

**CITY OF GRANBURY**  
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*Historic Preservation*  
**DESIGN GUIDELINES**

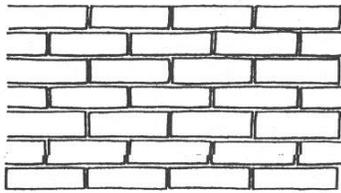
**9. BUILDING EXTERIOR MATERIALS**

**MASONRY: BRICK, STONE, TERRA COTTA, CONCRETE, STUCCO, AND MORTAR**

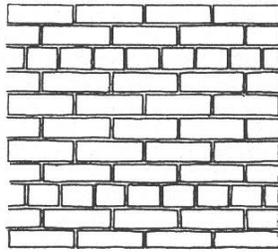
***Commentary:***

Masonry features of brick cornices, door pediments, stone window architraves, terra cotta brackets and railings, masonry surfaces, modeling, tooling, bonding patterns, joint size, and color are important in defining the historic character of a building. While masonry is among the most durable of historic building materials, it is also susceptible to damage by improper maintenance or repair techniques, harsh or abrasive cleaning methods, and chemically incorrect paint or sealant. Most preservation guidance for masonry should focus on cleaning and the process of tuckpointing or filling in with fresh mortar of cut-out or defective mortar joints in old masonry.

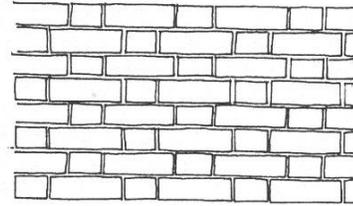
**MASONRY**



*Running Bond*



*Common Bond*



*Flemish Bond*

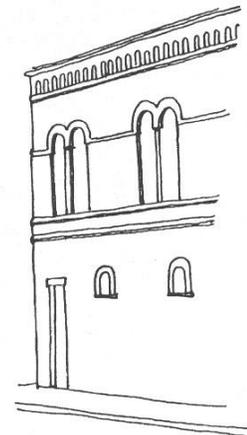
**Identify and Retain** masonry features that define the historic character of the building including walls, brackets, railings, cornices, window architraves, door pediments, steps and columns, masonry joints and unit size, tooling and bonding patterns, coatings, and color.

**Protect and Maintain** masonry by providing proper drainage so that water does not run down walls, stand on horizontal surfaces, or accumulate in curved decorative features.

Clean masonry only when necessary using established industry standards, methods and products specifically for preservation of historic masonry structures to halt deterioration or remove heavy soiling.

***Prohibited:***

- *Removing or radically changing masonry features.*
- *Replacing or rebuilding a major portion of the exterior walls that could be repaired or patched resulting in essentially new construction rather than a historic original.*



*Brick Belting*

- *Applying paint or other coatings such as stucco, to masonry that has been historically unpainted or uncoated, to create a new appearance.*
- *Removing paint from historically painted masonry.*
- *Radically changing the type of paint, coating, or color.*
- *Failing to evaluate and treat the various causes of mortar joint deterioration such as leaking roofs, parapets, gutters, differential settlement of the building, capillary action, or extreme weather exposure.*

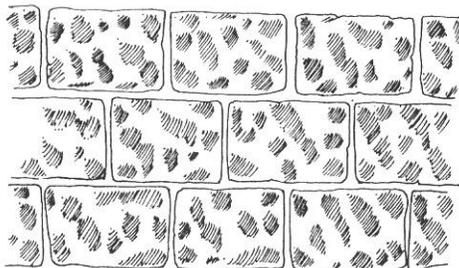
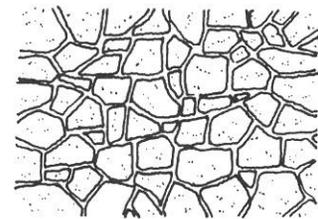


- *Cleaning masonry surfaces when they are not heavily soiled to create a new appearance and needlessly introducing chemicals or moisture into historic materials.*

### **Cleaning**

Masonry surface tests shall be performed to determine if cleaning is necessary. Tests should be observed over a sufficient period of time so that the immediate and the long-term effects may be known to enable the appropriate and gentlest method of cleaning to be performed.

Clean masonry surfaces with the gentlest method possible, for example, low pressure water and mild detergents using natural bristle brushes.



*Smooth Face Stone  
(some saw marks visible)*

Prior to any cleaning, inspect painted masonry surfaces to check for loss of adhesion, flaking and other coating failures to determine if repainting is required.

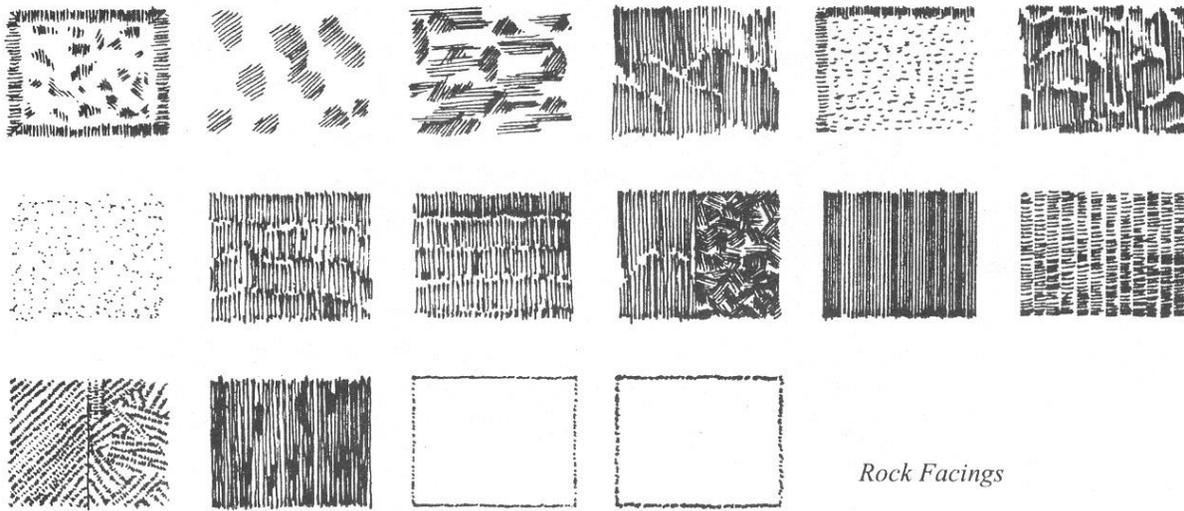
Remove damaged or deteriorated paint only to the next sound layer using the gentlest method(s) possible, i.e. hand-scraping, prior to repainting.

Apply a chemically compatible paint coating system following proper surface preparation and manufacturer's recommendations.

Repaint with historically accurate colors, which have been submitted to the Historic Preservation Commission and approved.

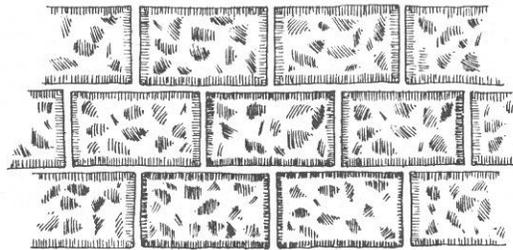
### **Prohibited:**

- *Cleaning masonry surfaces without testing, or without sufficient time for the testing results to be of value.*

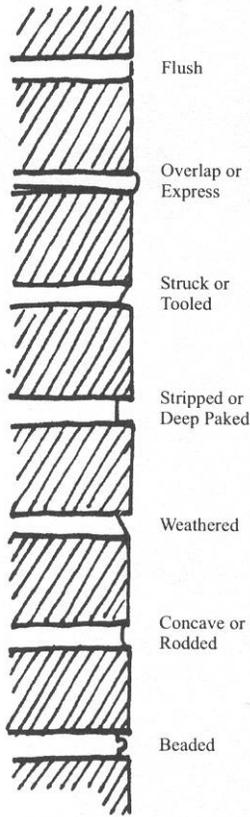


Rock Facings

- Sandblasting brick or stone surfaces using dry or wet grit or other abrasives. These methods of cleaning permanently erode the surface of the material and will accelerate deterioration.
- Using a cleaning method that involves water or liquid chemical solutions when there is any possibility of freezing temperatures.
- Cleaning with chemical products that will damage masonry, such as acid on limestone or marble, or leaving chemicals on masonry surfaces.
- High pressure water cleaning methods that will damage historic masonry or mortar joints
- Removing paint that is firmly adhered to masonry surfaces.
- Using methods of paint removal that may damage or be destructive to masonry, such as sandblasting, application of caustic solutions or high-pressure water blasting.
- Failing to follow manufacturer's product and application instructions when repainting masonry.
- Using new paint colors that are inappropriate to the historic character of the building or district.



Rock Cut Face Stone



## JOINTS

**Repair** masonry walls and other masonry features by tuckpointing the mortar joints where evidence exists of deterioration; disintegrating mortar, cracks in mortar joints, loose bricks, damp walls or damaged plasterwork are visible.

Remove deteriorated mortar by carefully hand-raking the joint to avoid damaging the masonry. *Duplicate new mortar in the old mortar's strength, composition, color, and texture. Duplicate new joints to match old joints in width and joint profile or tooling.*

## STUCCO

**Repair** stucco by removing the damaged material and patching with new stucco that duplicates the original material in strength, composition, color, and texture.

### **Prohibited:**

- *Failing to undertake adequate measures to ensure the preservation of historic masonry features.*
- *Using power tools to remove failed mortar in joints.*
- *Tuckpointing joints with high strength mortar, such as Portland cement (unless this type of mortar was used in the historic building masonry). Often, using a modern high strength mortar will create a bond stronger or harder than the historic mortar and may cause damage to the masonry walls and joints when expansion, contraction, or freeze thaw cycles affect dissimilar hardness in the fabric.*
- *Tuckpointing using a synthetic caulking compound.*
- *Using a "scrub " coating technique to repoint instead of the traditional tuckpointing methods.*

- *Changing the width or tooling of a joint when tuckpointing.*
- *Removing sound stucco or repairing with an incompatible stucco mix that may be stronger than the original surface or will appear visually different from the historic surface.*

**Repair** masonry features by patching or piecing-in the masonry, using recognized preservation methods. When parts of masonry features are extensively deteriorated or missing, repair may also include their limited replacement in kind, or with compatible substitute material that has been approved by the Historic Preservation Commission, using surviving prototypes as guides.

Apply new or non-historic surface treatments such as water repellent coatings to masonry only after tuckpointing and only if masonry repairs have failed to arrest water penetration problems.

**Replace** in kind an entire masonry feature only if it is too far deteriorated for repair. If the overall form and detailing are still evident, use the physical evidence to guide the new work. Examples include large sections of walls, cornices, balustrades, columns, or stairways. If using the same kind of material is not technically or economically feasible, or compatible, the Historic Preservation Commission may consider a substitute material or help find funding after exhausting all other means.

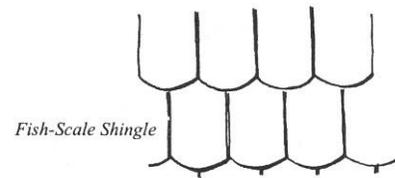
***Prohibited:***

- *Replacement of an entire masonry feature such as a cornice or balustrade when repair or limited replacement of the failed masonry is appropriate.*
- *Replacement of a feature using a substitute material that does not match the surviving parts or that is physically or chemically incompatible.*
- *Applying waterproofing, or water repellent, or non-historic coatings such as stucco to masonry as a substitute for tuckpointing and masonry repairs.*
- *Removing a masonry feature that is irreparable and not replacing it, or replacing it with a new feature that does not conform to the historic character and originally intended design.*

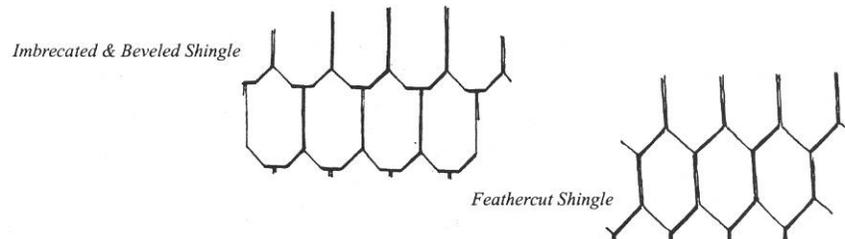
**When Designing Missing Historic Features**, such as steps or a door pediment, accurate restoration should be based on historical, pictorial, or physical documentation. The design must be submitted in accurately scaled drawings to the Historic Preservation Commission and approved.

***Prohibited:***

- *Creating a false historic appearance because the replaced masonry feature is based on insufficient historical, pictorial, or physical documentation.*
- *Introducing a new masonry feature that is incompatible with the historic character of the building and the original design's intent.*



**WOOD: CLAPBOARD, WEATHERBOARD, SHINGLES, SIDINGS, WOODEN DECORATIVE ELEMENTS**



**WOOD**

**Commentary:**

Because it can be easily shaped by sawing, planing, carving, and gouging, wood is the most versatile and commonly used material for architectural features, both decorative and functional.

**Identify, Retain and Preserve** wood features such as siding, cornices, brackets, window and door architraves, and each feature's finishes, including paints and colors. To faithfully execute a historic restoration, painting the building with original colors is recommended, however, take note that when discovering the original colors, consider the fact that exposure to weather, sun and time have affected the actual color. Research to determine the true colors used at the time period for the historic building is highly recommended for an accurate palette.

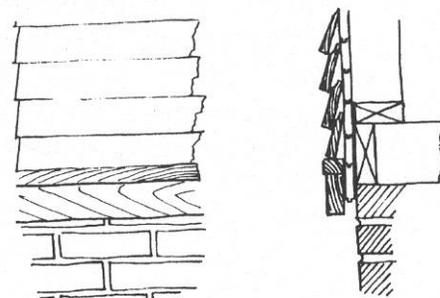
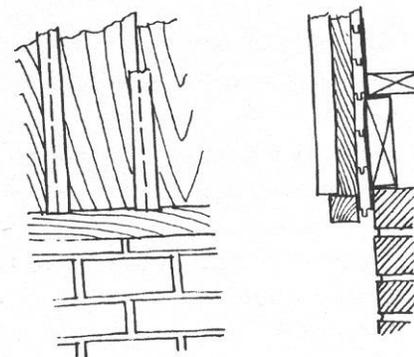
**Protect and Maintain** wood features by providing proper drainage so that water is not allowed to stand on flat, horizontal surfaces or accumulate in decorative features.

Apply chemical preservatives to traditionally unpainted wood features such as exposed beam ends, rafter tails, or outriggers that are prone to decay.

Retain coatings such as paint that help protect wood from moisture and ultra-violet light. Paint removal should be considered only where there is paint surface deterioration and as part of a normal, cyclical maintenance program.

Inspect regularly all wood surfaces to determine whether repainting is necessary or if cleaning is appropriate.

Remove damaged or deteriorated paint to the next sound layer using the gentlest method possible, handscraping and handsanding, to prepare the surface for repainting. Use power tools or chemical strippers to supplement other methods only when absolutely necessary. Test chemical strippers to determine the effect on glued joints prior to any use.



Apply compatible paint coating systems following accepted industry standards for historic preservation and the manufacturer's recommended procedures for surface preparation and application.

Evaluate the overall condition of the wood to determine whether more than protection and maintenance are required and repair is necessary.

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**Repair** wood features by patching, piecing-in, or otherwise reinforcing the wood using recognized preservation methods, including back priming. When portions of wood or parts of features are extensively deteriorated or missing, repair may also include their limited replacement in kind or with approved compatible substitute material. Use surviving prototypes for examples, such as original brackets, moldings, dentils, or sections of siding.

**Replace** in kind an entire wood feature or façade only when it is deteriorated beyond repair. Use existing physical evidence from the original building and/or old photos as models for reproduction of the feature(s). If using the same kind of materials does not appear to the applicant to be technically or economically feasible, then the Historic Preservation Commission will work with the applicant to overcome the technical or economic problem. The Commission may consider a substitute material on a case-by-case basis, after the proposed substitutions have been fully documented in drawings and samples of substitute materials submitted to the Commission for review. Examples of substitute materials include Hardie board or LP Smart Siding.

***Prohibited:***

- *Removing or radically changing wood features, in turn diminishing the buildings character.*
- *Removing a major portion of the historic wood from a façade instead of repairing or replacing only the deteriorated wood.*
- *Reconstructing the removed façade and/or changing the design, in order to achieve a uniform or improved appearance.*
- *Changing the type of finish or its color or accent theme so that the historic character of the exterior is diminished.*
- *Stripping historically painted, varnished, or stained surfaces for refinishing rather than repairing or re-applying the appropriate finish.*
- *Failing to identify, evaluate, and treat the causes of wood deterioration from faulty flashing, leaking gutters, cracks, holes in siding, deteriorated caulking in joints and seams, plant material allowed to grow onto and in wood surfaces, or insect or fungus infestation.*
- *Using chemical preservatives such as creosote which can change the appearance of wood features.*
- *Stripping paint or other coatings and leaving bare wood exposed.*
- *Removing good paint that is firmly adhered to the wood surface.*
- *Using destructive paint removal methods such as propane or butane torches to burn off the paint, sandblasting, or high-pressure water blasting.*

- *Failing to neutralize chemicals when used on wood surfaces, causing paint not to adhere to the surface or causing damage to the wood itself*
- *Using colors inappropriate to the character of the building and the original design's intent.*
- *Failing to undertake adequate measures to ensure the preservation of the wood features.*
- *Replacing an entire wood feature such as a cornice or a wall when repair and limited replacement of deteriorated or missing parts are appropriate.*
- *Using substitute materials for a replacement part that do not match or are physically or chemically incompatible with the original part.*
- *Removing an entire wood feature that is irreparable and not replacing it or replacing the feature with a new one that does not conform to the original building or the design's intent.*

**When Designing Missing Historic Features**, accurate restoration should be based on historical, pictorial, or physical documentation. The design must be submitted in accurately scaled drawings to the Historic Preservation Commission and approved.

***Prohibited:***

- *Creating a false historical appearance because the replacement was based on insufficient documentation.*
- *Introducing a new design incompatible with the historic character of the building and the original design's intent.*

