

Historic Preservation Commission

New Britain, Connecticut



Design Guidelines for Historic Properties



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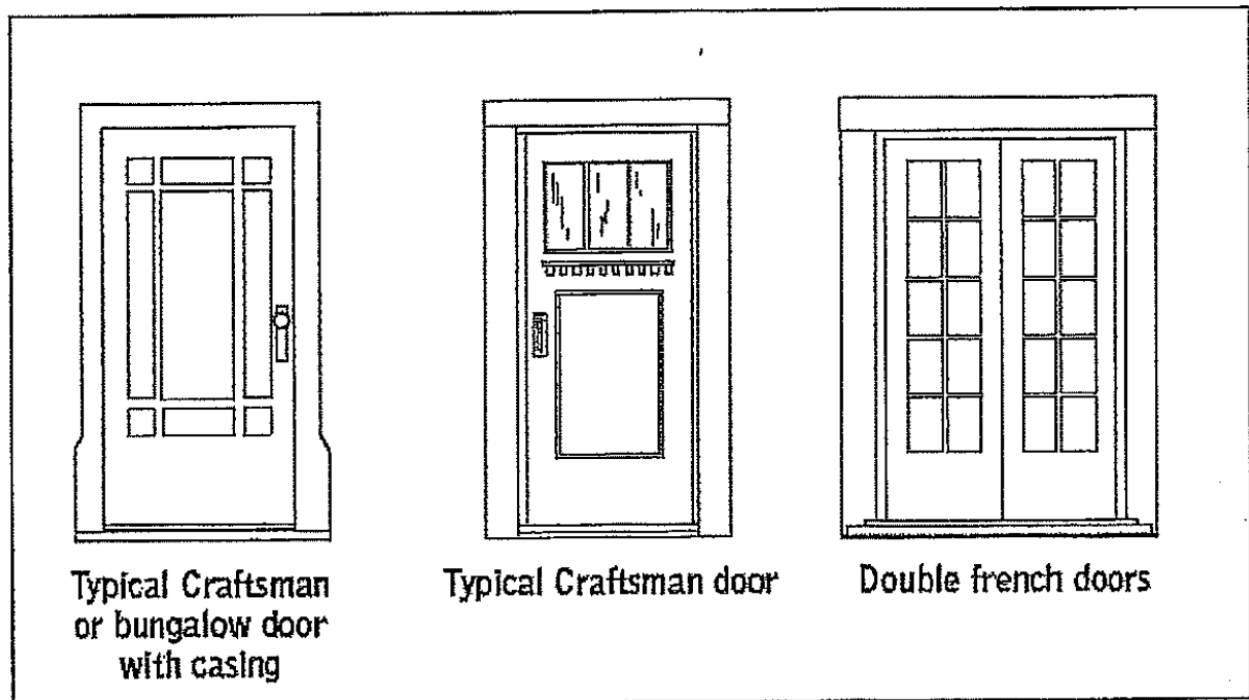
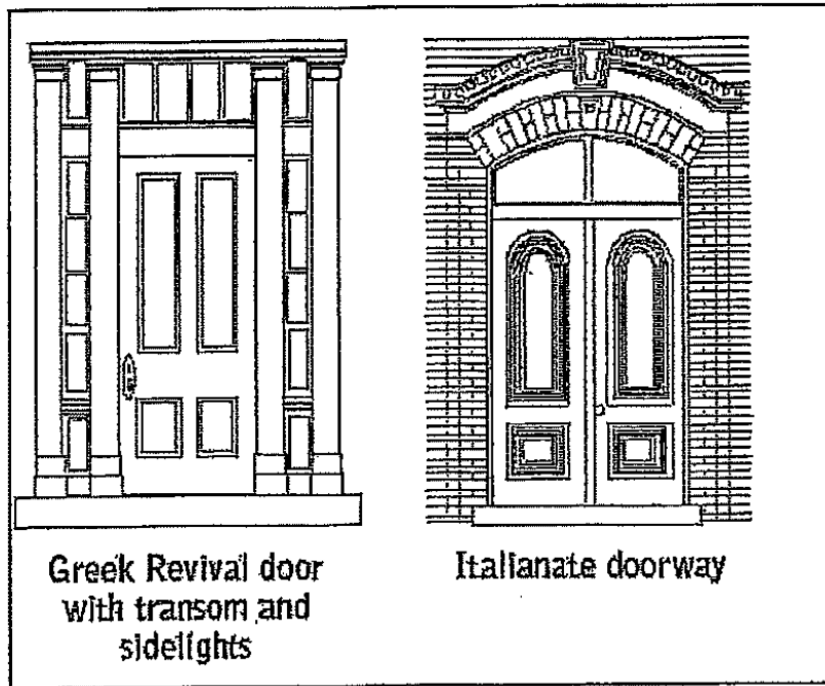
1. Entrances

Recommended:

- Conducting an in-depth condition survey of the entrance, to determine what level of intervention will be necessary on different elements – routine maintenance, repair, or replacement.
- Performing necessary surface treatments such as cleaning, rust removal, removal of peeling paint, and repainting on a regular basis.
- Retaining historic decorative features.
- Retaining historic materials and reusing hardware whenever possible.
- Replacing individual elements of the entrance (like columns) with like materials when they cannot be repaired.
- Using physical evidence or photographs to reproduce features that must be replaced.
 - If no evidence exists, newly designed features should be compatible with the size, scale, material, color, and overall appearance of the historic building.
- Replacing the entire entrance only when the existing one is deteriorated beyond repair or missing.
 - When the entrance is completely missing, the design for the replacement should respect the historic character of the building.
 - Ensuring that when substitute materials must be used, they are visually appropriate and chemically compatible.

Not Recommended

- Changing the colors, materials, finishes, or historic appearance of the doors and entrance features.
- Replacing parts of the doorway when instead they could be repaired.
- Removing materials that are not deteriorated.
- Replacing an entire feature of the entrance, such as a railing, when replacement of individual pieces of the feature would get the job done.
- Adding or removing entire features.
- Trying to transform a secondary entrance into a primary entrance by adding decorative elements.
- Removing a part of the entrance and not replacing it.
- Blocking in existing entrances.
- Installing additional windows on character-defining elevations.
- Moving or creating new entrances on character-defining elevations.
 - If a new entrance is necessary, it may be cut into a hidden elevation.
 - New entrances should be compatible with the overall design of the building.
- Trying to copy the appearance of the front of the building when a new door is added to the side of the building.
- Installing an entrance that is incompatible in size and scale with the historic building or that hides, damages, or destroys character defining features.



2. Paints and Stains

A. Paints and Stains – General Guidelines

Recommended

- Inspecting painted elements before beginning any project to determine whether repainting is necessary or if cleaning is all that is required.
- Making sure new coats of paint being applied are chemically compatible with existing coats.
 - Prepare painted surfaces before painting.
- Removing only the deteriorated outer layers of paint before repainting.
 - Use only the gentlest removal methods possible (such as hand scraping, brushing, and hand sanding).
- Limiting repainting to the areas of the building showing deterioration.
 - Too many paint coatings can damage paint and cause cracking.
- Retaining the paint, finishes, and colors on historic wooden, masonry, and metal elements.
- Choosing appropriate paint colors that will not look out of place with surrounding buildings.
- Follow manufacturers' instructions in applying paint.
- Using two finishing coats of paint.
- Allowing more time for paint to dry when the weather is very warm or humid.
- Using separate colors for the body and trim of architectural elements.

Not Recommended

- Painting historic architectural elements that have historically been unpainted.
- Permanently removing paint from elements that have historically been painted. Paint protects materials from moisture, UV rays, and decay.

B. Paints and Stains – Wood Guidelines

Recommended

- Caulking joints to prevent moisture from getting into adjoining wood surfaces and causing paint to peel.
 - Monitor other sources of moisture such as clogged gutters, damp basements, boards located too close to bare ground, painting over damp or mildewed wood, and failure to adequately vent moist areas such as bathrooms, kitchens, and laundry areas.

- Preparing wood surfaces well before painting.
- Removing all mildew from historic surfaces before repainting them.
 - Oil based paints are especially likely to get moldy and mildew.
 - Mildew can be removed by scrubbing with a commercial mildew was or a solution made of one part household bleach to three parts water, then rinsing with detergent, then water.
 - If paint below mildew is undamaged, then repainting is not necessary.
 - If paint has been damaged, anti-mildew chemicals should be added to the primer and paint so that the mildew will not come back.
- Removing paint blisters by scraping and sanding.
 - If blister was caused by moisture, remove the source of the moisture.
 - Blistering is usually the first stage of peeling.
- Using with extreme care electric hot-air guns or electric heat plates when paint is so deteriorated that total paint removal is necessary prior to repainting.
- Supplementing hand and heat methods of paint removal with mild chemical paint strippers.
 - Detachable wooden elements such as shutter doors, and columns may – with the proper safeguards – be dipped in chemicals to strip them of paint.
 - Painted surfaces can be washed with gentle cleaners like tri-sodium phosphate (TSP) to remove chalk, powder, and mildew.
- Washing chemicals off of stripped surfaces before repainting.
- Stripping paint to bare wood only when:
 - Paint deterioration is extreme, showing continuous patterns of deep cracks or peeling down to exposed wood or,
 - Doors, shutter, or windows have been painted shut or,
 - New wood is being pieced-in next to an existing feature.
- Filling cracks in wood with flexible caulk to protect materials and prolong paint life.
 - Caulk should expand and contract with the material that it has been inserted into.
- Finishing surface preparation by coating wood with a high-quality primer/sealer.
 - The primer/sealer should be allowed to dry completely before painting,
 - This coating will restore oil to weathered materials, seal surfaces, and provide a uniform film that the finish coat can bond to easily.
- Applying chemical preservatives to wood features such as beam ends or outriggers.
 - These features are exposed to decay hazards, but are traditionally unpainted.



Historic home located at 109 Vine Street.

Not Recommended

- Stripping painted wooden surfaces to bare wood, then applying clear finishes or stains in order to create a “natural look.”
- Stripping wood bare and not repainting it.
- Removing paint that is not peeling or damaged.
- Radically changing the color or appearance of historically painted surfaces.
- Removing paint using sandblasters, harsh chemicals, torches, or by high pressure water blasting.
 - These methods will damage historic surfaces.
- Using heated paint removal devices improperly.
- Soaking detachable wooden elements in chemical paint de-strippers for too long.
 - This can cause the wood grain to be raised and the surface to roughen.
- Chemically thinning paint that has thickened because of storage in cold temperatures.
 - Cold paint should be warmed in water or placed in the sun until it reaches a normal stirring consistency.
- Painting damp surfaces.
 - Waiting for wood to dry before applying paint will extend the life of the paint job.
 - Moisture trapped behind paint evaporates when exposed to the sun, causing blistering.
 - A “moisture meter” can be purchased from some paint dealers to determine when wood is completely dry.
- Painting wood surfaces in direct sunlight.
 - Heat blisters can result from this practice.
 - This problem occurs frequently with dark paint colors that absorb more heat.

C. Paints and Stains – Masonry

Recommended

- Removing flaking and chalking paint from masonry by bristle brushing or low pressure steam cleaning.
- Removing salt deposits from painted brick before repainting.
 - It can look like a white stain on unpainted brick.
 - A 4% solution of hydrofluoric acid or pure vinegar may be necessary to remove this salt.
- Rinsing masonry surfaces with clean water to remove any deposits of dirt, powdered masonry, or chemical residue before painting.
- Filling the cracks in clean, dried masonry surfaces with masonry patching compound, latex concrete patch, or caulking compound before painting.

Not Recommended

- Using oil-based paint on masonry because it can change chemically degrade mortar.
 - Instead, use a breathable exterior latex masonry paint.

D. Paints and Stains – Metal

Recommended

- Practicing good surface preparation techniques.
 - Paint peeling on metal surfaces is almost exclusively caused by poor surface preparation.
 - Painted metal surfaces must be cleaned of all rust, dirt, powder, and loose flaking paint, leaving only bare metal.
- Using conditioner or rust-proof galvanized metal primer as a first coat before any exterior enamels are used as finishing coats.
- Brushing rust, scale, paint, and dirt from iron surfaces before painting.
 - Commercial rust removers may also be used.
- Lightly sanding strongly adhering paint to ensure adhesion with new paint.
- Minimizing the appearance of replacement gutters, downspouts, screen and storm doors and windows, vents, and fire escapes by painting them to match the color of appropriate architectural features.

Not Recommended

- Painting or coating metals that were meant to be exposed, such as copper, bronze, and stainless steel.

3. Siding

Recommended

- Repainting wooden sidings regularly to protect and maintain historic materials.
 - Leaving deteriorated paint untreated can allow water to get into the building.
- Retaining original siding, architectural details, and corner elements.
- Repairing wooden siding by patching or reinforcing the existing wood.
- Replacing sections of siding that are extensively deteriorated or missing, and cannot be repaired.
 - Residing should be done with like materials in a similar style.
 - Ensuring that when substitute materials must be used, they are visually appropriate, chemically compatible, and will not damage or hide historic features.
 - The substitute material should match the appearance of the historic material.

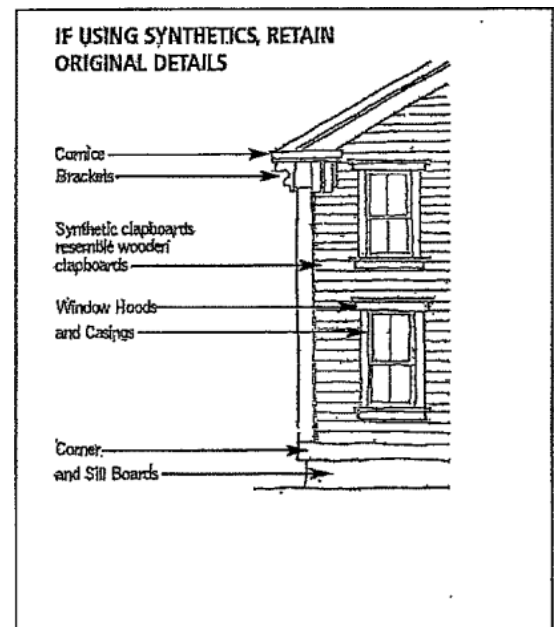
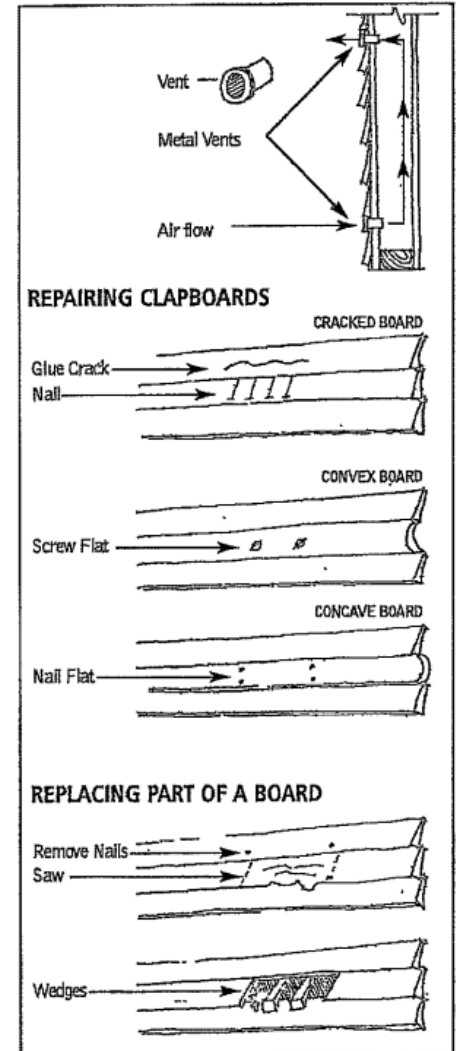
Not Recommended

- Siding masonry buildings with substitute materials.
 - Masonry buildings should not be sided with wood, aluminum, vinyl, or any material other than like masonry.
 - When siding is applied directly onto masonry buildings, the nailing required to attach the siding can cause irreversible damage to the masonry.
- Allowing architectural details to be lost when residing a building.
- Removing or replacing siding that is not deteriorated.
- Removing siding and not replacing it.

Note on Siding

In very limited instances, vinyl siding may be considered an acceptable substitute material for wood buildings, particularly when the historic building has previously been sided with vinyl or aluminum. Siding with vinyl may be acceptable if:

- Walls are currently in good condition with no evidence of water damage or rotting.
 - Peeling paint and stains are two indicators of deterioration.
 - Moisture problems should be resolved before they may worsen and hide subsequent damage.

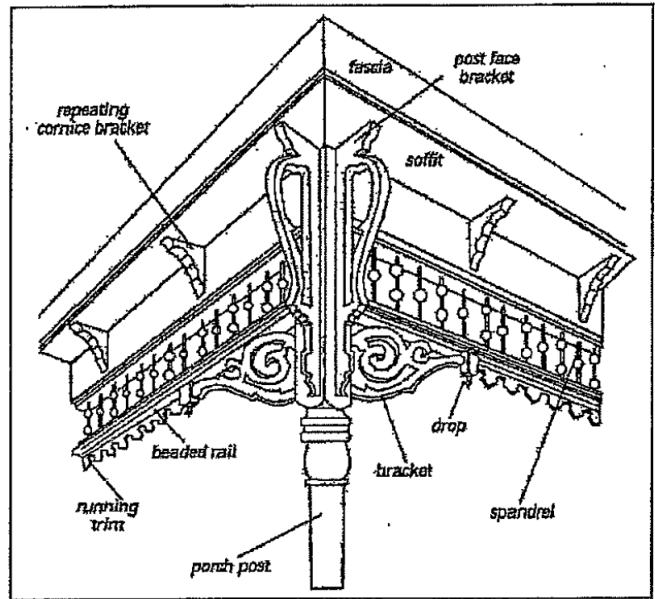


- The existing historic siding is deteriorated or damaged beyond repair.
- The vinyl siding can be applied without damaging or removing original materials.
- The vinyl siding will not hide architectural details and decorative trims.
 - Accessory molding pieces should be fitted around architectural elements.
- A siding is chosen that matches the historic wooden siding in design, color, size, texture, and finish.

4. Porches

Recommended

- Conducting an in-depth condition survey of the porch, to determine what level of intervention will be necessary on different elements.
- Routine maintenance, repair, or replacement.
- Performing necessary surface treatments such as cleaning, rust removal, removal of peeling paint, and repainting on a regular basis.
- Retaining historic decorative features.
- Retaining historic materials such as wood, iron, brick, and stone whenever possible.
- Replacing individual elements of the porch (like columns) with like materials when they cannot be repaired.
- Using physical evidence or photographs to reproduce features that must be replaced.
 - If no evidence exists, newly designed features should be compatible with the size, scale, material, color, and overall appearance of the historic building.
- Replacing the entire porch only when the existing one is deteriorated beyond repair or missing.
 - When a porch is completely missing, the design for the replacement should respect the historic character of the building.
- Ensuring that when substitute materials must be used, they are visually appropriate and chemically compatible.
- Enclosing a porch only when absolutely necessary.
 - The design for the enclosure should preserve the historic character of the building.
 - This could include using large sheets of glass and pushing the enclosure wall back behind the porch's posts.



Not Recommended

- Changing the colors, materials, finishes, or historic appearance of the porch.
- Replacing parts of the porch when instead they could be repaired.
- Replacing parts of the porch that do not match, just to create a uniform appearance.
- Removing materials that are undeteriorated.
- Replacing an entire feature of the porch, such as the railing, when replacement of individual pieces of the feature would get the job done.
- Adding or removing entire features.
- Removing a part of the porch and not replacing it.
- Removing the entire porch.
- Moving or creating new porches on character-defining elevations.
 - If a new entrance is necessary, it may be added to a hidden elevation.
 - New porches should be compatible with the overall design of the building.

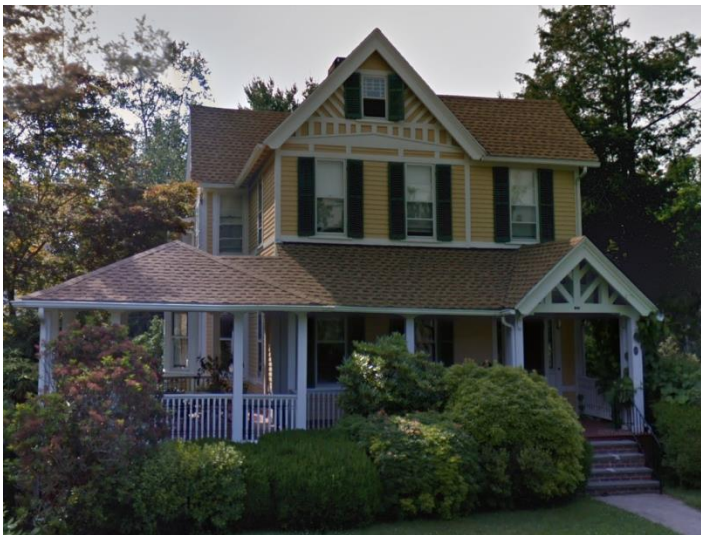
- Installing a porch that is incompatible in size and scale with the historic building or that hides, damages, or destroys character-defining features.
- Enclosing a porch with solid materials such as wood, stucco, or masonry.
 - Enclosures of this type decrease or destroy the character of historic buildings.



55 Lexington Street



10 Camp Street



201 Vine Street



66 Forest Street

5. Windows

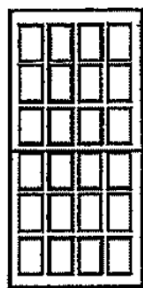
Recommended

- Performing necessary surface treatments such as cleaning, rust removal, removal of peeling paint, and repainting on a regular basis.
- Recaulking windows and replacing weather stripping when necessary, to conserve heat and prevent drafts.
- Repairing wooden portions of windows by patching and reinforcing existing wood.
- Repairing and replacing window elements with like materials.
- Reusing hardware whenever possible.
- Using physical evidence or photographs to reproduce features that must be replaced.
 - If no evidence exists, newly designed features should be compatible with the size, scale, material, color, and overall appearance of the historic building.
- Ensuring that when substitute materials must be used, they are visually appropriate, and chemically compatible.
 - Design elements that should be matched include color, glass to frame ratio, reveal, frame width and depth, and decorative details.
- Providing a setback between the window and a dropped ceiling to allow for the full height of the window openings.

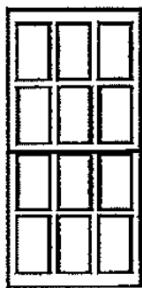
Not Recommended

- Changing the number, location, size, or glass pane pattern of the windows.
 - Do not cut new openings, block-in existing windows, or install replacement sashes that do not fit the existing window opening.
- Changing the colors, materials, finishes, or historic appearance of the windows.
 - Avoid work that changes the sash, reveal, glass pane pattern, reflectivity, color of the glass, or appearance of the frame.
- Covering historic window trims with metal or other materials.
- Removing historic materials such as wood, cast iron, or bronze.
- Replacing an entire window when replacement of individual parts would get the job done.
- Replacing units when instead they could be repaired.
 - Peeling paint, broken glass, stuck sashes, and drafts are all minor repair problems and do not require window replacement.
- Removing a feature and not replacing it.
- Installing additional windows on character-defining elevations.
 - If new windows are necessary, they may be cut into hidden elevations.
 - New windows should be compatible with the overall design of the building.
- Trying to copy the window pattern on the front of the building when a new window is added to the side of the building.
- Inserting floors or ceilings that cut across the glass area of the window because they are different height than what was previously there.
 - This could change the buildings outside appearance.

APPROPRIATE WINDOW STYLES



1700-1840



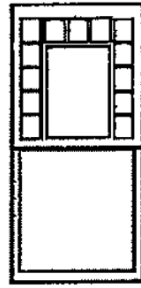
1840-1870



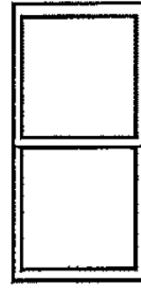
1870-1900



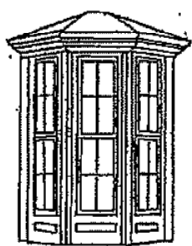
1900-1930



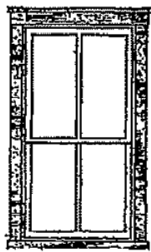
1880-1910



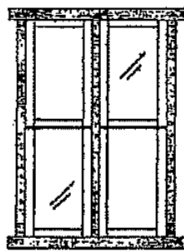
1900—



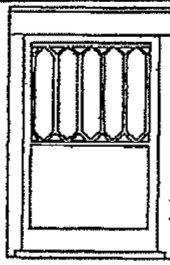
Victorian bay window



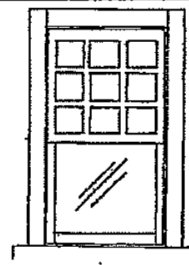
Typical Victorian two over two window



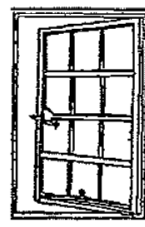
Typical Victorian paired one pane over one



Bungalow-style window



Typical Craftsman window—nine panes over one

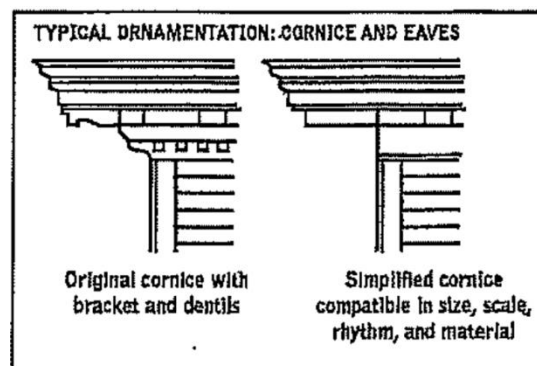


Steel casement window

6. Roofs

Recommended

- Retaining historic decorative features.
- Cleaning the gutters and downspouts regularly.
 - When water and debris are allowed to collect there, they can cause damage to roof fasteners, decking, and the underlying structure.
- Replacing deteriorated flashing to prevent water damage.
- Checking roof decking for proper venting.
 - This will prevent damage from moisture and insects.
- Anchoring roofing materials properly to prevent damage from wind and water.
- Providing temporary protection for leaking roofs until they can be properly repaired.
 - Applying plywood and building paper to leaking areas to avoid the deterioration of masonry, wood, plaster, paint, and structural elements.
- Reinforcing existing historic roofing materials.
- Reusing intact slate or tile when it is only the roof's decking that needs replacement.
- Replacing individual roof elements (slates, dentils, etc.) with like materials when they cannot be repaired.
- Repairing and replacing roof elements with like materials.
- Ensuring that when materials must be replaced, the replacements are visually appropriate and chemically compatible.
- Using physical evidence or photographs to reproduce features that must be replaced.
 - If no evidence exists, newly designed features should be compatible with the size, scale, material, color, and overall appearance of the historic building.
- Installing service equipment and mechanical systems on the roof rather than on parts of the building that will be very visible.
- Placing any additions and newly added features on the roof when possible, so they will not be as visible.



Decorative features like the brackets pictured at 44 South High Street should be retained.

Not Recommended

- Allowing roof fasteners such as nails and clips to corrode.
 - This will cause accelerated deterioration in roofing materials.
- Adding new features such as dormer windows, vents, or skylights that are visible from the street.
- Changing the roof's overall shape.
- Changing the roof's material, or color, pattern or size of the roofing units.

- Replacing sections of the rood that don't match, just to create a uniform appearance.
- Removing historic materials such as slate, clay tile, wood, or architectural metal from the roof.
- Adding paint or other coatings to historically uncoated roofs.
- Replacing an entire roof feature, such as cupola or dormer, when replacement of individual pieces of the feature would get the job done.
- Replacing units when instead they could be repaired.
- Removing a feature and not replacing it.

7. Masonry – Brick, Stone, Tile, and Concrete

A. Guidelines for Cleaning Masonry

Recommended

- Using the gentlest effective means to clean your masonry, such as low pressure water and detergents, and natural bristle brushes.
 - Masonry can be damaged easily by improper cleaning.
- Performing preliminary surface tests on areas that are to be cleaned.

Not Recommended

- Cleaning masonry when it is not necessary.
 - Only clean to halt deterioration or remove heavy soiling.
- Sandblasting.
 - Sandblasting will permanently erode masonry surfaces and cause deterioration.
- Using liquids to clean masonry surfaces when temperatures are freezing.
- Using chemicals that will damage masonry, such as acid on limestone or marble.
 - Do not leave chemicals on surfaces for extended periods.
- Performing high pressure water cleaning.
 - It will damage masonry and mortar joints.



Brick home located at 35 South High Street.

B. Guidelines for Waterproofing Masonry

Recommended

- Repairing flashings, drains, gutters and leaky roofs before other work is undertaken.
 - Most masonry damage is caused by water penetration.

Not Recommended

- Using water repellents as a first treatment for water penetration problems.
 - Apply water-repellent coatings and other surface treatments only after repointing and other repairs have failed to halt water damage.
- Allowing water to collect on flat, horizontal surfaces.
 - Do not allow water to accumulate in decorative features.

C. Guidelines for Masonry Replacement

Recommended

- Replacing masonry units with materials as close to the original as possible.
 - Replacement masonry units should be tooled to match originals.
- Constructing walls using masonry units and mortar of consistent strength throughout to avoid cracking.
- Using physical evidence or photographs to reproduce features that must be replaced.
 - If no evidence exists, newly designed features should be compatible with the size, scale, material, color, and overall appearance of the historic building.

Not Recommended

- Using old bricks if the hardness of the brick is unknown or different from the original.
 - In those cases, new brick is probably a better choice.
- Replacing masonry units when instead they could be repaired.
- Removing a feature and not replacing it.

D. Guidelines for Masonry Repointing

Recommended

- Recognizing when masonry needs repointing – when mortar is disintegrated or cracked, when bricks or stones are coming loose, when walls become damp or plaster is damaged due to exposure.
- Removing damaged mortar by hands with a joint rake to avoid damaging adjacent masonry edges.
- Repointing with mortar similar to the original in strength, composition, color, and texture.
 - Use similar tools to create a uniform overall appearance.

Not Recommended

- Repoint an entire building that does not need it, just to create a uniform appearance.
- Use electric saws and hammers when removing deteriorated mortar.
 - Use hand tools instead.
- Use mortar with a higher Portland cement content than the existing mortar.
- Repoint with synthetic caulking compound.
- Use a “scrub” coating technique rather than traditional repointing.



70 Vine Street.

E. Guidelines for Painting Masonry

Recommended

- Inspecting painted masonry first to determine whether repainting is necessary.
- Making sure new coats of paint being applied are chemically compatible with existing coats.
 - Prepare painted surfaces before repainting.
- Removing only the deteriorated outer layers of paint, and using only the gentlest methods possible (such as handscraping) before repainting.
- Choosing historically appropriate colors.
- Following manufacturers' instructions in applying paint.

Not Recommended

- Painting masonry that has historically been unpainted.
- Removing paint from masonry that has historically been painted.
- Removing paint that is not peeling or damaged.
- Radically changing the color or appearance of historically painted surfaces.
- Removing paint by sandblasting, using harsh chemicals, or by high pressure water blasting.
 - These methods will damage historic masonry.
 -

F. Guidelines for Stucco on Masonry

Recommended

- Removing damaged stucco and patching with new stucco that duplicates the old in strength, composition, color, and texture.

Not Recommended

- Stuccoing masonry that has historically been understuccoed.
- Removing stucco that is undeteriorated.