportion or profiles.

- **REPLACEMENT**

Window replacements should be considered only when the existing windows are not original, part of a remodel such as an addition, or when they are so deteriorated that repair is not economically feasible or physically possible.

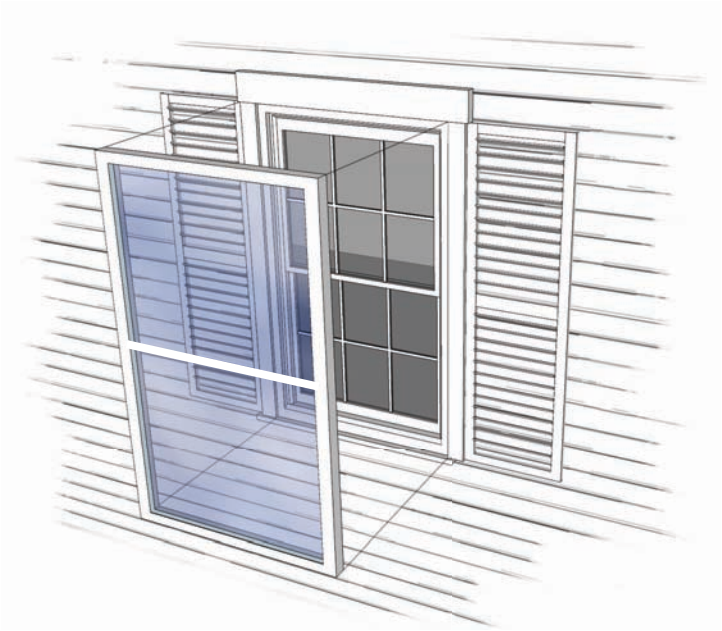
Avoid replacement windows that do not match the original in size, dimension, shape, design, material appearance, and glazing pattern. Replacement windows should fit the existing openings without the use of spacers or new, wider framing. Tinted or reflective glass should be avoided. Framing material and sash material that will not retain the look of painted wood should be avoided.

Avoid creating new window openings or eliminating original windows openings on front or side elevations, particularly if that area can be seen from a public right-of-way.



Replacement windows should match the original in all dimensions, design, material appearance and glazing pattern
Graphic by Susan Richards Johnson & Associates, Inc., 2011

Windows (Continued 3)



Storm windows should fit the window openings exactly, and should match the color of the windows and trim
Graphic by Susan Richards Johnson & Associates, Inc., 2011

- **STORM WINDOWS**

As storm windows are considered reversible, having the ability to remove them without damaging the historic fabric underneath, the Commission highly recommends their use. Storm windows should fit window openings exactly, without the use of spacers. They should be painted, anodized, clad, or otherwise coated in a color to match the windows and trim. They should be compatible with the window pattern and the meeting rails should match the existing window, if possible.

Interior storms are an effective alternative to exterior hung storms. Wood storm windows are highly recommended as they are the least likely to transfer heat and cold.

- **WINDOW TRIM**

Original window trim should be preserved and retained. Only badly deteriorated sections should be replaced. The replacement trim should match the original in material and appearance. Decorative window lintels or other details should be added only if there is evidence that they existed originally.

- **WINDOW SHUTTERS**

Window shutters may be installed if there is evidence that they existed on a building historically. Evidence of shutters can include old photographs, remaining hardware, or evidence of where hardware has been removed.

New Windows & the COA Approval Process:

If a property owner wishes to install new windows using an alternative material to traditional wood windows, the following should be considered before requesting approval by the Heritage Commission:

1. Are replacement windows being proposed due to lack of maintenance of historic wood windows?
2. Are the original windows still present? If so, can they be repaired or restored?
3. Does the new window complement the style of the building? For example, is a casement replacement window appropriate for a bungalow that had 3 over 1 double-hung sash windows?
4. Would the new window match the original style (glass, dimensions, locations, etc.)?
5. Are original windows being removed as a part of the project?
6. Can trim pieces around the windows be retained or repaired?
7. Are storm windows currently installed?
8. Are storm windows going to be installed as a part of the project?
9. Which is most cost-effective, repair or replacement of wood windows?

Awnings

Awnings can be an attractive element in a streetscape when they are made of a compatible, durable material and appropriate design. They provide shade, shelter, and a point of reference. Additionally, awnings can create continuity in a streetscape as well as a sense of human scale.

- **DESIGN**

Choose an awning design that is appropriate to the scale of the building. An awning that is too large or small will not look like an integrated part of the building.

Use treated canvas, cloth, or a soft vinyl. The shape of the awning should be simple enough to not detract from the building's architectural features. A shed-style awning is typically most appropriate. Install the awning in a manner that does not damage or hide the architectural character of the building.

- **REPLACEMENT**

Hardware for awnings installed on a masonry building should utilize the mortar joint rather than the face of brick or stone.

Avoid awnings made of hard materials such as wood, plastic, or metal.

Avoid color schemes that are incompatible with the building. Do not use too many colors.

Though signage can be integrated into the awning, the awning should not be used as a billboard. It is best to limit the signage to the valance or skirt of the awning.

- **Design**
- **Replacement**

References:

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

Example of new fabric awnings on the Independence Square, 200 North Liberty Street, 2010

Historic photograph of fabric awnings on the Independence Square at the corner of Main Street and Maple looking North West, 1950

Porches, Decks & Balconies

Porches and balconies are significant character-defining elements of architectural style, from the Victorian period through the era of the bungalow. Most late nineteenth and early twentieth century houses had open, front porches, and often times a combination of side and back porches. Porches, whether open or screened, were historically used to shade interior spaces, add open living space when temperatures were warmer (such as sleeping porches), provide space for neighborhood interaction, and add architectural definition to a building. When a porch or balcony is removed or altered, not only is the character of the building changed, but the loss can greatly affect the visual rhythm and alignment of the streetscape.

- **REPAIR / RESTORE**

It is important to maintain and retain original porches and balconies and their elements. Regular maintenance of porches and balconies is necessary, because they are exposed to weather and thus, are extremely vulnerable to the elements. If deterioration has occurred, repair wood elements first with wood epoxy before painting or staining. If the deterioration is too extensive to repair, replace heavily deteriorated wood elements in-kind and paint or stain to match the historic materials.

Do not alter character-defining elements such as replacing turned spindles with straight spindles or replacing wood railings with decorative metal railings. Not only do these alterations drastically change the appearance of the building and result in the loss of architectural integrity, but they create a false sense of the building's historic appearance.

- **Repair / Restore**
- **Enclosure / Removal**
- **Replacement**
- **New Construction**

References:

Preservation Brief 10: *Exterior Paint Problems on Historic Woodwork*

Preservation Brief 16: *The Use of Substitute Materials on Historic Building Exteriors*

Preservation Brief 45: *Preserving Historic Wooden Porches*

Example of character-defining front porch at a home on North Pleasant Street in Independence, 2010

Example of bungalow house with appropriately restored historic porch and railings, 400 North Delaware Street, 2010

Example of turned porch details at the Noel House, 409 North Pleasant Street, 2011

Avoid removal and replacement of original stone or concrete steps; and avoid replacing original wood floors with concrete. When possible, traditional methods of repair should be used to restore these elements for use. Alternative materials (such as Trex or Azek) for decking and porch details will weather and fade over time, so be sure to research the longevity of these materials and if they can be repaired. When using these alternative and composite materials they should match the original porch details in texture and all dimensions. (Refer to the Siding and Trim section for additional information about alternative materials.) *New materials require Heritage Commission approval if not evident.*

- **ENCLOSURE / REMOVAL**

The enclosure of a front porch, or a second-story sleeping porch located on a primary elevation, is not considered appropriate. Enclosing side and rear porches in a way that will damage existing historic fabric should be avoided.

Always assess the significance of a non-original porch before considering removal or alteration. Such porches may have attained historic importance as evidence of the evolution of the building.

- **REPLACEMENT**

The replacement of missing original porches and balconies is highly encouraged. Photographic, physical, or written documentation are helpful tools for the reconstruction of missing elements.

Construct a replacement porch or balcony with design elements appropriate to the style and age of the building, and if appropriate, take cues from surrounding buildings of similar styles.

- **NEW CONSTRUCTION**

Introducing new porches, where historically none existed, may diminish the historic character of the building. Caution should be taken to locate new porches on non-character defining elevations and to minimize damage to the historic building.

The construction of modern porches, decks or balconies on a primary facade detracts from the historic feel of the neighborhood, and are therefore never recommended.

Example of bungalow house with a non-compatible replacement front porch with disproportional columns and railing to that of the bungalow style

Signage and Historic Markers

Commercial signage and historic markers help to define the location and identity of a historic building. Historic markers help tell the story of a building, site, or district through a brief narrative. Signage denoting the location of a business or a historic resource should be kept to a minimum so as not to detract from the building's or district's architectural features.

All privately owned signage or markers being placed on a historically designated property must comply with Section 14-504 of the City's Unified Development Ordinance (UDO), and be approved by the Heritage Commission prior to installation. Copies of the UDO are available in the Community Development Department, Second Floor, City Hall.

- **REPAIR / RESTORE**

Retention of historic signage that conveys the current use of the building is always encouraged. Historic signs should be repaired in such a way that they utilize traditional materials. Signage which has been painted on the side of the building may be considered historic, consult with the City of Independence prior to its removal.

- **REPLACEMENT / NEW SIGNAGE**

New signage or historic markers should be unobtrusive; relating to, rather than obscuring the design elements of the building or site. Use signs that are appropriate in size, scale, and color to historic buildings. Signs should be made to a pedestrian scale rather than automobiles.

Sign materials should complement those found on the related building, or that are common within the neighborhood. Metal, stone, or painted wood signs are generally most appropriate.

- **Repair / Restore**
- **Replacement / New Signage**
- **Lighting**

References:

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*

Example of appropriate signage on the Independence Square, 205 West Lexington Avenue, 2011

Signage and Historic Markers (Continued)

Attach signs to windows or sign friezes above storefronts. Awning signs are also recommended. The signage should be attached to the building causing the least damage to the building as possible.

Neon will be considered as a material when appropriate to the age and architecture of the building/district. Neon signs that have gained historical significance may be rehabilitated for use in their original location.

Freestanding signs should be mounted fairly low to the ground to avoid blocking the pedestrian's view. Signs mounted on low, landscaped bases may also be appropriate.

Projecting signs should be utilized if there is historic precedence for that particular storefront.

Avoid signs that are too large in relationship to the size of the building or that obscure character-defining elements. Avoid roof-mounted signs. They are often difficult to read from pedestrian level and alter the rooftop continuity of the surrounding buildings.

- **LIGHTING**

Internally illuminated signs and modern materials such as plastic are generally not appropriate.

Accent lighting used to illuminate signs should be installed in a manner that minimizes visibility of the light fixture and does not result in glare. Up-lighting of monument signage should not spill onto neighboring properties.

Examples of directional signage and historic markers in the McCoy Neighborhood in Independence, 2011

Mechanical Equipment

Mechanical equipment, such as satellite dishes, antennas, HVAC condensing units, solar panels, wind turbines, and utility wires, are a necessary part of a building and city infrastructure. These items should be installed at the rear of a building in an inconspicuous location. Landscaping and fencing may be used to screen these elements from the view of the public right-of-way (streets and sidewalks). These elements should be installed in such a way that they do not cause permanent damage to the building, if removed at a later date.

- **LOCATION / VISUAL IMPACT**

Minimize the visual impact of mechanical and electrical equipment. Utilize lattice panels and plantings to screen utilities, as appropriate for the building type and period of construction.

Screen utility connections and boxes such as telephone, gas meters, and cable.

Locate service and mechanical equipment and standpipes on non-primary facades so that they will not impact the historic primary facade materials.

Do not install through-wall air-conditioning units on the primary facade of the building or in locations visible from the public right-of-way.

Avoid cutting channels into or removing historic facade materials to install utility lines or mechanical equipment including exhaust hood fans or dryer vents.

Do not locate utility lines or utility boxes on the front facade of a building or in the front yard of a residence.

- **Location / Visual Impact**

References:

Preservation Brief 3: *Conserving Energy in Historic Buildings*

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

Example of view from public right-of-way along West Maple Avenue in Independence, 2010

Lighting

Although most streetscapes in commercial districts are lit by street lamps, it is often desirable to provide additional lighting. Wall or ceiling-mounted light fixtures at a recessed entrance are appropriate for providing additional lighting at entrances. To light a secondary entrance to an upper level, a wall-mounted fixture placed above or beside the door is appropriate. If the fixture is too large and apparent (drawing one's eye straight to the light), the fixture should have some historic precedent.

Lighting within most of the City's historic neighborhoods, was traditionally fairly sparse. Victorian era houses did not make use of exterior ground lighting, and only occasionally were exterior gas fixtures used to light the porch. Early twentieth century homes more commonly used exterior lighting on porch ceilings and at entrances, but still very few utilized yard lighting.

The introduction of yard light fixtures, security lighting, pathway lighting, and/or accent architectural lighting is considered appropriate when introduced as a part of an overall site plan.

- **REPAIR**

Do not permanently remove or alter original lighting fixtures. Do not replace historic fixtures with new "updated" fixtures unless historic fixtures are no longer repairable.

Repair and maintain historic exterior fixtures whenever possible. When required, replacement in-kind, or with fixtures that maintain a similar material appearance, design, and scale is always recommended.

Finishes of original fixtures should be maintained. Retention of traditional gas lights is encouraged, and often can be successfully converted to electric.

- **Repair**
- **Replacement**
- **New Fixtures**

Example of exterior wall-mounted residential lighting at a recessed entrance, 403 North Delaware Street, 2010

Example of exterior pole lighting downtown Independence, Main and Lexington looking southwest, 2010

Lighting (Continued)

Example of appropriate house lighting and yard lighting, 610 North Delaware Street, 2010

- **REPLACEMENT**

Choose a fixture that is appropriate for the building age. A Colonial-style carriage lamp, for example, on a 1930's bungalow is inappropriate. Without documentation, it is not appropriate to install period light fixtures that will create a false sense of history.

Make sure the fixture is an appropriate size for the building. Do not place a very large fixture next to a secondary entrance or a very small, residential type fixture next to a storefront.

The most appropriate place for entry lighting is on the ceiling of the entry vestibule. A simple ceiling mounted or pendant fixture is most appropriate.

- **NEW FIXTURES**

When considering introducing lighting to a property, consider minimal fixtures on the front of the property. Lighting should be introduced to ensure that pathways and driveway are safe to pedestrians.

New yard and street light fixtures should be oriented toward the pedestrian in terms of scale, location, and intensity of illumination.

All exterior lighting should be directed to prevent light spillover onto adjacent properties or onto the street or alley. Whenever possible, consider low-level lighting sources.

Use of Compact Fluorescent and Light Emitting Diode (LEDs) bulbs is appropriate and encouraged by the Heritage Commission.

Sitework

- Accessibility
- Retaining Walls
- Fences and Railings

View looking east on West Maple Avenue, 2010

Accessibility

With the 1990 Americans with Disabilities Act (ADA), it became necessary to address the needs of the physically disabled for all commercial and publicly accessed properties. While some limited exceptions for historic buildings can be made by the City's Building Official, all publicly accessed buildings must comply with ADA regulations. It is highly recommended that a property owner contact the Building Department prior to the initiation of any change of use or historic building restoration to ensure compliance.

Review by the Heritage Commission does not connote compliance with ADA regulations.

For a complete list of requirements, consult the most current ADA Standards for Accessible Design and the current building code of the City of Independence.

Note: These are guidelines and are not intended to be complete descriptions of the code requirements. Please consult the local building code and the ANSI/ADA Accessibility Guidelines for a full listing of code requirements.

- **Location / Visual Impact**

References:

Preservation Brief 32: *Making Historic Properties Accessible*

Example of an exterior ramp. This design is inconsistent with the Secretary of the Interiors' Standards for Rehabilitation. Ramps of this nature should be built so they do not negatively impact the historic porch, and so they could be easily removed in the future

Retaining Walls

Retaining walls are often dominant visual elements of the streetscape. Throughout Independence, limestone walls appear most often. There are also some concrete retaining walls that date from the early to mid-twentieth century. Retaining walls often help define the setback, offering a visual alignment along a street.

Retaining walls require routine maintenance to keep up their appearance and structural integrity. Proper care and maintenance is also required in order for a retaining wall to endure the harsh elements of the Midwest climate. There are two types of retaining walls: those built with mortar and those built without mortar (drystack). Walls with mortar must be maintained and re-pointed as needed in order to keep from bulging and eventually collapsing. Drystack walls must be checked regularly for stability, as they may need to periodically be re-stacked.

While building permits are not required for the installation of new retaining walls (under 48" in height), approval by the Heritage Commission must be sought prior to their installation.

- **REPAIR**

Provide for periodic inspection and repair as needed. Winters and wet weather are extremely hard on all retaining walls.

Ensure proper runoff for rainwater, especially from gutter downspouts. Prevent damaging plants from penetrating retaining walls with their root systems.

- **Repair**
- **Replacement**
- **New Construction**

References:

Preservation Brief 1: *Assessing Cleaning and Water-Repellent Treatments for Historic Masonry Buildings*

Preservation Brief 2: *Repointing Mortar Joints in Historic Masonry Buildings*

Preservation Brief 15:
Preservation of Historic Concrete

Preservation Brief 38: *Removing Graffiti from Historic Masonry*

Example of the variety of historic retaining walls on North Delaware Street in Independence, 2010

Retaining Walls (Continued)

Historic photograph of a retaining wall within Independence, Location and Date Unknown

Example of a current retaining wall within the Truman Heritage District, 400 North Delaware Street, 2010

Make repairs so the pattern of material and the masonry joints match the existing. Inappropriate methods of repair can sometimes do more harm than good.

When patching or parging stone walls, it is critical that a straight portland cement mix not be used as the patching material. A cement mix containing more than 20% portland will not provide the elasticity needed during freeze/thaw cycles, and the resulting penetration of moisture will accelerate deterioration of the wall structure.

Using excessive force during repair efforts can result in additional damage to historic stone materials. If concrete has been used to parge a masonry wall, it is best to let weathering loosen the parging rather than use a jack hammer or hammer and chisel to remove it.

- **REPLACEMENT**

The use of modern materials in replacement of existing retaining walls is discouraged. Railroad ties, landscape timbers, and new cast stone units are not appropriate for street-front use on historic properties or within historic districts.

If replacement is necessary due to the condition of the wall, first consideration should be given to dismantling and rebuilding the wall using the original material and method of construction.

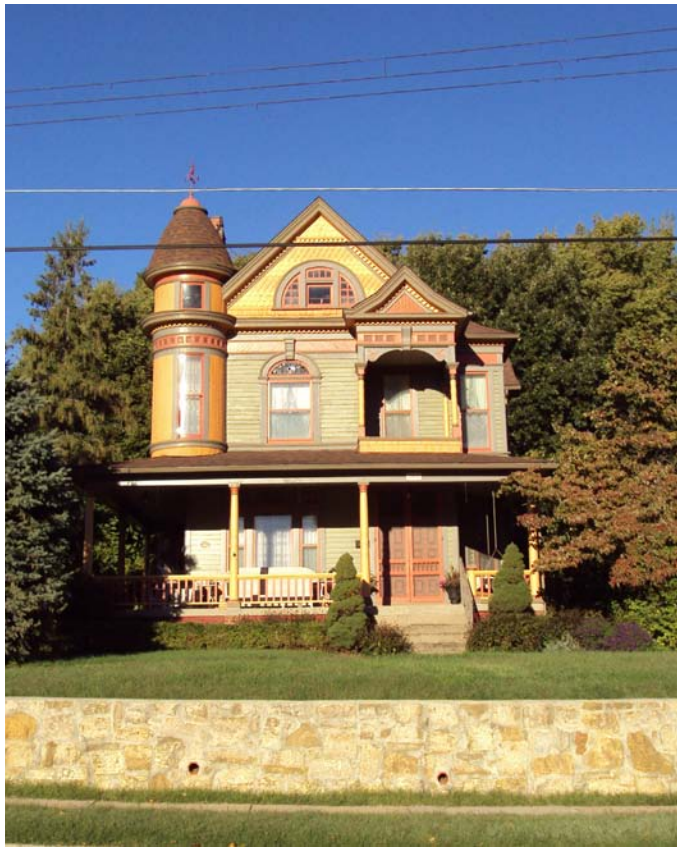
Retaining Walls (Continued 2)

- **NEW CONSTRUCTION**

Respect the style of building and existing walls along the streetscape when designing new retaining walls (i.e. new retaining walls should be designed to match the style of the building and the retaining walls that are adjacent to the new wall.) They should be constructed of materials that match those of the building. Close attention should be paid to details such as stone type (smooth or coarse), pattern (coursed, random, etc.), and joint types (flush, recessed, etc.). This helps the wall look more compatible with the historic building.

New retaining walls should not break the visual line of the streetscape and should not be made of materials such as wood planks, chain link metal, and precast concrete blocks.

Avoid introducing new street-front retaining walls on a lot that did not originally have them.



Example of a new retaining wall using traditional materials, 702 North Delaware Street, 2010

Fences and Railings

Throughout history, fences were installed for both ornamentation and privacy. In choosing a fence for a historic property, it is important to make sure the fence material and location complement the architectural style of the building.

There are numerous styles and materials of traditional fences including: picket fences, board on board fences, and decorative fences often constructed of iron and wood. Picket fences are most common because they are appropriate for a wide variety of building types and are more cost-effective than their wrought-iron counterparts. Fences located within the front yard of a building, should be short enough not to block the view of the building from the sidewalk or street. It is preferred that fencing be under 36" in height along sidewalks or streets.

Although a wide variety of modern fence types exist throughout the city, limited examples of historic fencing have survived (mainly wrought-iron). While the use of ornamental iron fencing has been documented in some instances, for reasons of affordability and versatility of style, wooden fences are most common. As the city evolved into urban and suburban neighborhoods, fencing became more functional and limited to rear yard areas. For instance, there is very little historic precedent of the use of front yard fencing within the Truman Neighborhood.

All fencing installed on a historically designated property must comply with Section 14-400-02 of the City's Unified Development Ordinance (UDO), and be approved by the Heritage Commission prior to installation. Copies of the UDO are available in the Community Development Department, Second Floor, City Hall.

- **Repair**
- **Replacement / Reconstruction**
- **New Fencing**

References:

Preservation Brief 10: *Exterior Paint Problems on Historic Woodwork*

Preservation Brief 27: *The Maintenance and Repair of Architectural Cast Iron*

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

Example of appropriate historic fencing materials in the Procter Neighborhood, 701 Park Avenue, 2010

Fences and Railings (Continued)

- **REPAIR**

Retain and preserve existing fences that contribute to the historic character of a property.

Maintain and repair, through appropriate methods, the defining features of historic fencing including: material, height, configuration, ornamentation, and functional design.

Privacy fences at the rear of the property should be painted or stained an opaque finish. Historically these fences were never left to weather naturally, or stained with a clear natural wood finish.

When the original protective coating has worn, wrought-iron fences should be carefully sanded, primed with a rust inhibitive primer, and painted. It is important to follow all preparation procedures prior to applying the finish coating, for rusty or improperly primed material will reduce the longevity of the paint finish.

- **REPLACEMENT / RECONSTRUCTION**

If replacement is required due to deterioration, remove only those portions that are damaged beyond repair and replace in-kind, matching the original in material, design, placement, and appearance.

When reconstructing a historic fence, the new construction should be based on existing and historic documentation of the original that identifies the defining features including: material, height, scale, configuration, ornament and detail.

Example of fencing in need of repair and painting

Example of restored historic fencing, 522 West Maple Avenue, 2011

Fences and Railings (Continued 2)

Example of a new fence in keeping with the historic neighborhood context on North Delaware in Independence.
200 North Delaware Street, 2010

- **NEW FENCING**

The introduction of new fences should be limited to those areas of the property that are not readily visible from the public right-of-way. Modern fences should be located in a way that complements the historic boundaries of the property without concealing its character defining features. Modern fences should also not attempt to look historic. Instead, these features should strive to enhance the character of the property and be constructed of an appropriate material, scale, height, and configuration.

Ornamental fences should be no more than 36” in height (unless required by city building code), so as not to distract from the architectural elements of the building. Ornamental shrubs may also be used as a fence when planted in tight rows. It is essential that the shrubs are pruned correctly and kept neat, in order to clearly define the building’s property line.

Privacy fences should never be installed along the primary facade of the building, or along the secondary property line of a corner lot. Fencing, other than ornamental style fencing, in front yards is discouraged. Metal chain link and wire fences should be avoided.