

Building Materials



The unpainted, natural exterior building materials – red brick and light stone-- of the George L. Pease Memorial Library are key visual features. The building was erected in 1923 to the design of Henry Barrett Crosby and Albert Marten Bedell.

The surface materials of a building are defining characteristics and important to a building's relationship with adjacent buildings. Many buildings in the District are distinguished by their brick, stucco, or stone wall surfaces. The District also has a few frame buildings, and wood is frequently the material for decorative features. While glass is a character defining feature for storefronts, the walls, columns and piers of the storefronts are of various materials. Historic materials provide texture and, on masonry buildings, colors that are intrinsic to a building's design.

Guidelines

Maintain and preserve exterior building materials that characterize a property.

Consult the technical publications of the National Park Service (see [Resources](#) at end of this section) when determining appropriate treatment for each building material and/or feature.

Repair underlying problems before treating surfaces.

Repair rather than replace deteriorated historic materials. Generally limit repairs to the affected areas and use techniques appropriate to the specific building material.

For necessary replacements, match the original in size, shape and other visual characteristics.

Do not use chemical or physical treatments, such as sandblasting that cause damage to historic building materials. Use the gentlest means possible for necessary surface cleaning of exterior materials.

Do not cover historic building materials with modern replacement. Synthetic siding and synthetic stucco (E.I.F.S.) are not appropriate for contributing historic buildings.

Building Materials: General

Recommended

For Contributing Historic Buildings

- Retain and repair original exterior buildings materials.
- When materials are deteriorated, determine and correct the cause of the deterioration before repairing/replacing the materials.
- When original materials have been altered or replaced, replace with materials similar to the originals.
- If the original material is covered by later materials (such as by a false façade, a later storefront, or non-historic stucco), remove these alterations and maintain and repair the original material and, if this is not possible, replace with materials similar to the original.
- Use only the type of building materials that originally existed on the building.



Recommended: Retain original historic materials. A variety of exterior wall and roofing surfaces distinguish the District's buildings. The stucco, stucco and half-timbering, bricks, and clay tile materials are among historic building materials that should be retained and repaired on these buildings along Garber Square.

For All Buildings

- Generally use traditional building materials on facades of the type that were typically used in the District between 1900-1930 (brick, stucco, stone, smooth concrete, glass, metal).
- Use materials of high quality and durability. In particular, the materials used near sidewalks and adjacent to building entrances need to be highly durable and easily maintained.



Recommended: Do not paint or cover original unpainted building materials. Frequently the exterior materials have constructional colors which should not be painted. This is particularly true for brick and stone walls.

Not recommended

For Contributing Historic Buildings

- Removing, changing, or covering exterior materials that are important to defining the overall historic character.
- Applying painting or other coatings to masonry, stone, stucco, or concrete that has been historically unpainted or uncoated.
- Using fake brick, decorative concrete block, rough textured wood siding, wooden shingles, gravel aggregate materials, aluminum and vinyl sidings, artificial stone, E.I.F.S. (Exterior Insulation and Finish Systems; synthetic stucco).



Not Recommended: Covering original exterior materials. The covering with stucco of the exterior brick of one of the buildings in a row of similar buildings damaged the historic architectural integrity not only of the specific building, but of the entire streetscape.

Building Materials: Masonry

Masonry. Under most conditions, stone, brick, concrete, and stucco are durable. Proper maintenance of masonry facades is important to maintaining the visual appearance and longevity of the building. Water, weather, air pollution, and structural problems can cause problems. The underlying cause of masonry problems should be determined before attempting to remedy masonry problems. For example, if a crack is patched without correcting the reason for its occurrence, it is likely to recur.

Recommended

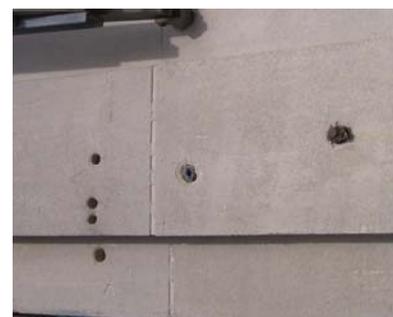
- Clean masonry only when necessary to halt deterioration or remove heavy soiling.
- Repoint and clean following the recommendations of the *Secretary of the Interior* for treatment of historic masonry. Most importantly, sandblasting is not an acceptable cleaning method. Electric saws, hammers, or drills can damage masonry.
- Repoint mortar joints only when moisture problem has been detected. Use mortar that duplicates the original in color, texture, and profile. Use mortar for repointing which has a similar content as the original (ratio of Portland cement/sand/lime). Duplicate the width and profile of original mortar joints.

Not recommended

- Painting or cladding with new finishes or materials an existing unpainted masonry wall that is visible from the public way.
- Using inappropriate cleaning methods which damage masonry surfaces.
- Applying waterproofing and water repellents. Such coatings should be used only with extreme care and when masonry repairs have failed to prevent water penetration.
- Drilling new holes into historic masonry. Make necessary attachments at joints.



Not Recommended: Sandblasting masonry. These sand-blasted bricks are pitted and eroded. They lack their outer protective surface.



Not Recommended: Drilling holes in historic masonry. These holes remain although the signs and other attachments are gone.

Buildings Materials: Stucco, Wood

Stucco. Stucco is an exterior finish for a number of buildings in the District and is an important defining stylistic characteristic of many of its important buildings.

Recommended

- Repair or renew stucco, if necessary, using the same building technique as was used in the original stucco construction.
- Test the original material and then replicate in color and texture.

Wood. Wood was most commonly used in the District for window and door framing and for decorative elements (frieze boards, signboards, cornices, brackets, etc.). Some buildings have wood siding.

Recommended

- Maintain historic wood features.
- Repair or replace damaged or deteriorated section of a historic wood feature rather than replacing entire wood feature. Seal joints to prevent water penetration. If possible, replace with the same species of wood for uniform finishing.
- Refinish an entire wooden element, rather than just a section. Paint or stain can be removed by several methods. Use the gentlest method possible. Maintain a sound paint film or other coating on wood. Paint with colors that are appropriate to the building and visually compatible buildings.
- Repair historic wood siding instead of covering with vinyl or aluminum siding or synthetic stucco (E.I.F.S.).
- If entire feature must be replaced or replicated and using the same kind of material is not technically or economically feasible, consider a compatible substitute material.

Not recommended

- Removing paint from historically painted surfaces and leaving unpainted or staining or varnishing.
- Do not sandblast as it damages the wood.



Recommended: Repair or renew historic stucco and wood. Half-timbering on buildings in the District combines stucco and applied wooden members.



Recommended: Maintain and preserve historic exterior building materials. Cornices may have wooden elements, but frequently other materials are also used. Here the decorative frieze is painted brick.



Recommended: Repair only the damaged section of historic wood features. This sill can probably be repaired with epoxy fill and then caulked. After repair, the entire element should be repainted.



Not Recommended: Unpainted wood is usually too rustic and not appropriate.

Building Materials: Glass, Architectural Metals

Glass. Glass is an important architectural feature for most buildings particularly for their storefronts. Some buildings have architecturally interesting glass transoms. In the 1920s and 1930s pigmented structural glass (Carrara glass and Vitrolite) were extensively used to provide smooth modern exterior finishes.

Recommended

- Preserve original glass. If necessary, replace in-kind.
- Identify pigmented structural glass (Carrara glass and Vitrolite) and preserve unless determined that these materials are inappropriate on the specific contributing historic building.

Not Recommended:

- Generally, tinted, dark, or mirrored glass for windows and doors.

Architectural Metals. The exteriors of many contributing historic buildings employ architectural metals such as cast iron, galvanized steel, aluminum, copper, zinc, and tin as window frames and doors, hardware, roof parapets, and decorative features.

Recommended

- Clean metal when necessary to remove corrosion. Use gentlest method possible. Use sandblasting only for cast iron.
- Leave metals exposed only if they were originally meant to be exposed. Maintain a sound paint film on any metal that can corrode.
- Repair metal features whenever possible. Metal features damaged beyond repair, if originally painted, may be replaced by a replicate feature made in a different material but matching the original in design and size.
- Isolate dissimilar metals from each other to avoid electrolysis.



Recommended: Preserve and repair glass transoms.



Recommended: Preserve pigmented structural glass. This material was frequently used below display windows for bulkheads.



Recommended: Preserve historic architectural metals. Architectural metal -the copper-covered parapet and finial- contribute to the great visual interest of the corner turret of the Moore Building at the corner of East Ridgewood Avenue and South Broad Street.

Building Materials, Resources

Resources

Hopewell, New Jersey, Historic Preservation Commission, *Design Guidelines: Guidelines for Exterior Maintenance, Exterior Woodwork, Masonry & Stucco, Wood Windows and Doors*,
<http://208.55.240.96/Guidelines-Historic-Properties.html>

National Park Service, *Preservation Brief 1: The Cleaning and Waterproof Coating of Masonry Buildings*,
<http://www.cr.nps.gov/hps/tps/briefs/brief01.htm>

NPS, *Preservation Brief 2: Repointing Mortar Joints in Historic Brick Buildings*,
<http://www.cr.nps.gov/hps/tps/briefs/brief02.htm>

NPS, *Preservation Brief 6: Dangers of Abrasive Cleaning to Historic Buildings*,
<http://www.cr.nps.gov/hps/tps/briefs/brief06.htm>

NPS, *Preservation Brief 7: The Preservation of Historic Glazed Architectural Terra Cotta*,
<http://www.cr.nps.gov/hps/tps/briefs/brief07.htm>

NPS, *Preservation Brief 8: Aluminum and Vinyl Siding on Historic Buildings*,
<http://www.cr.nps.gov/hps/tps/briefs/brief08.htm>

NPS, *Preservation Brief 10: Exterior Paint Problems on Historic Woodwork*,
<http://www.cr.nps.gov/hps/tps/briefs/brief10.htm>

NPS, *Preservation Brief 15: Preservation of Historic Concrete*,
<http://www.cr.nps.gov/hps/tps/briefs/brief15.htm>

NPS, *Preservation Brief 16: The Use of Substitute Materials on Historic Building Exteriors*,
<http://www.cr.nps.gov/hps/tps/briefs/brief16.htm>

NPS, *Preservation Brief 22: The Preservation and Repair of Historic Stucco*,
<http://www.cr.nps.gov/hps/tps/briefs/brief22.htm>

NPS, *Preservation Brief 27: The Maintenance and Repair of Architectural Cast Iron*,
<http://www.cr.nps.gov/hps/tps/briefs/brief27.htm>

NPS, *Preservation Brief 38: Removing Graffiti from Historic Masonry*,
<http://www.cr.nps.gov/hps/tps/briefs/brief38.htm>

NPS, *Preservation Brief 42: The Maintenance, Repair and Replacement of Historic Cast Stone*,
<http://www.cr.nps.gov/hps/tps/briefs/brief42.htm>

NPS, *Preservation Tech Notes: Restoring Metal Roof Cornices*,
<http://www.cr.nps.gov/hps/tps/technotes/PTN32/intro.htm>

New Jersey Historic Preservation Office, *FYI Publication: Masonry Cleaning*,
<http://www.state.nj.us/dep/hpo/4sustain/masonryclean.pdf>

NJHPO, *FYI Publication: Masonry Repairs*, <http://www.state.nj.us/dep/hpo/4sustain/masonryrepair.pdf>