

## **CITY OF PATERSON**

## Downtown Commercial Historic District

**Design Guidelines** 

## **INTRODUCTION**



The Downtown Commercial Historic District, centered around City Hall, features many architecturally significant individual buildings.

City Hall was designed by the New York firm Carrere and Hastings in 1894 in the Beaux Arts style, and was erected to commemorate Paterson's Centennial, 1792-1892.

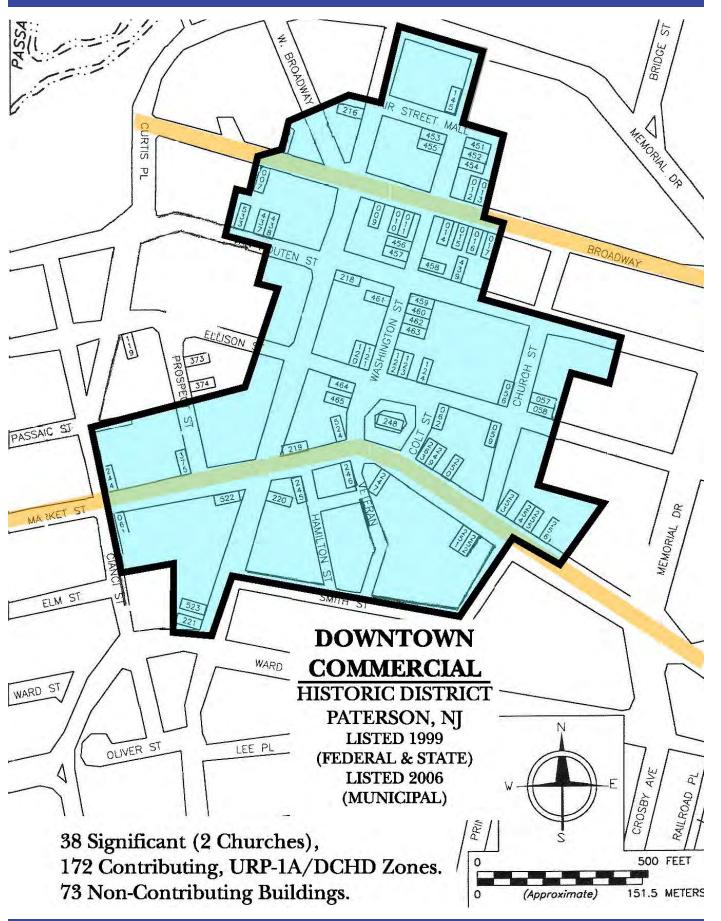
These *Guidelines* were developed in conjunction with the City of Paterson's Historic Preservation Commission (HPC) and with input of many diverse stakeholders. Please review this information during the early stages of planning your project. Familiarity with this material can assist you in moving a project quickly through the approval process, saving you both time and money. The HPC staff is available for informal meetings and to provide you with valuable information as you consider making improvements to your property.

Additional *Guidelines* addressing other historic building topics are available at 125 Ellison Street, Suite 408 and on the City's website at www.patersonnj.gov. For more information, to clarify whether your project requires HPC review, or to obtain permit applications, please call the HPC staff at (973) 321-1355.

#### PATERSON'S DESIGN GUIDELINES

The City of Paterson Downtown Commercial Historic District Design Guidelines (Guidelines) are intended to act as a tool to help manage, change and protect the city's architectural and historic resources. The Guidelines provide information, guidance and regulations to assist property owners, retail tenants, design professionals, contractors, City Staff and the Historic Preservation Commission (HPC) with regard to making changes to historic resources in the City's Downtown Commercial Historic District (DCHD). They are intended as a supplement to, rather than as a substitute for, consultation with architects, contractors and the HPC and its professional staff.

The Guidelines are based upon The Secretary of the Interior's Standards for the Treatment of Historic Properties. It is recommended that applicants review the information in the relevant Guidelines sections and consult with the HPC office during the early stages of planning a project.





The Great Fire of 1902 devastated the commercial center of Paterson. In this period photograph, City Hall remains standing, but little remains of the surrounding buildings.

Significant reconstruction occurred after the fire, with many new notable buildings constructed within the subsequent two years giving Paterson the distinction of having "New Jersey's finest collection of turn-of the-century commercial architecture."

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#### PATERSON'S HISTORIC SIGNIFICANCE\*

The City of Paterson was first established along the Passaic River by Dutch settlers in the late 17th century. The region remained farmsteads until after the Revolutionary War when then Secretary of Treasury, Alexander Hamilton, anticipated for this area to lead in the development of an industrial economy for the nation. Hamilton helped to establish the Society for Establishing Useful Manufacturing (S.U.M.) as a charter for innovation in the manufacturing of goods. The S.U.M. proposed the Great Falls area to explore the use of the waterfall as an important source of water power for industrial development.

Pierre L'Enfant, planner of Washington, D.C., was selected by the S.U.M to lay out the initial water systems and street plan of the place now called Paterson. He did not, however, complete the work. His successor, Peter Colt, would further develop the water raceways, and extend the street systems. Unfortunately, the S.U.M.'s only early achievement was the erection of a single cotton mill that upon its closing in the nineteenth century, reduced the local population to fewer than fifty individuals.

While the S.U.M.'s early development of Paterson was successful in establishing infrastructure in the 18th century, the charter transformed itself to maximize the opportunity to meet military industrial needs during the War of 1812. Under the direction of Roswell Colt, the industrial groundwork was laid to make Paterson a leading destination for cotton textile, machinery, locomotive, and silk textile production through the late 1800s. Hundreds of notable textile mills and heavy machinery works were established in Paterson over its two centuries.

Due to the success of Paterson's industrial growth, the city was incorporated in 1851. Main and Market Streets became the arterials of Downtown Paterson. A location situated off Market Street was aptly chosen for the erection of the new City Hall in 1894. During the last quarter of the 19th century, Paterson's growth drew commercial businesses to its downtown core, making it a viable place as a heart of the city's social life. The banks and theaters were soon to follow in order to support the retail environment.

In February 1902, Paterson lost up to twenty-six blocks of its downtown building fabric in the Great Fire, followed by a flood only three weeks later. The devastation motivated the city to quickly rebuild and within two years, Paterson had reinvented its Downtown to an even greater commercial status.

Paterson's triumphant achievements in industrial development and reconstruction after the Great Fire are demonstrated in the city's rich history and impressive architectural styles. For its significant national impacts in Architecture/Engineering events, The Great Falls / S.U.M. Historic District was listed on the National Register of Historic Places in 1970 and elevated to a National Historic Landmark in 1976. The Downtown Commercial Historic District was listed in was listed on the National Register in 1999, State Register in 1998, and local register in 2006, with period of significance in from 1850-1935.

<sup>\*</sup> Extracted from: Lyons, George. National Register of Historic Places: Statement of Significance. Highland Park, NJ: Cultural Resource Consulting Group, 1988.

## IMPORTANCE OF HISTORIC PRESERVATION

The City of Paterson recognizes that the character and quality of life enjoyed by its citizens depend in great measure upon the city's rich architectural heritage. The city and the HPC work together to ensure our historical, cultural, archeological, social and economic heritage, entrusted to each generation, is enriched and passed on to future generations.

#### **AVAILABLE GUIDELINES**

The following *Guidelines* are available for the Downtown Commercial Historic District:

- Introduction
- Guidelines for Roofing
- Guidelines for Masonry, Stucco & Concrete
- Guidelines for Windows
- Guidelines for Storefronts
- Guidelines for Signs & Awnings
- Guidelines for Architectural Metals
- Guidelines for New Construction & Additions
- Glossary

Each section addresses historic materials and building topics and all of the sections comprise the *City of Paterson Downtown Commercial Historic District Design Guidelines*. All information is available from the HPC office and on the city's web site at www.patersonnj.gov.

These *Guidelines* serve to cover the topics most typically addressed by the HPC. Anywork under the jurisdiction of the HPC that is not specifically covered in these *Guidelines* is subject to HPC review and approval.



#### PRESERVATION IN PATERSON\*

Paterson established a municipal focus on preserving the Great Falls Historic District through the creation of a City Historic Preservation ordinance in 1979. It was clear that National Register listing alone had little influence on private property owners, and privately owned mills were being demolished or significantly altered by some, while others were being proposed for restorations of poor quality. A local historic preservation ordinance, enacted as part of local land use regulations, provided an opportunity for Paterson to gain some control over the appearance of historic buildings in the Great Falls Historic District. However, New Jersey did not adopt enabling legislation specifically authorizing communities to undertake historic preservation regulation as part of municipal land use functions until 1986. Paterson's ordinance subsequently received minor amendments in 1988 to bring it into conformance with the state statute, and the Paterson Historic Preservation Commission (PHPC) was able to become fully functional in 1988. Further amendments were made to the local preservation ordinance in 1992 again to comply with changes made to the State's land use statutes. The City's city's ordinance was revised again in 2006 and 2014.

#### **Historically Designated Properties**

There are currently 12 different sites and 3 historic districts, along with the Morris Canal, that are listed on the National Register of Historic Places, and 66 sites with State Historic Preservation Office (SHPO) opinions within the City of Paterson. The sites and districts on the State Register include all 16 listed on the National Register, with the exception of City Hall, in addition to other sites and districts that are potentially eligible for listing on the National Register. In addition to the Great Falls Historic District, there are also two other National Register Historic Districts in Paterson: the Downtown Commercial Historic District, which includes the civic buildings and commercial core of the City; and the Eastside Park Historic District, a residential neighborhood surrounding Eastside Park, overlooking the Passaic River.

Locally designated historic sites and districts, which are subject to review, by the Paterson Historic Preservation Commission, include the he properties within the Great Falls Historic District, the Downtown Commercial Historic District , and the Eastside Park Historic District and other individual sites. The Paterson Register of Historic Places identifies all designated historic sites and districts in the City of Paterson.

Extracted from: City of Paterson Master Plan, Historic Preservation Element, March 2014.

#### **DEFINITIONS**

The following definitions are utilized by the HPC and their staff when pursuing a historic preservation project in the City of Paterson. Please refer to the Historic Preservation Review Ordinance at www.patersonnj.gov or contact the HPC office at (973) 321-1355 for additional information.

**Administrative Officer:** The Historic Preservation Professional (HPP) is the administrative officer, and is appointed as per the provisions of Paterson's Land Use Ordinance. In the event that the Historic Preservation Professional is vacant, the City's Principal Planner serves as the Administrative Officer.

**Architectural Feature:** Architectural style, design, general arrangement and components of all the parts and surfaces, including but not limited to the kind, texture and color of the building material, and the type and style of all windows, doors, lights, signs, cornices, ornaments, brackets, parapets, roofs, foundations, cladding, framing and other features appurtenant to the building, structure, object or improvement.

Certificate of Appropriateness (COA): A document attesting that proposed work within a historic district or affecting a landmark building, structure, object, site or landscape feature has been reviewed and deemed appropriate and consistent with the purpose of Historic Preservation Review Ordinance by the City of Paterson Historic Preservation Commission or the Historic Preservation Professional.

**Certificate of No Effect:** A document attesting that proposed work within a historic district or affecting a historic site has been reviewed by the HPP and has been deemed not detrimental to the historic district or historic property on which work is to be done or neighboring properties.

**Demolition:** The dismantling or raising of all or part of any historic site or landscape feature or of any improvement in a historic district.

**Design Review:** The process to discuss a project or request a formal review by the Historic Preservation Commission.

**Design Standards:** The broad methodology that assist long-term preservation of a property's significance through the preservation of historic materials and features. The goals of the standards are achievable by consulting the *Guidelines*.

**Historic District:** One or more historic sites and intervening or surrounding property significantly affecting or affected by the quality and character of the historic site or sites.

Historic Site: Any real property, building, man-made structure, object, lot, location, park, monument, street, neighborhood, district or any other feature of

the environment that can be situated collectively or individually that is of historical, archaeological, cultural, scenic or architectural significance.

Landmark: The same as Historic Site.

**Match:** Either an exact or approximate replication. If not an exact replication, the approximate replication shall be designed so as to achieve a harmonious result which exhibits the color, texture and dimensions of the original feature(s).

**Minor Application:** An application for approval of actions on a designated historic building, structure or object that consists of ordinary maintenance and repair. In accordance with the UCC, a repair is confined to an area of less than 25% of the overall area of that constituent element (i.e. roofing, brickwork, fascia boards, etc.)

Landmark Site: The land on which a Landmark and related buildings and structures are located and the land that provides the grounds, the premises or the setting for the Landmark. A Landmark Site shall include the location of significant archeological features or of a historical event, and shall include all significant trees, landscaping and vegetation.

**Ordinary Maintenance:** The repair or renewal of deterioration, wear or damage to a structure or improvement in order to return same as closely as possible to its condition prior to the occurrence of such deterioration, wear or damage with materials and workmanship of the same quality and appearance of the structure, replacement or improvement.

**Preservation:** The act or process of applying measures necessary to sustain the existing form, integrity, and materials of an historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing maintenance and repair of historic materials and features rather than extensive replacement and new construction. New exterior additions are not within the scope of this treatment; however, the limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate within a preservation project.

**Rehabilitation:** The act or process of returning an improvement to a state of utility through repair or alteration which makes possible an efficient contemporary use while preserving those orations or features of the improvements which are significant to historical, architectural and cultural values.

**Replacement:** The identical re-establishment of a feature as an integral part of a rehabilitation project based on the essential form and detailing of that feature from other physical or historic evidence. Replacement of the entire feature with the same material is preferable.

## HISTORIC DESIGNATION IN PATERSON

The three principal means of recording historic resources in the City of Paterson are the City's, State and National Registers of Historic Places. The majority of the designated historic properties in the City of Paterson are located within local (also called municipal) historic districts. In addition, there are individually designated municipal Landmark properties on both the city's register and on the National Register, some of which are located within local historic districts. Often these designations overlap, although they are not required to. (The boundaries of the Local and National Register's Downtown Commercial Historic District are very similar.)

Currently there are three designated historic districts in the City of Paterson; the Great Falls Historic District, the Downtown Commercial Historic District and the Eastside Park Historic District. In addition, there are many individual properties that are listed on or are eligible for listing on the National Register of Historic Places, as well as local landmarks scattered throughout the city.

Maps and lists of Paterson's historic resources are maintained by the City Clerk and by the HPC, and are available at these offices and on the city's website at www. patersonnj.gov.

#### The National Register of Historic Places

The National Register of Historic Places is the United States government's official list of districts, sites, buildings, structures and objects deemed worthy of preservation. The National Register is administered by the National Park Service, a division of the Department of the Interior.

Listing on the National Register does not restrict property rights of individual owners, but it does require that agencies using federal funding consider the effect of proposed undertakings on the historic resource. In addition, having a property listed on the National Register could make its owners eligible for tax credits for expenses incurred preserving a commercial property, and local exemptions. National Register information is available from the New Jersey Historic Preservation Office. Refer to www.nj.gov/dep/hpo. (Refer to *Preservation Assistance Programs, Page 13.*)

#### Local (Municipal) Designation

Most of the designated historic properties in the City of Paterson are found within local historic districts. Local historic districts and local landmarks are created through a collaborative process between the HPC, the Planning Board, the community and the City Council. (Keep in mind that anyone can nominate a site to the HPC to be considered for designation as a local historic landmark. Refer to *Downtown Historic District Map, Page 2.*)

All exterior work or repairs to individual local Landmark properties or to properties within local historic districts requires the review and approval of the HPC. In some cases, the HPP can approve an application after a full HPC public review. This review is conducted at a public meeting to ensure proposed changes are in keeping with the historic character of the property and/or surrounding district, thus providing protection for the city's most important resources from inappropriate changes.



Governmental and financial services buildings are located at the core of the Downtown Historic District surrounding City Hall.

#### BENEFITS OF LOCAL DESIGNATION

The designation of local historic districts and landmarks has been found to:

- Increase neighborhood stability and property values
- Preserve the physical history of the area
- Promote an appreciation of the physical environment
- Foster community pride and self-image by recognizing a unique sense of place and local identity
- Increase the awareness and appreciation of local history
- Increase tourism
- Attract potential customers to businesses
- Create local construction jobs while fostering skilled tradesmen

## HISTORIC PRESERVATION COMMISSION (HPC)

The HPC has the responsibility to implement the city's historic preservation reviews and related activities.

The HPC is a public advisory body first established in 1978 to help protect the architectural and cultural heritage within the City of Paterson. Among its responsibilities, the HPC considers the effects of proposed exterior changes to individual, locally designated historic landmarks, and to buildings and properties within the locally designated historic districts, and comments on the "appropriateness" of those changes.

The seven members and two alternate members of the HPC are appointed by the Mayor. Most members of the HPC are city residents (but not all are required to be under state law) and serve without pay in overlapping terms of four years for members and two years for alternate members. The required membership makeup of the HPC includes:

- Persons with knowledge of building design, construction or architectural history, usually an architect, engineer or other trained professional
- Persons with knowledge of local history, often a local historian, author or educator
- Persons with an interest in history, historic preservation, or a related field

A principle responsibility of the HPC is to review and provide recommendations on any proposed alteration, demolition, relocation, adaptive use and new construction to historic properties based on the *Secretary of the Interior's Standards for Rehabilitation* and other guidelines by issuing Certificates of Appropriateness (COA).

Another principle function of the HPC is to introduce new properties to the City Council that have merit for local historic designation. The HPC also promotes and provides advice regarding historic preservation activities in the city by recommending the documentation of historic buildings and sites and providing recommendations regarding State and National Register nominations. In addition, the HPC assists groups and individuals interested in historic preservation, undertakes preservation education programs and provides recommendations for the preservation and rehabilitation of individual historic buildings.

#### LOCAL DESIGNATION PROCESS

The HPC welcomes nominations for the designation of local landmarks and historic districts. Anyone can nominate a site for landmark consideration. Please contact the HPP for information regarding the designations process, property research, and the preparation of a nomination packet.



Many buildings in the DCHD have ground-floor retail.

## SUSTAINABLE BENEFITS OF PRESERVATION

An added benefit to historic buildings is that they are often intrinsically "green," reusing an existing building has substantially lower environmental impact than building a new one. Preservation and rehabilitation minimizes the wasteful loss of materials while maintaining a distinctive sense of place - a place called Paterson.

- Since historic buildings and structures already exist, the energy required to fabricate the lumber, bricks and details was expended in the past
- New construction often includes demolition of existing buildings, with construction waste already filling approximately 25% to 30% of landfills, in addition to waste associated with the fabrication of new construction materials
- The most appropriate materials for the majority of preservation projects are often historic materials rather than non-biodegradable manufactured products such as vinyl and plastics

#### PRESERVATION REVIEW PROCESS

To maintain the character of designated historic properties and districts, all proposed exterior changes require preservation review to obtain building permits and prior to beginning any work. The types of exterior changes requiring preservation review includes but are not limited to:

- Exterior Alteration Additions, reconstructions, repairs, or modifications of a building, structure or site amenity including walls, fences, driveways, sidewalks, curbs, etc.
- **New Construction** New building, structure or site amenity
- **Signs and Awnings** Erection, removal or alteration of signage or awnings
- **Relocation and Demolition** Complete or partial removal of a building, structure or site feature

#### STEPS FOR PRESERVATION REVIEW

The following six steps are typical for most applications referred to the HPC for review:

- 1. Contact the HPC Office to schedule a meeting to discuss your project.
- 2. Review preliminary plans with the HPP who will determine whether application requires full HPC review. It is helpful to provide property photographs, any plans, drawings, and available information about proposed materials and modifications.
- Schedule a follow-up review with the HPP to review changes from preliminary review. All changes must be made on paper and are prepared for submission as the final plans.
- 4. Submit a completed application, final plans, reports, photographs, and other required information to the HPC office by the meeting mailing deadline.
- 5. Present the project and plans to the HPC during the public portion of a regular meeting. The HPC requests clarification from the applicant, discusses the project, deliberates and votes on a resolution.
- 6. The HPC opinion of Approval, Conditional Approval, or Denial of a Certificate of Approval is issued in writing to the Construction Official and to the applicant following the HPC meeting.

#### TIMING FOR REVIEW

The City of Paterson makes every effort to quickly conduct required reviews. However, if an application is incomplete, if the HPC requests a change that is not followed up on in writing by the applicant, or if any city deadlines are not met, the issuance of permits and approvals could take several months.

When an application is technically "complete" (which includes submission of all required documentation, not just the application form itself) and requires only HPC review, applicants should anticipate 45 days from the time of the receipt of the application from the Construction Official, Planning Board, or Zoning Board of Adjustment to the issuance of a letter of recommendation regarding approval, conditional approval or denial.

Applications that are inconsistent with the recommendations in the *Guidelines* might require a longer review and approval process. If the proposed work requires other reviews in addition to HPC review, the HPP will make every effort to review the submission for permits simultaneously with the HPC review schedule.

#### APPROVALS REQUIRED FOR WORK

HPC review and approval is triggered by the application for a building permit, a zoning permit, or by limited repair work not requiring a permit. Fox example, this includes the replacement of windows, doors, roofs, signage, awnings, and security grates. A COA is necessary but not the only requirement for obtaining a building permit. Each property is also subject to review for compliance with applicable zoning, building and safety codes. The property owner is responsible obtaining all necessary approvals prior to commencing with work.

#### WORKING WITHOUT HPC REVIEW

The HPP will inspect all work for compliance with an approved COA. If any changes are proposed after the approval of a COA, please contact the HPP at (973) 321-1355 for additional required reviews. Work completed without an approved COA is subject to possible fines, removal and restoration of the site, building or structure to its appearance prior to the violation and revocation, non issuance or suspension of a Certificate of Occupancy.

#### STOP WORK ORDER

The Construction Official or his agents will issue a Stop Work Order for any project that is not in compliance with the approved COA or any project that did not receive the required COA. Stop Work Orders have the force of law and the violation of a Stop Work Order constitutes a separate offence. A Stop Work Order can be costly in terms of time and money since property owners will be required to go through the COA application process prior to restarting work.



#### CRITERIA FOR HPC DECISIONS

When reviewing the majority of proposed projects, the HPC's review is guided by standards and guidelines contained in *The Secretary of the Interior's Standards for the Treatment of Historic Properties*, and more specifically, these *Guidelines*. These documents provide property owners and tenants common-sense guidelines to allow sensitive contemporary uses for their sites while retaining their architectural and cultural heritage. In reviewing projects, the HPC encourages sensitive rehabilitation involving the least amount of intervention or change, as identified in the following guidelines:

- Identify, retain and preserve the overall form, materials and details that are important in defining the architectural and historical character of the building and site.
- Protect and maintain historic materials and features.
   This involves protection from other work that may occur in proximity to the historic materials, and also protection through regular maintenance. A regular program of protection and maintenance usually involves the least degree of intervention, and can prevent or postpone extensive and costly work.
- Repair rather than replace deteriorated historic
  materials and features. Repairs maintain the building
  in its current condition while making it weatherresistant and structurally sound. Repairs should
  involve the least intervention possible, concentrating
  specifically on areas of deterioration. When repair
  is not possible, replacement in-kind is encouraged,
  reproducing by new construction the original feature

exactly, including the original material, finish, detailing and texture.

- Replace missing or deteriorated historic materials and features when the extent of deterioration precludes repair. Similar to repair, the preferred approach is to replace the entire feature in-kind to closely match the original material, finish, detailing, and texture. Since this is not always technically or financially feasible, substitute materials may be acceptable when they convey the original appearance and finish of the original feature.
- Reconstruct missing historical features if adequate historical, pictorial and physical documentation exists so that the feature may be accurately reproduced. The addition of features from other historic buildings or addition of historical elements for which there is no documentation is not appropriate.
- Alterations and additions are sometimes needed to ensure the continued use of a building. An alteration involves returning a building to a useful condition while saving those parts that represent its historical, architectural or cultural significance. It is important that alterations do not radically alter, obscure or destroy character-defining spaces, materials, features or finishes. An addition, however, is new construction at the exterior of an existing building and should be avoided. If considered, new additions should be clearly differentiated but compatible in size, mass, form, fenestration, detailing and style with the historic building, and constructed at a less visible side or rear elevation, so the character-defining features are not radically obscured, damaged or destroyed.

#### **BALANCING CHANGE**

In balancing the desire for a change to a historic property with its historic integrity, the HPC encourages property owners to keep as much of the historic building's fabric as possible. When considering alterations, the HPC recommends the following approach, listed in preferential order:

- 1. Maintenance
- 2. Repair and Replacement
- 3. Alterations
- 4. Adaptive Reuse
- 5. Additions and New Construction

For information regarding Relocation and Demolition projects, please refer to the *Guidelines for New Construction & Additions*.



Regular repainting of exterior wood elements, such as windows, can protect them from wood rot and costly replacement.

#### MAINTENANCE IS PRESERVATION

Regular maintenance helps to preserve buildings and property, protect real estate values and investments, and keeps Paterson an attractive place to live, work and visit. Lack of regular upkeep can result in accelerated deterioration of building elements and features. In the case of historic buildings, these features often represent character defining elements that are difficult and costly to replace. Long-term lack of maintenance can impact a building's structure, resulting in expensive repairs.

It is prudent to regularly inspect properties to identify potential problems. If problems are detected early, minor maintenance may not only improve a property's overall appearance and value, but also can prevent or postpone extensive and costly future repairs. Regular maintenance items typically include roof repair, cleaning gutters and downspouts, and painting of exterior metals and windows.

#### Encouraged:

- Prolonging the life of original materials on historic structures through regular maintenance as long as possible
- Avoiding replacement of original materials with newer materials
- Referencing the topic-specific *Guidelines* for additional maintenance information

#### **REPAIRS & REPLACEMENT**

When it is no longer feasible to maintain a historic feature, repairs or replacement in-kind may be necessary. Repairs maintain the building in its current condition while making it weather-resistant and structurally sound, concentrating specifically on areas of deterioration.

When repair is not possible, replacement in-kind is encouraged. Similar to a regular maintenance program, these activities can prevent or postpone extensive and costly future repairs.

#### Encouraged: (Listed in order of preference)

- Non-intrusive repairs, focused at deteriorated areas, stabilizing and protecting the building's important materials and features
- When repair is not possible, replacement in-kind to the greatest extent possible, reproducing by new construction the original feature exactly, matching the original material, size, scale, finish, profile, detailing and texture
- When replacement in-kind is not possible, the use of compatible materials and techniques that convey an appearance similar to the original feature, similar in design, color, texture, finish and visual quality to the historic elements

#### **COST VS. VALUE-ADDED**

It is understood that some of the recommendations of the *Guidelines* do not represent the least expensive options; however the HPC strongly believes that selecting better quality options can have both short and long-term benefits.

A short-term benefit is that the alteration tends to be more historically appropriate and is often made with more sustainable materials. Long-term benefits generally include longer life-cycles for materials that do not need to be replaced as often, reducing associated landfill waste and replacement costs, as well as potentially increased property value associated with higher quality, traditional materials. (Refer to *Preservation Assistance Programs, Page 13* for possible preservation related grants and tax incentives.)



When considering alterations to a building, it is important to understand and retain the historically significant and character defining features.

#### **ALTERATIONS**

Alterations and renovations are sometimes needed to ensure the continued use of a building, but have the potential to alter the character of historic properties. When considering alterations or renovations, great care should be given to the original building and its relationship to the alteration.

#### Encouraged:

- Identification, retention and preservation of the character defining features of the historic building
- Minimal alteration to the original design, materials and features
- New design elements and scale that are compatible with the historic building and setting
- Use of materials and techniques that are compatible to the historic building and setting
- Maintaining the appropriate historic contextual setting

#### ADAPTIVE REUSE

In adaptive reuse projects, alterations or renovations might be necessary to use a building for a different purpose from which it is currently or was originally designed, if permitted under the Paterson Zoning Code. If considering an adaptive reuse project, it is important to ensure the new use will protect the historic features of the original building. In addition, great care should be taken with required alterations such as the modification or addition of window and door openings to accommodate the new use.

#### Examples of Adaptive Reuse:

- Conversion of an industrial or commercial building into housing
- Conversion of institutional buildings into commercial space

#### Benefits of Adaptive Reuse:

- Retention of historic character and high quality historic materials and craftsmanship
- Promoting stability of ownership and occupancy of historic resources
- Potential cost savings over new construction
- Presence of established neighborhood and existing infrastructure

#### **NEW CONSTRUCTION & ADDITIONS**

New construction and additions within a historic district or at a designated landmark site can dramatically alter the appearance of the individual property, the local historic district and the surrounding landscapes. Exact reproduction of historic buildings is discouraged, while contemporary design compatible to the context of the historic resources and their surroundings is encouraged. Property owners should take great care when proposing either an addition or new construction within a local historic district or to a designated landmark site.

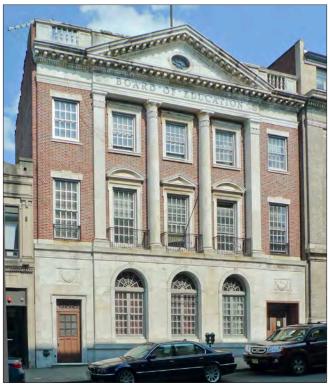
#### Encouraged:

- Preservation of the cohesive ambiance of historic resources with compatible, sympathetic and contemporary construction
- Compatible siting, proportion, scale, form, materials, fenestration, roof configuration, details and finishes
- Construction of additions at secondary elevations wherever possible, subordinate to the historic building, and compatible with the design of the property and neighborhood
- Construction of additions so that the historic building fabric is not radically changed, obscured, damaged or destroyed
- Following the Guidelines for New Construction & Additions

#### **ARCHITECTURAL STYLES**



**Italianate:** This three-story building is an example of the Italianate style with billeted arched windows, and a brick belt cornice.



Classical Revival: The Board of Education building emphasizes the style with a dominant pediment in the parapet, symmetrically balanced windows, and colossal marble columns and pilasters.



**Renaissance:** The Hamilton Club has a rusticated first story with arched door and window surrounds with voussoirs. The scroll supported balustrade and quioning are exemplary of this style.



**Art Deco:** This early 20th century structure displays the typical Deco stylings including geometric and floral terra cotta details as well as fluted pilasters between window groupings.

## PRESERVATION ASSISTANCE PROGRAMS

There are federal and state tax incentive and grant programs available for historic properties. The submission and review requirements are rigorous and it is highly recommended that applicants contact the applicable agency at the early planning stages of a potential project.

#### Federal Historic Preservation Tax Incentives

The Historic Preservation Tax Incentives Program rewards private investment in rehabilitating historic incomeproducing properties such as offices, rental housing and retail stores. The Program, established by the Tax Reform Act of 1986, is jointly administered by the U.S. Department of the Treasury and the U.S. Department of the Interior's National Park Service. Owner-occupied single-family residences are not eligible for the program. If eligible, up to 20 cents on every dollar spent on qualified rehabilitation work (including most architectural and engineering fees) would be available as a credit against income taxes. The 20% tax credit is available to buildings that are listed on the National Register of Historic Places, either individually or as a contributing building in a National Register historic district, or as a contributing building within a local historic district that has been certified by the Department of the Interior. To be eligible for the 20% tax credit, project work must be certified as meeting The Secretary of the Interior's Standards for Rehabilitation.

#### New Jersey Historic Preservation Trust Grant Programs

The New Jersey Historic Trust manages the following grant programs:

- The Garden State Historic Preservation Trust Fund: Provides matching grants for preservation planning and capital projects to stabilize, repair, restore and rehabilitate historic property.
- The Cultural Trust Capital Preservation Grant Program: Provides grants for the repair, preservation, restoration, rehabilitation and improvement of historic properties owned by organizations with a history or humanities mission.
- The Revolving Loan Fund: Provides lowinterest, long-term financing for the preservation, improvement, restoration, rehabilitation, and acquisition of historic properties.
- The Emergency Grant and Loan Fund: Provides small grants or loans for the stabilization of historic property. Grant requirements and submission deadlines are available on their website at www.njht.org/dca/njht/programs.

## RESOURCES IN THE DOWNTOWN COMMERCIAL HISTORIC DISTRICT

#### Greater Paterson Chamber of Commerce (GPCC)

100 Hamilton Plaza, Suite 120; Paterson, NJ 07505 973-881-7300; www.greaterpatersoncc.org

A member-driven professionally staffed not-for-profit association of business people committed to improving the economic climate and quality of life in the Greater Paterson area representing the interests of over 600 members.

#### Downtown Special Improvement District (SID)

100 Hamilton Plaza, Suite 1201; Paterson, NJ 07505 (973) 881-7302; www.shoppaterson.org

Since 1997, the Downtown Paterson Special Improvement District, Inc. has been working to enhance the quality of life in the Downtown Paterson retail district. They aim to provide workers, residents and visitors with a clean, safe and dynamic neighborhood.

#### Paterson Restoration Corporation (PRC)

c/o Department of Economic Development 125 Ellison Street, 4th Floor; Paterson, NJ 07505 (973) 321-2270

With a particular focus on small-to-medium business (SMB) loans, from \$50,000 to \$200,000, the PRC's mission is to create opportunities for Paterson businesses - including equipment loans, relocation loans, or property development loans. The PRC administers a low-interest revolving loan program with the purpose of stimulating private investment in Paterson, which will in turn create new, permanent, private sector jobs for low to moderate income citizens of Paterson, and to increase the tax base.

#### Paterson Urban Enterprise Zone (UEZ)

c/o Department of Economic Development 125 Ellison Street, 4th Floor; Paterson, NJ 07505 (973) 321-2267; www.patersonuez.com

Qualified retail businesses within the Urban Enterprise Zone are able to charge half of the State's sales tax on certain purchases. All member businesses are able to purchase certain operating supplies to run their business tax exempt. Manufacturers may qualify for sales tax exemptions on their energy and utility services when they meet specified employment (and other) criteria. There is no fee to register a business with the Urban Enterprise Zone.

#### Paterson Small Business Development Center

113 Ellison Street; Paterson, NJ 07505 (973) 745-8695; www.njsbdc.com

The Paterson Small Business Development Center offers low-interest loans; some 70 training programs per year; and consulting on marketing, business plan development, and more business development service assistance.

#### PRESERVATION ORGANIZATIONS

#### **Local Organizations**

City of Paterson; Historic Preservation Commission 125 Ellison Street, Suite 408; Paterson, NJ (973) 321-1355 www.patersonnj.gov.

Passaic County Historical Society Lambert Castle, 3 Valley Road, Paterson, NJ 07503 (973) 247-0085; www.lambertcastle.org

Paterson Museum
2 Market Street, Paterson, NJ 07501
(973) 321-1260; www.patersonmuseum.com

Paterson Public Library, Local History Room 250 Broadway, Paterson, NJ 07501 (973) 321-1260; www.patersonpl.org

#### **State Organizations**

New Jersey Historic Preservation Office; 501 East State Street, Trenton, NJ 08609 (609) 292-2023; www.nj.gov/dep/hpo

Preservation New Jersey; 310 West State Street Trenton, NJ 08618 (609) 392 6409; www.preservationnj.org

New Jersey Historic Trust; 101 South Broad Street, 6th Floor; Trenton, NJ 08625 (609) 984-0473; www.njht.org

#### **National Organizations**

Historic Preservation Learning Portal www.historicpreservation.gov

National Park Service; Heritage Preservation Services www.cr.nps.gov/hps

National Park Service; Historic Landscape Initiative www.cr.nps.gov/hps/hli

National Park Service; Historic Preservation Tax Incentives

www.cr.nps.gov/hps/tps/tax

National Center for Preservation Technology & Training (318) 356-7444; www.ncptt.nps.gov

National Trust for Historic Preservation
Preservation and Preservation Forum
(800) 944-6847; www.preservationnation.org

U.S. Green Building Council (800) 795-1747; www.usgbc.org

Association for Preservation Technology International APT Bulletin; www.apti.org

# PRESERVATION RESOURCES CITY OF PATERSON

Avignone, June. *Downtown Paterson, NJ: Images of America*. Arcadia Publishing, 1999.

Polton, Richard E. *The Life and Times of Fred Wesley Wentworth: The Architect Who Shaped Paterson, NJ and Its People.* Pine Hill Architectural Press, 2012.

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Bucher, Ward (ed.). *Dictionary of Building Preservation*. New York: John Wylie & Sons, 1996.

Harris, Cyril (ed.). A Dictionary of Architecture and Construction. New York: McGraw Hill, 2006.

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#### **BUILDING PRESERVATION**

Bernhard, Sandy and Tom Ela. *The House Journal:* A Resource to Evaluate and Document the History, Alterations, and Records of Your House and Property. Washington, DC: The Preservation Press, 1993.

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Preservation Briefs and Tech Notes. Washington, DC: National Park Service, Technical Preservation Services. www2.cr.nps.gov/tps/briefs/presbhom.htm www.nps.gov/tps/how-to-preserve/tech-notes.htm

Ramsey, Charles George and Harold Reeve Sleeper. Traditional Details: For Building Restoration, Renovation and Rehabilitation. New York: John Wylie & Sons, 1998.

Technical Preservation Services, National Park Service. Respectful Rehabilitation: Answers to Your Questions About Old Buildings. Washington, DC: The Preservation Press, 1982.

Weaver, Martin E. Conserving Buildings: A Manual of Techniques and Materials, Revised Edition. New York: John Wylie & Sons, 1997.

#### FREQUENTLY ASKED QUESTIONS

#### Q: Where should I begin the preservation review process?

**A:** Contact the City's HPC Office at (973) 321-1355 for a review of your property's historic status. Obtain the *Guidelines* section applicable to your proposed project and consider whether the proposed changes are appropriate for your property (refer to *Page 9*).

## Q: How can I find out about the history of my neighborhood or property?

A: Information about properties within local historic districts and historic landmarks is available on the City's web site at www.patersonnj.gov and at the offices of the City Clerk and the HPC. The Passaic County Historical Society is also an excellent resource for information, both through their web site at www.lambertcastle.org and their offices. Additional information regarding National Register historic districts and properties is available at the New Jersey Department of Environmental Protection, State Historic Preservation Office. There are also numerous reference books and resources, a few of which are listed on Page 14.

#### Q: What if I need an emergency repair?

A: If you have an emergency and require immediate work at your property, the HPP does have the authority to grant a building permit without HPC review under certain circumstances. Emergency building permits, without HPC review, can be granted by the HPP following a catastrophic event such as a tree collapsing on a roof, or in the event of imminent structural failure that poses a significant safety threat, and the applicant is proposing an in-kind replacement. The HPP will not grant a permit without HPC review for issues related to deferred maintenance or convenience. If you believe you have an emergency repair, contact the City's HPP at (973) 321-1355 to discuss whether an emergency permit can be granted and for submission requirements.

## Q: Can I begin construction immediately after I get the HPC's approval?

A: HPC review is not all that is required for obtaining a building permit or a Certificate of Occupancy. Each project is also subject to review by all agencies having jurisdiction over compliance with zoning, building and safety codes. HPC review is just one step in obtaining a building permit. You must complete all necessary reviews and obtain all necessary permits applicable to your project prior to proceeding with any work. In the case of historic properties within historic districts and individual landmarks, you cannot receive a building permit without HPC review.

## Q: Is the review process expensive? Do I need to hire an outside professional?

A: The HPC currently does not charge a fee for a Certificate, however, this is subject to change by action of the City Council at any time. Carefully reviewing the applicable Guidelines and the application package for the Certificate prior to hiring a design professional or contractor can assist in the early planning stages of your project. If not required by Code to receive a construction permit, you are still obligated to submit applications for work without the assistance of a design professional on historic buildings and sites. However, for complex proposals or those that require the submission of scaled drawings, plans, surveys and specifications, consultation with a professional will often speed up the review process. If you are retaining the services of a professional, it is helpful to work with architects and contractors who are familiar with the requirements of working with the HPC. Before submitting your application materials, confirm that it is complete. Only "complete" applications can be reviewed.

## Q: I am planning a complex project. When is the best time to talk to the HPP?

A: If your project is complex or requires multiple review by Commissions and Boards, the best time to talk to the HPP is as early in the project as possible, before you invest a lot of time and money into the design process. This initial informal informational review can help move a project more quickly through the review process. Please contact the City's HPP at (973) 321-1355 for an appointment.

#### Q: Is there a way to expedite the review process?

A: It is important to thoroughly complete the application and submit all required materials to the HPC for review. It is recommended that you contact the City's HPP directly to understand if HPC review is required, what submission materials are needed for a design review of your project, and the specific submission deadlines and meeting dates.

#### Q: How do I apply for HPC review?

A: The specific submission requirements for HPC review will vary based upon the complexity of the proposed project, but the submission materials are similar to those required for a building permit review. For specific information regarding the submission requirements for your proposed project please refer to the HPC application applicable to your project available on the HPC website at www.patersonnj.gov or contact the HPC office at (973) 321-1355.

#### **BUILDING CODES**

All construction projects in the City of Paterson are administered by the Division of Community Improvements and must comply with the New Jersey Uniform Construction Code (UCC). The UCC is designed to guarantee consistent construction standards throughout the State of New Jersey. By regulating the utilization of appropriate building materials, construction standards and workmanship for building, fire protection, electrical and plumbing.

The Division of Community Improvements is located at 111 Broadway; Paterson, NJ 07505, (973) 321-1232. Additional information and permit application forms are available at www.patersonnj.gov.

#### **ACKNOWLEDGEMENTS**

The representatives of the following groups and individuals helped make the *Guidelines* possible:

#### City of Paterson

Mayor

Hon. Jose "Joey" Torres

City Council

Hon. Anthony Davis, President (1st Ward)

Hon. Mohammed Akhtaruzzaman (2nd Ward)

Hon. William McKoy (3rd Ward)

Hon. Ruby Cotton (4th Ward)

Hon. Julio Tavarez (5th Ward)

Hon. Andre Sayegh (6th Ward)

Hon. Alex Mendez (At-Large)

Hon. Ken Morris, Jr. (At-Large)

Hon. Maritza Davila (At-Large)

#### **Historic Preservation Commission**

Kenneth A. Simpson, Chair

Nakima Redmon, Vice Chair

Martin M. Feitlowitz

Harold Foster

Richard Walter

Rodney De Vore

Staff

Gianfranco Archimede, Executive Director (HPP)

Kelly C. Ruffel, Secretary

#### **Additional Participants**

Greater Paterson Chamber of Commerce

#### **SAFETY PRECAUTIONS**

Repair and maintenance of a building can potentially be dangerous work. It is recommended that all manufacturers' recommendations be followed and appropriate safety precautions with ladders, tools, materials and processes be taken. Property owners should consult a professional for work that is unfamiliar or potentially unsafe.

Work on older buildings can uncover hazardous materials such as asbestos, lead, radon and mold. Property owners should familiarize themselves with these materials and their building's conditions prior to beginning work. Property owners who are unfamiliar with how to properly handle or work around potentially hazardous materials are strongly encouraged to consult with a trained or certified contractor. The following organizations can provide information about common hazardous materials:

#### **ASBESTOS**

**US Environmental Protection Agency Hotline** 

(800) 368-5888 www.epa.gov/asbestos

#### **LEAD**

National Lead Information Clearinghouse

(800) 424-LEAD www.epa.gov/lead

#### **RADON**

The National Safety Council's Radon Hotline

(800) SOS-RADON www.epa.gov/radon

#### **MOLD**

Indoor Air Quality Information Clearinghouse

(800) 483-4318 www.epa.gov/iaq/molds/index



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#### **PREPARATION**

All components of the City of Paterson Downtown Commercial Historic District Design Guidelines including all text, graphic design, photography and illustrations unless noted otherwise were prepared by:

#### Preservation Design Partnership, LLC

Philadelphia, Pennsylvania; www.pdparchitects.com Principal-in-Charge: Dominique M. Hawkins, AIA Research Assistant: Kimberly M. Bahnsen

16 City of Paterson - Introduction July 2014



## **CITY OF PATERSON**

## **Downtown Commercial Historic District**

### **Design Guidelines**

## ROOFING



Mansard roofs are typical of the Second Empire style and include a steeply pitched roof, with a low-slope roof above. In this example, the steeply pitched section is covered with slate shingles. The dormer windows provide natural light and ventilation to the top floor level and the stone surrounds are highly ornamented.

Also note the copper flashing at all of the roof edges and the decorative stone balustrade along the base of the roof.

#### PURPOSE OF GUIDELINES

- Encourage maintenance and retention of visible historic roof materials and elements
- Provide assistance in identifying problems with roofing and roofing elements and recommend potential actions for repair
- Encourage the location of non-historic roof elements in a manner that is not visible from the sidewalk

These *Guidelines* were developed in conjunction with the City of Paterson's Historic Preservation Commission (HPC) and with input of many diverse stakeholders. Please review this information during the early stages of planning your project. Familiarity with this material can assist you in moving a project quickly through the approval process, saving you both time and money. The HPC staff is available for informal meetings and to provide you with valuable information as you consider making improvements to your property.

Additional *Guidelines* addressing other historic building topics are available at 125 Ellison Street, Suite 408 and on the City's website at www.patersonnj.gov. For more information, to clarify whether your project requires HPC review, or to obtain permit applications, please call the HPC Staff at (973) 321-1355.

#### **ROOFS**

A building's roof provides the first line of defense against the elements while its design greatly affects its overall appearance. Therefore, the following should be considered for projects including a new roof or a roof alteration:

- Weather-tight roofing preserves a building and provides shelter from storm water, wind and sun
- Roofing helps define the building's character, silhouette and architectural style
- The form, color and texture of the roof and its associated features affect the scale and massing of the building
- Roofing variations add visual interest to the streetscape



There are a variety of low-slope roofing systems used in Paterson. Lighter color roofs tend to reflect sunlight and can reduce heat gain during warmer summer months.



In Paterson, most of the roofs are lowsloped, however they can include elaborate cornices and parapets. Both of these examples include the business names, and the shop on the left was a Millinery.

## HISTORIC CHARACTER OF ROOF FORMS

The historic form of a roof is critical to the understanding of a building's type and architectural style. Alterations to a roof's shape can have a negative impact on the building's appearance. Roof forms can have various pitches and be combined in different manners to provide numerous roof types. Most of the buildings in Paterson's Downtown Commercial Historic District (HCHD) were constructed following the Great Fire of 1902 with flat or low-sloped roofs, although there are a few exceptions. The building's exterior walls typically extend above the roof surface as parapets at the front and rear walls as well as between adjacent building. (Refer to photograph below, right.)

With the popularization of flat roof systems, greater emphasis was placed on the tops of street-facing facades in the forms of decorative cornices and parapets. Cornices project from the face of a building and were often made from decorative metals and terra cotta, and could have highly ornamented brackets, scrolls and projections. Parapets were often decorative and of varying styles and shapes such as an arched or stepped section, and could include the business name, the year of construction, or a balustrade. (Refer to *Guidelines for Architectural Metals* and *Guidelines for Masonry, Stucco & Concrete* for more information about cornice and parapet materials.)

#### HISTORIC ROOFING MATERIALS

Historically, roofing materials were selected based upon practical and aesthetic criteria, including pitch, weather conditions and availability of materials and craftsmen. With industrialization at the end of the 19th century and beginning of the 20th century, new roofing materials were introduced, including metal roofing, asbestos and asphalt based shingles, as well as varieties of rolled or built-up roofing for flat or low-sloped installations. As time progressed, the variety of metal roofing was also expanded to include copper, galvanized sheet steel and aluminum.

#### **ROOF PITCH & MATERIALS**

The pitch or slope of a roof helps define the appropriate materials for the roof. Although very few roofs are truly "flat", low-sloped, generally defined as a pitch below 3:12 slope, (3" rise for 12" run), require a watertight roofing system.

Low-pitched to flat roofs depend on a continuous or nearly continuous roof surface to minimize moisture infiltration. Material options for low-pitched roofs include soldered flat-seam metal roofing; built-up roofing, single-ply roofing, and modified bitumen roofing. Possibilities for moderately to steeply sloped roofs include unit materials such as slate, terra cotta, wood, metal and asphalt shingles.

To choose the most appropriate roofing materials for a building in the DCHD, it is important to first investigate existing conditions, such as how the roof is attached, how is drainage handled, and what weight limitations might exist.

#### **DEFINITIONS**

**Cornices:** Projecting horizontal moldings towards the top of the building wall.

**Parapets:** The portion of a wall that projects above an adjacent roof surface.



Parapets often have a wood cant strip (sloped edge) at the rear to allow installation of roofing. Also note the metal bracket is peeling away from the wall.

Both cornices and parapets should be covered with a coping, or cover, to protect water from coming into wall structure. For cornices, the coping is often metal flashing. For parapets, it can be metal, stone or terra cotta.

#### **METAL ROOFING**

The use of metal for roofing became more common after the mid 19th century after sheet metal production techniques were expanded. Metal roofing was historically used on commercial, industrial and residential buildings. Traditional sheet roofing metals include lead, copper, zinc, tin plate, tern plate and galvanized iron. Many metal roofs require regular painting with traditional colors including silver, grey or green to minimize the potential for corrosion.

On decorative shallow pitch roofs, including cupolas or domes, small rectangular pieces of flat seam metal roofing were installed with edges crimped together and soldered to form a weather-tight surface.

Deterioration of the metal tends to occur from wearing of the protective painted or galvanized surface, chemical action, rusting, pitting or streaking, caused by airborne pollutants, rain or material acids, or galvanic action. Galvanic action occurs when dissimilar metals chemically react against each other and corrode, and can come from adjacent metals, such as fasteners and non-adjacent metals, such as roof cresting via rainwater.

If the metal roofing is generally rusting, splitting, pitted, severely buckled or warped, or many of the seams or edges are open or disfigured, replacement of the roofing might be necessary. If considering replacement, applicants are encouraged to make every attempt to match seam patterns and color with the replacement material.

#### **EVALUATING LOW-SLOPED ROOFING**

Since many of the roofs in Paterson's Downtown Commercial Historic District have low slopes that are not visible from the streets and sidewalks, the following information is provided for reference. The HPC only reviews roofing materials and elements that are visible from the public way. When evaluating options for low-sloped roofing, it is important to consider the following:

- Whether the installation of the new roofing requires removal of all or portions of the existing roofing, or other preparation such as the installation of cant strips (sloped edges) where the roof surface meets the parapets
- Whether the existing roof structure can support the weight of the new roofing
- Whether it would be beneficial to add insulation to the roof system to improve thermal performance or to re-taper the slope to allow for proper drainage
- The maintenance requirements for the roofing including regular coatings, etc.
- The warranty for both the materials as well as the installation - these can often be different



The alligatored roof surface indicates deterioration and is in need for replacement.

#### **LOW-SLOPED ROOF OPTIONS**

In addition to flat-seamed soldered metal, there are five basic types of low-sloped roofing materials that are readily available:

- Single-Ply Membrane Roofs: Commonly know as rubber roofing or EPDM, is often made of recycled materials such as tires and requires propane torch heat to install the seams Can be easily cut or torn, and since it is a single-ply system, a damaged membrane can lead to a water leak
- Built-up Roofing: Also known as BUR, is overlapping rolls of treated felt using hot tar or asphalt that is also fire retardant Can become brittle and crack up over the years and is heavier than other roof systems and might require structural enhancement of roof
- Sprayed Polyurethane Foam: Spray foam can be applied to a roof surface and acts as an insulating layer and can act as a roofing surface or be covered by another material or coating Care should be taken during installation since health issues can result from contact
- Asphalt Roll Roofing: A single layer of asphalt-treated, granule coated felt is cold cement sealed or hot sealed to the primed decking or to a base sheet
   Because it is light-weight and highly likely to tear in expansion and contraction, it is typically considered a temporary roofing material
- SBS, APP or Modified Bitumen Rolls: The roofing is made from asphalt, modifiers and solvents and can be connected with heat or adhesive Can be installed without seams, or have seams as strong as the body and are also attached directly to the top of a building, eliminating need for gravel weight above

#### ROOFING & ROOFING RELATED ELEMENTS CHECKLIST

As a general rule, roofing and the associated components should be inspected every spring and fall, corresponding with the regular cleaning of leaves and debris from gutters and downspouts. In addition, it is best to inspect the gutters, downspouts and attic areas during a rainstorm to determine whether they are functioning properly. Flat roofs are best inspected immediately after a rainfall to determine whether standing water or ponding is present. Care should be taken when inspecting or maintaining roofs since they are potentially dangerous, especially when wet. If there are questions about if roofing elements should be replaced due to deterioration, consultation with a professional is recommended. It is usually less costly to fix a small problem than to delay action resulting in more extensive deterioration and repair needs.

MATERIAL / LIFE SPAN	INSPECTION REVIEW	RECOMMENDED ACTION
Roofing - General	Sagging or bowing of roof ridge, surface or rafters	□ Can indicate significant structural problems - consultation with an architect or structural engineer is recommended, particularly if condition worsens
	• Loose or missing fastener at metal, tile and shingle roofing	□ Replace with compatible and appropriate fastener
Flat Roofs 10+ years	<ul> <li>Bubbles, separation or cracking of the asphalt or roofing felt</li> <li>Feels loose, spongy or bouncy underfoot</li> <li>Water ponding on roof</li> <li>Mineral granules or gravel worn away</li> <li>Roofing felt looks dry or cracked</li> </ul>	<ul> <li>□ Consider patching of seams with compatible materials if area is isolated</li> <li>□ Consider roof replacement if deterioration is substantial or leaking is observed - verify condition of roof substrate</li> </ul>
<b>Metal Roofs</b> 60+ years	<ul> <li>Substantial number of rust or corrosion spots</li> <li>Signs of previous tar patches</li> </ul>	□ Tin, terne-coated steel and terne-coated stainless all need regular repair and painting every 5-10 years and can last for decades if properly maintained □ Consider patching with compatible materials if area of deterioration is isolated - verify condition of substrate □ Consider roof replacement if deterioration is substantial or prevalent - verify condition of substrate
	<ul><li> Punctures in the metal</li><li> Broken joints or seams</li></ul>	<ul> <li>□ Consider patching or re-soldering with compatible materials if area is isolated</li> <li>□ Consider roof replacement if deterioration is substantial or prevalent - verify condition of roof substrate</li> </ul>
	<ul><li>Bounce in surface of flat metal roof</li><li>Ponding or standing water on surface</li></ul>	□ Consider roof replacement if deterioration is substantial or prevalent
Flashing (Formed sheet metal at joint intersections to prevent moisture penetration)	<ul> <li>Loose, corroded, broken or missing flashing</li> <li>Roofing cement or tar on flashing</li> <li>Un-caulked gaps at the tops of flashing</li> <li>Vertical joint does not have both base and counter flashing</li> </ul>	<ul> <li>□ Consider patching or replacement with compatible materials if area of deterioration is isolated, such as around a chimney</li> <li>□ Consider roof replacement if deterioration is substantial</li> </ul>
Roof Projections (Dormer, TV dish, antenna, vent, pipe, skylight, solar or mechanical equipment, cupola lightning rod, etc.)	Connections around roof projections are not properly flashed and watertight	<ul> <li>□ Consider patching with compatible materials if area of deterioration is isolated</li> <li>□ Consider flashing replacement if deterioration is substantial</li> </ul>

MATERIAL / LIFE SPAN	INSPECTION REVIEW	RECOMMENDED ACTION
Chimneys	<ul> <li>Flashing around chimney is not watertight</li> <li>Mortar joints in chimney are open or badly weathered</li> <li>Masonry or stucco coating is cracked or crumbling</li> <li>Chimney is leaning</li> </ul>	<ul> <li>□ Consider patching with compatible materials if area of deterioration is isolated</li> <li>□ Re-point deteriorated or open mortar joints</li> <li>□ Consider replacement if deterioration is substantial - replacement might necessitate chimney rebuilding from the roof surface up - replicate all chimney detailing in reconstruction</li> </ul>
	<ul><li> Chimney is not properly capped</li><li> Chimney is not properly lined</li></ul>	☐ Install an appropriate chimney cap for the building style ☐ Install a chimney liner if wood-burning fireplaces are used or if masonry inside of flue is crumbling
Parapets	<ul><li> Parapet is leaning</li><li> Components or parapet are loose</li></ul>	☐ Can indicate significant structural problems - provide sidewalk protection and notify Paterson's Division of Planning and Zoning who can recommend consultation with an architect or structural engineer
	Flashing around parapet is not watertight	□ Consider patching with compatible materials if area of deterioration is isolated
	<ul> <li>Mortar joints in parapet are open or badly weathered</li> <li>Masonry is cracked or crumbling</li> <li>Metal elements are rusting</li> </ul>	□ Re-point deteriorated or open mortar joints □ Consider replacement if deterioration is substantial - replacement might necessitate parapet rebuilding - replicate all parapet detailing in reconstruction
Gutters & Downspouts	Clogged gutters or downspouts	□ Review roof drainage during a rainstorm - water should collect in gutters and flow through downspouts without "spilling over" roof edge or ponding or pooling on the roof surface □ Inspect internal downspouts with a camera to see if the interior of the pipe is rusting and restricting water flow
		☐ Clean out debris at least twice each year, in the spring and fall, or more frequently based on debris accumulation
	<ul> <li>Rusty, loose, askew or tilting gutters or downspouts</li> <li>Open or missing seams in hanging gutters</li> <li>Missing sections of gutter or</li> </ul>	□ Install screens and/or strainers over downspout locations  □ Consider repair or patching with compatible materials if area of deterioration is isolated  □ Consider gutter or downspout replacement if deterioration is substantial or sections are missing
	downspouts  • Water ponding adjacent to foundation	□ Re-grade area at foundation to direct water away from building
	mater ponting adjacent to foundation	□ Verify water exiting from downspouts is directed away from building foundation - install splash blocks or downspout extensions at base of downspouts

#### FLASHING, GUTTERS & DOWNSPOUTS

**Flashing** is typically made of thin sheet metal formed to prevent water from entering a building at joints, intersections and changes of pitch. It is typically installed around chimneys, parapets, dormer windows, roof valleys, vents and intersections of additions or bay windows. Flashing often fails before roof surfaces, particularly with more durable roofing such as slate, resulting in interior leaking. If the flashing deteriorates, it is possible to replace it without replacing the entire roof.

When replacing flashing or installing a new roof, it is important to select a flashing material that has an anticipated life span similar or longer than the roofing. The life span of each material is based upon its thickness, how fast it deteriorates from environmental conditions, and whether it is galvanized, treated or coated. Generally, copper or lead-coated copper have the longest life span, followed by steel, with aluminum being highly susceptible to punctures, tears and galvanic reaction with other metals and some roofing materials. It is important to verify that flashing materials are sympathetic and compatible with existing roofing materials. The HPC strongly discourages the application of tar to coat flashing.

**Gutters** are typically located near or along the bottom edge of a roof slope to collect rainwater. Built-in gutters are hidden from view from the ground within or behind architectural features such as cornices or parapets and are typical in the DCHD. Built-in gutters are formed of flashing materials typically wrapped around or within wood forms. Hanging gutters are located just under the roof slope edge and are usually metal with a half-round or profiled cross sections. Gutter materials have different life spans. New gutters should match historic gutter type and material. The installation of a hanging gutter in place of a built-in gutter is strongly discouraged.

**Downspouts**, also known as rainwater conductors, can be inside a building or mounted to exterior walls and conduct a gutter's water down from the roof to the ground or an underground storm water drainage system. Interior downspouts were often made from cast iron and the interior surface of the pipe can rust over time and reduce the water flow. Similar to gutters, exterior mounted downspouts can be fabricated of a variety of materials, in a round or rectangular profile, while interior downspouts tend to be cast iron. It is generally recommended that new exterior downspouts be made from galvanized metal. The HPC strongly discourages PVC downspouts, even if they are painted.



Rooftop features, such as this chimney, need regular maintenance, particularly to prevent storm water from entering a building.

#### **ROOF FEATURES**

Roof features are decorative and sometimes functional elements that help define the profile of a roof against the skyline and should complement the building's style. Historic rooftop features include finials, roof vents, water towers, chimneys, bell towers, turrets and monitors. More recent additions include skylights, mechanical and television equipment and solar panels.

Water towers were a common rooftop feature on commercial buildings in Paterson. They provided water for occupants and were used for fire fighting.



Water towers were historically placed on rooftops to both provide water to building occupants and to aid in fire fighting efforts. Although with improvements to public water systems and are no longer required, they are distinctive elements and a tribute to Paterson's past, and therefore should be maintained. Removal of existing water towers in the DCHD, even if not in use, is strongly discouraged.



Some skylights were historically located in warehouse and commercial buildings, providing natural interior light and ventilation. The visibility of new skylights should be minimized.

**Skylights** are sometimes historically found in commercial buildings. The installation of new skylights should minimize alteration of the roof structure, and should not be visible from the public way.

Rooftop mechanical equipment should not be visible from the street.



Restaurant ventilation systems typically provide exhaust for cooking equipment. The installation of restaurant ventilation systems is subject to building code requirements as well as HPC review. Restaurant vents and exhausts should be installed in a location where they are not visible from the public right of way and within the building boundaries.

Cellular collocation equipment, which includes flat panel antennae, catwalks, railings, equipment sheds, and wiring raceways are discouraged from the DCHD. If they must be located in the DCHC, the HPC encourages that their visibility from the public way be limited.

Roof mounted equipment including mechanical equipment, vents, television dishes and antennae are all examples of modern mechanical equipment and roof penetrations that can affect the historic integrity of a building. Although it is understood that some roof penetrations are required for items such as plumbing vents, property owners are encouraged to limit the amount of rooftop equipment and penetrations, and minimize the overall appearance of clutter.

The installation of all rooftop equipment where visible from the is public way strongly discouraged.

#### MAINTAINING ROOFTOP FEATURES

Many historic rooftop features are made from masonry including elevator penthouses, parapets, balustrades and cornices. In addition, rooftop features include metal elements such as cornices and water towers. Refer to the *Guidelines for Masonry, Stucco & Concrete* and *Guidelines for Architectural Metals* for additional maintenance information.

#### ADDING ROOFTOP FEATURES

Prior to installing new rooftop features, all required approvals must be obtained from the Division of Planning and Zoning. In addition, the following should be reviewed:

- Whether the rooftop equipment be visible by pedestrians and will require HPC review
- Whether the existing roof structure can support the new rooftop feature

#### ROOF SUSTAINABILITY OPTIONS

Property owners are more frequently looking towards their roofs when considering sustainable improvements to their buildings. Roof sustainability options can generally fall into the following categories:

- Reducing Solar Heat Gain: Because a roof surface is typically exposed to the sun for large portions of the day, the roof surface temperature, and often the attic below, can easily exceed 120° Fahrenheit. Although the added warmth may be appreciated in the winter, it can result in higher cooling needs in the summer. Possible ways to reduce solar heat gain include installing an attic fan or vent, or installing attic insulation to limit effect of heat gain in habitable portions of building. Another option is to install lighter colored, more reflective roofing if the roof surface is not visible from the public way, or to coat existing roofing.
- Capturing Solar Energy: Solar collector panels provide a renewable energy source for space heating, hot water and electricity. However, solar collectors should be located where they are hidden from public view. Verify seasonal shading of neighboring buildings should be considered to ensure sufficient year-round solar exposure to justify the expense of installation.
- Improving Natural Lighting: New skylights should be hidden from the public view, and should not disturb historic roof materials such as parapet walls.
- Managing Storm Water Run-Off: The rain that falls on a roof surface is typically diverted to a gutter, then a downspout, and discharged at the perimeter of a building or into a storm sewer. By reducing the amount of water that reaches the downspout, the sewer system is less likely to become overwhelmed in a significant storm. One way to reduce the water diverted to a gutter system is to install a green roof in a manner that the planted material is not visible by pedestrians.



Green roofs
are becoming
increasingly
common in new
construction,
providing both an
insulating layer of
soil and reduced
storm water
runoff. They may
be an energyupgrade option for
buildings with flat
roofs and sufficient
structural capacity.

# ROOFING GUIDE THE HPC ENCOURAGES:

- Replacing visible roofing material in-kind, and if in-kind is not possible, replacement material should appear the same as historic by pedestrians
- Considering quality, longevity and warranties for proposed replacement roofing materials
- Verifying whether existing roof structure can support additional roof layers, or if removal is required
- Maintaining, cleaning or repairing of roofing, roof accessories and historic rooftop features
- Securely installing fasteners and flashings with a similar expected life span to the roofing material
- Regular repainting of metal components susceptible to rusting and wood elements susceptible to rot and deterioration
- Cleaning of gutters and downspouts regularly, typically every spring and fall
- Inspecting of attics or top floors periodically after a storm or freeze to catch small leaks early to minimize the potential for interior damage

#### THE HPC DISCOURAGES:

- x Removing or altering historic gutters and downspouts
- ▼ Installing visible PVC downspouts
- **x** Removing roof features such as parapets, chimneys, dormers, cupolas, finials, etc.
- x Adding or altering rooftop features or equipment at areas visible from a public way including skylights, antennas or dishes, solar collectors, water towers, mechanical equipment, roof decks, chimney stacks and dormer windows
- ★ Using tar for major roof repairs or as a substitute for flashing
- x Adding rooftop features that create a false historical sense without supporting documentary evidence such as cupolas or mansard roofs
- **x** Adding new features that are out of character, scale, materials or detailing to the historic building
- x Encapsulating decorative elements such as cornices, parapets and brackets with vinyl or aluminum capping or siding

## ADDITIONAL AREAS OF CONSIDERATION:

- Roofing work is potentially dangerous and should be left to professionals
- All roofers are not experienced in all materials; obtain references and verify that roofers have appropriately completed compatible work
- Verify the extent of both the material and installation warranties and company histories
- Verify whether removal of existing roofing is required before installation of new roofing; too much weight can damage structural elements
- Verify the condition of substrate for rot or decay and make necessary repairs, including the sheathing or lath, and structural elements
- Use substrate appropriate for roof material and provide adequate ventilation under roof surface
- Use appropriate underlayment including building paper, rosin paper and/or ice shield
- Use a single type of metal compatible with roofing at fasteners, flashing, gutters and downspouts to avoid galvanic action
- Select a flashing material with a longer or comparable life span to the roofing material
- Reference industry standards such as SMACNA, Copper and Common Sense, and Slate for roofing information



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#### **PREPARATION**

All components of the City of Paterson Downtown Commercial Historic District Design Guidelines including all text, graphic design, photography and illustrations unless noted otherwise were prepared by:

#### Preservation Design Partnership, LLC

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## **CITY OF PATERSON**

## **Downtown Commercial Historic District**

**Design Guidelines** 

# MASONRY, STUCCO & CONCRETE



This building on Washington Street demonstrates how masonry can be used visually as a structural statement, as well as delicate ornamentation that reinforces the building's character defining features.

#### **PURPOSE OF GUIDELINES**

- Identify masonry as a key architectural building feature
- Provide guidance regarding masonry problems
- Encourage retention and maintenance of historic masonry so that it continues to serve as a key architectural feature and protective wall system

These *Guidelines* were developed in conjunction with the City of Paterson's Historic Preservation Commission (HPC) and with input of many diverse stakeholders. Please review this information during the early stages of planning your project. Familiarity with this material can assist you in moving a project quickly through the approval process, saving you both time and money. The HPC staff is available for informal meetings and to provide you with valuable information as you consider making improvements to your property.

Additional *Guidelines* addressing other historic building topics are available at 125 Ellison Street, Suite 408 and on the City's website at www.patersonnj.gov. For more information, to clarify whether your project requires HPC review, or to obtain permit applications, please call the HPC staff at (973) 321-1355.

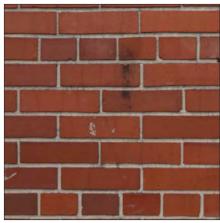
## EXTERIOR MASONRY, STUCCO & CONCRETE

Following the Great Fire of 1902, much of the Downtown Commercial Historic District was reconstructed in masonry, a relatively fireproof material. As such, masonry is considered an important character-defining material in the area. For the purposes of these *Guidelines*, exterior masonry includes stone, brick, and stucco, as well as concrete and concrete block. Historically, a building's exterior masonry surface serves both visual and functional purposes. Visually, it is an important design feature that establishes the rhythm and scale of a building. Historic exterior masonry:

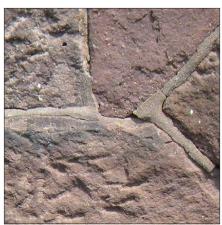
- Acts as an important design feature, helping to define a building's architectural style
- Establishes a building's scale, mass, and proportion
- Adds pattern and casts shadows on wall surfaces

Functionally, historic exterior masonry and concrete typically acts as the principal load bearing system of the building, as well as its "skin," shedding water and deflecting sunlight and wind. Historic exterior masonry:

- Acts as a principal element in the structural system
- Establishes a weather-tight enclosure, providing protection from rain, wind, and sun



20th Century Brick - A hard, dense, firedclay, regularly shaped building component; sometimes with a glazed surface; used primarily in walls, piers, foundations and exterior pavers.



Brownstone - A reddish brown sandstone used as a building material, popular in the late 19th century.



Terra Cotta - A fired-clay, non-structural building component, often with colored glaze, used for decorative, ornate details and wall finishes.



Limestone – A sedimentary rock; used for building walls, window sills and lintels, ornamental stone, sculpture and for producing lime.



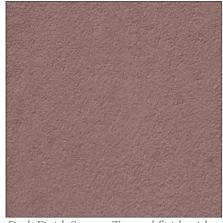
Granite — A hard rock, consisting of small, yet visible, grains of minerals, which can be highly polished or textured; used for walls, piers and street curbs; commonly in gray, black and pink.



Marble – Typically fine grained and able to be highly polished; has a wide range of colors and patterns; used for steps and stoops, statuary and fine masonry.



Scored Stucco - Smooth finish with scoring to simulate stone joints.



Dash Finish Stucco - Textured finish with pronounced aggregate at the surface.



Concrete Block - A structural building material made by mixing water, cement, sand and aggregate, placing the mix in forms and hardening; commonly used for foundations, walls and piers.

#### COMPONENTS OF MASONRY WALLS

Masonry walls, foundations, and piers were historically constructed of stones, bricks, hollow clay tiles, or concrete blocks stacked on top of each other. The individual units were bonded by mortar, which served to hold the masonry units together and fill the gaps between them. Historically the masonry was load bearing, meaning it carried its own weight to the ground as well as the load of other building elements such as walls, floors, and roofs.

#### **STONE**

Stone is a very common exterior wall material in Paterson, particularly for the commercial and institutional buildings constructed after the 1902 fire. The most common types of stone in Paterson are limestone, granite and marble. Limestone detailing is often found at brick buildings. Additionally, some of Paterson's buildings include brownstone. In the mid 20th century, stone veneers became popular, particularly at storefronts. Stone veneers are thin slabs of masonry (typically marble or granite), attached on an underlying structural support system or applied to a wall surface with mortar in various patterns including storefronts.



Rusticated limestone is often found at the base of buildings, particularly by those in the Renaissance Revival style.

#### **BRICK**

Bricks are made by inserting clay into a mold and then firing or baking the brick at very high heat. The result is a standardized unit, generally 8" by 4" by 2-1/4" in size. The color of brick can vary, but red is by far the most common. Other colors include yellow, orange and brown. The color is determined by the chemical and mineral content of the clay, and the temperature and conditions of the kiln or oven. Similar to the color, the strength or hardness of brick is determined by the clay ingredients and the firing method, but it is also affected by the way the brick is manufactured.

#### TERRA COTTA

Similar to brick, terra cotta is made of fired clay, often used for decorative ornamental details and wall finishes. It can have the color of red or yellow brick, or be fired with a clear or colored glaze. Terra cotta became popular in Paterson in the middle of the 20th century, and was often installed as a non load-bearing wall screen material at Mid-Century Modern buildings.



The way terra cotta is manufactured allows for a variety of shapes, forms, and colors. This example celebrates the Art Deco style.

#### **CONCRETE MASONRY UNITS**

Concrete masonry units (CMUs), also known as concrete blocks, are similar to bricks in that they manufactured in molds so they all are produced in standard sizes. They are made by mixing water, cement, sand and aggregate (small stones or pebbles), which is placed in forms to harden. The blocks are typically 8" by 8" by 16" in size and typically include voids.

Similar to brick, CMUs are typically stacked and bonded with mortar. They are most often laid in a running-bond pattern (the joints alternate so they are not all lined up.) They can also be formed in decorative molds that create varied patterns when used in construction. In some cases these building elements are structural, weight-bearing elements, and in others they are purely ornamental.

#### **MORTAR**

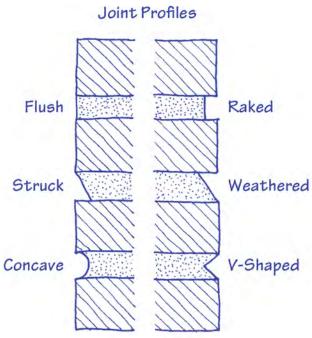
Historically, mortar was generally composed of a few ingredients: sand, lime, and water, and possibly additives such as animal hair or oyster shells. Starting in the mid 19th century, a small amount of Portland cement was added into the mix to improve the workability and hasten the setting time. In the early 20th century, the amount of Portland cement in mortar was increased, resulting in harder mortar corresponding with the manufacturing of harder bricks and concrete block.

**Sand** is by far the largest component of mortar and defines its color, character, and texture. Since masons would use products that were readily available, sand from historic mortars tended to have weathered, rounded edges and was available in a great variety of grain sizes and shades of white, grey and yellow. Most sand available today has sharper edges from being mechanically crushed and is separated into standard sizes. As a result, mixing several sand colors and sizes might be needed to match historic mortar.

Lime and Portland Cement act as binders for the mortar. High lime mortar is soft, porous, and varies little in volume with seasonal temperature fluctuations. Because lime is slightly water-soluble, high-lime mortars can be self-healing and reseal hairline cracks. By contrast, Portland cement can be extremely hard, is resistant to water movement, shrinks significantly upon setting and undergoes relatively large thermal movements. Portland cement is available in white or grey, and the two colors can be mixed to achieve a desired color. It is possible to add a small percentage of Portland cement to a high lime mixture to improve workability and plasticity. The proportion of Portland cement can generally be increased when repointing 20th century buildings or structures such as most of those found in Paterson.

**Water** used in mortar needs to be clean and free of salts, harmful minerals and acid. If not, it can break down the mortar and adjacent masonry and discolor finished surfaces.

Additives historically included shells, animal hair and clay particles. To duplicate the character of historic mortar, it might be necessary to include additives to match the original. (Refer to Page 5, Matching Historic Mortar & Stucco.) It should be noted that there are several types of chemical additives available today including those that increase or reduce the setting time or expand the recommended temperature installation ranges. The use of newer chemical additives is strongly discouraged unless they have been specifically tested over an extended period of time with similar historic materials to the proposed installation conditions.



There are numerous joint profile types, with each producing different shadow lines and highlights. When repointing an area of masonry, it is important to tool mortar to match the existing joint profile for a consistent appearance.

# Normal Hot Masonry Cold Masonry Contracts Flexible Lime Mortar Inflexible Portland Cement

Temperature changes cause masonry units to expand when heated and contract when cold. The expansion and contraction of the masonry units results in compression and flexing of the adjacent mortar joints.

**MORTAR HARDNESS & MASONRY** 

Lime based mortar is pliable and is more likely to compress and flex through temperature cycles. If properly installed, it should also be softer than the adjacent masonry.

Portland cement based mortars are significantly harder than lime based mortars and far less elastic. In addition, cement mortars tend to be substantially harder than historic masonry. When masonry units expand in warm temperatures and when heated by the sun, they press against the harder cement mortar and tend to spall at the edges. During colder temperatures, masonry units tend to pull away from harder mortar, resulting in open cracks that can allow moisture penetration.

Mortar



The mortar joints between bricks has deteriorated, particularly at the vertical joints, increasing the potential for mortar infiltration. The area at the lower right corner of the photograph has been recently repointed and mortar has been smeared over the surface of the brick rather than tooled. To maintain the historic appearance, it is recommended that the replacement mortar match the historic in appearance, color, texture, hardness, and joint profile.

#### REPOINTING HISTORIC MASONRY

Repointing work can be time consuming and expensive; however, it can last more than 50 years when completed properly. Repointing requires a great deal of hand labor by skilled craftsmen to remove the existing mortar without damaging adjacent masonry, achieve the appropriate mortar mix and hardness, apply the mortar, and tool it to match the historic joint style and appearance. As a result, it is generally recommended that repointing projects be limited to areas of deterioration rather than an entire building.

To achieve the best results, repointing work should be completed when the temperature ranges between 40°F and 90°F for at least two days after the installation of the mortar to help the mortar bond to the masonry. Mortar must be of a similar composition to the historic mortar, including hardness, color, and texture. In repointing projects, it is often recommended or could be required to have a mortar analysis completed by a laboratory to determine the proper mixture proportions for consistency, strength texture and color. It should be placed in joints in layers of no more than 3/8" thick and allowed to harden before additional layers are added. The final layer should be tooled to match the existing joint profile. (Refer to *Page 4, Joint Profiles.*)

## MATCHING HISTORIC MORTAR & STUCCO

Most pre-mixed mortar available from hardware stores is generally inappropriate for historic masonry as it contains too much Portland cement and is too hard. The most exact method of matching historic mortar and stucco is to have it analyzed by a professional lab. The HPC Staff is also available to provide guidance based upon the type, location, and condition of the masonry.

## TYPICAL CAUSES OF MASONRY PROBLEMS

The principal components of most unit masonry walls are stone, brick and, in Paterson, concrete block and terra cotta. Mortar, which is located between the bricks, stones, blocks, or terra cotta, bonds the individual units together, transfers the load through the masonry and provides a weather-tight seal at the exterior surface. Many problems associated with historic masonry result from the failure to keep masonry mortar joints in good repair. Deteriorated mortar joints can allow water to penetrate the masonry and cause severe interior and exterior damage. There are five principal causes of mortar joint failures:

Weathering of mortar occurs when rain, wind, and pollution eat away at softer historic mortar over time. (Historic mortar was purposely softer to allow the masonry wall to expand and contract with seasonal temperature changes.)

**Uneven Settling** of masonry walls, hurricanes, and seismic events may result in cracks along masonry joints or within masonry units.

**Poor Original Design and Materials** can cause ongoing problems if the masonry and mortar are incompatible or inappropriate for their installation location, or if the masonry does not properly shed water.

Temperature Cycles can cause deterioration in Paterson's climate, which is subject to extreme heat in the summer and cooler temperatures in the winter. Temperature cycles can cause masonry and mortar to expand and contract at different rates, breaking the masonry's bond with the mortar. This situation can be much worse if moisture enters an open joint, potentially popping out the surface of the mortar and the masonry, resulting in spalling.

**Insufficient Exterior Maintenance** refers to potential areas that might cause water to enter a masonry wall and contribute to its accelerated deterioration. Potential areas of concern are: poorly functioning gutters, downspouts, and flashing; rising damp; standing water at foundations; water splashing back off paving and hard surfaces onto walls; or water-entrapping vegetation such as ivy or shrubs on or near masonry walls.

#### **DEFINITIONS**

**Efflorescence:** Water-soluble salts leached out of masonry or concrete by capillary action and deposited on a surface by evaporation, usually as a white, powdery surface

**Spalling:** Chipping or flaking of masonry, especially concrete.

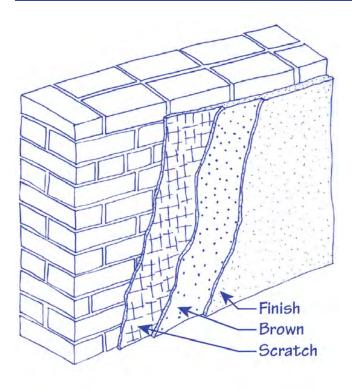
#### **EXTERIOR MASONRY, STUCCO & CONCRETE CHECKLIST**

Almost all buildings include some masonry, in some cases such as the Downtown Commercial Historic District it is used as a wall material, but even in wood-framed residential buildings it is typically used as a foundation, pier or chimney, which are masonry elements. Since masonry is often used as part of the structural system for older buildings, it is critical that it is maintained to prevent serious problems. For the best results, it is critical that all masonry and stucco repair and cleaning be conducted when the temperature is consistently between 40 and 90 degrees Fahrenheit. This will minimize potential spalling and problems associated with colder temperatures and shrinkage with warmer temperatures.

Sometimes it is unclear if masonry units or areas are detoriorated enough to be replaced rather than surface repaired. Consultation with a professional is strongly recommended because it usually costs less to fix a small problem now than to delay it into becoming a major expense later.

MATERIAL	INSPECTION REVIEW	RECOMMENDED ACTION
Exterior Walls - General	Cracks in masonry wall	□ Can indicate differential or uneven foundation settlement or significant structural problems - consultation with an architect or structural engineer is strongly recommended, particularly if condition worsens □ Vertical or diagonal cracks or cracks that split individual bricks or stones tend to represent a more significant problem, such as differential settlement □ Horizontal cracks or hairline cracks limited to mortar joints or individual stones or bricks tend to be less severe □ Monitor and photograph condition after repair during each inspection to see if cracks return
	<ul><li>Bows or bulges in wall plane</li><li>Leaning walls</li></ul>	☐ Can indicate differential or uneven foundation settlement or significant structural problems - consultation with an architect or structural engineer is strongly recommended, particularly if condition worsens
	<ul> <li>Water ponding adjacent to foundation</li> <li>Vegetation, such as shrubs, are located immediately adjacent to foundation</li> <li>Vines growing on walls</li> <li>Damp walls</li> <li>Moss or algae on masonry surface</li> </ul>	□ Verify water exiting from downspout is directed away from building foundation - install splash blocks or downspout extensions at base of downspouts □ Vegetation can trap moisture in masonry by blocking sunlight and air circulation - remove or thin vegetation close to a building or conduct regular inspections for algae and mold behind vegetation, remove vines □ Re-grade area adjacent to foundation to direct ground water away from building □ Clean moss or algae from wall surface with low pressure water, with the possible use of detergent and brushing
	• Efflorescence, i.e. water-soluble salts leached out of masonry and deposited on a surface by evaporation, usually as a white, powdery surface	□ Clean efflorescence from wall surface with low pressure water, with the possible use of gentle detergent and a natural bristle brush (not metal)  □ Review area for possible additional sources of moisture
Mortar	<ul><li> Soft and crumbling</li><li> Open joints or broken joint bonds</li></ul>	□ Consider patching with compatible mortar if area of deterioration is isolated - mortar should match original in appearance, profile, hardness and composition □ Consider replacement if deterioration is substantial

MATERIAL	INSPECTION REVIEW	RECOMMENDED ACTION
Stones & Bricks	Spalling, chipping, flaking, cracking or crumbling of surface	□ Consider patching with compatible materials if area of deterioration is isolated
	Loose or missing stones or bricks	□ Consider replacement if deterioration is substantial
	Pitted surface from sandblasting or pressure washing	☐ Masonry with a damaged surface is more likely to absorb moisture leading to accelerated deterioration - consult a professional
		☐ Monitor and photograph condition to see if it continues to deteriorate
		□ Review adjacent materials and interior finishes for signs of moisture infiltration and rot
		□ Consider patching with compatible stucco if area of deterioration is isolated
		□ Consider replacement if deterioration is substantial
Stucco	Cracks in surface	□ Substantial cracks might indicate differential or uneven foundation settlement or severe structural problems - consultation with an architect or structural engineer is recommended, particularly if condition worsens
	Bulges in wall	□ Verify keying of stucco / plaster to lath or underlying substrate - if wall area moves when pushed, stucco/ plaster is not bonded and should be replaced with compatible material to avoid potential surface collapse
Concrete	Open cracks in concrete surface	□ Surface cracks can increase exposure of reinforcing bars to moisture and corrosion - consultation with an architect or structural engineer is recommended, particularly if condition worsens
		□ Substantial cracks might indicate differential or uneven foundation settlement or severe structural problems - consultation with an architect or structural engineer is recommended, particularly if condition worsens
	Pitted surface from sandblasting or pressure wash	□ Concrete with a damaged surface is more likely to absorb moisture leading to accelerated deterioration - consult a professional
		☐ Monitor and photograph condition to see if it continues to deteriorate
Painted Masonry, Stucco or Concrete	Chalky or dull finish	□ Additional preparation might be required prior to repainting - preparation dependent on surface
	Peeling, flaking, curling and blistering	□ Possible indication of a moisture problem - review drainage, potential leaks and whether there is a vapor barrier in the wall
		□ Paint failures near the roof edge, downspouts and porch ceilings and foundations are often the result of drainage problems
	Paint surface worn	□ Similar to woodwork, painted masonry needs repainting every 5 to 8 years with compatible paint



Stucco was traditionally applied in three layers: the scratch coat; the brown coat; and the finish coat.

#### **STUCCO**

Stucco is a relatively inexpensive material that can provide a more finished appearance to brick, stone, or wood framed buildings. In some cases, the surface is scored to look like stone. It acts as a weather repellent coating, protecting the building from rain, sunlight, and wind, and can moderately increase its fire resistance. Stucco can also provide an insulating layer to a wall, reducing the passage of air, and improving a building's fire resistance.

In Paterson, stucco was traditionally applied at the time of construction over concrete and concrete block as a decorative protective coating. Beginning in the 20th century, it was also applied on wood-framed buildings in revival styles of architecture. It was a common exterior finish in Art Deco and Modern structures. Depending on the style of building, the texture of the stucco varies widely, from a smooth finish to textured, troweled, and Spanish-finish stuccoes.

Stucco was also applied on some buildings and structures, years after the original construction, as a remodeling material to vary the original appearance or to conceal deterioration.

The components of stucco are similar to pointing mortar and include sand, lime, Portland cement, water, and possible binders. In some cases, pigments were added to the mix to alter the finished color.

#### STUCCO APPLICATION

Stucco is essentially a layer of mortar held in position by the bond formed with the underlying material. Historically at masonry walls, one of the best ways to achieve a bond was to "rake-out" the mortar joints about 1/2" to form a groove that holds the stucco in place. (Refer to Raked Joint at *Joint Profiles*, *Page 4*.) When installed on masonry, stucco becomes an integral part of the wall when it sets. When stucco was installed historically on wood framed walls, the stucco was generally "hung" on strips of wood called lath that were nailed to wall studs. By the mid 20th century, metal lath replaced wood lath for stucco application on wood framed buildings.

A stucco wall surface is generally about 1" thick and applied in the following 3 coats:

- 1. The **Scratch Coat** is approximately 3/8" thick and applied directly to the wall surface. It is forced into the raked joints or pushed into the lath to provide a strong bond. The surface of the scratch coat is deeply scored to allow bonding of the brown coat.
- 2. The **Brown Coat** is also approximately 3/8" thick and finished with a wood float for a smoother surface.
- 3. The **Finish Coat** is generally about 1/4" thick with the overall thickness being determined by the finish style

#### **PATCHING STUCCO**

Similar to repointing mortar, stucco should be applied in moderate weather conditions, avoiding extreme heat, sun, and freezing temperatures. The final appearance should duplicate the existing as closely as possible in strength, composition, color and texture. Successful patching of stucco surfaces generally requires a skilled craftsman. Similar to stucco application, stucco repairs are applied in three coats. Similar to pointing mortar, if stucco patches are too hard, they could cause additional damage to the adjacent historic stucco surfaces or lead to the formation of cracks that can allow water migration into the wall.

When repairing stucco, hairline cracks can generally be filled with a thin slurry coat of the finish coat ingredients, while larger cracks need to be cut-out and prepared for a more extensive repair. Similarly, bulging wall surfaces need to be cut-out to a sound substrate. For the best appearance, the area to be patched should be squared off and terminated at a building joint or change in materials such as a window or door frame.

Repaired stucco will often need to be repainted for a uniform appearance. When selecting paint, it is important that the new paint is compatible with earlier coats of paint and the stucco material, and applied following the manufacturer's recommendations.



The crack from the window sill might be a sign of building settlement. Review wall for other signs of movement or settlement. Repair crack and apply a lime-based paint for a uniform appearance.

#### SYNTHETIC STUCCO

The Exterior Insulation and Finish System, or EIFS, is a synthetic stucco system that was popularized in the United States in the late 20th century. It generally consists of 3 layers:

- An inner foam insulation board secured to the exterior wall surface, often with adhesive
- A middle polymer and cement base coat that is reinforced with glass fiber mesh
- An exterior textured finish coat

One of the significant problems with EIFS is that it does not "breathe" and can trap moisture within the wall thickness. This can lead to powdering or melting of softer masonry and rotting of wood sills and framing. If the problem persists, mold and mildew can develop in the building, providing a perfect home for termites.

Although the surface of EIFS can be finished to match many types of stucco, there are some differences. In larger areas of wall surface, EIFS is typically installed with control joints or grooves to allow the surface to expand and contract with temperature changes. These joints are typically not needed with lime based stucco and can result in odd wall patterns. Also, if properly installed, EIFS should not come in contact with roofing, wood trim or porch floors to reduce the possibility of moisture infiltration. Instead, these joints are often filled with sealant that can crack and eventually allow moisture to penetrate.

Because of the differences in the visual characteristics of EIFS from stucco and the potential to harm historic building fabric, the application of synthetic stucco or EIFS at any designated building or structure is not permitted where visible from a public right-of-way.

#### **CONCRETE**

Concrete is prepared using a variety of materials, but is generally composed of sand and gravel or crushed stone to which lime and/or cement is added. When water is added, a chemical reaction occurs causing the mixture to harden. This mixture can be poured to form standard and decorative concrete block. To allow poured concrete to be used for structural elements such as floors, walls and columns, metal reinforcing bars are embedded in the concrete to increase its tensile strength, making it less susceptible to cracking.

Concrete deterioration often occurs due to:

- Corrosion of the metal reinforcing bars: Reinforcing, when properly installed, is protected by a layer of concrete. When the steel is exposed to water or moisture (including high humidity) it corrodes and expands causing cracking and eventually spalling.
- **Degrading of the concrete material:** Degrading of concrete can occur through weather and wear of a concrete surface, eroding the binder (lime and/or cement) material, exposing the aggregate and possibly the reinforcing bars.
- Improper construction techniques: Some aggregates can degrade over time and salts and chemicals within the aggregate can react to the reinforcing or binder material. It is also possible, particularly in concrete from the beginning of the 20th century, that the reinforcing was improperly laid in the form work without sufficient cover or air bubbles were trapped within the pouring of the concrete.
- **Structural problems:** Structural problems can include insufficient or improperly placed reinforcing bars within the concrete, structural settlement, and severe winds or seismic events.

Signs of concrete deterioration often include cracks, spalls (missing chunks of concrete) staining and deflection (bowing) of the concrete. Because of the complex nature of concrete, the variations in chemical properties, and potential for severe structural problems, it is highly recommended that the repair of larger spalls and the repair of deflected concrete be addressed by a preservation architect or engineer.



The expansion due to the corrosion of the reinforcing bars causes spalling of the concrete surface.

## MASONRY, STUCCO & CONCRETE CLEANING

Appropriate masonry, stucco, and concrete cleaning improves the character and overall appearance of a building. However, improper cleaning of historic masonry can cause damage to the historic surfaces and cause more harm than good. There are three principal reasons for cleaning historic masonry:

- To improve the appearance by removing dirt, pollen, stains, graffiti, or paint
- To slow deterioration by removing deposits, salts, efflorescence, acids, ivy, algae, moss, mildew, and pollutants that can damage masonry surfaces
- To clean select areas to match historic masonry or mortar or to assess surface condition

Masonry cleaning methods fall within three general categories:

- Low pressure water, with the possible use of gentle detergent and brushing
- Mechanical cleaning including sand blasting, walnut shell blasting, power washing, grinding, sanding, and wire brushing
- Chemical cleaning

Because of the potential damage to historic surfaces, cleaning should be completed using the gentlest means possible. In many cases, soaking the masonry, stucco and concrete with low pressure water can remove much of the surface dirt and deposits. If the soaking method is not successful, it might be necessary to add a non-ionic detergent or brush the wall surface with a natural bristle brush.

The use of mechanical methods, including abrasive blasting, power washing, sanding or grinding, can potentially remove decorative details and the protective surface of the masonry, stucco or concrete, resulting in an eroded surface and permanent damage. Abrasively cleaned masonry, stucco, and concrete usually has a rougher surface that can hold additional dirt and be more difficult to clean in the future. Chemical based cleaners can etch, stain, bleach or erode masonry, stucco and concrete surfaces. Both mechanical and chemical cleaning methods can also make the masonry, stucco, and concrete surfaces more porous and deteriorate mortar joints, allowing for increased moisture penetration.

The rough texture and uneven surface of this brick suggest that an aggressive cleaning method was used. Stucco patches replace bricks and efflorescence, a powdery white substance, can be seen on the surface.

## MASONRY, STUCCO & CONCRETE COATINGS

Water repellent and waterproof coatings are generally applied to prevent water from entering a masonry, stucco or concrete wall, but tend to be unnecessary on weather-tight historic buildings. Water infiltration through masonry and concrete buildings is generally caused by other moisture related problems including open mortar joints, surface cracks or spalls, and poor or deferred maintenance. In instances where the surface of the masonry has been severely compromised, such as for previously sandblasted bricks, the use of water repellent coatings might be appropriate.

Water Repellent Coatings, also referred to as "breathable" coatings, keep liquid from penetrating a surface but allow water vapor to escape. Many water repellent coatings are transparent or clear when applied, but may darken or discolor over time.

Waterproof Coatings seal surfaces and prevent liquid water and water vapor from permeating the surface. Generally, waterproof coatings are opaque or pigmented and include bituminous coatings and some elastomeric coatings and paint. Waterproof coatings can trap moisture inside of a wall and can intensify damage. Trapped moisture can freeze, expand, and spall masonry and concrete surfaces.

Anti-Graffiti Coatings are often installed in an attempt to help remove future graffiti from buildings. Although many of the coatings applied are clear, they can alter the color of historic masonry or become glossy. Similar to waterproof coatings, they can reduce the vapor permeability of the historic masonry. Water-based coatings are available, which can minimize changes to the appearance and permeability of historic masonry. If they are considered, sample test areas should be applied and checked over time for changes in appearance. Pigmented or colored coatings are generally not recommended, since they are rarely the same color as the masonry and can cause problems to the masonry over time.



## MASONRY, STUCCO & CONCRETE PAINTING

If the exterior of the masonry, stucco, or concrete surface has been compromised through previous sandblasting, moisture infiltration or the use of harsh chemicals, appropriate painting can provide a degree of protection. Proper application of a water repellent paint can prevent water from penetrating while allowing water vapor to escape. Waterproof or inappropriate paint can trap moisture within a wall. Proper preparation is critical to a successful masonry, stucco, or concrete painting project.

Remove loose or flaking paint, mortar, masonry, stucco or concrete as well as ivy, algae, moss and mildew

- Complete items of deferred maintenance including repair of deteriorated gutters and downspouts
- Complete repointing, re-caulking and patching as needed
- Select a paint color appropriate for the building style and seek approval from the HPC; Apply undercoat and paint appropriate for masonry application type; Follow manufacturer's recommendations for application



When painting stucco, it is recommended that a breathable masonry paint be used and that loose or flaking paint be removed prior to repainting.

#### REMOVING PAINT FROM MASONRY

When considering whether to remove paint from a masonry, stucco, or concrete surface, it is important to assess whether removal is appropriate. In some instances:

- The building might have always been painted; less attractive, softer, or more porous bricks, stones or concrete might have been painted to provide a water repellent protective layer
- Paint can mask later changes or additions

Reason to consider stripping paint:

- To reduce the long term maintenance requirements associated with repainting
- Paint might have been originally applied to mask other problems such as a dirty building
- If existing paint has failed, it might be necessary to strip it before repainting

Signs of failed paint include:

- Paint is badly chalking, flaking, or peeling, possibly due to moisture penetration - it is important to find the cause of moisture and repair before repainting
- If masonry or concrete has been "sealed" by excessive layers of paint or by waterproof coatings, the underlying masonry might not be able to "breathe" and dispel the internal moisture and salts eventually, pressure from moisture and salts can build up under paint layers and possibly cause the paint to peel and masonry to spall

If paint is stable, complete paint stripping might not be necessary. However, new paint should be compatible with previous paint layers for best adhesion.



Graffiti should be removed quickly to minimize damage to underlying material and discourage additional graffiti.

#### **REMOVING GRAFFITI**

Graffiti should be removed as quickly as possible to minimize damage to underlying masonry. To best remove graffiti from masonry, it is necessary to understand the type of masonry and paint used to reduce the potential damage to the surface during cleaning.

In instances where a severe stain or graffiti is present, it might be necessary to use a chemical based cleaner in specific areas. Caution should be taken to test the effects of the proposed cleaner on a discrete area of the building before using it on a principal elevation. It is recommended that the most diluted possible concentration be used to minimize potential damage of the masonry surface. It should be noted that many chemical cleaners are hazardous and require special handling, collecting, and appropriate disposal of the chemicals and rinse water.

#### PAINT REMOVAL SAFETY

Caution should be used when removing paint since some paints include lead, requiring proper collection and disposal techniques. (Refer to Guidelines for Windows, Page 5.)

#### **MASONRY GUIDE**

#### THE HPC ENCOURAGES:

- Replacement masonry, stucco and concrete that matches the historic in material type, color, texture, size, shape, bonding pattern and compressive strength
- Repointing mortar or stucco of the same hardness or softer than the original mortar or stucco and always softer than the original masonry older buildings typically of high lime content with limited Portland cement
- Using mortar, stucco and concrete that matches the appearance, color, texture, pattern, joint size and tooling of the historic mortar, stucco and concrete, as approved by the HPC
- Replacement masonry toothed into existing masonry and continuing the adjacent pattern
- Carefully removing algae, moss, vines and other vegetation from masonry walls
- Completing masonry, stucco and concrete work in fair weather
- Cleaning masonry using the gentlest means possible
- Verifying mortar joints are sound and building is water-tight before water cleaning
- Using clean water without excessive salts, acids or minerals that can deposit on masonry surfaces and traces of iron or copper that can discolor masonry
- Conducting water cleaning a minimum of one month before freezing temperatures to minimize the potential for spalling
- Minimizing water pressure, generally no more than 100 psi, to reduce potential etching of masonry surfaces
- Using non-ionic detergent and natural bristle brushes when water soaking is not successful
- Considering whether paint removal is appropriate
- Removing paint using the gentlest means possible

#### THE HPC DISCOURAGES:

- **x** Using power tools to remove existing mortar from joints since they can damage historic masonry
- × Using modern chemical additives
- x Install pointing mortar in a single layer greater than 3/8" deep x than
- ★ Installing modern bricks for patching historic masonry
- × Using the taping method of repointing

- **x** Widening or extending the existing mortar joints or overlapping the new mortar over masonry surfaces
- **x** Using pre-mixed mortar or stucco that contains a high percentage of Portland cement or does not match the appearance of the historic mortar
- × Using chemical cleaning
- x Applying water repellent or waterproof coatings including paint that can trap moisture and prevent the wall from "breathing"

#### THE HPC DOES NOT PERMIT:

- × Removing or covering historic masonry
- ★ Installing stucco over brick, stone or wood framed buildings that were not intended to be stuccoed
- **x** Painting historic brick, stone, stucco, block, and poured concrete that was previously unpainted because the paint can: damage the historic masonry; alter the visual characteristic of the building and obscure the craftsmanship of the masonry including colors, texture, masonry and joint patterns; and paint on masonry is not easily removed
- x Using mechanical cleaning methods including sand blasting, high pressure power washing, grinding, sanding and wire brushing
- **x** The use of EIFS in place of historic stucco walls
- × Painting over large areas of graffiti



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#### **PREPARATION**

All components of the City of Paterson Downtown Commercial Historic District Design Guidelines including all text, graphic design, photography and illustrations unless noted otherwise were prepared by:

#### Preservation Design Partnership, LLC

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## **CITY OF PATERSON**

# Downtown Commercial Historic District

### **Design Guidelines**

### WINDOWS



Windows are a key design feature of many historic buildings. Most windows in the Downtown Commercial Historic District are double-hung and can be opened to provide natural ventilation.

#### **PURPOSE OF GUIDELINES**

- Encourage retention of historic windows, typically located at upper floors of buildings in the Downtown Commercial Historic District
- Provide design assistance in identifying key features of windows that can encourage stylistically appropriate replacement options when retaining historic windows is not longer viable
- Encourage window security options that are historically compatible, visually minimal and more pedestrian friendly

These *Guidelines* were developed in conjunction with the City of Paterson's Historic Preservation Commission (HPC) and with input of many diverse stakeholders. Please review this information during the early stages of planning your project. Familiarity with this material can assist you in moving a project quickly through the approval process, saving you both time and money. The HPC staff is available for informal meetings and to provide you with valuable information as you consider making improvements to your property.

Additional *Guidelines* addressing other historic building topics are available at 125 Ellison Street, Suite 408 and on the City's website at www.patersonnj.gov. For more information, to clarify whether your project requires HPC review, or to obtain permit applications, please call the HPC staff at (973) 321-1355.

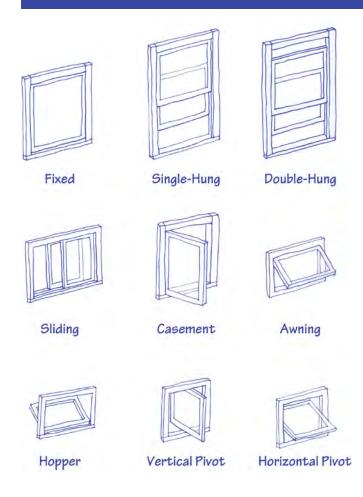
#### **WINDOWS**

Windows typically comprise at least one quarter of the surface area of exterior walls of most historic buildings. Windows and doors, in addition to their trim and associated features are important elements of historic buildings because they can:

- Define the character of each individual building and provide a visual feature on the streetscape
- Help define architectural style, and building type
- Help identify the time or period of construction
- Provide natural light and ventilation
- Act as a visual transition from the exterior to the interior of a building



Windows typically comprise one quarter of the surface area of most historic buildings and are considered a character-defining element.



#### COMMON WINDOW TYPES

The window types above can have different muntin patterns or configurations. Muntin patterns (or grids) are defined in terms of the number of panes of glass. For example, a six-over-one (6/1) double-hung window indicates there are 6 panes in the upper sash and 1 pane in the lower sash.

- **Fixed:** Non-operable framed glazing
- Single-hung: Fixed upper sash above a vertically rising lower sash
- Double-hung: Two sashes that can be raised and lowered vertically
- **Sliding:** Either a fixed panel with a horizontally sliding sash or overlapping horizontally sliding sashes
- Casement: Hinged on one side, swinging in or out
- Awning: Hinged at the top and projecting out at an angle
- Hopper: Hinged at the bottom and projecting in at an angle
- **Vertical pivot:** Pivots vertically along a central axis
- Horizontal pivot: Pivots horizontally along a central axis

#### WINDOW STYLES

Window patterns and configurations are linked to a building's period of construction and style. Late 19th century buildings, from about the 1880s, featured a vareity of window shapes and more elaborated frames, casings and applied ornament and trim. When the Renaissance Revival styles were popularized beginning in the 20th century, the use of multi-paned windows with elaborate frames and casings was more prevalent; while Classical Revival buildings often incorporated simpler frames and casings, and the Art Deco style and Mid-Century Modern buildings utilized larger sheets of glass or glass block.

Since all of the components and details of a window are essential to defining a building's style, property owners are encouraged to investigate the essential elements of their windows prior to undertaking any modifications. What might be an appropriate alternative at one building, might not be appropriate at another. For guidance on window and building styles, please consult with the HPC staff prior to beginning work.

#### **GLASS BLOCK**

Glass block was popularized as a building material at the beginning of the 20th century. It is available in a variety of sizes, with the most common size being approximately 8" square and 4" thick. Although typically made of clear glass with a relatively smooth finish, some glass block can be colored and include decorative patterns.

In Paterson, glass block was historically used in Art Deco and Moderne buildings. At the exterior of buildings it offers a distinctive pattern and texture while at the interior it provides diffused translucent natural light. It also has the advantage of being burglar resistant and has a higher thermal rating than standard glass windows. Glass block is laid in mortar similar to brick and stone. Refer to *Guidelines for Masonry, Stucco & Concrete* for more information.

#### **DEFINITIONS:**

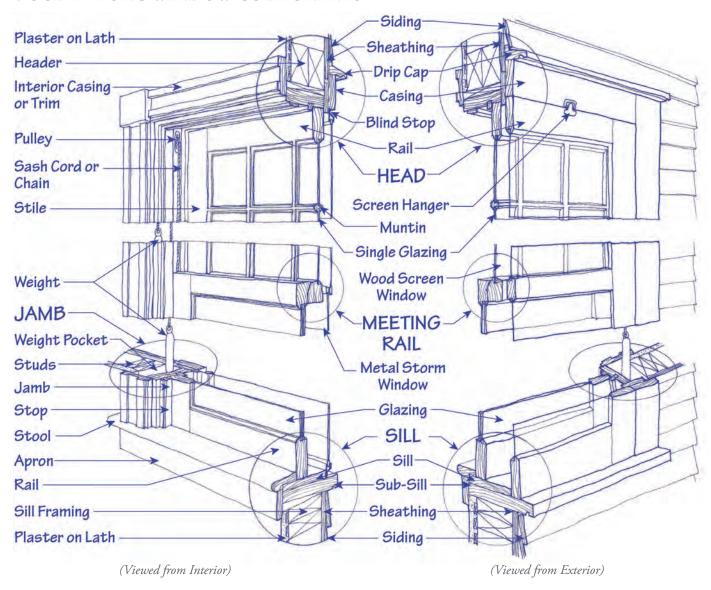
**Mullion:** The vertical element separating two window or door frames.

**Muntin:** The narrow molding separating individual panes of glass in a multi-paned window sash.

**Sash:** The part of the window frame that holds the glazing, especially when movable.

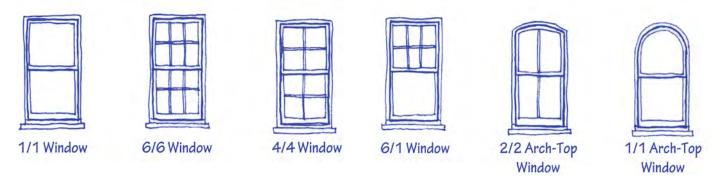
**True Divided Light:** A window or door in which the glass is installed as several individual small panes.

#### **DOUBLE-HUNG WINDOW COMPONENTS**



#### WINDOW CONFIGURATIONS

Different window configurations are appropriate for each architectural period or style. Altering the window type, style, shape, material, size, component dimension, muntin pattern or location can dramatically alter the appearance of the building.



### WINDOW MAINTENANCE CHECKLIST

This checklist can help property owners look over the conditions of their windows as well as to keep track of their maintenance. The checklist shows some of the most common problems and issues that come up and suggestions for repairs and follow-ups. Each checklist is most useful if it is changed to show the specific materials used in a specific building. If serious issues are discovered in a building, an architect or qualified building professional should be brought in to recommend the most appropriate options and solutions.

MATERIAL	INSPECTION REVIEW	RECOMMENDED ACTION
	Windows and doors do not fit or operate properly	<ul> <li>□ Verify whether frame is wracked or out-of-square         <ul> <li>possibly an indication of differential or uneven             foundation settlement or deteriorated wall framing</li> <li>□ Verify whether windows are painted shut</li> <li>□ Verify that hardware (including sash cord or chains) is             operational</li> </ul> </li> </ul>
	Wood rot, particularly at sills and lower rails	<ul> <li>□ Repair or selectively replace deteriorated components in-kind</li> <li>□ Following repairs, verify deteriorated areas are well painted and joints caulked</li> </ul>
Windows	Glass is cracked	☐ Replace glazing to match existing
	Glazing putty is missing, cracked or deteriorated	□ Replace glazing putty - verify compatibility with adjacent materials - older putty can contain asbestos (Asbestos is a hazardous material. Refer to the <i>Guidelines - Introduction, Page 16</i> , for additional information.)
	Screen or storm windows or doors are missing, deteriorated or non-operational	□ Repair or replace deteriorated units as appropriate □ Consider installing interior storm windows and doors - interior installation can minimize potential condensation between the storm and window, reduce drafts, are virtually invisible thus maintaining the exterior appearance of the building
Window Frames & Trim	Loose, cracked, missing or open joints at decorative woodwork and window frames	□ Could lead to water infiltration and rot - repair or replace in-kind as appropriate □ Apply caulk to open joints - verify compatibility with adjacent materials
	Original wood trim has been covered with vinyl or aluminum siding	□ Vinyl and aluminum siding and capping can trap moisture and hide rot and damage - if possible, vinyl or aluminum siding and capping should be removed and woodwork inspected for damage and repaired
Painting (Refer to Page 5 for information about Paint Removal Safety and Exterior Paint)	Chalky or dull finish	☐ Surface cleaning might be all that is needed ☐ If repainting, additional preparation might be required
	Paint surface worn	□ Wood generally needs repainting every 5 to 8 years
	Peeling, curling, crazing and blistering	□ Possible indication of a moisture problem - review drainage, potential leaks and vapor barrier in the wall □ Paint failures near roofs, downspouts and porch ceilings are often the result of drainage problems

# HISTORIC WINDOW PROBLEM SOLVING

In general, property owners do not pay close attention to their windows until problems come up, such as frozen or difficult movements of the sashes, air infiltration that causes rattling, and chipping paint that looks shabby. Usually a historic window that has not been maintained for many years looks much worse than it actually is. Replacement of an entire window because of one deteriorated component - such as the sill or the bottom rail - is not necessary. Repairing or replacing the damaged or rotted parts is usually enough, along with beginning a regular maintenance schedule after the repairs. It is usually economical to upgrade existing windows that are in fair to good condition rather than replace them altogether.

#### To improve operation:

- Repair sash cords, chains and weights
- Remove built-up paint, particularly at jambs
- Repair or replace deteriorated components such as parting beads that separate window sash

#### To reduce air infiltration:

- Install weather-stripping snugly between moving parts (quality metal weather-stripping can last 20 years)
- Replace broken or cracked glass (glazing)
- Re-caulk perimeter joints
- Remove and replace missing or cracked glazing putty
- Add sash locks to tighten windows
- Insulate weight pockets if no longer in use

#### To reduce solar heat gain or heat loss:

- Install interior blinds or curtains
- Install UV window shades
- Install clear UV film without tint or color

#### Maintenance:

• Regularly review, repair and repaint windows

#### PAINT REMOVAL SAFETY

Paint removal is sometimes necessary but it is potentially hazardous work. Paint dust from older buildings can contain lead.

Paint removal, particularly lead based paint removal, must comply with City Health Department and Environmental Protection Agency (EPA) requirements. Keep children and pets clear of work areas. Property owners should consult a professional for work that is unfamiliar or potentially unsafe.



The window sill and jamb have peeling paint and some checking or splitting. Removal of the loose paint will allow the wood to be inspected for signs of rot.

#### **EXTERIOR PAINT**

Painting the exterior of a building is one of the most common ways to protect it from the elements. This is especially true for wood and metals that would rot and rust faster if left unpainted. When a painted surface is chipped and worn, the building materials underneath are exposed to moisture and deterioration can quicken. In addition to protecting building materials, paint colors highlight architectural features to visually tie the parts of a building together. A building's architecture, period of construction, materials and setting can all help identify appropriate paint colors.

Exterior paint adds a barrier of protection from moisture, sun, insects and other elements that rot wood and rust metals. Exterior woodwork that is not coated with a natural or chemical preservative will weather and eventually rot, and uncoated metals will rust and weaken. Even though paint is an important protective layer that provides many extended years to the life of historic buildings, it is a temporary barrier that must be replaced in order to function well. In general, exterior surfaces should be repainted every 5 to 8 years, with intermediate touchups of worn or deteriorated areas. High quality paints can last longer if applied according to the manufacturer's recommendations.

### **CRITERIA FOR REVIEW**

Use the following guidelines when evaluating window repair or replacement:

- 1. **Perform routine maintenance:** Replace broken or missing components such as trim, glazing or sash cords. Verify that caulking, glazing putty and weather-stripping is securely applied and repaint.
- 2. Treat or repair deteriorated components: At the earlier stages of wood deterioration, it is possible to complete in-place treatments that do not necessitate component replacement. This includes treating wood for insects or fungus, epoxy consolidation, applying putty at holes and cracks and painting. Metal window components, particularly steel, require regular maintenance to prevent deterioration, most frequently rusting. Regular scraping of surface rust and application of a rust-inhibitive paint will allow windows to remain serviceable for a significantly longer period of time.
- 3. Replace deteriorated components: Replace either the deteriorated portion of the component with a "Dutchman", or the entire component if very deteriorated. A "Dutchman" is a repair with a piece of the same material in a sharp-edged recessed cut and can be used for wood or metal components, although metal Dutchmen typically require a skilled metal worker. The replacement pieces should match the original in design, shape, profile, size, material and texture. New wood sills are usually easily installed, while complete sash replacement might solve problems of broken muntins and deteriorated rails.
- 4. **Replace window:** If the majority of the window components are deteriorated or missing and in need of replacement, replacement of the unit might be warranted.



Often, the deterioration of wood windows first occurs at the sill. Peeling paint can allow moisture to enter wood and cause rot. Regular repainting is recommended to provide a protective layer against moisture.



When windows have unique details and decorative elements that could be difficult to duplicate with replacement windows, property owners are strongly encouraged to make every effort to maintain and repair historic sash.

#### WINDOW REPAIR VS. REPLACEMENT

Because windows are of key importance in showing the architectural character of a building, the HPC strongly encourages repair or replacement of only the parts of windows that are deteriorated beyond repair. When considering whether to keep existing windows versus replacing them, the HPC encourages keeping the existing ones. It is important to remember that because a portion of a window is rotted, replacement of the entire unit might not be necessary, especially for wood windows.

However, it is sometimes necessary to replace an entire window due to extensive deterioration. If a property owner would like to replace existing windows, they must demonstrate to the HPC that the existing windows are beyond repair.

# HISTORICALLY APPROPRIATE REPLACEMENT WINDOWS

Replacement windows can be found at several buildings in Paterson's Downtown Commercial Historic District. The HPC staff is available to provide guidance to property owners that are appropriate for a building's style and period of construction.



Historic windows were often seen as a design feature. This example includes a decorative wood surround and stained glass in the transom above an operable casement sash.

# WINDOW MATERIALS: PAST & PRESENT

Wood windows were historically manufactured from durable, close, straight-grain hardwood of a higher quality that is uncommon today. The quality of the historic wood materials from the 19th century or earlier allows many of these windows to survive through today. Replacement windows tend to have much shorter life spans than historic wood windows.

Selecting replacement windows is usually challenging since manufacturers offer various grades of windows, with different types and qualities of materials and warranties. Today, lower cost wood windows are typically made from new growth timber, which is much softer and deteriorates quicker than the hardwoods used in the past. Vinyl and PVC materials, now common for replacement windows, break down in ultraviolet light, and have a life expectancy of approximately 25 years - which is much less than historic wood windows. Because of the great variety of finishes for aluminum windows, they are still being tested to determine their projected life spans.

Other areas of concern with replacement windows are the types and quality of the glazing, seals, fabrication and installation. Double glazing or insulated glass, used in most new window systems, is made up of an inner and outer pane of glass with a sealed air space between the glass layers. The space is typically filled with a gas and sealed at all edges. This seal can fail in as few as 10 years, resulting in water condensation or fogging between the glass layers. Many of the gaskets and seals that hold the glass in place also have a limited life span and deteriorate with exposure to the ultraviolet light from the sun.

Other problems with replacement windows result from poor manufacturing or installation. Twisted or crooked frames can make windows difficult to operate. Open joints allow air and water into the wall or even into the interior.



These low-quality 9-over-6 vinyl replacement windows have applied muntins, are mounted flush against the outside wall and lack the depth of traditional windows. They do not have sills to direct water away from the building wall below or exterior trim. The window to the right is wracked, or twisted in its opening and it does not appear it will close properly. They are not appropriate for historic buildings.

### REPLACEMENT WINDOW QUALITY

Local lumber yards can usually provide a better selection and higher quality replacement window options than those advertised with bulk mailings or flyers. The better manufacturers also give several grades of replacement window options that can be very helpful in meeting budgets. This information can usually be found on their web sites or in product catalogues.

Keep in mind that quality replacement windows will not need to be replaced as often as lower quality units, and can save money over time.

#### WINDOW OPTIONS

Repair or replacement of existing components: Deteriorated sills, sash and muntins are repairable by craftsmen with wood consolidant or replacement parts, retaining original fabric and function. In-kind replacement sash and sills can be custom-made to replace deteriorated sections if necessary. It is strongly encouraged that property owners explore repair and selective replacement parts options prior to considering sash or frame replacement.

Benefits of repair and selective component replacement:

- Original building fabric and historic character remain
- Repairs can be completed by local carpenters
- Timber, used in historic windows, can last substantially longer than replacement units

**Sash replacement package:** Some manufacturers offer replacement jamb liners and sash for installation within existing window frames. The system allows installation of new sash of various muntin patterns within existing frames. Because of the loss of the historic sash, this option is discouraged.

Benefits of a sash replacement package:

- · Original muntin pattern can be duplicated
- Maintains the historic opening, surround and trim

Negatives of a sash replacement package:

- Historic sash are removed and become landfill debris
- Replacement sash have a limited warranty, likely needing replacement again in 10 to 25 years as seals and joints open
- Modification of the jambs is necessary
- The jamb liners do not always work well in existing window openings and might need more frequent replacement
- Out-of-plumb openings can be difficult to fit making window sash hard to operate
- Perimeter seals might not be tight

**Frame and sash replacement unit:** This is a complete frame with pre-installed sash of various muntin patterns for installation within an existing window frame opening. Because of the total loss of both the frame and the sash, this is strongly discouraged.

Benefits of the frame and sash replacement unit:

- Manufactured as a unit to be weather tight
- Original muntin pattern can be duplicated

Negatives of the frame and sash replacement unit:

- Historic sash are removed and become landfill debris, the historic character of the building is diminished
- The surrounding frame is modified, alteration of builtin surrounds might be required and two frames and sills are typically visible at the exterior
- The size of the window sash and glass openings are reduced due to the new frame within the old frame
- In-fill might be required for non-standard sizes



When considering replacement windows, it is important to fill the entire historic window opening. In this example, the property owner installed two small windows within a larger opening, and infilled the remainder with wood paneling.

#### REPLACEMENT WINDOW COSTS

If planning to replace windows, the following costs should be considered:

- Labor to remove old windows
- Environmental costs of disposal including transportation and landfill fees
- Purchase price and delivery of new windows
- Environmental costs of new window manufacturing and transportation from the factory
- Labor and materials to modify existing frames for new windows
- Labor to install new windows
- Life-cycle costs associated with more frequent replacement of new windows as they deteriorate



Selecting better quality replacement windows, such as this paired 6-over-6 example with a profiled exterior aluminum muntins will require less maintenance and less frequent replacement over time.

## MAINTAINING REPLACEMENT WINDOWS

One of the selling points of replacement windows is that they do not require maintenance. With the relatively short life expectancy of many of the materials and components, this is an optimistic viewpoint.

As joints or seals in replacement windows deteriorate, openings can be formed that allow air and water to enter into the window frame, wall cavity and/or building interior, causing additional damage. Repair of these openings typically requires replacement of the deteriorated parts. This can present a problem if the manufacturer has modified their designs or is no longer in business, necessitating custom fabrication of deteriorated elements or replacement of the window.

As previously described, double-glazing has similar problems over time with the deterioration of the perimeter seal. In addition, if the glazing unit is cracked or broken, it will require full replacement. This is even more difficult when a double-glazed window has a grid within the space between the two glass panes. By contrast, a good carpenter can generally repair a historic wood window with single pane glazing and install an interior or exterior storm window to improve thermal performance.

## ALUMINUM REPLACEMENT WINDOWS

When the majority of windows in commercial buildings are deteriorated, property owners often seek a quality replacement window that will not require a high level of maintenance. One option that is often considered is aluminum replacement windows. Because aluminum replacement windows are typically custom made to fit within existing masonry openings, they are typically used in larger applications such as commercial buildings rather than replacement windows for single-family homes.

Some of the advantages of aluminum replacement windows is that they can usually be made to replicate historic wood windows while including insulated glass for better thermal performance. As shown in the example to the left, this replication includes the operation of the sash and exterior profiled muntins matching the historic configuration. In addition, because they have a factory-applied, baked on paint finish, which can selected to match historic paint colors, they do not require the regular repainting associated with wood windows.

Because of the strength of aluminum and ability to fasten the parts of the window together with strong connections, aluminum replacement windows can easily outlast the lifespan of vinyl alternatives by two to three times depending on the quality of each product. Although the initial costs associated with aluminum replacement windows is typically greater than vinyl, the life-cycle costs associated with more frequent replacement of lower-quality windows might provide overall costs savings in the long run. In addition, the overall thermal performance of an aluminum replacement window tends to be higher than most vinyl windows, allowing for energy costs savings for the building occupants

# MODIFYING OR ADDING WINDOW OPENINGS

The arrangement, size and proportions of window openings are key components of a building's style and character.

As a result, the HPC strongly discourages the modification or addition of window or door openings, particularly on more prominent building façades. This includes the infill of all or part of an opening to make it smaller or to visually remove it. It also includes increasing the size of a door opening to provide a larger opening for a display window, garage or other use.

# WEATHER STRIPPING & CAULK FOR WINDOWS & DOORS

Proper application of weather stripping and caulk around windows and doors can greatly reduce air infiltration and drafts. When selecting weather stripping or caulk, it is important to choose the material appropriate for each location and follow manufacturer's installation recommendations for the best results.

Because weather stripping is used between the moving parts of windows and doors, it is highly susceptible to damage and can become loose, bent or torn. It is important to inspect weather stripping on a regular basis, preferably every fall, and replace it as needed. For high use installations such as entrance doors, it may be beneficial to install more durable weather stripping such as spring metal or felt.

Recommended locations for weather stripping:

- Behind window sash track
- Between window meeting rails
- At perimeter of doors and windows

The installation of caulk or other sealants should occur throughout the exterior of the building. Locations include where two dissimilar materials meet; where expansion and contraction occur; or where materials are joined together. In some instances caulks and sealants can be sanded and/ or painted to minimize their visual appearance. It is important to select the appropriate type for each location and exercise care when removing old caulk that might contain lead.

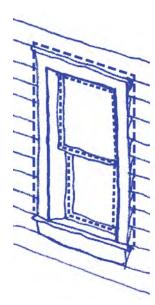
Recommended locations for caulk:

- Between window or door frame and adjacent wall
- Between abutting materials such as corner boards and siding, porch and wall surface
- Between dissimilar materials such as masonry and wood, flashing and wall surface

#### **DEFINITIONS:**

Weather Stripping: A narrow compressible band used between the edge of a window or door and the jambs, sill, head and meeting rail to seal against air and water infiltration; of various materials including spring metal, felt, plastic foam and wood with rubber edging.

**Caulk:** Flexible sealant material used to close joints between materials; of various materials including tar, oakum, lead, putty, and modern elastomerics such as silicone and polyurethane.



Recommended weather-stripping locations:

- Behind window sash track
- Between window meeting rails
- At perimeter of doors/windows

Recommended caulk locations:

- Between door/window frame and adjacent wall
- Between abutting materials such as corner boards and siding, porch and wall surface
- Between dissimilar materials such as masonry and wood, flashing and wall surface

#### **SCREEN & STORM WINDOWS**

Screen windows can provide a barrier for insects allowing occupants to enjoy natural ventilation, while storm windows can reduce air infiltration and improve the comfort of occupants in the winter.

Since many screens and storms are located on the exterior of buildings, they should conceal as little of the historic window as possible and should be selected to complement each window type. This generally means selecting a screen or storm window that has rails that coincide with the rails and glazing pattern and overall configuration of the associated window.



The installation of weather stripping and caulk is often completed with regular window maintenance such as repainting.

#### WINDOW GUIDE

Although the condition of each window installation is unique, the following provide general recommendations when addressing window issues. Property owners are invited to consult with the HPC early in the process when contemplating window modifications.

#### THE HPC ENCOURAGES:

- Maintaining existing windows including regular repainting rather than replacement
- Reopening previously infilled windows
- Installing caulk, weather stripping, and storm windows to improve thermal performance
- Following the *Criteria for Review* on *Page 6* when considering replacement as outlined to determine whether window replacement is warranted

### WINDOW REPLACEMENT GUIDE THE HPC STRONGLY ENCOURAGES IF REPLACEMENTS ARE WARRANTED:

- Matching the original material, size, shape, configuration, type, operation, materials, muntin pattern, dimensions, exterior profiles and detailing to the greatest extent possible with a salvaged or new replacement window
- Reusing serviceable trim, hardware or components
- Installing clear glass at all openings unless replacing historic colored, beveled or frosted glass in-kind
- Reviewing grades of windows offered by manufacturers and install quality wood or aluminum windows when replacement is deemed necessary using quality materials in the process
- Understanding the limits of the warranties for all components and associated labor for replacement
- Selecting reputable manufacturers and installers who are likely to remain in business and honor warranties

# THE HPC ENCOURAGES IF REPLACEMENTS ARE WARRANTED:

- Relocating historic windows to the publicly visible elevations and install replacement windows or doors in less visible areas
- Installing quality replacement windows to match the historic materials, although wood windows with exterior wood or aluminum cladding or aluminum windows are often an acceptable option for historic wood windows
- Reusing serviceable trim, hardware or components or use salvaged materials

#### THE HPC DISCOURAGES:

- Replacing a window component or unit if repair and maintenance will improve its performance and preserve historic elements
- ➤ Decreasing the original window opening size or shape with in-fill to allow for installation of stock unit size
- x Installing vinyl or vinyl-clad windows
- x Installing an inappropriate window type, such as putting a casement window in the place where a double-hung window was before
- ★ Increasing window sizes or altering the shape to allow for picture or bay windows
- ★ Installing glass block at buildings where it was not found historically
- ★ Installing translucent daylight building systems at window and door openings
- ★ Infilling existing window openings at publicly visible elevations
- **x** Installing new openings at publicly visible elevations
- x Installing window with only interior or internal grid that is in the space between the two panes of glass
- ★ Installing single hung where the upper unit is glass mounted directly in the frame instead of in a fixed sash
- x Installing reflective or other films on window glass

### STORM / SCREEN WINDOW GUIDE

#### THE HPC ENCOURAGES:

- Simple screen / storm windows with large screened openings that reveal as much of the historic window as possible and fit historic openings
- Removable screen / storm windows to facilitate maintenance of historic windows
- Screen / storm that minimize the change to the exterior appearance
- Painting the wood screen / storm window frame to match the adjacent window trim
- Wood screen / storm windows custom fit to match the size and configuration of the window opening

#### THE HPC DISCOURAGES:

- × Visually opaque screen material
- ➤ Plexiglas, or similar material, fastened to window frames or screens
- ★ Storms / screens adhered or fastened directly to window trim
- x Half or stock storm / screen windows that are too small or a different shape than the window opening and require in-fill trim or panels

#### WINDOW SECURITY

Window security is an issue in some locations where the window openings are accessible from the ground, building elements such as fire escapes, and adjacent structures and roofs. Historically, decorative metal grilles have been installed at several locations that are easily accessible from the ground. (Refer to *Guidelines for Architectural Metals* for additional information.)

When installing new security measures, every effort should be used to minimize the appearance from the public way. More recently, re-glazing, particularly tempered glass, has been used as a deterrent, providing a barrier that is difficult to break and shatter. Electronic security systems and warning devices can be installed at the interior of doors and windows without altering the historic appearance of the building's exterior.

If metal bars or grilles are considered the only acceptable method for securing a building, the HPC encourages property owners to install them at the interior of the window, door or display window. If metal bars or grilles are installed at the exterior, the HPC only permits the use of simple barrier grilles without decorative detailing. The bars or grilles should be properly sized to fit the opening and align with the frame opening and muntin configuration. No acrylic panels or metal mesh will be permitted to be attached to the security screens.

#### WINDOW SECURITY GUIDE

#### THE HPC STRONGLY ENCOURAGES:

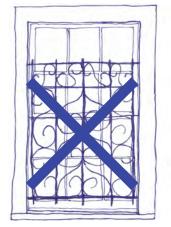
 Installing security systems that do not alter the exterior appearance of windows

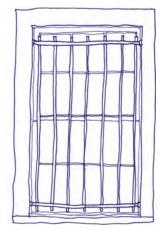
#### THE HPC ENCOURAGES:

- Installing security systems that minimize the change to the exterior appearance
- Painting exterior security grilles to match the adjacent window trim

#### THE HPC DISCOURAGES:

- x Installing highly decorative or ornate security screens
- ★ Installing visually opaque security material that do not allow the window to remain visible
- x Installing window security that is too small or a different shape than the window opening and require in-fill trim or panels
- **x** Installing acrylic panels or metal mesh to exterior security screens. ■





If metal bars or grilles are installed at the exterior, they should be sized to fit the opening and align with frames and muntins with simple barrier grilles and no decoration.



Simpler security grilles without decorative elements are generally less visibly obvious than those with scroll work or contrasting colors.



The research undertaken in support of this document, and the production of the document itself, have been funded by a historic site management grant from the Garden State Historic Preservation Trust Fund administered by the New Jersey Historic Trust.

#### **PREPARATION**

All components of the City of Paterson Downtown Commercial Historic District Design Guidelines including all text, graphic design, photography and illustrations unless noted otherwise were prepared by:

#### Preservation Design Partnership, LLC

Philadelphia, Pennsylvania; www.pdparchitects.com Principal-in-Charge: Dominique M. Hawkins, AIA Research Assistant: Kimberly M. Bahnsen



## **CITY OF PATERSON**

### Downtown Commercial Historic District

**Design Guidelines** 

## **STOREFRONTS**

#### **STOREFRONTS**

The storefront is one of the most significant features of a retail commercial building. Most people experience buildings at the ground floor level and the attractiveness and overall maintenance of a storefront can greatly influence a casual observer's perception of a building and the business within. Because a positive impression can help draw potential customers, regular maintenance and careful design can positively affect the success of a business.

#### **PURPOSE OF GUIDELINES**

- Provide storefront design assistance to encourage compatible alternative's for a building's retail identity
- Define a pedestrian's visual experience and create a sense of transparency at the ground floor
- Identify key elements of historic storefronts, appropriate alterations, and components for new storefronts
- Encourage security options that encourage after-hours window-shopping by pedestrians
- Attract potential customers with eye-catching merchandise displays
- Encourage sensitive alterations to existing buildings to allow access to all citizens including those with physical challenges

These *Guidelines* were developed in conjunction with the City of Paterson's Historic Preservation Commission (HPC) and with input of many diverse stakeholders. Please review this information during the early stages of planning your project. Familiarity with this material can assist you in moving a project quickly through the approval process, saving you both time and money. The HPC staff is available for informal meetings and to provide you with valuable information as you consider making improvements to your property.

Additional *Guidelines* addressing other historic building topics are available at 125 Ellison Street, Suite 408 and on the City's website at www.patersonnj.gov. For more information, to clarify whether your project requires HPC review, or to obtain permit applications, please call the HPC staff at (973) 321-1355.



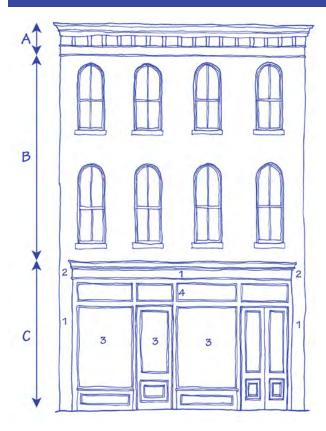
A well designed storefront can attract potential customers and provide a positive impression. The clear glass windows of this storefront allow pedestrians to see what is being offered for sale.

#### **COMMERCIAL PROPERTIES**

The HPC encourages the economic development and revitalization of the retail and commercial properties within the Downtown Commercial Historic District (DCHD). The HPC recognizes Paterson's vibrancy is linked to the viability of its businesses. We make every effort to assist building owners and their tenants with revitalizing buildings in the DCHD, helping to attract new customers while promoting an appreciation of historic architecture.

# INFORMATION FOR NEW BUSINESSES

If considering opening a new business in the City of Paterson, representatives are available to discuss zoning, construction and other requirements applicable to a specific project. Please contact the Office of Economic Development at (973) 321-1212 x 2270 for additional information.



# COMPOSITION OF COMMERCIAL BUILDINGS

This represents a typical multi-story, commercial building in the City of Paterson. It has three distinct vertically stacked zones:

- A. The bracketed ornamental building cornice provides a visual cap or termination at the top of the building.
- B. Upper floor operable windows appear to be "punched" through the flat, relatively solid, typically masonry, wall surface in a regular pattern that does not align with the storefront openings below.
- C. A storefront capped by a storefront cornice runs along the ground floor with large display windows topped by transom windows.

In reviewing potential locations for signage on the building above, the following should be considered:

- 1. Wall-mounted sign
- 2. Projecting sign
- 3. Window sign
- 4. Awning sign

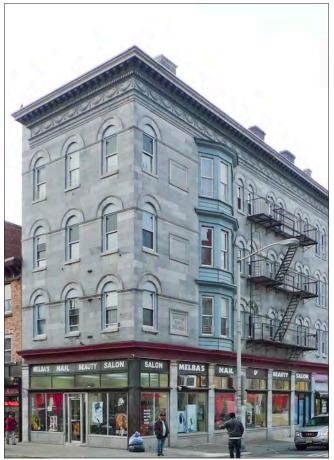
It is important to note that the location, number, and size of signs is limited by the sign regulations. Please refer to the *Guidelines for Signs & Awnings* for more information.

#### STOREFRONT DEVELOPMENT

A storefront is typically defined as a ground-level façade constructed with large areas of glass to display merchandise. The development of storefronts was linked to the desire to increase commercial visibility and merchandise display possibilities. As technology progressed through the middle of the 19th century, the configuration of storefronts was also modified. Smaller windows were replaced with larger sheets of glass and new materials, such as cast iron, were introduced into architecture as structural and decorative components. Advances in structural design also allowed new building configurations, including corner entrances with wrap-around storefronts to maximize commercial visibility.

Commercial storefronts can:

- Serve a key role in a commercial building's identity
- Define a pedestrian's visual experience and create a sense of transparency at the ground floor
- Attract potential customers with eye-catching merchandise displays



This four-story building retains the three vertically stacked zones, typical of commercial buildings, namely the ornamental cornice at the top of the building, punched windows on the upper floors, and the storefront with large display windows at the ground floor.



#### STOREFRONT COMPONENTS

Although the specific design of storefronts can vary greatly depending upon different styles, sizes and locations of buildings, the typical construction includes large amount of glass to display merchandise, an entrance to the store, and often a second entrance to upper floors. Historic storefronts were typically constructed of wood, metal (cast iron, bronze, copper, tin, galvanized sheet metal, cast zinc or stainless steel), masonry (brick or stone,) large display windows and clear, translucent or pigmented glass at the transoms. Many later 20th century and 21st century storefronts are made from aluminum.

One of the key aspects of historic storefronts is that all of the various pieces and parts combine into a unified expression or style. It should be noted, however, that all storefronts do not necessarily include all components.



Storefront cornices separate upper floor windows from the storefront below. They can be made of a variety of materials, such as this decorative brick example.

1. Storefront Cornices are projecting moldings at the top of storefront. They provide a visual cap or termination to the storefront and separate it from the upper floors. Cornice materials can vary widely and include wood, pressed metal, limestone, terra cotta or decorative brick patterns. Cornice details can include brackets, dentils and panels as well as decorative paint highlighting.



These leaded transom windows have translucent glazing that provide additional light to the interior.

**2. Transom Windows** are located above display windows and doorways to provide additional daylight, and can be either fixed or can open for ventilation. They can be either single or multi-paned and are often leaded, stained, pigmented or textured glass. Historically, transom windows could also include signage, lettering or other ornamental details.



Display windows with an alcove increase the visibility of merchandise for sale.

**3. Display Windows** are typically large areas of glass to show the available merchandise within a shop. Display windows are usually found on both sides of the entrance door or alcove to a store, and can include additional advertising to further entice potential customers.



Glass storefront doors can act as a display window and allow potential customers to see merchandise offered for sale inside of a shop.

**4. Entrances** must be recessed from the sidewalk within an alcove providing additional display areas and shelter from the elements. In addition to commercial entrances, there are often secondary entrance doors that provide access to upper floor levels.

**5. Structural Supports** at storefronts are necessary to carry the weight of the building and roof above and are often decorative, reinforcing the storefront's style. Typically, structural supports are found on either side of the entrance doors and display windows. They can be constructed of wood, cast iron or masonry.



This cast iron structural support is a fluted pilaster. When considering the alteration or addition of a storefront, property owners and tenants are encouraged to retain and reuse historic decorative building elements whenever possible.

**6. Aprons,** or knee walls, act as the base for the display windows and at the interior can also provide a raised platform for merchandise display. Historically, aprons were constructed of a variety of materials with different finishes including paneled wood, brick, marble, granite and tile.



This polished granite apron provides the base for the storefront window and includes a metal vent.

#### STOREFRONT ENTRANCE ALCOVES

A storefront's entrance alcove acts as a transitional space from the sidewalk to the commercial entrance. It provides shelter from the weather, and is often designed to increase the display area of the storefront to entice potential customers. Entrance alcoves tend to include a decorative ceiling and floor, and be flanked by large storefront display windows leading to a central entrance door.

**Decorative Ceilings** within entrance alcoves were often decorated with patterns, textures or materials that included lighting and reinforced the architectural style of the building and geometry of the space. The materials used within the entrance alcove ceiling may be repeated on the ceilings of the flanking display windows. Historically these materials included paneled wood, beaded board and pressed tin, with flatter surfaces, such as stucco gaining in popularity in the early 20th century.



The entrance alcove allows for additional display window area for potential customers and an area protected from in bad weather. The name of the former business remains in the terrazzo flooring of the entrance alcove.

**Decorative Flooring** within storefront entrance alcoves was often composed of small ceramic tiles in square or hexagonal shapes. In the early 20th century terrazzo became a popular option. Historically, the configuration of tile or terrazzo was only limited by the creativity of the installer, and often included decorative borders and patterns of various colors. It was not uncommon for the tiles to include the name of the business occupying the store within the alcove flooring.

#### INSTALLING STOREFRONTS

Making changes to storefronts or installing new storefronts can be a costly endeavor, which if not properly planned might negatively impact a business. When designing storefront work, the following approach is recommended:

- a. **Identify Key Historic Elements** An important place to begin is the identification of key elements in the existing storefront or building style to determine what might be appropriate. For example, an aluminum storefront system might not be appropriate for a building constructed at the end of the 19th century; however it might be a good option for an early 20th century building.
- b. Locate Structural Supports One of the important factors in designing a storefront is understanding the building's structure. Although the front wall is desirable for display windows, it also must support the wall and/or roof structure above. By identifying the locations of the structural supports, it will inform where openings such as windows and doors can be installed. In the case of buildings with granite piers or cast iron facades, the location of the structure is fairly obvious. In buildings that have been clad with another material, investigation might be necessary.
- c. Review Other Storefronts When beginning the design process for a new storefront it is helpful to look at the design of existing storefronts at similar historic buildings. Existing storefronts can provide information about the size, location and pattern of doors and windows; the types of materials used; the design of the elements including the display windows, doors, aprons and cornice; and the detailing and proportions of the components.
- d. **Designing a New Storefront** The new storefront design should be compatible in size, pattern, scale, material and color with the overall building and similar storefronts from the period. The elements of the design should be thought of holistically, and should not include elements from multiple buildings and styles. (*Pages 3 to 5* include some of the components that can be found at storefronts. It should be noted that all storefronts do not necessarily include all components.)

# INFORMATION FOR NEW STOREFRONTS

If considering installing a new storefront, please contact the HPC at (973) 321-1355 to review stylistically appropriate options for specific buildings.



Security grilles should be open weave and located at the interior behind storefront display areas and entrances whenever possible.

#### **SECURITY**

Security systems can have a negative impact on the visual character of a building, particularly roll-down security grilles installed on the outside of store fronts. As an alternative, the HPC recommends installing tempered glass as a deterrent, providing a barrier that is difficult to break and shatter. Electronic security systems, motion detectors, lights and warning devices can be installed at the interior of doors and windows without altering the historic appearance of the building's exterior.

If considering the installation of roll-down security grilles, they should be of an open-weave pattern and installed inside of the display windows and ideally the display area. This allows people passing by to see into the storefront even when the business is closed. It also conceals the housing for the roll-up security grilles. The HPC does not permit the installation of new solid or opaque security grilles or the installation of visible grille housings at publicly visible exterior elevations.



Exterior security grille housings are not permitted.

#### **MERCHANDISING**

Storefront display windows are a key means of attracting potential customers. The potential merchandising area of a storefront can extend as much as four to five feet within the store area, therefore merchandising and storefront display materials should be designed to be as transparent as possible to highlight the merchandise being offered. In addition, this area should have flexible lighting within the display area to feature various arrangements.

- Using simple graphics and clean appropriately large scale displays to keep the windows transparent and maintain views into the store
- Maintaining a minimum of 70% of the window area unobstructed to keep the windows transparent and maintain views into the store
- Using seasonal or holiday decorations to accentuate the storefront
- Constructing storefronts display areas of high quality, durable materials
- Installing flexible lighting within the display area and keeping the lights on until 9:00 pm to maintain pedestrian interest
- Installing interior security grates behind storefront displays so pedestrians can clearly see what is offered for sale after business hours



Interior open-weave security grilles provide protection while allowing the merchandise to be visible when the store is closed.



Walk-up services such as ATM machines should be compatible with a building's storefront and style.

#### WALK-UP SERVICES

Walk-up services include automated teller machines (ATMs), pay telephones, vending machines and takeout windows. The installation of these services should not include the removal of historic building fabric or negatively impact the historic character of the building. When considering the addition of a walk-up service, it is preferred if they are located at the interior of the building such as an ATM lobby. The modification of historic building materials should be avoided and the features installed should be sympathetic to the historic building. The locations of these services should be discreet and unobtrusive, and the overall building design should be considered as part of the process. In addition, power and other supply services, such as conduit, junction boxes and water supplies, should be concealed and not mounted on the exterior of the building.

It should also be noted that many of these services also require protective coverings, such as awnings or canopies in addition to lighting. The addition of canopies or awnings and lighting should comply with the *Guidelines for Signs & Awnings*.



It is generally not appropriate to alter a commercial storefront for residential use.

#### STOREFRONT GUIDE

Although each storefront is unique, the following provide general recommendations when addressing storefronts. Property owners are invited to consult with the HPC early in the process when contemplating storefront modifications.

#### THE HPC ENCOURAGES:

- Reopening previously infilled windows
- Retaining and maintaining all building cornices, features and details; and replacing missing features
- Providing attractive merchandising to encourage potential customers

#### THE HPC DISCOURAGES:

- Locating air conditioners where visible from the street
- x Infilling or altering window and door openings
- ★ Installing built-in furniture or walls visually blocking the inside of display windows
- x Installing any material other than clear glass within a display window
- x Installing walk-up services that damage historic materials or are not compatible with the building

#### THE HPC DOES NOT PERMIT:

- ★ Introducing a new storefront or element that alters or destroys historic building materials
- Enclosing or removing elements, such as building cornices and storefronts
- x Installing inappropriate materials at storefronts including vinyl siding, EFIS, ceramic tile and T1-11 siding
- x Installing stylistic elements from periods that are different from the storefront or building and do not complement the overall stylistic expression
- x Altering size or shape of major building forms such as window, door and transom openings or altering doors to swing unless required by the code
- × Installing exterior security grilles
- ★ Installing solid security grilles that do not allow the interior of a storefront to remain visible
- × Altering a commercial storefront for residential use
- × Removing windows to install air conditioner units



The two steps at the right side of the opening were cut-down to allow wheel chair access from the sidewalk.

#### **ACCESSIBILITY**

The Americans with Disabilities Act (ADA) strives to improve the quality of life of people with disabilities. The ADA recognizes that, for people with disabilities to participate in the everyday activities in their communities such as going to work, eating in a restaurant or shopping in a store, they need to have access to the goods and services provided by businesses. Many business and institutional facilities in Paterson were constructed prior to the enactment of the ADA in 1992 and lack features to accommodate people with disabilities, including those who use wheelchairs.

As existing buildings are renovated, they are often required to make accommodations for people with disabilities. One of the most visible exterior alterations required by ADA is the installation of a wheelchair ramp or lift to provide building access. In many locations, these ramps or lifts have been successfully incorporated at the interior of the building envelope with modification of existing door sills. When installing ramps, it is important to remember that if the ramp is too steep or railings are not secure, it can potentially be hazardous.

Other historic features that might require modification to accommodate individuals with special needs are doors, particularly paired doors. The individual leaves of doors tend to be too narrow to allow the passage of a wheel chair. In some cases, the hardware at paired doors can be modified for automatic operation or reconstructed as a single leaf in a manner that matches the overall design and arrangement of the historic doors.

#### THE HPC OFTEN APPROVES:

- Retaining the historic entrance stairs and doors
- If access to the front door is not possible, providing a respectful accessible entrance that is located close to the principal entrance and designed in a manner that is visually unobtrusive and complements the building's style
- Complying with all aspects of the accessibility requirements, while minimizing alterations of the primary building façade and architectural features
- Modifying sidewalk, walkway or entry alcove elevation a few inches, where possible to provide an accessible entry and meet all code requirements
- Installing ramps and/or lifts within the building envelope where it is possible to modify an existing door sill to allow entry at grade The design of interior features that are visible from the exterior are also subject to HPC review
- Installing a lift in lieu of a ramp if it would be less obtrusive
- Ramp or lift styles that are compatible with the building
- Railings that are as simple and visually unobtrusive



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#### **PREPARATION**

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#### Preservation Design Partnership, LLC

Philadelphia, Pennsylvania; www.pdparchitects.com Principal-in-Charge: Dominique M. Hawkins, AIA Research Assistant: Kimberly M. Bahnsen



## **CITY OF PATERSON**

### Downtown Commercial Historic District

**Design Guidelines** 

## SIGNS & AWNINGS



The wrapping sign band with the simple text of the store name clearly brands this location.

The clear glass storefront with mannequins and minimal window signage allows potential customers to clearly see the merchandize being offered for sale.

#### **PURPOSE OF GUIDELINES**

- Provide design assistance for signs and awnings
- Encourage compatibility and provide a visual connection with the building and the historic district
- Provide variety and vitality in the Downtown Commercial Historic District (DCHD)
- Encourage the greatest amount of design flexibility
- Identify those elements that are detrimental to the historic streetscape
- Encourage the consideration of how proposed signage or awning relates to each property its surroundings

These *Guidelines* were developed in conjunction with the City of Paterson's Historic Preservation Commission (HPC) and with input of many diverse stakeholders. Please review this information during the early stages of planning your project. Familiarity with this material can assist you in moving a project quickly through the approval process, saving you both time and money. The HPC staff is available for informal meetings and to provide you with valuable information as you consider making improvements to your property.

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#### **IMPORTANCE OF SIGNS & AWNINGS**

A well designed and well placed sign or awning can make a good impression, attract potential customers and unify a streetscape. By contrast, a confused, poorly designed or poorly placed sign or awning can overwhelm buildings, detract from the streetscape, give an inappropriate impression, turn away customers and damage the historic materials or finishes of buildings. Historically, signs and awnings were attached to and placed near buildings. New signs can use similar features of historic ones to both enhance the character of the building and convey the desired information to potential customers.

#### **COMMERCIAL PROPERTIES**

The HPC encourages the economic development and revitalization of the DCHD's retail and commercial properties within it. The HPC recognizes Paterson's vibrancy is linked to the viability of its businesses. We make every effort to assist building owners and their tenants with revitalizing buildings in the DCHD, helping to attract new customers while promoting an appreciation of historic architecture.

#### NEW BUSINESS INFORMATION

If considering opening a new business in the City of Paterson, representatives are available to discuss zoning, construction and other requirements applicable to a specific project. Please contact the Office of Economic Development at (973) 321-1212 x 2270 for additional information.



The most effective signs provide a clear message identifying the goods or services offered for sale. This sign, sized to fit within the band between the rows of windows, includes individually-mounted pin letters identifying the company name.

### TYPES OF SIGNS IN PATERSON

Because most of the buildings within the DCHD are located along the sidewalk and property line, most of the signs are mounted on the buildings. The following illustrations are intended to provide general examples of the most common sign types that can be found within the DCHD.

#### PATERSON'S PERMITTED SIGNAGE

The types of signage permitted for a business vary depending on whether the property is located in a residential or non-residential district, and the amount of street frontage for the building, and whether the property fronts on one or more streets.

When considering a new signage or awning project, applicants should contact the Division of Community Improvements (CI) and the HPC office early in the design process to understand the allowable signage at a specific property. It is also important to keep in mind that the following types of signs are subject to the requirements of the current sign regulations and review of the CI and HPC:

- All new exterior signs and interior signs that are visible from the exterior
- All changes or alterations of existing signs including the removal of unsafe signage (Refer to *Page 8.*)
- All temporary and movable signage
- All relocated or altered signage, including "recovers"
- All signage that requires significant repair or replacement of components including re-facing of existing signs ("recovers")

The installation, modification or altering of any signage will require review by the Division of Community Improvements for code compliance and the HPC. Applicants should not install or alter any signage before obtaining all required approvals and permits.

**Wall Signs** are single-sided signs mounted parallel to and generally flat against a wall of the building. Wall signs can be made from a variety of materials to suit the individual needs of the business and unique character of the building onto which they are applied.



This channel-letter wall sign includes internally illuminated letters and a logo.

**Suspended Signs** are one or two-sided signs, generally suspended from an architectural element of the building such as a canopy or balcony, mounted perpendicularly to the face of the building.



The suspended signs under this storefront canopy are the same size and have similar colors and designs. The smaller text is scaled for pedestrians.

Window Signs are attached to the interior or exterior of the window or door glazing. The signs that are attached to the glazing are generally painted, vinyl appliqués or etched / stained glass. Window signs are generally a good choice for professional offices with multiple tenants that see most of their clients by appointment rather than rely on drop-in business.

To allow potential customers and patrons to see the merchandise being offered for sale by local businesses, the sign regulations also establish the maximum allowable area of the glass that can be covered by windows signs.



Window signs are often a good option for multi-tenant buildings, particularly for professional offices that see most of their clients by appointment rather than rely on drop-in business.

**Directory Signs** can be either freestanding or attached to a building and are often used for professional offices. They include information about several businesses on a single larger sign, with an identifying building address and/or building name. The individual nameplates on the sign should match each other in size, colors, letter size, case and styles.

### 123 SOUTH BROADWAY

REYNOLDS & REYNOLDS, PC

Law Offices

MCCANN AND ASSOCIATES

Architecture \* Planning \* Interior Design

THE HARRIS AGENCY

Accounting and Investment Services

DR. JAMES A. CONRAD, MD

Pediatric Medicine

Directory signs tend to be a good option for upper floor tenants of a building sharing a single entrance, particularly professional offices.



**Projecting Signs** are generally two-sided signs, suspended from an iron bracket or building element, mounted perpendicular to the face of the building.

Larger scale projecting signs that are mounted to the building at the top and bottom such as this example are sometimes referred to as blade signs.

**Awning Signs** are typically located on the awning fabric. In addition to identifying a business, awnings can protect merchandise from sun damage and reduce solar heat gain. Therefore, they are a good option for businesses that are orientated to the south or west. (Refer to *Page 6*.)

#### HISTORIC SIGNAGE

Historic signage is often an architectural feature that reflects the original owner and use of the building. Although abandoned signs from recent tenants must be removed immediately, (Refer to *Page 8*,) the HPC encourages historic signage to be retained. Retaining historic signage does not reduce the amount of allowable signage for an occupant.



Although historic signage is typically located near the top of a building, it can also be paving typically located at store entrance doors.

#### SIGN MATERIALS

Historically, signs were typically made of wood and either attached directly to the building or suspended from metal brackets or galleries attached to the building. As technology advanced and building styles changed, a wider range of materials were used. Each material was popular during particular time periods or with certain building styles, and might not be appropriate for all buildings.

Some materials that were used historically may no longer be practical for signage installations due to limited availability or expense. For example, durable redwood for exterior installations can be expensive; but alternatives are available. If a wood appearance is desired, available substitutes for redwood include Urethane board and Medium Density Overlay (MDO) board. Both materials can be painted, carved or routed similar to wood, but are not subject to warping in the same manner as lower grade woods or plywood.

In addition to materials that appear historic, the HPC welcomes innovative sign designs and alternate materials that are appropriate to the specific building's style and placement.

It is important to note that plastic, Plexiglas, or glossy coatings are not appropriate unless used in individual channel letter signs or routed signs. No other internally illuminated signage or box signs are permitted.

#### SIGN COLOR AND LEGIBILITY

The contrast between the logo or lettering and background color can greatly increase the overall legibility of the sign or awning. In many instances limiting the number of colors to those necessary to convey the information also increases the legibility.

Similar to selecting a color, when considering letter style for signs and awnings, business owners must balance the need to make them legible, convey the business identity or logo, and complement the historic character of the building and environment. Too much text or highly stylized type styles can overwhelm a viewer and make the message confusing or difficult to read.

In general, there are three styles of lettering available, serif, non-serif and script. Within each style are many typefaces to chose from, which can be varied by making them bold or italicized. Similar to materials, different styles of lettering were typically used for specific historic periods. Applicants are encouraged to utilize lettering styles and materials that complement their particular property and historic period.

#### **SIGN SIZE & SHAPE**

Paterson's sign regulations establish the maximum size and number of allowable signs; however the HPC determines the appropriateness of the size and placement relative to the building's design. In general, the HPC utilizes the following guidelines when reviewing the appropriateness of proposed sign's size:

- Signage should be compatible to scale of the building, adjacent buildings, the streetscape and adjacent signage
- Small scale signs are appropriate to smaller scale buildings, and professional offices while larger scaled signs are appropriate to vehicular traffic
- Small scale signs are appropriate for building with several signs and often can be grouped in a single directory sign for a unified appearance
- A well-designed smaller sign can have more of an impact than a larger signs, particularly in commercial corridors where the means of travel is by foot or slow moving vehicles
- A sign's shape can reflect the type of business at the location



Words are not always required to attract customers. This projecting ice cream shop sign, in the shape of a cone and suspended from a metal bracket, clearly conveys what is being offered and is visible from adjacent cross streets.



Signage that obstructs the view into stores is not permitted.



LED reader boards or changeable message signage is not permitted.



Exposed raceways for channel letter signage should be painted to match the adjacent wall surface.



Conduits should be concealed and not mounted to the face of the building. The number of lamps should be reduced to provide enough light for the signs to be read.

#### SIGNAGE GUIDE

#### THE HPC ENCOURAGES:

- Maintaining and repairing historic signage with materials to match the original whenever possible
- Innovative signage that identifies the business, complements the style of the building and is appropriately scaled for its location
- Using materials that are consistent with the character of the building
- Using modern durable materials such as Urethane board or MDO board that are similar in appearance to historic materials
- Using existing ambient street light or storefront lighting in lieu of sign lighting whenever possible
- Using light styles for signage that is consistent with the character of the historic building including location, orientation and brightness

#### THE HPC DISCOURAGES:

- **x** The use of fasteners and hangers for sign installation that destroy important building fabric
- **x** Obscuring distinctive architectural elements and features with signage
- × Paper signs or graphic films adhered to glazing
- Signage that obstructs views into the store through storefront windows and glazing
- **x** Internally illuminated box signs
- **x** Removal, damaging, alteration or encasing of historic architectural building features to allow for the installation of signage
- ★ Exposed conduit, junction boxes and raceways for channel letters or sign lighting
- **x** Temporary signs or banners for more than 90 days

#### SIGNAGE NOT PERMITTED:

- ★ Signs with flashing lights or changing messages including LED scrolling signs
- ★ Signs with exposed lighting including neon and incandescent bulbs
- x Paper or painted signage applied to a wall surfaces x Paper or painted signage applied to a wall surfaces x Paper or painted signage applied to a wall surfaces x Paper or painted signage applied to a wall surfaces x Paper or painted signage applied to a wall surfaces x Paper or painted signage applied to a wall surfaces x Paper or painted signage applied to a wall surfaces x Paper or painted signage applied to a wall surfaces x Paper or painted signage applied to a wall surfaces x Paper or painted signage applied to a wall surfaces x Paper or painted signage x Paper or paper or
- **★** Signs with moving components
- x Signs that cover any portion of a window, cornice, balcony, or other architectural feature
- Signs that project above the roof or building parapet including roof or wall-mounted billboards



The awning provides a unifying element along the storefront, visually connecting the two buildings that comprise this business. The name of the business can be found at each face of the awning. The color choice of the awning fabric also complements the storefront below.

#### **AWNINGS**

Awnings are a historically popular means of sheltering pedestrians, advertising a business and protecting window merchandise from sun damage. Several awnings along a streetscape can provide a sense of scale and separation of the storefront from the upper stories. Historically, awnings project at a continuous angle away from the face of the building on a metal frame, terminating at a skirt or valance. Awnings can include a business name and logo, subject to the provisions of the sign regulations.

In Paterson, awnings can also serve to cover pre-existing exterior roll-down security gates, however, all new security gate installations are required to be on the inside of the display windows.



Awnings can be used to conceal exterior security grates until they can be relocated inside of display windows.

#### **AWNING GUIDE**

#### THE HPC ENCOURAGES:

- Canvas-like fixed or retractable awnings, whose color, style and location are compatible with the building's historic character
- Awnings sloped away from the building in a continuous angle possibly with an 6 to 8 inch straight or scalloped valance, in compliance with Paterson's Sign Regulations Ordinance
- Locating awnings over windows and doors and between storefront bays
- Limiting lettering and logos to awning valances when installed in conjunction with a wall sign
- Installing awning hardware in a manner that minimizes damage to historic building materials
- Installing awnings to conceal exterior security grates

#### THE HPC DISCOURAGES:

- ★ Awning shapes known as balloon, waterfall or barrel awnings
- **x** The use of awning materials that act as wall signs
- **x** The use of fasteners and hangers that destroy important building fabric for awning installation
- × Pole supported awning canopies

#### THE HPC DOES NOT PERMIT:

- **x** Awnings that cover, alter or obscure architectural features
- **x** Awnings installed in locations where they are non-functional, such as under a gallery or overhang
- **x** Contemporary or glossy awning materials such as vinyl, plastics or leatherette
- × Internally illuminated awnings
- × Awnings with a solid or closed underside

#### STOREFRONT CANOPIES

Many stores at the northern end of Paterson's Downtown Commercial Historic District feature storefront canopies in lieu of awnings. These canopies are a simple shed structures supported by metal posts in concrete piers topped with corrugated metal roofing with acrylic panels to provide natural light. (Refer to photograph on *Page 2*.) They are typically located below storefront cornices, and can be used to hang suspended signage. Some of the important considerations related to the construction of new storefront canopies include:

- All new canopies are subject to compliance with the Uniform Construction Code and Zoning Ordinance requirements including location, height, and distance from the street;
- The location where the canopy intersects with the wall or window:
- They are typically covered by corrugated metal roofing and often include acrylic panels to provide natural light;
- The type, material and style of the supporting system should be consistent with the building's character and style; and
- Posts are typically evenly spaced across a façade with a supporting posts at both ends of a canopy

The HPC recommends maintaining existing canopies and checking the supporting systems periodically to ensure canopies are secure and the structure is safe.



Storefront canopies provide protection from the weather and direct sunlight.



Gooseneck lights illuminate this wall mounted sign.

#### **SIGN ILLUMINATION**

In many instances, available ambient street or storefront lighting can illuminate signs, which is preferred to the installation of additional lighting. The use and placement of sign illumination is limited by the Zoning Ordinance. Gooseneck lighting or other unobtrusive light fixture is often the most appropriate choice to illuminate wall signage.



Numerous holes have been drilled into the face of this granite pier and several previous fasteners remain.

#### **MOUNTING SIGNS & AWNINGS**

Care should be taken in mounting walls signs and awnings to minimize the damage to historic materials. This includes reusing hardware or brackets from previous signs or awnings, or attaching them at previous attachment locations. If reusing existing hardware or attachment locations is not an option, remove abandoned hardware and patch holes. When installing new signage or awnings, select mounting locations that can be easily patched if the sign or awning is relocated or removed. An example would be to locate anchors in mortar joints rather than mounting directly into brick or stone faces.

When installing signage, such as wall mounted signs, business owners are encouraged to recess fasteners and patch the fastener opening to match the sign background for a more finished appearance, unless the fasteners are part of the overall design.



The former business owners mounted their signs below the historic sign band, leaving it visible and undamaged. However, it is the responsibility of the sign owner or lessee, or the property owner to remove all signage identifying or advertising a business or any product offered for sale within 60 days of the business ceasing operation.

# SUBMISSION REQUIREMENTS FOR SIGNS & AWNINGS

Property and Applicant Information application forms for sign and awning review are available at the HPC office or on their website at www.patersonnj.gov. It is often helpful to work with the company manufacturing the sign to complete the application and assemble the required submission materials. With the completed application, applicants for sign and awning review will be required to provide the following information:

- A description of the size, shape, total square footage, colors and any lighting for the proposed sign – Should be submitted as a scaled sketch labeled with dimensions
- Accurate information regarding the location of the sign in relation to the building – Can be submitted as a marked-up photograph indicating the location of the proposed sign or awning
- Freestanding signs must include a scaled site plan showing the location of the sign, locations of adjoining buildings, walkways, driveways and roadways
- Attachment details
- Proposed lighting
- Photographs of the building from different angles
- Drawings of any proposed logos or other graphic designs
- Material samples for awning signs
- The proposed font to be used for lettering
- Color and texture samples

#### **UNSAFE SIGNAGE**

If the Division of Community Improvements determines a sign has become unsafe and represents a potential hazard, they will provide written notice requiring that the sign be made safe within 30 days. If the sign is altered or modified in any way that results in a visible change, the modification is subject to HPC review. (Refer to *Paterson's Permitted Signage*, *Page 2.*)



The research undertaken in support of this document, and the production of the document itself, have been funded by a historic site management grant from the Garden State Historic Preservation Trust Fund administered by the New Jersey Historic Trust.

#### **PREPARATION**

All components of the City of Paterson Downtown Commercial Historic District Design Guidelines including all text, graphic design, photography and illustrations unless noted otherwise were prepared by:

#### Preservation Design Partnership, LLC

Philadelphia, Pennsylvania; www.pdparchitects.com Principal-in-Charge: Dominique M. Hawkins, AIA Research Assistant: Kimberly M. Bahnsen



## **CITY OF PATERSON**

## Downtown Commercial Historic District

**Design Guidelines** 

## ARCHITECTURAL METALS



Decorative architectural metals are found on many buildings in Paterson's Downtown Commercial Historic District. This sheet metal cornice includes very deep and highly ornate brackets, helps to define its architectural style and period of construction and is a character defining feature of the building.

#### **PURPOSE OF GUIDELINES**

- Encourage retention and maintenance of historic architectural metals, typically located at upper floors of buildings in the Downtown Commercial Historic District (DCHD)
- Encourage regular safety reviews of architectural metal elements, particularly fire escapes and railings
- Provide design assistance in identifying options for new architectural metals that are historically compatible and visually minimal where appropriate

These *Guidelines* were developed in conjunction with the City of Paterson's Historic Preservation Commission (HPC) and with input of many diverse stakeholders. Please review this information during the early stages of planning your project. Familiarity with this material can assist you in moving a project quickly through the approval process, saving you both time and money. The HPC staff is available for informal meetings and to provide you with valuable information as you consider making improvements to your property.

Additional *Guidelines* addressing other historic building topics are available at 125 Ellison Street, Suite 408 and on the City's website at www.patersonnj.gov. For more information, to clarify whether your project requires HPC review, or to obtain permit applications, please call the HPC Staff at (973) 321-1355.

#### ARCHITECTURAL METALS

Architectural metals can be found throughout the Downtown Commercial Historic District (DCHD), used for both decorative and functional purposes. Metal can be made into a variety of forms and shapes, including sheets, bars and cast elements. Various components can then be joined together to make elements that are used in building construction. Examples of architectural metals in Paterson's DCHD include:

- Water towers
- Cornices and parapets
- Fire escapes
- · Projecting bay and oriel windows
- Railings
- Window spandrel panels
- Window security grilles
- Posts, columns and pilasters
- Storefronts

There are several types of metals used in the fabrication of these features, typically associated with the function as well as the architectural style. Sheet metal materials, which include copper, tin,zinc and aluminum.

Rigid metal is typically used for structural elements, but in many cases it can include decorative patterning or texture. Historically, rigid metal elements were made from cast or wrought iron, bronze, brass or steel.

#### TYPES OF METAL

There are several different types of metals found at the exterior of historic buildings. Depending on the composition of the metal, the maintenance and care requirements will vary.

- Iron based metals, which include steel, wrought iron
  and cast iron, are all very strong in compression,
  however they are prone to rusting. To minimize
  the potential for rusting, it is important to keep the
  surfaces of iron based metals painted regularly.
- **Tin** is a white, corrosion-resistant material, which is often used as a coating for sheet steel or iron on buildings, typically at roofs, cornices and parapets. Similar to iron based metals, tinned metals (or tinplate) are often painted to improve its lifespan, or at cornices and parapets, for decorative purposes.
- Copper starts as a bright reddish brown color, which
  changes to brown, then black, and eventually green.
   Copper tends to be used as a sheet metal. Because it is
  a relatively soft metal, harsh cleaning can damage the
  surface.
- Brass or Bronze are copper mixed with other metals including zinc, lead and tin. Depending on the metals included, the color can range from golden yellow, to dark brown, to green. Brass and bronze are typically used in casting architectural elements such as window spandrels and monumental doors.



The three cast bronze spandrel panels have a cast swag pattern and separate the arched window from the doors below.



This wrought iron balcony railing is highly decorative and a character defining feature of the building.

#### **METAL REPAIR**

Repair options for deteriorated metal features dependeds on the following issues:

- The type metal
- The type of deterioration
- The extent of deterioration
- Whether the feature is decorative, or serves a structural or life-safety role such as a column, balcony railing or a fire escape

If an feature is not structural, it might be possible to patch or fill the area of deterioration. If it is structural, replacing the deteriorated portion with a splice might be required. It is important to ensure that the resulting repair and the overall feature is strong enough to safely serve its original purpose. If enough of the feature has failed or is no longer able to safely fulfill its structural role, replacement of the element might be required.

#### WROUGHT IRON VS. CAST IRON

Wrought iron, is hand made by heating, beating and stretching iron into decorative hardware and ironwork, and was common into the early 19th century. Cast iron, formed by casting iron in foundry molds, was popularized in the mid 19th century. Casting allowed the fabrication of more elaborate and larger elements such as columns, and produced standardized decorative components like scrollwork and filigree. Components could be ordered from a catalogue, and for larger and more complex installations, individual pieces were often fastened together.

The use of wrought or cast iron details including handrails, cornice components, columns, brackets, balusters, spandrel panels, etc. is typically associated with specific architectural styles and periods.



Surface rusting is visible at the iron based metal railing at this balcony. Scraping and repainting is often all that is required at the earliest signs of surface rusting.

#### **RUST**

Iron based metals that have not been treated or coated will rust over time with exposure to moisture and the atmosphere. This is true of steel, wrought iron and cast iron. (Stainless steel, which is not a common building material, is an exception.) As metal rusts, it can expand in size as much as seven times its original thickness. In addition, it looses strength reducing its structural capacity. This can become a serious problem, particularly of the element is supporting a portion of a building, such as a column, or is meant to support or protect people, such as the case of a fire escape or railing.

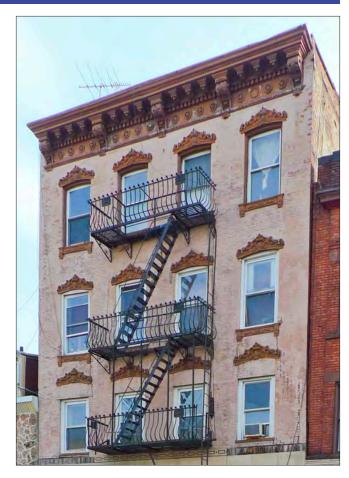
One of the best ways to protect iron based metals from rusting is to provide a protective coating in the form of paint. Before applying paint to any metal surface it is important to make sure that it is clean and that all rust has been removed. If the rust is not too severe, hand scraping and a wire brush is generally all that is required to remove the rust. Since new rust will form quickly on a metal surface, it should be cleaned right away and painted with a rust-inhibiting primer to prevent new corrosion. Regular repainting with proper preparation will increase the lifespan of iron based metals.

#### **METALS IN MASONRY**

Some metal features, such as fire escapes and handrails, are imbedded into masonry. If these elements are iron based, they can rust if exposed to moisture within the wall. This often occurs when there are open mortar joints in the masonry, or a deteriorated roofing system that allows the wall to become saturated.

With the expansion of the metal from the rust, the masonry wall can be damaged, with potential problems including cracking, opening of joints, and possibly dislodged or displaced bricks or stones. If damage is visible, consultation with a professional architect or engineer is highly recommended. For additional information, please refer to:

- Guidelines for Masonry, Stucco & Concrete
- Guidelines for Roofing



The fire escape includes decorative wrought iron balconies. Also note the decorative metal cornice.

#### FIRE ESCAPES

A fire escape is a combination of platforms, ladders and stairs located on the exterior of a building to provide an exit for occupants in the event of an emergency, such as a fire. Fire escapes are typically made from iron-based metals and are mounted into masonry walls, with their supports imbedded in the wall structure. Although fire escapes serve a functional purpose, historic examples can be decorative, with designed elements typically found on the balcony railings.

Since fire escapes are made from iron-based metals, they have the potential to rust if left unpainted. In addition, since their support depends on the structural capacity of the masonry wall to which it is attached, the condition of the masonry, and specifically the components of the fire escape that are embedded into the masonry, are critical in determining whether the fire escape will able to hold the weight required if occupants are required to use it in the event of an emergency. Therefore, for the safety of occupants, it is critical to maintain both the metal fire escape as well as the supporting masonry wall. (Refer to *Metals in Masonry* on this page.)

#### **SHEET METALS**

Sheet metals are formed by rolling or casting different types of metals into thin sheets. These thin sheets can then be formed and bent into varying shapes, and embossed or pressed with to add a decorative pattern. Because sheet metal can be attached together by welding or with fasteners, the uses, potential size and level of detail was often limited to the architect's or designer's imagination. As described in the *Guidelines for Roofing*, sheet metal was also historically used to protect joints in roofing or between dissimilar materials from water infiltration, and if installed properly, could provide a watertight surface.

In Paterson's DCHD, sheet metal is often found at building parapets and cornices as well as a facing material for projecting bays and oriel windows. (Refer to *Guidelines for Roofing*.) In these locations, the sheet metal provides a weather resistant enclosure and as a decorative element, often serving both roles in a single architectural feature. Since it is used as a decorative character defining element, it is typically part of the larger architectural design of a building and should be preserved.

# ARCHITECTURAL METAL GUIDE THE HPC ENCOURAGES

- Maintaining existing architectural metal features rather than replacement
- Regular repainting of cast iron, wrought iron, steel and tin to prevent rusting
- Cleaning of architectural metals using the gentlest means possible
- Replacing only deteriorated components of architectural metal features, retaining serviceable decorative metal elements
- Matching the original material, size, shape, profiles, configuration, type, materials, and detailing to the greatest extent possible with a salvaged or new replacement architectural metal features

#### THE HPC DISCOURAGES:

- ★ Replacing an architectural metal feature if repair and maintenance will improve its performance and preserve historic elements
- Removing, modifying or covering historic architectural metal elements especially metal cornices
- ★ Installing new metal features at publicly visible elevations where they were not located historically
- Installing fire escapes on street facing elevations of buildings



This projecting, two-story oriel window is clad in copper sheet metal. The top of the oriel window includes a projecting bracketed cornice. Decorative spandrel panels are located beneath each of the windows. The copper cladding serves as a decorative element as well as a weather resistant finish.



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## **CITY OF PATERSON**

Downtown Commercial Historic District

**Design Guidelines** 

# NEW CONSTRUCTION & ADDITIONS



New construction should be compatible to surrounding buildings.

#### **PURPOSE**

These *Guidelines* were prepared to assist property owners with information when considering the construction of a new building or an addition to an existing building in the Paterson's Downtown Commercial Historic District (DCHD.) They are not intended to replace consultation with qualified architects, contractors, the Historic Preservation Commission (HPC) and their Staff. The HPC Staff is readily available for an informal review and consultation of plans and ideas for new projects free of charge.

These *Guidelines* were developed in conjunction with the City of Paterson's Historic Preservation Commission (HPC) and with input of many diverse stakeholders. Please review this information during the early stages of planning your project. Familiarity with this material can assist you in moving a project quickly through the approval process, saving you both time and money. The HPC staff is available for informal meetings and to provide you with valuable information as you consider making improvements to your property.

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## NEW CONSTRUCTION & ADDITIONS WITHIN A HISTORIC CONTEXT

New construction is a sign of the economic health and vitality of the city and it can take many forms including:

- New primary buildings along a street
- Additions to existing buildings

Before starting a new construction or addition project, the HPC encourages property owners to develop an appreciation of the unique architectural character of the DCHD and its neighborhoods and allow that understanding to inform their design. The HPC does not require that historic buildings be "copied" in new projects, but encourages that new construction be of high-quality design and sympathetic to its distinctive surroundings.

#### **REVIEWS BY OTHER CITY AGENCIES**

Property Use: The Historic Preservation Commission (HPC) does not regulate the use of a property. It does, however, have jurisdiction to review applications within the DCHD made to the Land Use boards and provide opinions and recommendations about proposed use and other changes. All proposals for work on a property under the jurisdiction of the HPC must also conform to the City of Paterson's Zoning Ordinance and all other applicable building codes. Applications for variances or special permits should be made to the Zoning Board of Adjustment concurrently with an HPC application to reduce review and processing time. Please contact the HPC regarding concurrent reviews.

Concurrent Reviews: The HPC works with various branches of city government to coordinate approvals involving use, zoning, design, and other regulated items. The HPC provide recommendations to other reviewing bodies including the Construction Official, Planning Board, and Zoning Board of Adjusment. Inter-departmental meetings can be arranged on an as-needed basis through the HPC. Any HPC approved project must be presented to the Division of Community Improvements for building permit exact as it was approved, or additional review by the HPC may be required.

### **COMPATIBLE DESIGN PRINCIPLES**

The development Paterson's DCHD followed its own pattern and rhythm after the Great Fire of 1902 that largely consumed the area. The culture of the city's early businesses is expressed through its architectural and built environment. To continue the evolution of the built environment, the HPC encourages creative solutions that reflect current design and are sensitive to the character of their historic surroundings.

Each of the significant and contributing buildings in the historic district has its own unique characteristics. The specific styles and types of compatible new construction or additions will vary at each site depending on its specific context. Recognizing that what might be appropriate at one property is not appropriate at another, no specific design "solutions" for new construction or additions are mandated. However, in making determinations regarding the appropriateness of new construction or additions, the HPC is guided by *The Secretary of the Interior's Standards for Rehabilitation* and general design principles when reviewing the compatibility of a proposal within the property's specific context.

- **Significant** A building that is of national importance or major state, regional or local significance
- **Contributing** A building that is determined to contribute to a historic district based on its historical, cultural, or architectural significance
- Non-Contributing A building that is determined not to contribute to a historic district as it no longer posses historic integrity due to alterations, additions, and other criteria

#### **DEVELOPABLE PROPERTIES**

When reviewing applications for new construction within the bounds of the historic district, the HPC understands that there are two types of parcels that may be available for development, those that are vacant and potentially those that have noncontributing buildings and structures. Contact the HPC Staff at (973) 321-1355 to determine if a parcel has a non-contributing resource and is potentially developable.

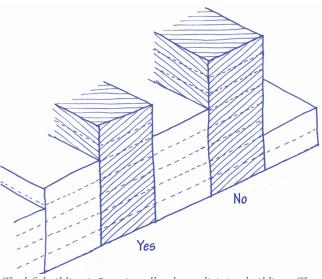
DESIGN PRINCIPLES	ADDITIONS & NEW CONSTRUCTION
Scale: Height and Width	Proportions and size of the addition/new building compared with existing building/neighboring buildings
Building Form and Massing	Three-dimensional relationship and configuration of the addition/new building footprint, its walls and roof compared with existing building/neighboring buildings
Setback: Yards (Front, Side and Rear)	Distance of the addition/new building to the street and property lines when compared with the existing building or other buildings on block
Site Coverage	Percentage of the site that is covered by addition/new building, compared to similar nearby sites
Orientation	The location of the front of the new building/addition and principal entrance relative to other buildings on the block
Architectural Elements and Projections	The size, shape, proportions and location of doors, porches, balconies, chimneys, dormers, parapets and elements that contribute to an overall building's shape and silhouette relative to neighboring buildings
Alignment, Rhythm and Spacing	The effect the addition/new building will have on the existing street patterns
Façade Proportions: Window and Door Patterns	The relationship of the size, shape and location of the addition/new building façade and building elements to each other, as well as to other buildings on the block
Trim and Detail	The moldings, decorative elements and features of a building that are secondary to major surfaces such as walls and roofs and how they relate to the existing and neighboring buildings
Materials	The products with which an addition or new building is composed or constructed and how these relate to existing and neighboring buildings

## PRINCIPLES FOR NEW CONSTRUCTION & ADDITIONS

#### Scale: Height and Width

The proportions of a new building or addition and its relationship to neighboring buildings establish its compatibility within a neighborhood or block. The height-width ratio is a relationship between the height and width of a street façade and should be similar in proportion to neighboring buildings. New construction should neither be visually overwhelming or underwhelming when compared to its neighbors. Additions should be less prominent than historic buildings.

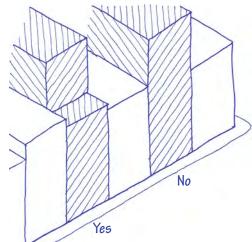
In blocks where 4- and 6-story buildings or 2- to 3-story buildings are the norm, buildings that are different from these standards by any great degree can negatively impact a neighborhood. If large-scale construction is considered, particular attention will be given to the location, siting, setbacks of the building and its upper stories, façade treatments (materials, window and door openings, etc.) and the effect of the proposed building on the streetscape and neighborhood as a whole.



The left building is 2 stories taller than adjoining buildings. The right building is 3 and 6 stories taller than adjacent buildings and not appropriate.

#### It is Generally Appropriate to...

- Construct a new building that is similar in height and width to buildings on adjacent sites
- Construct an addition that is smaller than the existing building
- Construct a new larger building than adjacent buildings by breaking the building mass, dividing its height or width to conform with adjacent buildings
- Construct taller portions of the buildings away from the street



It some
circumstances
it might be
preferable
to have a
building setback above
adjacent
cornice heights.
This minimizes
the apparent
height of
the new
construction to
pedestrians.

#### **Building Form and Massing**

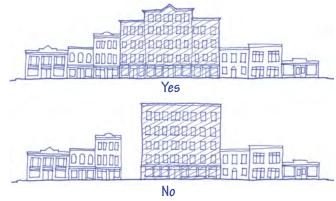
Building form refers to the shape of major volumes while massing refers to the overall composition of the major volumes, its overall "bulk" and how it sits on the site. Elements that are typically used to define building form and massing include the roof form, as well as wings, ells and other projecting elements, such as bays and balconies. New buildings with similar form and massing to adjacent construction will allow the new building to be compatible with the surrounding neighborhood.

It is Generally Appropriate to...

- Construct a new building or addition with similar form and massing to buildings on adjacent sites
- Construct roof forms, wings, ells and bays and other projecting elements that are similar to those found on the block of the proposed building
- Match adjacent cornice heights

#### It is Generally Inappropriate to...

• Construct a new building whose form and massing are not found in the immediate vicinity of the project site



The central building in each case is 5-stories tall. In the top example, it abuts adjoining walls and steps up in the center. The new 5-story building in the lower example is a single volume and appears more massive.

#### Setback

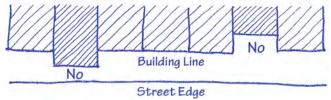
New construction and additions should reflect prevailing setbacks (distances between the building and the property line, adjacent buildings, street and/or sidewalk) which are determined by zoning requirements. Physical elements that define historic properties and buildings create visual continuity and cohesiveness along a streetscape. These elements typically include building façades, walls, and fences. A consistent setback maintains the visual rhythm of the buildings and site elements in the neighborhood and makes new construction more compatible in its setting.

It is Generally Appropriate to...

- Keep the visual mass of the building at or near the same setback as buildings on adjacent sites
- Keep landscape elements, such as walls and fences at similar setbacks as adjacent buildings

It is Generally Inappropriate to...

- Construct a new building in a location on a site that greatly varies from buildings on adjacent sites
- Create large front yard setbacks to allow for parking in front of a building



New construction should not step forward from or recede back from adjacent buildings on the streetscape.

#### Site Coverage

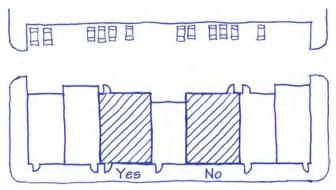
The percentage of a lot that is covered by buildings should be similar to adjacent lots. Although zoning regulates the maximum allowable coverage area and minimum setbacks, the overall building-to-lot area should be consistent along a streetscape. If parcels are combined for a larger development, the site coverage proportions should be minimized by breaking large building masses into smaller elements to be more compatible with adjacent buildings.

It is Generally Appropriate to...

- Maintain the building-to-lot proportions found on adjacent lots
- Adjust the massing to suggest building-to-lot proportions found on adjacent sites
- Screening parking, mechanical equipment and garbage collection from public view with walls or fencing

It is Generally Inappropriate to...

 Construct a building that does not maintain or suggest similar building-to-lot proportions as on adjacent sites



Commercial buildings should retain a street entrance. A secondary entrance facing a parking area can also be added.

#### Orientation

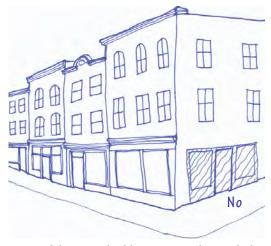
The principal façade of new construction should be oriented in the same direction as the majority of the buildings on the streetscape, with main entrances located on the principal façade. In the case of new construction on a corner site, the front façade should generally face the same direction as the existing buildings on the street and follow the rhythm of the streetscape. (Refer to Paterson's Zoning Ordinance for specific site orientation requirements.)

It is Generally Appropriate to...

• Orient the primary façade and principal door parallel with the street

It is Generally Inappropriate to...

• Orient the primary façade or principal elevation of a building on secondary street elevation



The entrance of the corner building is oriented towards the perpendicular street and is inappropriate.

#### **VARIANCES**

When appropriate, the HPC will work with the applicant and the Zoning Board of Adjustment if a variance is required for a new building to have a similar setback to the buildings on adjacent site.

#### **Architectural Elements and Projections**

Throughout Paterson's neighborhoods, the rhythm of the streetscapes is highlighted by the projection of bays and balconies to relieve otherwise flat façades. At the roofline, projecting chimneys, dormers and parapets contribute to a building's overall shape and silhouette. The choice, size, location and arrangement of elements of a proposed building should reflect those of surrounding buildings.

#### It is Generally Appropriate to...

- Construct a building with an architectural element or projection designed and detailed similarly to those found at neighboring buildings
- Design an architectural element with simplified detailing that is similar to architectural elements at comparable buildings within the local Historic District or setting

#### It is Generally Inappropriate to...

- Construct a new "historicized" architectural element on a building that historically would not have included one
- Construct a bay, balcony, parapet or dormer at a building type or style which typically would not have included one or in a configuration or location where they are not appropriate for the building type



The rhythm, spacing and proportions of the building to the right are more consistent with the streetscape than the left building.

#### Alignment, Rhythm and Spacing

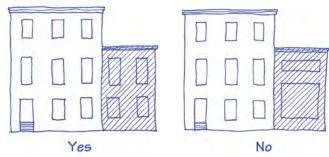
Although the architecture of Paterson is characterized by great variety of building types and styles, within each block there tends to be consistency in façade proportions and the space between buildings. The consistent spacing establishes a rhythm which should be applied to new construction. This rhythm and spacing not only refers to the building, but also the projections along the streetscape.

#### It is Generally Appropriate to...

- Align the façade of a new building or addition with the façades of existing adjacent buildings
- Align parapets, roof and storefront cornices with those found on existing adjacent buildings
- Construct new buildings that have similar widths relative to other neighboring buildings on the street
- Construct new larger buildings than those on adjacent sites, if the larger building is visually divided to suggest smaller building masses

#### It is Generally Inappropriate to...

- Place the primary façade of a building out of alignment with existing buildings on adjacent sites
- Add a building to a site that does not maintain or suggest the spacing of buildings on adjacent sites
- Construct an addition that is larger that the historic building



The proportion of the windows at the left addition are more consistent with the building than those at the right addition.

#### Façade Proportions; Window and Door Patterns

The rhythm and pattern of principal façades of new construction or additions that should reflect and maintain neighborhood patterns. Across the width if a façade, rhythm and patterns typically include the number of bays and the location and spacing between doors, windows, shutters and blinds.

There are also vertical components of rhythm and pattern. These include to the distance of the first floor or porch above ground level, building floor-to-floor heights, cornice heights, and the distance between rows of windows. In some instances, where the proposed use and scale of a new building prevents maintaining rhythms and patterns, the property owner is encouraged to incorporate detailing to suggest them such as pilasters that give the impression of bays or multiple buildings.

#### It is Generally Appropriate to...

- Construct a new building or addition whose façade height and width proportions are similar to existing adjacent buildings
- Use similar proportions, sizes, locations and numbers of windows and doors as adjacent sites
- Install stylistically compatible windows and doors at new construction with those found on existing neighboring buildings

#### It is Generally Inappropriate to...

- Construct a building that does not maintain the proportions and patterns of windows and doors as adjacent sites
- Install window or door types that are incompatible with the surrounding local Historic District or setting



The majority of buildings in the DCHD are masonry, combining brick and stone, and many have highly ornate details, particularly at the cornice.

#### Trim and Details

Trim and details include the moldings, decorative elements and features of a building that are secondary to major building components such as walls and roofs. Historically, trim and details were often installed to serve functional needs. Over time, they were later modified to enhance a building's type and style. Trim is not only decorative, but often serves to infill or provide a transition between different materials or building elements such as walls and windows.

Functional and decorative detail elements include cornices, lintels, arches, balustrades, chimneys, columns, posts and other common architectural features. The exterior details and forms of new construction or additions should provide a visual link to neighboring historic buildings. In the same way that new buildings should be compatible but not necessarily copy historic buildings, new details should be compatible but not necessarily copy historic trim and details.

The trim and details of new construction or additions should be used to accomplish purposes similar to those used historically, both functionally and decoratively. When installed, trim and details should create a unifying effect on a building and should be compatible with the context of the neighborhood.

It is Generally Appropriate to...

- Construct a new building or addition with details and trim that complements historic neighboring trim and details
- Install trim and details appropriately scaled to the building type and style
- Install detail that is functional with a high level of craftsmanship rather than simply applied decoration

It is Generally Inappropriate to...

- Copy historic trim and details exactly unless duplicating a historic building
- Apply details and trim that are stylistically incompatible with the new building

#### Materials

The materials used in the construction of a new building or addition for walls, sloped roofs, windows, doors, trim, balconies and other exterior visible elements contribute to a building's character and appearance. Typically, materials for new construction should match or be compatible and similar to those predominantly found on surrounding buildings. However, materials need not be identical to those found in a local historic district if they are complementary, particularly along streets where existing buildings are of diverse materials.

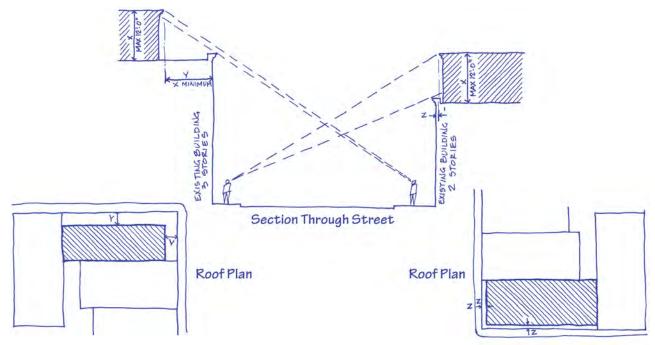
Inappropriate materials include those which unsuccessfully pretend to be something they are not, such as plastic or veneer "bricks" and aluminum or vinyl instead of wood. All are imitations which fail to produce the texture, proportions and colors of the real materials. It is important to note that the size, texture, color and other characteristics of exterior materials can be as important as the material itself.

It is Generally Appropriate to...

 Use exterior materials that are present in adjacent neighboring historic buildings in new construction or additions

It is Generally Inappropriate to...

- Install a material where it is historically and stylistically incompatible
- Install building materials that do not exist in the surrounding area



Rooftop additions must be set back from the street walls of the existing building by a minimum of the proposed height of the addition, (i.e. 12'-0" high rooftop addition must be set back from the street wall a minimum of 12'-0".) The HPC discourages rooftop additions on buildings less than 3 full stories in height, since their visibility from the street tends to be much greater.

#### **ROOFTOP ADDITIONS**

Since many buildings in Paterson were historically built at or close to their property lines, it is often not possible to expand a building's footprint. Rooftop additions are often proposed as a way to increase the square footage and floor area of existing buildings. This method of adding space to buildings is generally more appropriate at flat or low-sloped commercial and warehouse buildings.

The HPC believes it is important that the historic integrity of these structures and areas be maintained. It is also important that additions, when appropriate and permitted, contribute to the character of the area and respect the design and context of the building and its streetscape. When reviewing rooftop additions, the HPC considers all applications on a case by case basis. An approved rooftop addition at one location should not be considered as a precedent or be construed to mean that new proposals will automatically be approved. Factors considered by the HPC in its review include:

- The significance of the building or site;
- The location of the building and site;
- The height of the existing building, the proposed addition and surrounding buildings;
- The visibility of the proposed addition; and
- The architectural treatment of the proposed addition and its compatibility with the existing building— It should not be obtrusive or detract from the architecture of the existing building or the surrounding buildings.

## DESIGN STANDARDS FOR ROOFTOP ADDITIONS

If allowable by the Zoning Ordinance and appropriate at the specific site, the HPC uses specific design standards to review proposals for rooftop additions. When reviewing rooftop additions the HPC:

- Strives to make all rooftop additions, elevator and mechanical equipment, and furnishings as unobtrusive or minimally visible from the public way as possible
- Limits the overall height of rooftop additions, including framing and parapet, to 12'-0" above the lowest surface of the existing roof, except for coderequired components, such as elevator overrides
- Requires that rooftop additions be set back from the street façades of the building by a minimum of the overall height of the proposed addition, (i.e. a 12'-0" high rooftop addition should be set back from the street wall a minimum of 12'-0")
- Requires that rooftop additions incorporate elevator equipment, mechanical equipment and HVAC equipment within the single story, allowable rooftop addition footprint
- Requires that all furnishings including railings, screens, planters, plants and permanent rooftop furnishings taller than the closest parapet be setback from the street wall(s) a minimum of the height of the proposed furnishing from the lowest roof surface

# NEW CONSTRUCTION & ADDITIONS

If considering the construction of a new building or an addition within the Downtown Commercial Historic District, the HPC encourages consultation with the HPC Staff as early in the process as possible. The HPC Staff can assist with working with other city departments as well clarify questions related to appropriate design and materials issues, potentially saving applicants both time and money.

### THE HPC REQUIRES:

- The preservation of the cohesive ambiance of the local historic district through compatible, sympathetic construction
- Compatible siting, proportion, scale, form, materials, fenestration, roof configuration, details and finishes
- Maintaining the appropriate historic contextual setting within the surrounding neighborhood
- Use of materials and techniques that are compatible with the surrounding neighborhood
- Construction of additions at secondary elevations wherever possible, subordinate to the historic building, and compatible with the design of the property and surrounding neighborhood
- Construction of additions so that historic building fabric is not radically changed, obscured, damaged or destroyed

#### THE HPC ENCOURAGES:

- Consultation with the HPC Staff early in the planning stages of a new construction project
- Review of related sections of the *Design Guidelines* to better understand the historic context and appropriate design and materials issues relevant to the project
- Identification, retention and preservation of all character defining features of the historic site
- Minimal alteration to the original design, materials and features
- New design elements and scale that are compatible with the historic building and setting
- Use of materials and techniques that are compatible to the historic building and setting
- Maintaining the appropriate historic contextual setting

#### **ROOFTOP ADDITIONS**

In limited circumstances the HPC will consider proposals for rooftop additions that do not conform to these *Guidelines* at contributing and noncontributing buildings; however excellence in design and the architectural character of the existing building will be strong factors in the review.

### THE HPC REQUIRES:

Rooftop additions to comply with the Paterson Zoning Code, and shall not require the granting of a variance for height limits or floor area ratios

### THE HPC DISCOURAGES:

- × Rooftop additions on Contributing buildings
- ★ Rooftop additions on buildings of less than 3 full stories in height

#### THE HPC DOES NOT APPROVE:

- Rooftop additions on buildings originally constructed as residential buildings
- × Rooftop additions on Significant buildings
- **x** Rooftop additions on a roof with a pitch greater than 3" vertically in 12" horizontally and an existing parapet less than 18" in height
- x Roof additions greater than 1-story and 12'-0" in height with roof forms other than flat roofs



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#### **PREPARATION**

All components of the City of Paterson Downtown Commercial Historic District Design Guidelines including all text, graphic design, photography and illustrations unless noted otherwise were prepared by:

#### Preservation Design Partnership, LLC

Philadelphia, Pennsylvania; www.pdparchitects.com Principal-in-Charge: Dominique M. Hawkins, AIA Research Assistant: Kimberly M. Bahnsen



### CITY OF PATERSON

### Downtown Commercial Historic District

### **DESIGN GUIDELINES**

### **GLOSSARY**

**Adaptive Reuse** - Any act or process that converts a structure to a use other than that for which it was designed.

**Addition or Enlargement** - Any construction that increases the size of a structure in terms of site coverage, height or building size (depth or width or floor area).

**Administrative Officer** - The Historic Preservation Professional (HPP) is the administrative officer, and is appointed as per the provisions of Paterson's Land Use Ordinance. In the event that the Historic Preservation Professional is vacant, the City's Principal Planner serves as the Administrative Officer.

**Alteration** - Any act or process that in any way effects a change in the design or outer appearance of a building, structure, object or site, or any part thereof. Painting and window replacements are examples of alterations, as is the removal or addition of any materials.

**Application** - An application form and all accompanying documents submitted for approval of a permit for alteration, repair, reconstruction, demolition or relocation of a designated historic site, building, structure or object, or improvement within a designated historic district or review of a development application concerning same.

**Architectural Feature** - Architectural style, design, general arrangement and components of all the parts and surfaces, including but not limited to the kind, texture and color of the building material, and the type and style of all windows, doors, lights, signs, cornices, ornaments, brackets, parapets, roofs, foundations, cladding, framing and other features appurtenant to the building, structure, object or improvement.

**Architectural Survey** - A complete document of such similar title and intent that is executed, compiled, drafted by qualified historic preservation professionals and / or New Jersey licensed planning or building professionals in a methodology and format accepted and derived by the State of New Jersey Historic Preservation Office.

**Architecturally Worthy** - An architectural design which represents either a significant aspect of the history of the City, architectural history in general or a significant design of an architect of historical importance.

**Awning** - A roof-like cover designed and intended for protection from weather or as a decorative embellishment that projects from a wall of a building over a walk, window, door or the like. Awnings are entirely supported from the building and constructed and erected in a manner that readily permits removal.

**Baluster** - A shaftlike element used to support a handrail.

**Balustrade** - A railing (such as a porch or balcony railing) made up of rails, balusters, and posts.

 $\boldsymbol{Bays}$  - Repetitive divisions into which a building is divided.

**Blistering** - Air bubbles under paint or other coating.

**Bracket** - A support element under eaves, balconies, or other overhangs. Frequently used as ornamentation rather than for structural support.

**Brick Masonry** - Construction technique using bricks held together by mortar.

**Brick Veneer** - A wall of non-structural, thin, brick covering an inner wall such as a wood frame.

**Brown Coat** - A roughly finished, leveling coat of stucco either the second coat in three-coat plaster or the base coat in two-coat stucco, applied over lath or masonry.

**Buffer Area** - A transitional area between two areas of land use; more specifically, an area immediately outside of the formal borders of historic district boundaries that may be reviewed to soften transitional appearance moving from a historic preservation regulated area to a non regulated area.

**Casement Window** - A window that is hinged on one side.

**Casing** - An enclosing frame around a door or window opening.

**Caulk** - Flexible sealant material used to close joints between materials; made of various materials including tar, oakum, lead, putty, and modern elastomerics such as silicone and polyurethane.

Certificate of Appropriateness (COA) - A document attesting that proposed work within a historic district or affecting a landmark building, structure, object, site or landscape feature has been reviewed and deemed appropriate and consistent with the purpose of Historic Preservation Review Ordinance by the City of Paterson Historic Preservation Commission or the Historic Preservation Professional.

**Certificate of No Effect** - A document attesting that proposed work within a historic district or affecting a historic site has been reviewed by the HPP and has been deemed not detrimental to the historic district or historic property on which work is to be done or neighboring properties.

**Character Defining Feature** - A prominent or distinctive aspect, quality, or characteristic of a historic property that contributes significantly to its physical character or style.

**Cladding** - The exterior, non-structural finish material of a building, such as siding.

**Column** - A round vertical support normally consisting of a base, a round shaft and a capital.

**Commission** - The City of Paterson Historic Preservation Commission.

**Conditional Use** - A use permitted in a particular zoning district only upon showing that such use in a specified location will comply with the conditions and standards for the location or operation of such use as contained in the Paterson Land Use ordinance, and upon issuance of an authorization therefore by the Paterson Planning Board. Conditional uses require site plan review and approval by the Planning Board.

**Common Bond** - A brickwork bond having a course of headers between every five or six courses of stretchers.

**Context** - The buildings, structures, landscape elements and features immediately surrounding a historic resource.

**Contributing** - A building that is determined to contribute to a historic district based on its historical, cultural, or architectural significance.

**Coping** - A water resistant covering at the top of a wall, common materials include stone, terra cotta and metal.

**Cornices** - Projecting horizontal elements and moldings towards the top of the building wall. Cornices vary in scale, size, design and materials, and are important defining architectural features.

**Demolition** - The dismantling or razing of all or part of any historic site or landscape feature or of any improvement in a historic district.

**Design Guidelines** - Locally-developed criteria which assists property owners, developers, architects, and others in making decisions about the appropriate treatment of historic resources (i.e. buildings, structures, etc.) when planning repair, rehabilitation, restoration, landscape, or new construction projects. These criteria are also used by the Commission in evaluation of project proposals. *Guidelines* explain in more detail how to achieve the goals of the Design Standards.

**Design Review** - The process to discuss a project or request a formal review by the Historic Preservation Commission.

**Design Standards** -The broad methodology that assist long-term preservation of a property's significance through the preservation of historic materials and features. The goals of the standards are achievable by consulting the *Guidelines*.

**Development** - Any division of a parcel of land into two or more parcels, the construction, reconstruction, conversion, structural alteration, relocation, or enlargement of any building or other structure, or any mixing, excavation or landfill, and any use or change in the use of any building or other structure, or land or extension of use of land, for which permission may be required pursuant to N.J.S.A. 40:55D-1 et seq.

**Double-Hung Window** - A window consisting of two sashes that can be raised and lowered vertically.

**Downspout** - A rainwater conductor, generally surface mounted to a building's exterior to conduct water from a gutter to the ground or an underground drainage system.

**Drip Edge** - A projecting molding or flashing over an exterior door or window opening for catching and shedding rainwater.

**Drop Siding** - A type of weatherboard with a depression in the upper part of each board.

**Efflorescence** - Water-soluble salts leached out of masonry or concrete by capillary action and left on a surface by evaporation, usually as a white, powdery surface.

**Elevation** - The side of a building; or in an architectural drawing, an orthographic projection of an object or structure on a vertical plane parallel to one of its sides, usually drawn to scale.

**Exterior Architectural Appearance** - The architectural character and general composition of the exterior of a structure, including but not limited to the kind, color and texture of the building, material and the type, design and character of all windows, doors, light fixtures, signs and appurtenant elements.

**Façade** - The front wall of a building. The primary elevation or wall, usually where the entrance is located along with the most prominent details, that is also visible to the public way.

**Fenestration** - The window and door openings in a building. **Finish Coat** - The final coat of stucco, serving either as a finished surface or as a base for decoration.

Fixed Window - Non-operable framed glazing.

**Flashing** - Pieces of sheet metal or other thin, impervious material installed to prevent the passage of water into a structure at an angle or joint.

**Floor Plan** - A plan of a room, suite, or entire floor of a building as seen from above after a horizontal section is cut and the upper portion is removed, typically showing the form and arrangement of interior spaces and their enclosing walls, windows and doors.

**Footprint** - The form of a building on a site.

Grade - Ground level.

**Historic District** - One or more historic sites and intervening or surrounding property significantly affecting or affected by the quality and character of the historic site or sites.

Historic Preservation - a) The application of strategies to promote the identification, evaluation, documentation, registration, protection, treatment, continued use, and interpretation of historic resources; b) the act or process of applying measures necessary to sustain the existing form, integrity, and materials of historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing maintenance and repair of historic materials and features rather than extensive replacement and new construction. New exterior additions are not within the scope of this treatment; however, the limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate within a preservation project.

**Historic Site** - Any real property, building, manmade structure, object, lot, location, park, monument, street, neighborhood, district or any other feature of the environment that can be situated collectively or individually that is of historical, archaeological, cultural, scenic or architectural significance.

**Historically Worthy** - To have a special historical interest or value because it represents one or more periods of styles of architecture typically of the City or because it has value as part of the development, heritage or cultural characteristics of the City.

**Incompatible Use** - A use that is incapable of direct association with certain other uses in its immediate vicinity because it is contradictory, incongruous or discordant with surrounding uses, or will change the essential character of a neighborhood.

**Improvement** - Any building, structure, work of art or other object installed upon real property or any part of such improvement.

**Landmark Site** - The land on which a Landmark and related buildings and structures are located and the land that provides the grounds, the premises or the setting for the Landmark. A Landmark Site shall include the location of significant archeological features or of a historical event, and shall include all significant trees, landscaping and vegetation.

Light (Lite) - A glass pane in a window or door.

**Lime** - A white or grayish white, caustic, odorless solid obtained by heating forms of calcium carbonate as shells or limestone, at a high temperature.

**Lime Mortar** - A mixture of lime, sand and water.

**Lintel** - The horizontal structural element above a window or door, usually carrying the wall load above.

Major Work - Any external modification of the type that under the Uniform Construction Code (UCC) would require a federal, state or local development approval or permits, or any construction of new "structures" as defined by the UCC. On publicly-owned lands, any work that may not require local development approvals or permits shall be considered as major work if such work on private lands would reuqire a local development approval or permit.

**Massing** - The overall composition of the exterior of the major volumes of a building, especially when the structure has major and minor elements.

**Match:** Either an exact or approximate replication. If not an exact replication, the approximate replication shall be designed so as to achieve a harmonious result which exhibits the color, texture and dimensions of the original feature(s).

**Minor Application:** An application for approval of actions on a designated historic building, structure or object that consists of ordinary maintenance and repair. In accordance with the UCC, a repair is confined to an area of less than 25%

of the overall area of that constituent element (i.e. roofing, brickwork, fascia boards, etc.) Note however that while for UCC purposes Minor Applications may not require a permit, all changes to the exterior of buildings - even for repair purposes - in the DCHD require review by the HPC.

**Molding** - A linear decorative element, or curved strip, used for ornamentation or trim.

**Mortar** - A plastic mixture of lime or cement, or a combination of both, with sand and water, used as a bonding agent in masonry construction.

**Mortar Joints** - The exposed joints of mortar in masonry.

**Mullion** - The vertical element separating two window or door frames.

**Muntin** - The narrow molding separating individual panes of glass in a multi-paned window sash.

**Multi-light** - Having many lights or glass panes, as a window or door.

**Non-Contributing** - A building that is determined not to contribute to a historic district as it no longer posesses historic integrity due to alterations, additions, and other criteria.

**Ordinary Maintenance:** The repair or renewal of deterioration, wear or damage to a structure or improvement in order to return same as closely as possible to its condition prior to the occurrence of such deterioration, wear or damage with materials and workmanship of the same quality and appearance of the structure, replacement or improvement.

**Parapets** - The portion of a wall that projects above an adjacent roof surface.

**Plaster** - A composition of lime, water, and sand, that is soft when applied and hardens upon drying; used for coating and finishing walls and ceilings.

**Principal Use** - The main or primary purpose for which a structure or lot is designed, arranged or intended.

**Property Line** - The lines forming the boundary of a lot, determined by metes and bounds, whether those lines are for single lots or combination of lots.

**Reconstruction** - The act or process of reproducing by new construction the exact form and details of a vanished building, structure, or object or part thereof, as it appeared at a specific period of time.

**Rehabilitation** - The act or process of returning an improvement to a state of utility through repair or alteration which makes possible an efficient contemporary use while preserving those orations or features of the improvements which are significant to historical, architectural and cultural values.

**Relocation -** Any removal or relocation of a structure or improvement on its side to another site.

**Renovation** - The process of repairing and changing an existing building for modern use, so that it is functionally equal to a new building; may include major changes.

**Replacement** - The identical re-establishment of a feature as an integral part of a rehabilitation project based on the essential form and detailing of that feature from other physical or historic evidence. Replacement of the entire feature with the same material is preferable.

**Repointing** - Repairing existing masonry joints by removing defective mortar and installing new mortar.

**Restoration** - The act or process of accurately recovering the form and details of an improvement by the removal of later work and / or by the reconstruction of missing earlier work.

**Right-of-Way -** Public property including sidewalks, streets, plazas and parks.

**Round-Headed Window** - A window whose uppermost part is rounded.

**Running Bond** - A brickwork or masonry bond composed of overlapping stretchers (long faces) of bricks or stones.

**Sash** - The part of the window frame that holds the glazing, especially when movable.

**Scratch Coat** - The first coat in three coat stucco, which is scratched to provide a better bond for the second or brown coat.

**Section** - An architectural drawing which includes an orthographic projection of an object or structures as it would appear if cut through by an intersecting plane to show its internal configuration, usually drawn to scale.

**Sign** - Any display of characters, ornamentation, letters, or other display such as, but not limited to, a symbol, logo or other device used to attract attention, or to identify, or as an advertisement, announcement or to indicate directions, including the structure or frame used in the display.

**Sidelights** - Stationary glass panes on either side of an entrance door.

**Significant** - A resource that is of national importance or major state, regional or local significance.

**Sill** - A horizontal member forming the lowest portion of a building or window; also, the bottom of a door.

**Simulated Divided Light** - A window that has the appearance of a number of smaller panes of glass separated by muntins but actually is a larger glazing unit with the muntins placed between or on the surfaces of the glass layers.

**Single Hung Window** - A window unit with a fixed upper sash above a vertically rising lower sash.

**Site** - The land on which a building or other feature is located. **Site** - Plan - A plan showing the form, location, and

**Site Plan** - A plan showing the form, location, and orientation of a building or a group of buildings on a site, usually including the dimensions, contours, landscaping and other significant features of the parcel.

**Siting** - The placement of a building, structure or object on a site in relation to natural features; boundaries, and other parts of the built environment.

**Sliding Window** - Either a fixed panel with a horizontally sliding sash or overlapping horizontally sliding sashes; similar in operation to a sliding glass door.

**Spalling** - Chipping or flaking of masonry or concrete.

**Stabilization** - The act or process of applying measures designed to reestablish a weather-resistant enclosure and the structural ability of an unsafe or deteriorated building, object, site, structure or landscape feature while maintaining the essential form as it exists at present.

**Stile** - Any of various upright members framing panels of a window or door.

**Streetscape** - The appearance or view of a street and its associated features.

Stucco - Exterior plaster.

**Surround** - The framework and associated trim around a door or window.

**Transom** - A glazed opening over a door or window.

**True Divided Light** - A window or door in which the glass is installed as several individual small panes.

**Vent** - A pipe or duct by which air is allowed to pass through the exterior wall or roof of a building.

**Weather Stripping** - A narrow, compressible band used between the edge of a window or door and the jambs, sill, head and meeting rail to seal against air and water infiltration; made of various materials including spring metal, felt, plastic foam and wood with rubber edging.



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#### **PREPARATION**

All components of the City of Paterson Downtown Commercial Historic District Design Guidelines including all text, graphic design, photography and illustrations unless noted otherwise were prepared by:

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