# Society Hill

*(and Pennsylvania Hospital of Washington Square West)*

# Historic District

## A Guide for Property Owners

Preservation Alliance
for Greater Philadelphia

This publication was produced by the **Preservation Alliance for Greater Philadelphia.** The Preservation Alliance is a non-profit, membership organization that actively promotes the appreciation, protection, and appropriate use and development of the Philadelphia region's historic buildings, communities, and landscapes.

Philadelphians and visitors alike treasure the streets of the Society Hill (and Pennsylvania Hospital of Washington Square West) Historic District as a living museum of 300 years of American architecture. If you are fortunate enough to own property here, you know that these old buildings merit thoughtful preservation and require special care and upkeep. This book is a concise guide to maintaining and preserving your historic building. I hope you will keep it on your bookshelf, and pass it on to future owners. It is our pleasure to work with you, and the Philadelphia Historical Commission, to insure proper building maintenance and preservation, so that the district retains its extraordinary historic significance for a fourth century.

Patricia Wilson Aden

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President, Preservation Alliance for Greater Phladelphia

**Contents**

Introduction ....(1)
The Society Hill (and Pennsylvania Hospital of Washington Square West) Historic District ....(4)
Roofs, Cornices, and Related Elements ....(7)
Masonry....(12)
Windows ....(18)
Doorways ....(23)
Stoops, Railings, Paving, and All the Rest....(26)
Storefronts ....(29)
New Construction....(31)
Selecting and Working with Building Professionals ....(33)
Architectural Styles in the Society Hill District ....(36)
Glossary....(39)
Preservation Resources ....(44)
For Further Reading ....(46)

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Philadelphia Historical Commission
Robert Powers
Allison S. Rachleff
Cynthia Rose
Lisa Soderberg
Laura M. Spina
Michael Stern
Janice Stramara
Dr. Richard Tyler

**Project Director/Editor:** Elise Vider
**Designer:** Prough Creatives after a design by Maryann Devine

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# Introduction

***No other city in America can furnish such abundant and diverse material for an architectural retrospect. No other city in America is so conservative or has kept intact so much of the work of each succeeding period. It is a veritable paradise wherein architects may survey styles past and gone.*** ("Architectural Philadelphia Yesterday and Today," by Coften Fitzgerald, *Architectural Record,* July 1913)

A historic district is a sum greater than its parts. Its character derives from the cumulative impact of many historic buildings and structures maintained with sensitivity to their architecture and surroundings. Those who live, work, or own property in a Philadelphia historic district can feel more confident that their community will maintain its special quality because it is protected from inappropriate alterations, thoughtless demolition, and insensitive new construction by the Philadelphia Historical Commission.

There are other benefits to being part of a Philadelphia historic district. Property owners and architects, developers, and contractors working in the district can consult with the Historical Commission for technical and historical advice. Some rehabilitation projects may be eligible for federal investment tax credits. Experience in other cities has shown that historic district designation often boosts property values and stimulates investment. In the *Economic Benefits of Preserving Philadelphia's Past* (Preservation Alliance for Greater Philadelphia, 1998), the findings demonstrated that Philadelphia's historic districts are more stable and retain more of their residents when compared to the city as a whole. They also attract more new residents than other neighborhoods. And they are among the city's most racially, economically, and educationally diverse communities. Most of all, historic districts foster community pride and help improve and maintain the quality of life.

There are some restrictions and a few extra steps if work that affects a building's exterior appearance is planned. But the regulatory process is not overly burdensome and you will find that the Historical Commission and its staff approach their job in a reasonable and practical way, with an understanding of contemporary living requirements and changes in building uses.

## Using This Manual

This manual is intended as a practical guide for property owners in the Society Hill (and Pennsylvania Hospital of Washington Square West) Historic District, regulated by the Philadelphia Historical Commission. It explains the regulatory process involved in obtaining approval for projects in the historic district, and lists the types of work that may require Historical Commission review. It tries to address the issues that are likely to confront the historic property owner, but old buildings often present unique and unpredictable situations that may not be included here. Nor does the general guidance provided here constitute absolute guarantee of Historical Commission approval. The best strategy is to consult the staff of the Historical Commission.

The manual also provides information on the proper maintenance of historic buildings, and guidance on approaches to restoration and rehabilitation that the Historical Commission finds most successful. In general, property owners in Philadelphia historic districts should bear in mind that regular building maintenance is preferable to – and often prevents the need for – repairs; that repair of historic building fabric is preferable to replacement; and that replacement in-kind or restoration to the original appearance is preferable to alteration.

## What is Regulated?

Under city law, the Philadelphia Historical Commission reviews all applications for work on any building, structure, site, or object, listed as historic in its own right or situated in a historic district, that alters the appearance or for which a building permit is required.

Building permit applicants start at the Department of Licenses and Inspections (L&I) and are routinely referred to the Historical Commission if the property is

individually designated or is located in a historic district. Common applications include permits to replace doors and windows, reroof, add security features, or erect a building addition. A building permit is also required for demolition or new construction in a historic district.

Alterations which affect the exterior appearance of a designated property – back, sides, and roof, as well as the street façade – also require Historical Commission approval even if a building permit is not otherwise required. Such alterations include, but are not limited to, replacing windows, cleaning or repointing masonry, and painting façades. If you plan work that in any way affects the exterior appearance of your building, check with the Historical Commission. Interior work is reviewed by the Historical Commission only to ensure that the exterior is not adversely affected. For example, a kitchen remodeling might involve altering a window.

The Historical Commission is guided in its evaluation of applications by Section 14-2007 of the Philadelphia Code (widely known as the preservation ordinance), its Rules and Regulations, and *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring & Reconstructing Historic Buildings*, published in 1996 by the National Park Service. All are available at the Historical Commission office.

## The Application Process

Whether you are referred by L&I or bring your application directly to the Historical Commission, it is a good idea to consult with the Commission staff early in the planning process for guidance on preparing the application and providing all necessary support documentation. The Historical Commission returns incomplete applications with a request for additional information.

Along with a completed building permit application available from the Historical Commission or L&I, you will need to provide the following documentation: dated and labeled pictures of the present condition of all locations where alterations are proposed (these pictures will remain the property of the Historical Commission); something that demonstrates the proposed materials and design (for example, a catalog picture, a roofing shingle, or a detailed drawing); and a cover letter that describes the proposed undertaking and any special circumstances you want the Historical Commission to consider. Depending on the nature of the alteration, you may also be asked to provide additional information, such as scale drawings, plans, or specifications. Contact the Historical Commission for further details before you plan to submit an application for review.

The timetable for approval depends on the complexity and nature of the project. Alterations to secondary elevations that face service alleys or are not visible from public rights-of-way or for interior work which will not affect the exterior are reviewed and approved within five working days by the Historical Commission staff.

More complicated applications are considered by the Historical Commission's Architectural Committee, a technical review body, and then by the Historical Commission itself. You or your representative will be asked to appear at the Committee's monthly public meeting to describe the proposal and answer questions. The Committee will subsequently make a recommendation to the full Historical Commission which formally votes on the proposal.

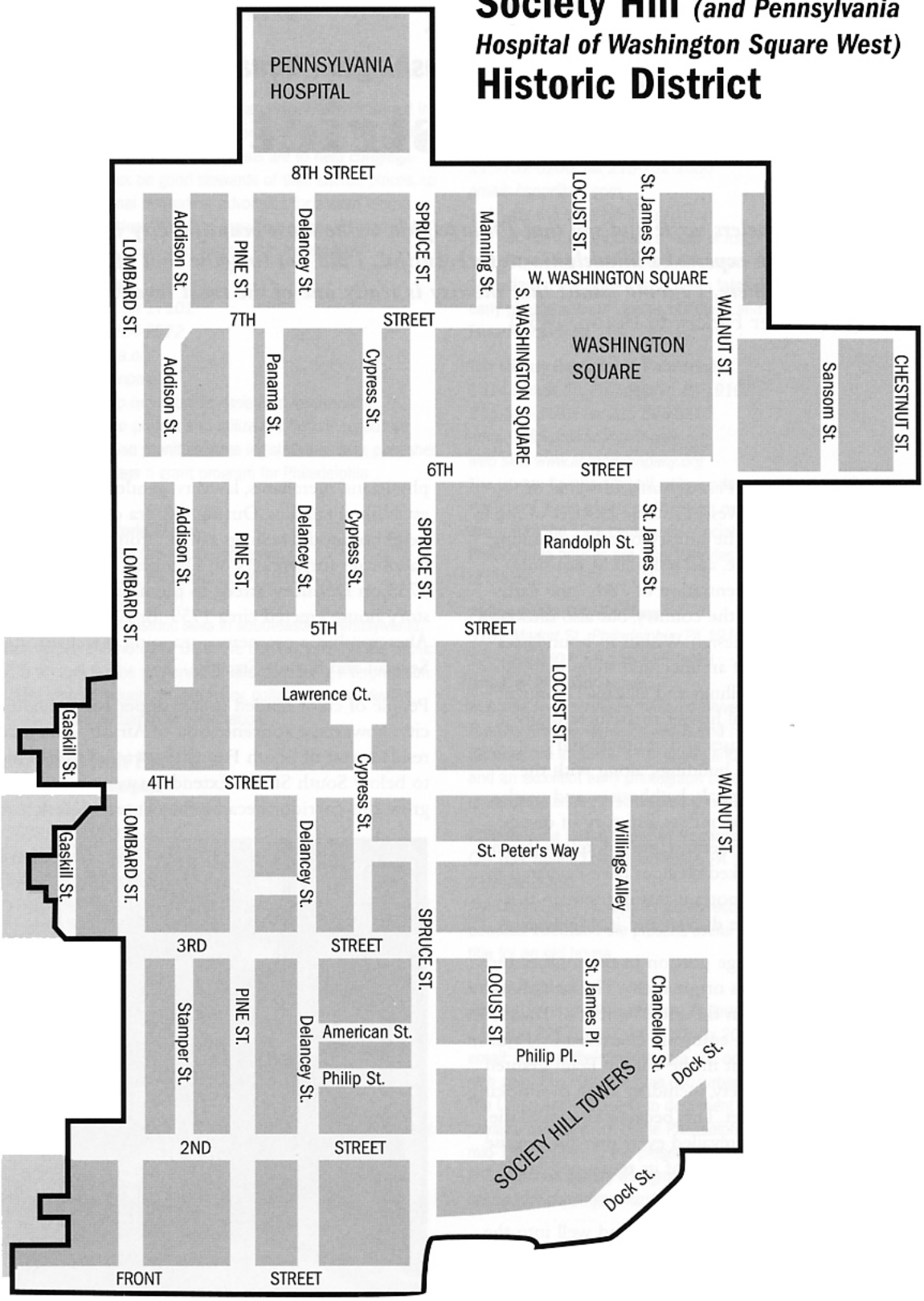
The Historical Commission will weigh the recommendations of the Architectural Committee and Commission staff with its own judgment at its next monthly public meeting, usually within two weeks, and will decide whether to approve, reject, defer (for not more than six months), or request resubmission of the application. The Historical Commission must vote on the proposal within 60 days of receiving the completed application.

If the Historical Commission accepts the recommendations of the Architectural Committee, a permit can be issued immediately. If revisions to your plans are suggested, the Architectural Committee and Historical Commission staff will work with you to revise your plans so that the work will be acceptable. If approval is denied, you may appeal to the Board of License and Inspection Review within 15 days, if you wish.

The law contains provisions for postponing applications and for hardship situations. Contact the Historical Commission for more information.

**by Elise Vider, Preservation Alliance for Greater Philadelphia**

# Society Hill *(and Pennsylvania Hospital of Washington Square West)* Historic District



# Society Hill
## *(and Pennsylvania Hospital of Washington Square West)*
# Historic District

***Many travelers write and say that Philadelphia is the most beautiful city in the world... although I expected Philadelphia to be beautiful, I did not imagine that after ten days residence there, I should admit that the city is really one of the most lovely.***
(Alexander Farkas de Bolon, 1831)

The Society Hill (and Pennsylvania Hospital of Washington Square West) Historic District occupies an extraordinary place in the history of urban planning, architecture, society, culture, and religion. It not only contains a significant concentration of 18th- and early-19th-century buildings in the country, but also illustrates mid-20th-century urban design. Within its boundaries stands a broad spectrum of architectural styles ranging from modest colonial dwellings and elegant Georgian, Federal, and Greek Revival houses to architecturally significant, modern high-rises and contemporary rowhouses. Together, these buildings, along with the churches and temples, hospitals, bathhouses, and workplaces of the neighborhood, reflect a history of diverse social and economic classes, ethnic groups, religions, and institutions. Although marked changes have occurred in Society Hill over time, important features remain that characterize and define the district and its importance.

Society Hill occupies a large portion in the southeastern quadrant of William Penn's original city. The neighborhood derives its name from the Free Society of Traders in Pennsylvania, a joint-stock company chartered by Penn in 1682 to foster development in the colony. Penn granted 100 acres to the Free Society, including a hill overlooking Dock Creek at Front Street. This became known as the Society's Hill. The name prevailed even after the demise of the Society itself and the sale of its remaining lands in 1723.

Throughout most of the 18th century and well into the first half of the 19th century, Society Hill remained a stable, socially and economically mixed community where blacksmiths, layers-out-of-the-dead, servants, people of color, and new immigrants lived in close proximity with physicians, merchants, lawyers, gentlemen, whites, and established families. During this era of the "walking city," neighborhood dwellings ranged from the two-story bandboxes for workers on Drinker's Court, built circa 1765 on Delancey Street, to the nearby four-and-one-half story house erected circa 1759 for Captain James Abercrombie, a prosperous seagoing merchant, at Second and Spruce Streets.

People of color tended to live dispersed throughout the city; however, a concentration of African-Americans resided west of South Fourth Street and from Pine Street to below South Street. Extending westward as the city grew, this corridor became the center of black

Historic district designation helps retain the character of residential streets like this.

Philadelphia. Mother Bethel A.M.E. Church, built 1889-90 at 419-27 South 6th Street, stands as a reminder of this community.

By the late-19th century, improvements in transportation and the growth of large factories in other parts of an industrialized Philadelphia had transformed the city. Workers often moved to the city's periphery where large factories and new housing were being built on less expensive land. Many well-to-do residents headed westward to new, more fashionable, and generally larger residences around Rittenhouse Square, as well as to Germantown and West Philadelphia.

Society Hill began to be repopulated in the 1890s and 1900s by some of the immigrant refugees who flooded Philadelphia from Eastern Europe, Russia, and Italy. Eastern European Jews found work in the needlecraft trades and tobacco businesses in the old port neighborhood. The new occupants altered many dwellings to provide ground-floor stores, but Society Hill escaped widespread demolition and construction of newer commercial buildings. Surviving structures that illustrate the Jewish presence during this era include the Rebecca Gratz Club, a foundling hospital built in 1913 at 536 Spruce Street, and the Congregation of Kesher Israel Synagogue. Erected in 1793, the First Universalist Church at 521 Lombard became a synagogue in 1887 upon the purchase of the building by the Congregation Children of Jacob; six years later the Children of Jacob merged with another congregation to form Congregation Kesher Israel.

Modern architecture, like these contemporary houses on Lawrence Court, reflects the mid-20th-century redevelopment of Society Hill.

Society Hill also became home to various businesses. Insurance companies occupied Walnut Street and the 300 block became known as "Insurance Row." Publishing companies, such as Lea and Febinger, Curtis, and Lippincott concentrated around Washington Square. Philadelphia also fostered a strong medical establishment, beginning with the Pennsylvania Hospital on Pine Street. Construction of the hospital, which now occupies several blocks, began in 1755-57 on the fringe of the city. It contains the nation's oldest surgical amphitheater. In addition, almost from its inception in the middle of the 18th century, Pennsylvania Hospital pioneered in the treatment of mental disorders. The Philadelphia Historical Commission named the district Society Hill (and Pennsylvania Hospital of Washington Square West) because the hospital is tied to the architecture and development of Society Hill, but stands in the Washington Square West neighborhood.

Despite efforts to improve decayed housing conditions, the neighborhood declined during the late-19th and early-20th centuries. By the 1950s, Society Hill had evolved into a slum that housed disadvantaged immigrants and minorities and a variety of manufacturing and distributing facilities. Following World War II, Philadelphia found itself with a shortage of adequate housing; at the same time, political and social reformers sought to establish the right of access to well-built housing for all members of society. Philadelphia's leaders recognized the potential of Society Hill as a way to revitalize and beautify Philadelphia, increase its declining tax base, and provide an enhanced context for the development of Independence National Historical Park and Independence Hall. The City Planning Commission and Redevelopment Authority, with assistance from the newly created Philadelphia Historical Commission, instituted the Washington Square East Urban Renewal Plan in 1958, using federal urban renewal funds. This plan gained national

attention as one of the first attempts in the country to revitalize a deteriorated neighborhood through the restoration and reinvestment of existing housing stock – an early exercise in large-scale historic preservation. The new residential scheme included not only housing, but "greenways" such as St. Peter's Way, parks like Delancey Park, and public art with an emphasis on outdoor sculpture such as the Kangaroos in Lawrence Court.

The Redevelopment Authority focused on the 18th and early-19th centuries, generally requiring the return of buildings to their earliest appearance. Later alterations, such as the small storefronts introduced in the late-19th century, were removed and residential façades reconstructed. Anything built past the mid-19th century was considered expendable, unfortunately, causing the loss of some important turn-of-the-century buildings. However, the Redevelopment Authority accomplished the extensive restorations of the earlier buildings and the construction of significant modern buildings, such as the Society Hill Towers.

Changes in physical development, proximity to the Delaware River, ethnic and cultural diversity, and economic forces all shaped the Society Hill of today. The neighborhood reflects William Penn's tolerance for religious freedom; the remnants of thriving commercial activity; the diversity of its inhabitants; and an integrated building fabric of old and new, high-style, and vernacular. The preservation of Society Hill recognizes the unique social and architectural fabric of an important area of Philadelphia that bears the mark of each century since the City's founding.

**by Laura M. Spina, Philadelphia Historical Commission**

# Roofs, Cornices, and Related Elements

***Under the roofs are gutters which are carefully connected with pipes, and by this means, those who walk under them when it rains or when the snow melts need not fear being wetted by the water from the roofs.*** (*Peter Kalm's Travels in North America*, 1770)

The roof of a historic building, along with cornices, pediments, dormers, and other ornamental details, is critical to the architectural character of the structure and urban streetscape. The shape (gable, gambrel, hipped, etc.), material, pattern, color, and texture of a sloped roof greatly affect the building's appearance. Even on a flat-roofed Philadelphia rowhouse, the cornice and pediment at the roofline are key style elements.

The function of the roof is also critical, serving as the building's first line of defense against the weather, and taking the heaviest beating from the sun, wind, rain, snow, and ice.

The preservation of any structure, regardless of age, size, or design, is dependent upon a weathertight roof that protects the building from the elements, and a rainwater conduction system that directs water away from the exterior walls. Yet, the roof and its associated structures are among the most vulnerable elements, and they must be maintained vigilantly to prevent the destructive effects of water leaking into the building.

## What Causes Leaks?

Typically, moisture penetration, causing the accelerated deterioration of the structure, is the result of one of the following problems:

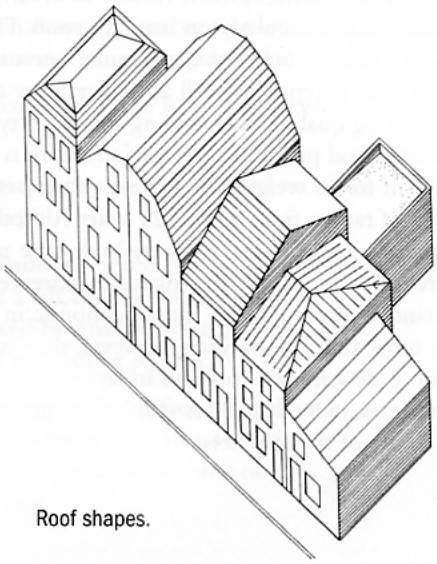
- Faulty, clogged, or missing gutters or downspouts;
- Damaged or deteriorated roof structure, coverings (e.g. shingles), and/or fasteners;
- Deteriorated or missing flashing at the intersection of roof planes or penetrations such as dormers, vents, or chimneys;
- Damaged or deteriorated roof dormers, skylights, hatches, or roof ornaments;
- Deteriorated chimneys, parapet and party walls, or cornices and/or associated flashing.

## Routine Maintenance

Even the highest quality roof will not protect a building effectively from the elements without proper maintenance. All roofs should be inspected at least twice a year. Look for slipped, missing, or damaged shingles, which should be repaired or replaced as quickly as possible to prevent leaks and water damage. On flat roofs, look for bubbles, torn seams, and separating edges on the surface materials.

Where possible, periodic inspections of the underside of the roof from the attic space, if there is one, following a storm or freezing temperatures may provide early warning of potential leaks or condensation caused by inadequate ventilation. Peeling paint or rotted wood on cornices or soffits are also telltale signs of roof problems.

Gutters and downspouts should be inspected and cleaned of debris at least twice a year, more if they clog with leaves and debris from nearby trees. The installation of gutter screening or strainers at downspouts and over the full length of open hanging gutters can minimize such clogging, although the gutters will still need frequent cleaning.



Roof shapes.

## Roofing Materials

Many Society Hill houses have a sloped, gabled roof. Originally, these roofs were covered in wood shingles. Later replacement and present-day roofing materials include metal, slate, and asphalt shingles. The life span of each roof material depends on many factors, including its weathering properties, the method used to fasten the material, and the roof configuration and orientation.

**Wood** shingles are rare in the district today. Fire resistant undercoatings and sheathings are required to make wood roofing adequately fireproof. The Philadelphia Historical Commission will allow three-dimensional asphalt/fiberglass shingles as a substitute when replacing wood shingles, provided the shingles mimic the appearance of weathered wood in shape and color.

**Metal** roofs shed water effectively from a relatively shallow pitch. Historic metal roofs typically consist of sheets that are about two-feet wide, joined by a full-length soldered seam, either "standing" or "folded." The metal is usually lead-coated or plain copper, or galvanized steel plated with tin or terne (an alloy composed of lead and tin). If painted with a metal-preservative paint every eight to ten years to prevent corrosion, a metal roof will last 60 to 80 years, although some metals such as copper or terne-coated stainless steel may not need painting at all. Liquid membrane coatings may also be acceptable. Typical causes of deterioration include puncturing by sharp objects, nails, or workers' feet, and the breakdown of the metal by urban pollutants.

The varied colors and shapes of **slate** shingles enliven many of the historic houses of urban Philadelphia, particularly on mansard roofs. This masonry roofing material was popular because of its aesthetic potential as well as its durability and fireproofing qualities. Depending upon the type of slate used, and providing the roof structure is sufficient for its weight, the life expectancy of a slate roof ranges from 80 to 125 years. Although installation and material costs are high, slate roofing requires minimal maintenance, is extremely resistant to erosion, and is more economic in the long term. Over many years, however, slate will begin to de-laminate (peel off in layers). Sometimes, individual slates will loosen due to the failure of the fasteners.

**Clay or terra cotta** tile roofs also appear on some historic Philadelphia houses. If maintained properly, their life span is approximately 125 years. Like slate, tile is resistant to erosion but very brittle and can easily crack or shatter.

**Asphalt and fiberglass** shingles are modern roofing materials, with a life span of 15 to 35 years. Typical deterioration patterns include splitting, curling, eroding, or disintegration from continued exposure to the weather. Installation of asphalt and fiberglass is less labor intensive and consequently less expensive over the short-term than the historic materials listed above.

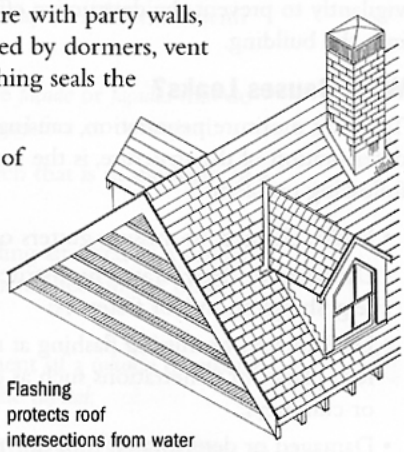
Asphalt and fiberglass roofing is produced in long sheets, designed to give the appearance of individual shingles. Some varieties purport to simulate historic slate or wood shingles, with varying degrees of success.

**Built-up roofing**, for flat or shallow roofs, consists of alternating layers of waterproof membranes and other bituminous materials. These roofs deteriorate by blistering and cracking. Flat, built-up roofs can be repaired by adding layers of waterproof membranes over the existing roof. However, to reduce the weight of the roofing material, the Philadelphia Building Code requires that old roof coverings more than two layers thick be removed down to the underlying wood sheathing before applying a new roof to keep things watertight.

## Flashing

Flashing, one of the most important and vulnerable parts of a roof system, consists of strips of sheet metal, usually copper, inserted at the intersection of roof surfaces, at the juncture with party walls, or where the roof is penetrated by dormers, vent pipes, chimneys, etc. Cap flashing seals the tops of cornices and walls.

Failure of the flashing is one of the major causes of roof deterioration and water leaks. Flashing should be inspected periodically for deterioration due to poor design or workmanship, thermal stress, or metal decay of flashing material or fasteners. All deteriorated or unfastened flashing should be replaced or repaired immediately.



Flashing protects roof intersections from water penetration. Here, valley flashing is used at the dormer gable and step flashing alongside the dormer and chimney.

Pole gutters are a typical Society Hill feature. They should be kept intact and in good working order.

Temporarily, small holes can be repaired with sheet metal patches, or it may be possible to extend the life of the flashing material – typically copper or aluminum – by applying a polymer roofing paint.

Replacement of flashing on an existing roof may require the removal of large sections of the roof surface, and is usually a job for a professional. When installing a new roof, make sure that top quality flashing is used, and that the roofing contractor is fully knowledgeable about proper flashing details and the importance of flashing in maintaining a watertight roof.

## Rainwater Conduction System

The system of gutters, downspouts (also called leaders), and drains which collects water from the roof and directs it down and away from the building wall is critical to the effectiveness of any roof system.

Many houses in Society Hill have pole gutters. These consist of a "pole" (roughly three-to-six inches in diameter) fastened on the roof about one foot above the cornice and sloping toward the downspout. These gutters channel rainwater to an interior or exterior downspout that carries the water through the cornice down to an underground storm drain.

The rainwater conduction system should be inspected and thoroughly cleaned at least twice annually, more if trees are near the building. Leaves, twigs, and debris can quickly clog drains and cause overflows. Particular vigilance is required to ensure that internal gutter systems or pole gutters are maintained in good working order, because failure can allow unseen water damage to structural components within the building and to the cornice. These maintenance steps can prevent unnecessary and costly water damage, including peeling paint, rotted wood, and crumbling masonry.

The replacement or repair of specific, individual failed elements with the same materials is the recommended solution, rather than abandoning prematurely the entire original rainwater conduction system designed for the house. All replacement components should match the profile, materials, dimensions, and placement of the original elements.

Sheathing a cornice in siding destroys historic character.

## Cornices

Roof cornices are major architectural features and contribute significantly to the rhythm and continuity of Philadelphia streetscapes. Removing or covering them with aluminum or vinyl siding devastates the appearance of the individual building and the entire block; their removal exposes the building façade and structure to excessive weathering and allows water to wash down the front façade and possibly penetrate the structure.

Cornices should be kept tight and periodically repainted. Cornices are usually constructed of wood or sheet metal, although there are cornices of cast iron, masonry, and copper throughout Philadelphia. Deteriorated cornice elements should be replaced with matching material. If it is necessary to remove an existing cornice, it should be replaced with a substitute that matches the profile and detailing of the original.

A well-maintained original cornice enhances the appearance of a historic building.

Replacement cornices are available in alternative lighter weight materials such as fiberglass and GFRC (glass fiber reinforced concrete).

On some rowhouses, what appears to be a mansard or gabled roof is actually a parapet that masks a flat roof. Parapets also mark the masonry party walls between adjoining rowhouses. Parapets are usually built of masonry and require adequate flashing where they meet the roof. The coping on parapets, and joints between coping and wall, should be kept well sealed and in good repair to prevent water from leaking through the roof and into the building.

## Dormers, Chimneys, and Other Roof Elements

Dormers, chimneys, and roof ornaments such as finials, iron cresting, crockets, ornamental ridge tiles, dormer brackets, etc., give character and style to buildings and should not be removed or altered. Dormers are especially significant aspects of roof design in Society Hill. In original form, they were often sided with wood clapboards or shingles. In restoring a dormer, the property owner should consult with the staff of the Historical Commission regarding proper siding and decorative details. Aluminum or vinyl siding is not an appropriate treatment for a dormer on a historic house.

Dormers give architectural character to many Society Hill buildings and should be vigilantly preserved.

Chimneys are usually constructed of brick. They are not only useful today because they contain the fireplace and furnace flues, but their historic form is important to preserve as they represent the many fireplaces needed to heat the building originally.

Deterioration and leaks at dormers, chimneys, and other roof elements typically originate at the flashing at their juncture with the roof. Moisture infiltration may also occur at the top of chimneys. Water travels down the sides of the flue, soaking the chimney wall and allowing water into the building. This source of water penetration can be prevented if the chimney is lined with an impervious terra cotta flue liner that is as close to the original size as possible.

A properly installed flue liner ensures safe chimney operation. The Philadelphia Historical Commission does not approve metal "B" vents sticking out of chimneys. Instead, use terra cotta liners or metal liners cut below the brick. A proper chimney cap prevents the entry of rain or snow, and permits adequate ventilation. Installation of chimney liners and caps is a job for a skilled professional to make sure that chimneys operate safely.

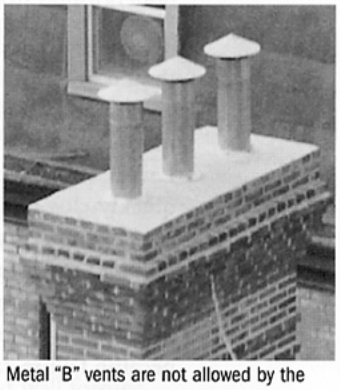
Other sources of water infiltration at chimneys include open and deteriorated mortar joints. Covering deteriorated masonry chimneys with tar, cement, or stucco is not recommended.

Chimneys should be repaired as described in the chapter on Masonry to match the color, texture, tooling, and constituent composition of the original mortar. Even unused chimneys should be kept in good repair, and capped. Chimneys, dormers, skylights, hatches, finials, and crestings, etc., are particularly vulnerable to the deteriorating effects of the weather and should be periodically inspected and maintained to stay watertight.

Antennae and satellite dishes should be installed so they are not visible from public rights-of-way.

## A Word about Metal Roofing Materials

All replacement metals on roof and rainwater conduction systems should match or be compatible with the existing metals. Contact between non-compatible metals can create a galvanic action, which will cause the metal to corrode. For example, when new aluminum downspouts are fastened to original copper gutters, an electrolytic reaction will quickly corrode the aluminum parts. Some roofing materials will similarly corrode metal fasteners or flashing, so it may be necessary to coat the metal parts. Consult with a professional roofer about the use of dissimilar metals on your roof.



Metal "B" vents are not allowed by the Philadelphia Historical Commission.

## Repair and Replacement of Historic Roofing Systems

Repair of damaged or deteriorated sections of original roofs saves money and the character of the building. Eventually, however, all roofs require replacement. All new work should be compatible with the historic and architectural character of the building, and original detailing should be saved or replicated wherever possible.

Individual slates may fall out from time to time. This does not mean the roof itself is failing, but rather that the fasteners (usually nails) that hold the slates in place have rusted. It is usually more cost effective to have an experienced roofer replace dislodged slates – on an annual basis, for example – than to replace the entire roof prematurely.

Slate, clay, or terra cotta tile roofs are brittle and cannot be walked on without the risk of cracking and breaking. In order to carry out repairs on these roof types, wide planks can be laid over the roof surface or scaffolds and other devices installed.

The common practice of coating a historic wood shingle, asphalt shingle, or metal roof with tar paper or other bituminous material should be avoided. The bituminous material not only compromises the architectural integrity of the historic building, it also damages the original material, and is an ineffective and short-lived sealer that often hides rather than prevents water infiltration.

When repair is no longer practical, the ideal course is to replace the roof with historically accurate materials. These may be more expensive than modern materials, but have a far longer life span. Clues to the appearance of the original roof may be obtained by studying neighboring or similar houses, from historic photographs, or in consultation with the staff of the Philadelphia Historical Commission. Often, the historic roof is still in place, hidden under layers of newer roofs, and can be studied by removing a section of the later material. When a roof is being replaced, it is advisable to go to the extra expense of removing all old roofing so that the underlying sheathing material can be inspected and repaired or replaced if necessary. Built-up layers of roofing also make it difficult later to trace and correct leaks. The Philadelphia Building Code allows a maximum of two layers of roofing material.

If a modern alternative must be used on a roof that is visible from the street, careful consideration should be given to matching the scale, texture, configuration, profile, detailing, and color of the original as best as possible. Contact the Philadelphia Historical Commission for alternatives. If the roof is flat, or is not visible from the street, the substitution of a more economical modern roofing method would be an acceptable solution.

**by Lisa Soderberg, The Hillier Group**

**Not Subject to Philadelphia Historical Commission Approval**

Minor patching of cornices or other decorative elements to restore their original appearance

**Subject to Philadelphia Historical Commission Approval**

Constructing roof hatches, decks, or skylights
Altering or removing dormers, dormer windows, chimneys, or other roof elements
Replacing roofing material
Replacing surfaces or decorative components of cornices
Replacing the entire cornice with an exact replica of appropriate design or major repair to cornice
Repairing or replacing flashing if large portions of roof are removed
Replacing or repairing skylights, chimneys, roof hatches, and other features
Re-setting and repointing coping stones on parapet walls
Replacing or repairing flat built-up bituminous roofs
Installation of antennae or satellite dishes
Replacing downspouts and gutters

# Masonry

***The houses make a good appearance, are frequently several stories high and built either of bricks or of stone; but the former are more commonly used, since they are made near the town and are of good quality.*** (*Peter Kalm's Travels in North America,* 1770)

Philadelphia is a red brick city, and the Society Hill Historic District is no exception. But a variety of other masonry materials — brownstone, marble, stucco, terra cotta, limestone, and more — used both as trim and, less frequently, for primary façades, contributes to the neighborhood's rich textures and solid presence.

## Maintaining Masonry

Masonry is defined as the work of the mason using a wide variety of natural and man-made building materials such as stone, brick, concrete block, tile, etc. Masonry is one of the most durable of building materials, and, properly maintained, can last indefinitely. It is, however, susceptible to deterioration from acid rain, airborne pollutants, wind, salting of sidewalks, fungi, or plants, which can all leave masonry vulnerable to water penetration, and subsequent freezing and thawing which will ultimately damage any form of masonry.

The first line of defense, therefore, is to keep masonry walls as dry as possible and to make sure that they are allowed to dry if they do get wet. Roofs, gutters, cornices, and downspouts should be vigilantly maintained (see the chapter on Roofs, Cornices, and Related Elements) to prevent moisture from penetrating walls, and storm drains should be kept clear to help keep foundations dry. It is also essential that the mortar (or "pointing") surrounding masonry units be kept in good repair, to keep masonry surfaces tight and prevent moisture penetration.

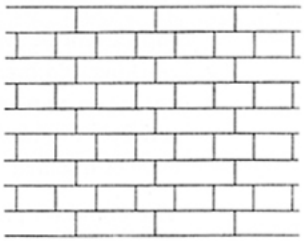
## Common Masonry Materials

**Brick** is the predominant exterior building material throughout Philadelphia, testimony to the abundance of good, cheap, local red clay. Until just before the Civil War, brick was molded by hand, resulting in a brick that was somewhat irregular in shape and color. Later machine-made brick was harder and more uniform in size and appearance.

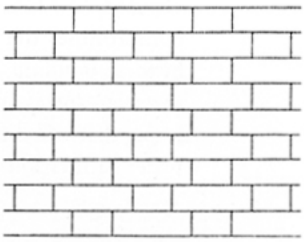
The hardest, best quality bricks were usually reserved to face exposed façades. The softer, so-called salmon brick (also called common brick), was relegated to unexposed areas, such as the party walls between rowhouses and to secondary elevations. The bond pattern in which brick is laid in a wall provides visual interest, characterizes various styles of architecture, and distinguishes the visual importance of façades versus back walls.

Bricks that are exposed to excessive moisture can flake or disintegrate into powder. Abrasive cleaning, such as sandblasting, makes bricks more susceptible to this type of deterioration. (See section on Cleaning further in this chapter.)

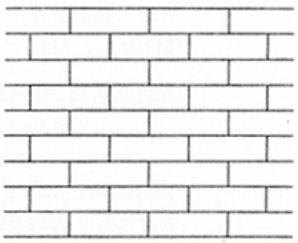
**Terra cotta** is a man-made clay product often used to imitate carved stone for decorative elements, although it also has been used as a veneer for entire façades. Terra cotta may be glazed or unglazed, molded or carved, and may be any color from white to brownish red.



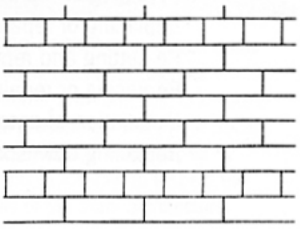
English bond



Flemish bond



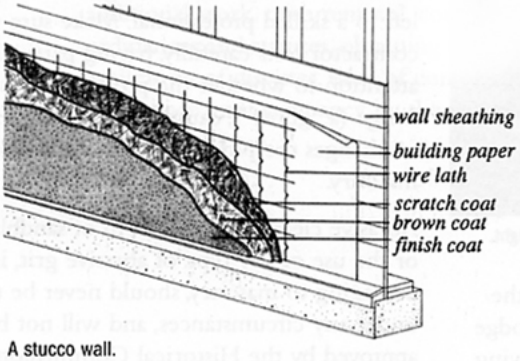
Running bond



Common bond

Brick bond patterns.

**Stucco**, sometimes referred to as cement plaster, is an exterior wall covering consisting of cement, lime, sand, and water. Old stucco might also include binders of animal hair, straw, pebbles, bits of brick or coal, or even seashells. Stucco is traditionally applied in three coats directly over




A stucco wall.

brick or stone rubble walls with a finish that is either smooth, scored to resemble stone, or rough textured. Stucco tolerates movement and allows moisture to pass to the wall surface and evaporate. Nevertheless, it is not advisable to stucco a brick façade, since it hides the original façade, may damage the brick, entrap moisture, and conceal structural problems.

**Granite** is a natural stone prized for its hardness and durability. Its visual characteristics include a wide range of color from gray and blue-gray to red and black, a glossy or matte finish, and a speckled appearance. Granite is expensive to quarry and difficult to build with, and it is found primarily as a base on institutional buildings.

**Limestone** is commonly used for lintels, windowsills, and water tables and as a face material on some institutional buildings and late-19th-century homes. Limestone is easy to work with, but is vulnerable to erosion due to acid rain. Those areas of limestone protected from regular washing of rain are prone to accumulate deposits of damaging gypsum crust. Limestone colors include brilliant white, cream, and gray.

**Marble** is used primarily as building ornament and for steps, water tables, windowsills, and lintels. It is susceptible to damage by airborne pollutants and paint removers.

**Sandstone** has a coarse, grainy texture and a matte appearance. **Brownstone** is the common name for the brown (or, occasionally, red or purple) sandstone which was popular as both trim and facing in the late-19th century. A porous material, brownstone easily absorbs moisture, allowing sub-surface freezing and expansion that cause erosion and spalling, in which the stone comes apart layer by layer.

The problems with brownstone façades are made worse by the fact that many late-19th-century builders set the stones with the grain running vertically. As a sedimentary stone, brownstone is formed in horizontal planes and is strongest when laid in that position. Laying the stone upright and piling on other stones fractures the brownstone, allowing water to penetrate its surface and contributing to the spalling that plagues many brownstone façades today.

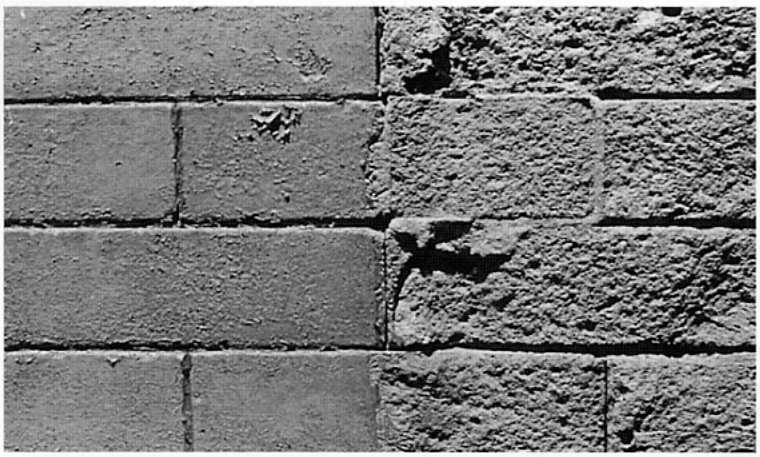
**Cast stone**, commonly used as a trim material, is cement used to imitate stone. It can be cast in virtually any shape, including ornamental designs.

## Cleaning

Masonry cleaning, when done incorrectly, can result in serious problems that far outweigh any aesthetic gains. Brick, especially, has a hard, protective surface formed during the manufacturing process which can be damaged by cleaning, leaving the wall vulnerable to moisture. If, however, cleaning is necessary to remove graffiti, waterproof or anti-graffiti coatings, grime, or staining from metal or organic growth, the gentlest method should be used. Consult with the staff of the Philadelphia Historical Commission to obtain a permit before undertaking any cleaning, and keep in mind that most masonry cleaning is a job for experienced professionals. Test patches must be done before proceeding to confirm the gentlest effective cleaning method. Aggressive cleaning methods to achieve a "brand-new" appearance can be destructive.

A natural-bristle brush, mild household detergent, and buckets of water may be all that are needed. If this method fails to produce satisfactory results, a practiced contractor can test progressively stronger methods.

Low-pressure water wash, at no more than 600 pounds-per-square-inch (psi) and no more than three-to-five gallons-per-minute (gpm) using a fan tip nozzle gun, can be used for most materials. Even at this low pressure, however, the water can remove the surface of soft brick and mortar. High-pressure water wash (above 600 psi) is not allowed;



The negative effects of abrasive cleaning or sandblasting on brick are evident on the right.

this method can cause water to infiltrate the building, abrade the masonry surface, dislodge soft mortar, and break carved details. Spraying or dripping water at a low pressure and volume over a prolonged period of time avoids the abrasive effects of pressurized washing, but saturation of the façade may cause mildew, rusting of any metal in the wall, or damage to the building interior.

A number of chemical cleaning methods are available, all involving wetting the surface with water to avoid excessive penetration of the chemical, brushing on the chemical cleaner, neutralizing the chemicals and, finally, rinsing with a low-pressure water wash. Application of these products is strictly a job for skilled professionals, and requires careful testing and extreme caution. For instance, the application of an acid-based cleaner on marble or limestone can seriously damage the stone's surface. High concentrations of some cleaners can cause staining and can alter the physical characteristics of the stone. Poultices are chemical pastes made up of an inert material mixed with an appropriate solvent that draw stains from masonry as they dry. They are used mostly for stubborn spot cleaning.

Depending on its nature, graffiti can be removed from masonry surfaces. Contact the Philadelphia Historical Commission before attempting any graffiti removal for advice on how to proceed. Graffiti removal should always be done as soon as possible, using the gentlest available method, and testing carefully on a small, inconspicuous area. A capable do-it-yourselfer, using commercial paint removal products and a garden hose spray, can often remove small amounts of graffiti. Do not use steel wool, wire brushes, or anything abrasive – not even baking soda, harmless as it seems – and make sure to wear protective clothing, eyewear, gloves, and a face mask.

Removal of more extensive graffiti is a job best left to a skilled professional. Make sure the contractor tests carefully, paying particular attention to whether the product leaves a faint image (a "ghost"), causes the graffiti to spread, or changes the physical character of the masonry.

Abrasive cleaning in the form of sandblasting, or the use of any type of abrasive grit, is damaging to masonry, should never be used under any circumstances, and will not be approved by the Historical Commission. Abrasion erodes the surface of the masonry, opens mortar joints, allowing moisture penetration, and obliterates carvings and details.

## Masonry Coatings and Paint

Masonry coatings are rarely necessary or effective. Masonry needs to "breathe" so that any moisture in or behind the masonry can escape through the surface. Many commercial masonry coating products, including waterproofing sealers, water repellents, graffiti protectors, consolidants for deteriorating masonry used on a large scale, and even paint, are more likely to trap moisture and eventually harm the wall or force moisture to migrate back to the interior, causing interior damage. Even water-repellent masonry coatings that claim to be "breathable," allowing water vapors to pass, are not recommended.

Furthermore, masonry coatings may alter the color and appearance of historic masonry and cause permanent maintenance headaches, attracting dirt, forming a patchy appearance as they age, and proving difficult or impossible to remove.

The use of all masonry coatings should be avoided, except under special circumstances (such as where a brick wall has been severely damaged by sandblasting), and only after consultation with the staff of the Philadelphia Historical Commission.

Painting brick or stone may seem innocuous, but paint, too, can create an impermeable film

and cause serious moisture problems and spalling. Painting also creates unnecessary maintenance; like all surfaces, masonry, once painted, will need periodic repainting. And, of course, paint radically changes the appearance of historic masonry.

Paint removal should only be undertaken after careful analysis of the condition of the masonry and the reason for the initial painting, and after consultation with the staff of the Historical Commission.

If painted masonry needs repainting, it is important to use a paint that is designed for masonry that does not create an impermeable film. Avoid epoxies, most alkyd paints, or any textured paint. The color should be similar to the original masonry.

## Masonry Repair

Repair of damaged masonry is a specialized job for a skilled professional. Masonry consolidants such as silanes, acrylics, and epoxies penetrate the pores of stone, making it stronger and resistant to further deterioration. Consolidants can bring disintegrating, crumbling, spalling, and sugaring masonry back together, and increase the masonry's strength and resistance to further deterioration. However, inappropriate application of these materials can result in further damage to stone, changing its appearance, making it less breathable, and subject to damage by frost.

Broken masonry can sometimes be repaired by attaching the broken elements with non-rusting pins scored for proper anchorage. Use epoxy mixed with the powder of the masonry to be repaired to bond the joint between the two broken pieces. Care should be taken not to use epoxies across mortar joints, since these joints need to remain flexible. The joint should be filled with mortar that matches the original in appearance and composition. If portions of masonry are missing, epoxy and powdered stone patches should replace only the material that is missing. This method is best used for decorative pieces and is not practical for repairs of masonry materials that cannot be matched, such as brownstone, which is no longer quarried.

An alternative method for more general use, particularly effective with brick, is to remove the unit of masonry that is damaged to its full depth or to sound subsurface material. Replace with the new or salvaged material using a traditional mortar. The brick should match in size and color. Again, care should be taken to maintain the mortar joint. Missing masonry elements can also be replaced with carefully crafted, molded cement patches that incorporate powder of the replaced masonry.

A qualified structural engineer should evaluate all cracks for underlying structural problems and any such issues should be addressed. Generally, the wider and longer the crack, the more serious the problem. Short cracks that split masonry units are also potentially serious. Cracks usually appear at corners, in arches, around openings, or where different building materials meet.

The procedure for patching damaged areas of stone or resurfacing an entire façade is essentially the same. Because the repair of small patches of deteriorated stone is as complicated as resurfacing a whole façade, qualified contractors should be retained for any work involving stone repair. In order to retain as much original fabric as possible, only those areas of a building's masonry façade that are deteriorated should be replaced.

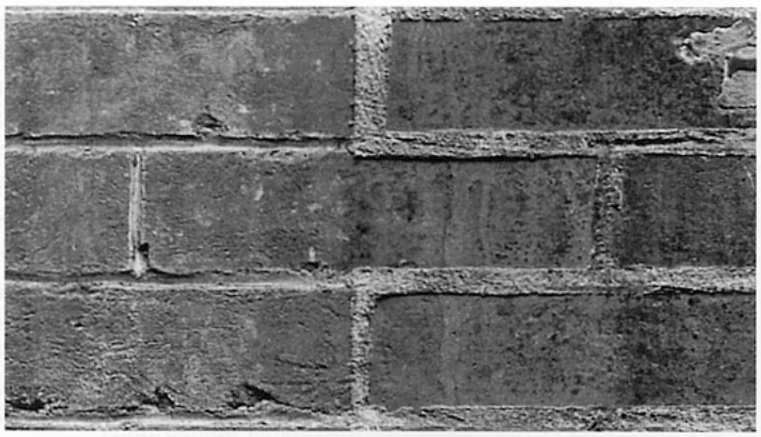
Resurfacing and patching work should only take place when the exterior temperature remains a constant 45-degrees F or above for a 72-hour period from the commencement of work, or the materials will not properly cure. The Philadelphia Historical Commission usually requires that a patch test of the proposed finish coat of the masonry patch be reviewed and approved by the Commission staff before the work begins.

The best patching procedures ensure that the patch is well secured to a sound base material via "mechanical" keying methods such as undercutting the edges of the base material and/or drilling holes into the underlying base material to serve as anchoring connections. The patching material should be applied in a minimum of three thin coats, and contain actual crushed stone which matches the characteristics of the masonry to be repaired. The surface of the patch should imitate the surface qualities of original masonry surrounding the patch.

## Repointing

Like the flexible tendons that bond bone to muscle in the human body, mortar is a malleable substance that bonds bricks or masonry units to one another. Repointing, sometimes called tuck-pointing, is the process of removing deteriorated mortar, and replacing it with new mortar.

It is essential that mortar – like human tendons – be flexible to protect the masonry – the bones – that surrounds it. Masonry walls must be able to move with the slight movements caused by fluctuations in temperature, building settlement, and vibrations. If the mortar is too strong, such movements will cause the masonry to crack or spall, allowing water to penetrate and do further damage. Instead, mortar must be sufficiently soft to absorb small movements. It is much less expensive and invasive to repoint a wall than to rebuild it.



In a good repointing job (left), the new mortar matches the existing mortar in color, hardness, and joint profile. A poor repointing job (right) can destroy the original appearance of the building. Here, the mortar joints are too wide and the composition of the mortar is too hard.

Removal of deteriorated mortar is best done by hand chiseling. A skilled mason may use a thin diamond- or carbide-tipped blade on horizontal joints. (It is too easy to cut into the bricks above and below when cutting mechanically in the vertical joints.) Care should be taken to remove only the old mortar without damaging the edges of the masonry units. Mortar should be removed to a depth of two-and-one-half times the height of the joint or deeper, if necessary, to sound mortar.

Repointing mortar should be tried on a test patch, and evaluated after it has cured for how well it matches the original in color, hardness, and joint profile.

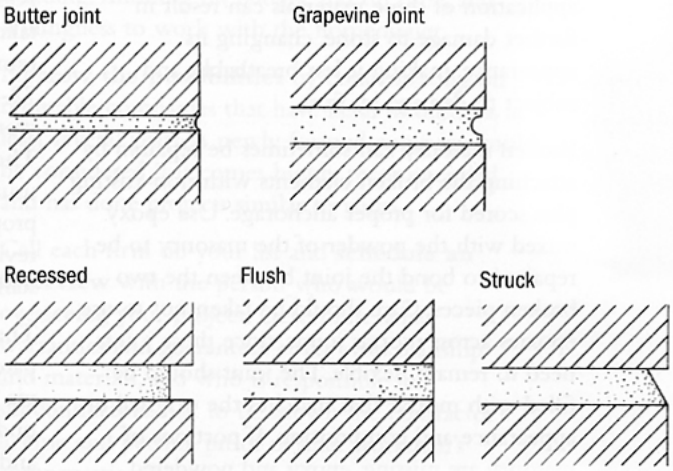
Repointing mortar should normally be "cut" or softened by adding lime to the mix. Avoid using too much cement; cement-rich mixes are too hard for historic masonry. The Philadelphia Historical Commission must approve a pointing sample before work can begin.

One good mortar formula, recommended by the New York City Landmarks Preservation Commission for most early buildings (although specific circumstances may necessitate a different recipe), is as follows:

- 1 part Portland cement (ASTM C – 150, Type I)
- 2-1/2 parts lime
- 5-6 parts sand
- Parts are by volume; mix dry ingredients first before adding potable water; use dry pigments (natural or synthetic stable oxide pigments) to tint or color mortar; mix all ingredients thoroughly.

Individual mortars will vary according to the type of aggregate (sand, pebbles, or even shells) added, and experimentation will be needed for a good color match.

The finished joint profile should be slightly recessed from the face of the wall. Consult the staff of the Historical Commission for approval of the appropriate joint style and profile. Avoid overfilling the joint and be sure not to create a horizontal shelf for water to collect. If water does wash down the wall, it should flow unimpeded or be deflected away from the wall.




Mortar joint profiles.

## Replacement Siding

Encasing a masonry structure or its decorative elements, such as the cornice, in aluminum or vinyl siding is not allowed in the historic district. Re-siding obliterates the historic appearance of the building and masks any potential problems on the building surface.

Applying a stucco finish on exposed, former party walls between rowhouses is acceptable since this procedure will provide additional protection to brick walls not originally intended to be exposed to the weather. Such stucco must have a smooth finish; special decorative finishes are not allowed. Beige may not be the appropriate color; better to match the brick or other masonry on the building. Contact the Philadelphia Historical Commission for advice.

## Air Conditioners

The insertion of an air-conditioning unit through a hole cut into the façade of a masonry building causes irreversible damage to the building and is not allowed. If air-conditioning units installed in windows require support brackets, these should be affixed to the mortar joints only – not into the masonry. Take care that condensation does not run down the masonry wall, which over time can cause damage.

**by Joseph F. McCarthy, RA,**
adapted, in part, from the
New York City Landmarks
Preservation Commission
*Rowhouse Manual*

**Not Subject to Philadelphia Historical Commission Approval**
All procedures that affect exterior masonry are regulated

**Subject to Philadelphia Historical Commission Approval**
Painting previously unpainted masonry
Repainting previously painted masonry
Repairing or resurfacing masonry
Cleaning exterior wall surfaces
Removing graffiti
Stripping paint from the façade
Applying masonry coatings
Repointing
Repairing cracks
Installation of air-conditioning units through or anchored in masonry
Installation of siding and cladding

# Windows

***See that the rooms are properly lighted, and at the same time, that there are a sufficient number of windows, and of a size suitable for the external part of the building.***
(Asher Benjamin, *The American Builder's Companion*, 1827)

Windows are key to defining a building's historic character. The style, size, configuration, profile, and materials of the windows' features, including sash, muntins, glazing, frames, heads, sills, jambs, hood molds, and interior and exterior shutters are individually and collectively important elements of the building's overall design. Much like building height, the continuity and variety of window patterns creates a visual rhythm along the street. Inappropriate alterations or replacements are intrusions that can compromise the integrity of a building, its row, the entire street, and the historic district.

Yet, windows are among the most vulnerable features of historic buildings. Age, weathering, and inadequate maintenance all contribute to their deterioration. Damaged windows can be drafty and difficult to operate, prompting their premature replacement or alteration on the mistaken assumption that they are beyond repair. Simple yet effective maintenance, repair, and retrofitting measures will save both money and the building's historic fabric.

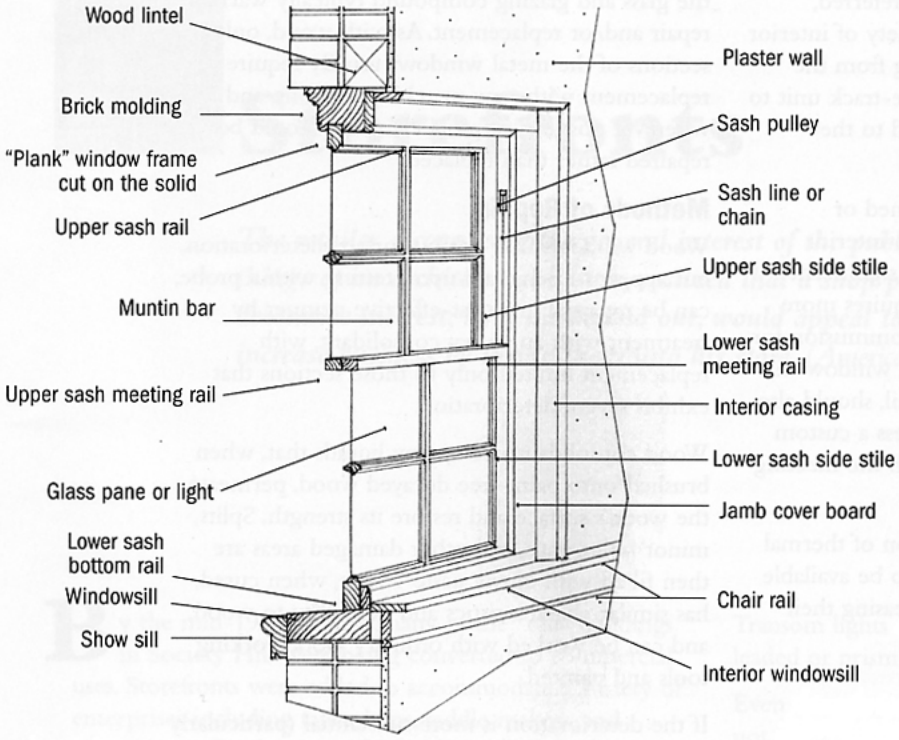
Nevertheless, many windows in the Society Hill Historic District have been replaced over the years. Studying neighboring buildings for clues to the original windows' appearance can be misleading. If replacements are contemplated, it is better to consult with the Philadelphia Historical Commission staff early, since existing replacement windows may have attained "historic" significance in their own right.

## Routine Maintenance

Windows that seem beyond repair may require only basic maintenance and repairs to reestablish their smooth operation and improve their energy efficiency.

Deterioration of windows is primarily caused by the effects of water, which decays wood and corrodes metal. The two major causes of water damage are exposure to the exterior elements and interior condensation. To minimize these problems, the areas vulnerable to water seepage should be inspected regularly and sealed when necessary. The joint where the window frame meets the masonry should be caulked, cracked window panes and dried or missing glazing putty should be replaced, all chipping and peeling paint should be removed, and the window primed and repainted. Bare wood and metal window components are particularly susceptible to decay and should never be left exposed to the elements.

A continuity of window patterns creates a visual rhythm along the street.




Cross-section of typical double-hung window; view from interior.

Over time, old windows can become difficult to operate due to excessive paint build-up or broken operating mechanisms. Paint can best be removed by the careful scraping or stripping of the paint with a chemical paint remover or heat gun. Paint removal can be hazardous; be sure to follow all safety precautions. While heat guns are effective at removing old paint, their improper use by an inexperienced operator may result in the scorching of wooden elements and can be a fire hazard. Never use open-flame torches to remove paint. Use the heat gun on the sill, stops, parting beads, and window trim. Chemical paint stripper should be used on the sash since the glass will break if heated. Take care to follow safe lead-paint removal procedures and the manufacturer's recommendations for the safe use of chemical strippers.

Windows that bind, have become inoperable, or will not remain open may require repairs to the operating system. For example, on most double-hung windows with a counterweight-and-pulley system, an experienced do-it-yourselfer can attend to these problems by removing the interior trim and jamb or the jamb access panel to examine the pulley and rope system. First, examine the condition of the pulley. If it is coated with layers of paint, tie off the sash cord, remove the pulley, strip the paint layers, lubricate the pulley and reinstall it in the jamb. If the pulley is too damaged, replace it with a new matching element. The other potential problem is a broken and/or damaged pulley sash cord or chain. Either stripping the chain of interfering paint layers or replacing the sash cord or chain with a new element will reestablish the smooth operation of the sash.

Metal casement windows, found on some buildings in the historic district, are damaged when they are allowed to flap about in high winds or are poorly maintained. The problem can be avoided by keeping locking systems, hinges, and other hardware maintained and lubricated.

Contact the Philadelphia Historical Commission staff for help on maintaining and repairing contemporary metal windows.

## Storm Windows and Weather Stripping

A variety of cost-effective options exist to improve the energy efficiency of historic windows. In addition to replacing caulk and glazing putty, weather stripping can be applied around sash and frames and at the meeting rails of windows to prevent drafts. Weather stripping is one of the least expensive means of improving energy efficiency, yet it can increase energy performance by as much as 50 percent.

Storm windows insulate against noise and drafts, and exterior storm windows protect windows from weathering. Exterior storm windows, however, can have a detrimental visual impact on the architectural integrity of a building. Depending on their design and color, exterior storm windows can be obtrusive and unsightly and can cause reflections, which obscure the configuration and detail of the historic windows. Storm windows should fit tightly within the window openings, without the need for panning (or fillers) around the perimeter, and should be set as far back as possible from the exterior wall plane. The meeting rails and stiles of the storm window must align with those of the historic window and the color should match the color of the window frame. Modern aluminum triple-tracks may be installed on secondary façades only.

Interior storm windows are much preferred, especially on primary façades. A variety of interior storm windows are available, ranging from the interior version of a traditional triple-track unit to a single sheet of clear glazing applied to the window jambs, head, and sill.

Any decorative window, such as stained or leaded glass, should be fitted with an interior storm only, so as not to obscure the significant detailing. If a decorative window requires more protection, contact the Historical Commission for suggestions. An arched window, or a window that does not have a centered meeting rail, should also be fitted with an interior storm unless a custom storm can be manufactured to match the meeting rail or arched configuration.

Other options, such as the installation of thermal glass into existing windows, may also be available to preserve old windows while increasing their energy efficiency.

## Repair or Replace?

Seriously deteriorated windows require careful evaluation to determine whether repairs are possible. The integrity of historic wood windows can generally be assessed through a few simple steps. Deciding the overall stability of metal windows is much more complex and typically requires the attention of an experienced professional.

One simple test to determine the structural integrity of the window is to prod the various frame and sash elements with a sharp probe or tool, such as an ice pick. If the probe easily penetrates the wood or the surface of the metal, and brittle strands of metal can be dug out, then the element is beyond traditional repair.

Even then, wholesale replacement may not be required. In many instances, the replacement of several elements may be possible. Intact elements should always be repaired, restored, and reused. Usually, only the sash needs replacement and the frames and sills can be simply repaired using traditional methods.

Corrosion of metal windows typically starts along the sill, bottom rail, and the lower extremities of the stiles. Corrosion swells the metal, making it difficult to operate the window. In extreme situations, the corrosion spreads beyond the lower extremities and leads to bowing, bending, and misalignment of whole metal sections. In addition, the glass and glazing compound typically warrant repair and/or replacement. As with wood, only sections of the metal windows usually require replacement with new matching sections, and wherever possible, original elements should be repaired rather than replaced.

## Methods of Repair

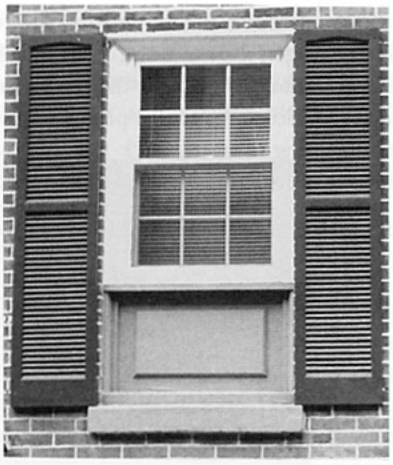
Wood windows that exhibit surface deterioration, but appear to be sound upon testing with a probe, can be repaired in a cost-effective manner by treatment with an epoxy consolidant, with replacement limited only to those sections that exhibit severe deterioration.

Wood consolidants are syrupy liquids that, when brushed onto paint-free decayed wood, permeate the wood's surface and restore its strength. Splits, minor holes, gaps, and other damaged areas are then filled with epoxy paste which, when cured, has similar characteristics and flexibility to wood, and can be worked with ordinary woodworking tools and painted.

If the deterioration is more substantial (particularly in the sill area), but is limited to only a section of the wooden element, the damaged area can be removed, squared-out and a wood "dutchman" patch installed.

Like their older counterparts, modern metal windows in the district cannot be altered or replaced without approval of the Philadelphia Historical Commission.

The repair of metal windows is usually more complex and requires the expertise of a professional. The typical repair process includes scraping and wire brushing deteriorated paint and loose corrosion layers, patching depressions in the metal with epoxy fillers with a high content of steel fibers, splicing in new matching metal sections as necessary, and aligning bent and bowed sections. Hinges and other hardware should be cleaned, lubricated, or replaced as required to



Left, preserve wooden windows and shutters. Right, an inappropriate window replacement.

reestablish the operation of the window. Metal windows should be primed with an anti-corrosive primer as soon as they are exposed to the exterior elements. At least two coats of finish paint compatible with the primer should be applied to the metal surface.

## Replacement Guidelines

Repair and retrofitting of historic windows are always preferable to replacement. Replacement of original windows should be considered only as a last resort and is justified only when the severity and extent of deterioration warrants. If replacement window sash and frames are installed on primary or highly visible façades, they should match the original in dimensions, materials, operation, configuration (the pattern or organization of glass panes), profile, and detail. Matching historic windows maintains the historic character of the building and helps retain the sense of scale and rhythm of the historic district.

In undertaking the replacement of windows, always seek the advice and review of the Philadelphia Historical Commission. The staff will help you determine the correct configuration of the window, based on historical photographs, pictures, surveys, and other documents, and they have numerous replacement window samples to show you.

The Historical Commission does not approve vinyl windows with snap-in muntins. If multi-pane windows are appropriate, they should be "true divided lights" in which the wooden muntin actually holds each pane of glass in place.

If possible, keep the original window frames and replace the sash only. If the frame must be replaced, the Historical Commission requires that the dimensions and profiles match the original. Any existing exterior shutter hardware must be reinstalled, sometimes necessitating that the outside frame be cut. The Historical Commission recommends, but does not require, that counterweight-and-pulley systems on double-hung windows be retained, especially on large, heavy windows.

On secondary and rear façades not readily visible from the street, replacements should match the original in size, configuration, and operation, but an alternative material may be acceptable. In all instances, the use of snap-in muntins and panning (covering the window frames and moldings) is inappropriate.

Repair is generally more cost-effective than replacement and, when accompanied by routine maintenance procedures, ensures the preservation of one of a building's most distinguishing features.

## Basement Windows, Security Bars, and Grilles

Basement windows should not be infilled with glass block. The original wood multi-pane sash should be retained or replaced to match the original.

Original basement window grilles are part of the building's design; inappropriate alterations are jarring.

Metal window bars or grilles are typically found on basement windows and were often installed at the time of construction to provide added security. Many of these original bars or grilles have elaborate designs and are an important component of the building's façade. Original window grilles should always be maintained rather than replaced. However, if replacement is necessary, new grilles should match the originals and be installed without damaging the window frame or masonry.

The installation of modern security bars or grilles on windows that would not have originally contained such features is generally discouraged, especially on primary façades, and the use of alternative security measures should be explored.

## Awnings, Exterior Shutters, and Flower Boxes

Shutters were of great importance to certain styles of historic architecture, providing security and a means of controlling light and heat. The replacement of missing shutters is encouraged, as is the preservation and restoration of existing original shutters. Where replacement is necessary, the new shutters should match the originals in wood. If the originals are not available, match the panel pattern of historic doors and reveals. Before painting, treat new shutters with wood preservative to increase their resistance to weather.

Make the new shutters operable, or at the very least, appear to be operable, and completely fill the window opening when closed. In addition, the shutters must contain the appropriate hardware such as hinges, shutter dogs, and bolts. Fortunately, on most historic buildings that had shutters, the shutter pintles are often in place, simplifying installation of new shutters. Lock rails of new shutters must fall below the window sash meeting rails.

Fixed aluminum awnings are not appropriate for any historic dwelling.

Consult with the staff of the Historical Commission before purchasing and installing flower boxes. Care needs to be taken when they are attached. Do not screw flower boxes directly into a stone sill or allow them to rest against the masonry wall.

**by Robert Powers and Cynthia Rose, Powers & Company, Inc.**

| Not Subject to Philadelphia Historical Commission Approval | Subject to Philadelphia Historical Commission Approval |
|---|---|
| Caulking | Installing new sash or frames |
| Weather stripping | Installing exterior storm windows |
| Reglazing | Installing or removing exterior shutters |
| Repairing original window materials (minimal) | Installing window awnings |
| Repairing suspension systems (pulleys, chains, ropes) | Installing or removing exterior security bars or grilles |
| Repairing or replacing window hardware | Altering the size, shape, or design of a window opening |
| Installing most interior storm windows | Blocking up existing window openings or constructing new openings |
| Installing interior security bars or grilles | Restoring original window openings |
| Installing regulation child guards | Replacing original window materials (extensive) |
| Painting wood trim | Installing flower boxes |

# Doorways

***Few features of a house are more noticeable than its entrance. It seems to introduce us to its life and spirit. It may wear the plain word "Welcome!" all over its generous proportions and its genial aspect, or it may impress us as cold and forbidding.*** (*Philadelphia Real Estate Record and Builders' Guide,* March 21, 1887)

The doorways in the Society Hill Historic District reveal much about their original builders and owners. The elaborate entry of the Hill-Physick House at 321 S. 4th St. signals wealth and opulence; the simple doorways on Drinker's Court reflect modest origins. Yet even on the plainest dwelling, some attention to detail was usually lavished on the doorway, one of the main stylistic elements of a building.

## Maintenance and Repair

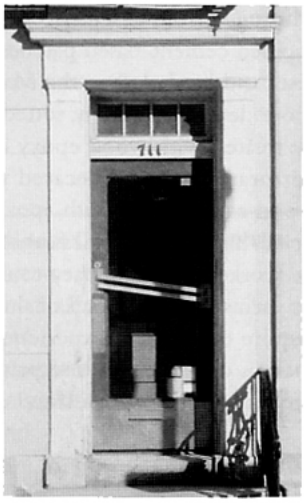
Doors deteriorate because of exposure to weather, flaws in construction, and the enormous wear they endure. Although exterior doors are installed so that they are somewhat protected from the elements, over time wood doors are inevitably subject to wear and rot. Fortunately, wood is easily maintained and repaired, and a properly maintained wood door will last for generations.

Paint or clear coatings such as varnish are essential, for not only appearance, but structural stability as well. These coatings create a hard, protective finish that sheds water and protects the wood from moisture and rot. Occasionally paint needs to be removed, since too many layers weaken the adherence of the paint to the surface and hide carved or molded detail. Too much paint can also result in unattractive paint build-up at the joint where the panels meet the frame; panels should be kept free moving to allow for natural expansion and contraction of the wood.

Damage or rot to wood doors is relatively easy to repair with household tools. Dents, checks, and surface marks can be fixed with glue, plastic wood, and small wood shims. Stiles and new panels and moldings can be made by experienced mills to replace missing and damaged parts.

Rotting areas of the frame, often at the door's bottom where the end grain has absorbed water, can be consolidated with epoxy resins, and missing areas can be reconstituted and molded out of epoxy paste fillers. Or, a replacement piece of wood can be fit in place by an experienced carpenter. Such "dutchman" patches are also needed when door locksets or hinges are changed and the mortises of the former hardware exposed.

If an original door must be replaced, the new door should match the original design, material, and configuration. If the original door is missing, appropriate replacements can sometimes be determined by examining neighboring or similar buildings, by looking at historical photographs and illustrations and, always, in consultation with the staff of the Philadelphia Historical Commission.



The doorway of a historic buildings is an artistic ensemble that should be preserved.

## Door Surrounds

The woodwork, moldings, and ornamental trim that surround a door are all part of the architectural design and character of the building. For the most part, the simple, brick dwellings in the Society Hill neighborhood had plain brick reveals at the door, with simple molded wood frames, lintels, and sills. More expensive dwellings had elaborate entranceways, or frontispieces, that included paneled wood reveals, pilasters, and fanlights topped by a pediment. Similarly, in the Society Hill district, the door is usually accompanied by a marble stoop and ornamental ironwork in the form of handrails, boot scrapers, and grillwork. (For more details, see the chapter on Stoops, Railings, Paving, and All the Rest.)

This architectural ensemble should be preserved and restored. Removal of rotted elements or of the entire surround, or sheathing it in another material, is inappropriate. So is adding an architectural element that was never there or has the wrong style. (A modern "Victorian"-style door hood added to a colonial house, for example, confuses the style and meaning of the architecture.) If you suspect that a more modern piece has been added to the original doorway, contact the Philadelphia Historical Commission about its possible removal and replacement with something more appropriate.

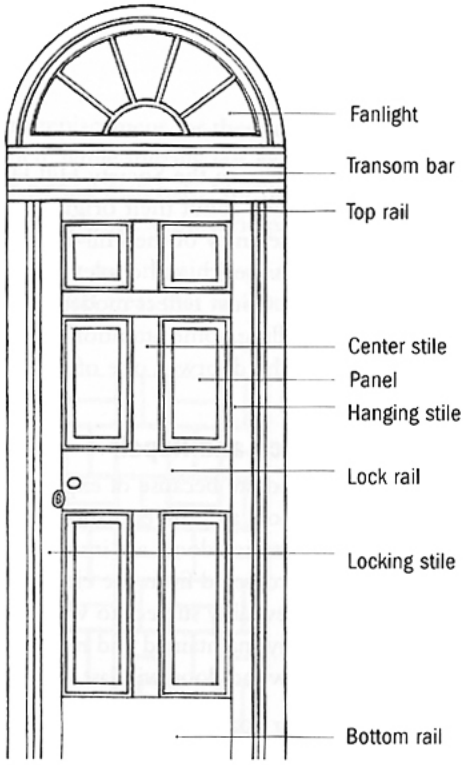
The exposed elements surrounding historic doorways often deteriorate over time, but their restoration is not a do-it-yourself job. Stone ornamentation can be consolidated using such materials as silanes, acrylics, and epoxies that penetrate the pores of the stone, making it stronger and resistant to further deterioration. Missing masonry elements can be replaced with molded cement-based patches. Marble steps can be reset and leveled. (See the Masonry chapter for more details.) Similarly, rotted wood elements can be treated with wood epoxy consolidants that permeate porous or decayed wood. Gaps in the wood can be filled with epoxy paste which, when dried, has characteristics similar to wood and can be worked with ordinary tools, primed, painted, or varnished. Almost all of these repairs will require the skills of experienced restoration masons or carpenters and prior approval of the Historical Commission.

## Door Types and Configurations

Doors come in a variety of types, sizes, and configurations. The single-leaf door is the most common, but double-leaf doors also appear in the district. The tops of doors and door surrounds may be flat, round, segmental, or even pointed. Transoms and sidelights were commonly used to admit light and air into the entry hall. The number of leaves, shape, transom, sidelights, and accessories all constitute the doorway's configuration, which should be preserved.

Blocking up or altering transoms and sidelights, reducing, enlarging, or blocking up door openings, or cutting new openings where none previously existed all destroy the appearance of a historic building and jeopardize its physical integrity.

In some cases, however, the original door has already been replaced. Contact the Philadelphia Historical Commission for guidance in choosing an appropriate design when you wish to change a door.



How a door is constructed.

## Door Construction

Most doors in historic structures are made of stiles (the vertical elements) and rails (the crosspieces) containing panels, a centuries-old construction method in which finished and ornamental wood planks are assembled, usually with strong mortise-and-tenon joints held secure with pins and glue. Most historic doors conform to this basic type, whether they are flat, paneled, or ornate and deeply molded.

Panels may be either wood or glass and are held in place in grooves in the inner edges of the frame or by moldings fastened to the frame. Wood panels should not be glued into the grooves; they need to move freely within the frame to allow for seasonal wood shrinkage and swelling.

## Hardware

The style of the hardware on a door should be compatible with the age and style of the door and dwelling. Generally, residences have simple round or oval knobs made of easily cleaned materials like brass, bronze, or ceramic. A plain, six-panel door should have a plain brass knob or latch set. More intricate, raised, eight-panel doors might have a more elaborately decorated, but classically derived knob and plate. Stainless steel came into use with Art Deco and modern architecture. If the original hardware is missing, you can determine an appropriate replacement by looking at the style of the house and similar houses in the neighborhood and by consulting with the Philadelphia Historical Commission.

## Awnings, Storm and Screen Doors

Fixed aluminum awnings are not appropriate for any historic dwelling. Prepainted aluminum storm or screen doors, especially those with added scalloped and "colonial" ornament, are not appropriate on the houses in the Society Hill Historic District. Drafty transoms and sidelights can be protected with fixed glass or polycarbonate panels discreetly inserted on the inside of the existing wood door reveal. Consider weather stripping and caulking as the first, and usually least expensive, method to eliminate air infiltration from drafty doorways.

## Lighting and Electrical Devices

Most houses in the Society Hill Historic District were built before the advent of electricity and never had exterior lights, electric doorbells, electric door openers, or intercom systems. In the modern city, however, these items have become necessities to improve security in the home and safety on the street.

Generally, these devices should be as simple and unobtrusive as possible and wiring should be concealed on the inside of the building. Exterior lighting fixtures should be appropriate to the style of the building, or as inconspicuous as possible. A simple, modern light fixture may be a better choice than an overly elaborate or inappropriate reproduction. If the door has a deep, wood reveal, a small, plain, recessed light hidden above the door is preferred. Doorbells and intercom boxes should be small and recessed into the casing or wood reveal to the side of the door.

**by Charles A. Evers, AIA, Atkin, Olshin, Lawson-Bell and Associates Architects**

**Not Subject to Philadelphia Historical Commission Approval**

Painting wood elements
Sanding or refinishing
Repairing wood door and frame
Replacing or installing new locks
Replacing broken glass
Weather stripping

**Subject to Philadelphia Historical Commission Approval**

Installing exterior lighting, intercoms, door bells
Installing new doors, storm doors, or door frames
Installing security grilles or bars
Replacing solid panels with transparent materials
Replacing transparent materials with solid materials
Altering door frame or surround
Altering door configuration (size, number of doors, transoms, or glazing) or material

# Stoops, Railings, Paving, and All The Rest

***Wood & Perot Ornamental Iron Works. 1136 Ridge Avenue, Philadelphia. Manufacturers of Iron Railings for Cemetery Enclosures, Public Squares, Churches and Private Residences, Iron Verandahs, Balconies, Bank Counters, Stairs (in every variety), Mausoleums or Tombs, Chairs, Settees, Tables, Tree Boxes, Hitching Posts, Lamp Posts, Brackets, Statuary and all other Iron Work of a decorative character. Drawings furnished to those who wish to make selections.*** (*Philadelphia and Its Manufactures,* 1858)

Miscellaneous building and site elements – sidewalks, stoops, railings, boot scrapers, mounting blocks, etc. – are easy to overlook, but play an important role in creating the character of the Society Hill Historic District. These significant details establish a relationship between the building and the street, and contribute to the overall streetscape.

## Sidewalks

Most of the historic sidewalks in the district are made of brick pavers or large pieces of granite or bluestone. You may see a long depression across the brick or stone; this would have channeled rain runoff from a downspout to the street.

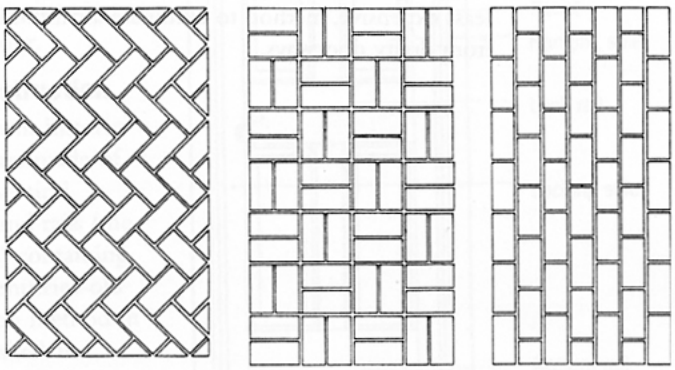
**Brick paving** may be installed with or without mortar joints. Mortar is the binding material in the joints between the bricks, as you would see on a brick building wall. Mortared brick paving requires that the bricks be set on a stable base, such as a concrete slab. Separating bricks from mortar for reuse can be difficult. A qualified contractor may be able to remove the mortar.

Many brick sidewalks are mortarless, or "dry laid." This makes removing the pavers, reestablishing the base (or bed), and resetting the pavers easier and better accommodates thermal movement. In a mortarless installation, the bed should consist of six inches of gravel with three inches of sand on top. The pavers are then set as close together as possible, and sand or a sand/cement mixture is brushed into the joints.

**Granite** was historically used for curbing, and is still used for this purpose today because of its durability. **Bluestone,** although more fragile, is also a historic curbing material.

The most common replacement for these original materials is concrete, which, while initially less expensive, is not as durable as other paving materials. Nor does concrete have the character and texture of historic paving materials.

Historic sidewalk paving may require repair if there are cracks or sunken or raised areas that make the walkway hazardous to pedestrians. Repair by removal and reinstallation of original materials is recommended because it retains the actual historic fabric of the sidewalks. Replace damaged or missing pavers with new or salvaged material that matches the original.



Brick paving patterns, all more appropriate than concrete.

Always pitch paving slightly away from the building to direct water away from foundation walls. When curbing requires replacement, building owners should contact the Philadelphia Streets Department, along with the Philadelphia Historical Commission.

In December 1998, the Historical Commission designated the Historic Street Paving Thematic District. The Historical Commission now protects all of the granite block, brick, and cobblestone

Sidewalks and historic street paving are under the jurisdiction of the Philadelphia Historical Commission.

streets in the city from inappropriate alterations. This non-contiguous district includes Society Hill streets with historic paving materials, such as portions of Delancey, Randolph, and Cypress Streets.

For problems with street trees, including damage to sidewalks and curbs caused by root growth, contact the Fairmount Park Commission.

## Stoops and Railings

Stoops and railings were designed to harmonize with the building façade. Front steps, cellar entrances, and basement-level water tables are often all constructed of the same material. Railings may exhibit patterns and shapes associated with the style of the building.

Stoops in the historic district, and their side (or cheek) walls, are constructed of various masonry materials, most commonly marble, brownstone, and brick. As with all masonry surfaces, painting is not recommended. Paint can trap moisture in the masonry, which can lead to deterioration.

Painted masonry will also have to be repainted periodically. If, however, the masonry steps have previously been painted, seek guidance from the Philadelphia Historical Commission on repainting with an appropriate color or gentle paint removal. (For more details, see the Masonry chapter.)

Joints on steps should always be mortared to prevent moisture from getting behind the stones where it may freeze and expand, dislodging the stones. Masonry steps can be taken apart and reassembled if they have shifted dangerously out of position, although additional structural support may also be required. When replacing mortar (repointing), use a mortar made with lime, sand, and cement. Most modern mortars made only with Portland cement are too hard and may damage the masonry. Adding lime gives the mortar necessary flexibility. (For more details, see the Masonry chapter.)

Historic stair railings, boot scrapers, and bollards are made of wrought or cast iron. Beating or hammering shapes wrought iron; cast iron is formed by casting, that is, pouring molten metal into a mold. The different processes result in different characteristics. Wrought iron can be welded and hammered into delicate, often curvilinear shapes; it tends to be lighter in appearance. A cast iron railing is constructed of separately cast pieces bolted together (large pieces are usually hollow); it generally tends to be heftier in appearance.

Masonry steps should be maintained to prevent the damaging effects of water penetration and subsequent freezing and thawing.

Steps often crack at the point where a railing post is set into the surface of the tread (the part you step on). Rainwater ponding on the masonry surface at the railing base causes the metal to rust and expand, exerting pressure on the surrounding masonry and causing it to crack and become dislodged. To prevent this, the post base should be set into the masonry using a soft material or a stainless steel sleeve. Traditionally, lead was used for this purpose; sealants are more commonly used today. Filling the joint with cement is discouraged because it does not have the flexibility required to hold up under normal thermal expansion and contraction; it aggravates the problems it was intended to fix.

Rusting, caused by moisture on bare metal, is the primary cause of iron deterioration. Keeping your cast or wrought iron railing painted is a simple and effective way to preserve it. Hand scraping and wire brushing can remove rust. This is followed immediately with the application of a rust-inhibiting primer and a compatible finish coat. Repair small voids with plumbing epoxy or auto body putty; be sure to maintain the original profile of the metal. Replacing screws and bolts with new stainless steel ones may repair loose connections in cast iron assemblies.

**by Suzanna Barucco, Martin Jay Rosenblum, RA & Associates**

**Not Subject to Philadelphia Historical Commission Approval**
Minor sidewalk repairs
Repairing railings (e.g. replacing worn or missing fasteners)
Painting railings, boot scrapers, mounting blocks, bollards, etc.

**Subject to Philadelphia Historical Commission Approval**
Repointing masonry steps
Painting masonry steps (whether previously painted or not)
Removing paint or cleaning masonry steps
Repaving a sidewalk with new materials
Major sidewalk repairs
Replacing curbing
Replacing steps or railings
Removing boot scrapers, mounting blocks, bollards, etc.

# Storefronts

***The retailer, recognizing the general interest of the public in things artistic, especially those things of an architectural nature, realized that a shop possessing architectural value and decorative interest, both inside and out, would appeal to his prospective customers and increase business by luring them into his store.*** (*American Commercial Buildings of Today,* 1928)

By the mid-19th century, many of the "old" buildings in Society Hill were being converted to commercial uses. Storefronts were added to accommodate a variety of enterprises including tailorshops, saddle makers, and tobacconists. By the time of World War I, there was a shop on practically every corner.

During the redevelopment period of the mid-20th century, the emphasis was on returning to the district's early residential character, and many of the storefronts were removed. A few of these older storefronts escaped the changes made by the Redevelopment Authority and can be found scattered throughout the district. Late-19th- and early-20th-century storefronts are generally characterized by large plate glass windows, and are supported by cast iron or wood columns and piers. Wooden components include decorative cornices, doors, and paneled bulkheads below the display windows.

An intact Victorian storefront is worthy of preservation, even though it is not original to the building.

Transom lights over the shop windows, sometimes with leaded or prism glass, are also distinctive features.

Even though most storefronts in the historic district do not date from the building's original construction, and may differ in style from their earlier building, they reflect an important aspect of neighborhood history and are worthy of preservation in their own right.

## Maintenance of Historic Storefronts

Storefronts are susceptible to deterioration, primarily because of water infiltration and weathering. Water penetration behind the storefront, possibly into the supporting building, can cause unseen damage.

The primary areas of concern include the storefront's cornice, which requires proper flashing and water conduction, and the joints between components, which require careful sealing. (For more information, see the chapter on Roofs, Cornices, and Related Elements.) On wooden storefronts, moldings traditionally covered joints. Seams and joints in storefronts made of metal and other materials should be protected with caulk. Regular painting will help protect wooden elements from water infiltration and rot, and will prevent metal components from rusting.

## Alteration, Rehabilitation, or Restoration of Storefronts

Historic storefronts should be retained, repaired, or restored with matching materials. An existing storefront may not appear to be historically significant, but it may be hiding historic fabric underneath later alterations. Consult the Philadelphia Historical Commission staff before making changes.

The Historical Commission encourages the retention and repair of early storefront features and the incorporation of any remaining fragments into new design. Removing a historic storefront in order to achieve restoration to an earlier period – even to the building's original appearance – may not be appropriate.

If the historic storefront is completely obliterated, as many have been over the years, the new storefront should approximate the original configuration, based on photographs or other historical evidence. Again, consult the Historical Commission. In the absence of solid evidence, simple generic storefront features are recommended. As with all new design in the historic district, these storefronts should be compatible with the building and streetscape in scale and proportion, materials and finishes, configuration, sill and cornice heights, etc.

Even if a building with a historic storefront is being returned to residential use, the storefront is considered a significant alteration to the building and should be retained. Contact the Historical Commission for design options regarding privacy and security.

## Signs and Awnings

All signs and awnings in the historic district – including banners – require the approval of the Historical Commission. The only exception may be temporary real estate signs.

The size, shape, design, material, location, and method of attachment of commercial signs have a large impact on historic storefronts. Signs should be to scale with the building and storefront and should be placed within the historic "signboard" area – the fascia between the storefront and the second floor. Signs must not obscure, damage, or destroy any of the character-defining features of the building. Backlit or illuminated plastic box signs are not allowed.

Historic storefronts should be retained, even if the building is in residential use.

Signs and awnings may also require the approval of the Art and Zoning commissions.

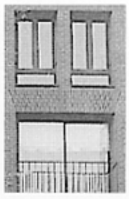
## Security Grilles and Bars

Every attempt should be made to situate security grilles and bars in the interior of the storefront, behind the glass. Open, see-through grilles are preferred to solid metal screens, which not only obscure the storefront, but pose security and safety risks. The Historical Commission generally recommends that the grille housing also be located on the interior.

**by Sara Jane Elk,**
**Eastern State Penitentiary**
**Historic Site**

**Not Subject to Philadelphia Historical Commission Approval**
Painting wood or previously painted metal components

**Subject to Philadelphia Historical Commission Approval**
Painting masonry
Installing awnings
Removing, replacing, or altering storefronts
Installing security gates
Installing or replacing signage



# New Construction

***Visitors from out of town are wont to sigh with rapture when they see our trim blocks of tall brick buildings — that even cornice running in a smooth line for several hundred yards really is quite a sight — and exclaim, "Oh, I wish we had something like this in New York!"*** ("Pine Street," by Christopher Morley, *Pipefuls,* 1921)

The Society Hill Historic District contains significant early structures interspersed with contemporary architecture of the 20th century. With its remarkably high number of important buildings, there are relatively few open lots. Opportunities for new construction are limited; most building involves rear additions, the replacement of the few structures that do not contribute to the district, and the building out of the few empty lots. New construction on vacant lots in the district is subject to the review and comment of the Philadelphia Historical Commission, whose advice, while not binding, will help insure the integrity of the historic district. Other new construction is fully regulated.

Any new construction in the district should not obscure, damage, or destroy the character-defining features of existing historic buildings. Additions to historic buildings, however, should not exactly duplicate the design in an attempt to achieve a seamless effect. Instead, the new addition should be designed so that there is clear definition between historic and new materials. Better for new construction to reflect our time rather than to give a false historical impression through exact mimicry.

At the same time, all new construction should be compatible with the size, scale, color, material, and character of the property and neighborhood.

The goal should be to create consistency in the street façade, including setback, materials, overall height, and the spacing and scale of window and door openings.

As you think about your new building or addition, take a careful look at the adjacent buildings as well as others throughout the district. Note the materials used, almost always some form of masonry: brick, stucco, brownstone, or limestone. Look at special features, such as bay windows, dormers, the number of windowpanes, and style of windows.

Note how most streets in the district are consistent in scale and materials, whether the buildings were built as a single design, or added gradually over time. This notion of taking design cues from the surroundings is the goal for sensitive new construction in the district.

An experienced design professional can help meet your needs with a design that is compatible with the historic district. And the staff of the Philadelphia Historical Commission is available for advice and consultation.

**by Michael Stern, Foundation for Architecture**

**Recommended**
Alignment with adjacent building height and cornice line
Alignment with adjacent window sills and heads
Materials similar to adjacent buildings
Similarity in roof profile
Doorway design, dormers, and bay windows can differ in design, if not overall scale, from adjacent buildings

**Not Recommended**
No alignment with adjacent building height and cornice line; some variety is okay
Window height size and design radically different from adjacent buildings
Use of materials not found in adjacent buildings or neighborhood
Dissimilar roof profile and design

# Selecting and Working with Building Professionals

***The attention of builders and architects and others has been closely devoted to supplying materials for buildings that would add to beauty, cheapness and durability.***
(*Philadelphia Real Estate Record and Builders' Guide,* August 16, 1886)

Many home maintenance and routine repairs lie within the capabilities of the typical old house owner. There are instances, however, when professional help is advisable.

Some of the areas in which building professionals can prove invaluable are the assessment and correction of structural problems (why is a wall bulging?); the assessment, specification, and correction of major repairs (the replacement of a roof, for example); and the design and specification of additions or alterations to ensure that they meet the preservation requirements of the Philadelphia Historical Commission.

Three types of building professionals can be of help: architects, engineers, and contractors who specialize in working with historic buildings and are familiar with Philadelphia's regulatory scheme.

## Working with Architects and Engineers

Architects and engineers can diagnose problems and prescribe remedies. Don't presume that using their services represents an added expense; an architect or engineer can supply a wealth of advice for what may be a minimal consulting fee. An architect can guide you through the entire design and construction process – from helping define what you want to build, to helping get the most for the construction dollar, all the while preserving the historic integrity of the building. Many architects specialize in preservation-related work. An engineer is more typically retained to address structural, mechanical, or electrical problems.

Architects and engineers can:

**Help clarify and refine building needs** by providing an overall assessment of a building's condition, or an assessment of a specific problem, including structural issues, deterioration of materials, or electrical or mechanical systems. Through a process called programming, you and your architect discuss your requirements, needs, and budget. The architect then helps define what is to be built and establishes the project's scope. The architect can write contract documents and specifications (instructions to contractors) for repair projects, and can also design a sensitive addition or alteration to your historic house.

**Maximize your construction dollar.** The architect and engineer can help you select appropriate materials, workmanship, and systems at a fair price, and can help you avoid unnecessary or inappropriate work and costly mistakes. For example, an architect may advise on how to save money by repairing, rather than replacing, an old slate roof. By producing contract documents for competitive bidding, the architect helps ensure that contractors are bidding on identical work, potentially controlling construction costs.

**Manage the project.** From conception to completion, the architect protects your interests and pursues ways to make the design and construction process go smoothly. The architect can help you find qualified contractors based on your requirements. During construction, the architect visits the site to verify that the project is being built according to the plans and specifications you approve. In addition, if your project requires engineering or other special services, the architect can coordinate this team of experts. The architect also sorts out complex building

codes, zoning laws, and historic district regulations, and helps ensure that you get all necessary permits and are in compliance.

If you are contemplating a project that may involve an architect, consider seeking architectural consultation early in the process. Many architects are willing to meet with you initially without obligation or cost. Consultations with two or three architects will provide you with an understanding of what can be expected from different architects and will help ensure a satisfactory match. Choose an architect with both experience with, and appreciation of, historic buildings. Request that a prospective architect supply references for similar projects that he/she has done, and check these references.

**Where to find an appropriate architect?** AIA Philadelphia's Architects Resource and Referral Center (215-569-3186), which offers information about architectural firms and examples of their work according to numerous project categories, can give referrals. Another good source is neighbors in the historic district who have retained architects for their projects.

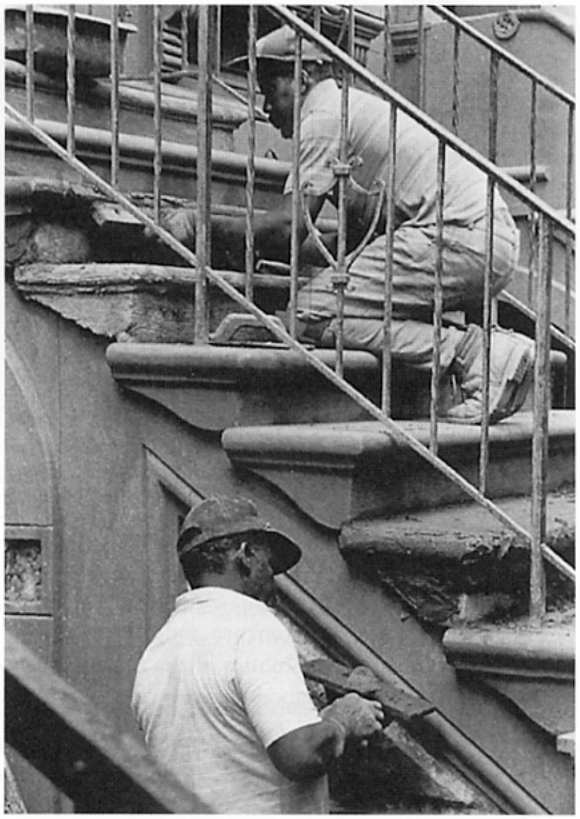
## Working with Contractors

Contractors carry out the actual repair or rehabilitation work, or construct additions. During the planning stages, they can also advise on alternative methods of construction or ways to control construction costs.

In general, except for routine work, contractors do not provide design services; this is a role for an architect. The homeowner – with the assistance of an architect or other building professional – should define the exact scope and nature of construction work through plans and specifications, rather than have a contractor define the work. This assures objectivity and cost control.

A general contractor manages larger projects, which will use various subcontractors or specialty building trades. If the project is limited in scope or involves primarily one building trade (for example, painting), a general contractor is probably not required. In addition, keep these pointers in mind when selecting contractors:

**Choose only contractors experienced with the special needs of older houses and historic properties.** Obtain referrals from your architect, the Philadelphia Historical Commission, the Preservation Alliance for Greater Philadelphia, other homeowners in the historic district, or published resource guides. The Historical Commission also has product information. Referrals by these organizations do not constitute endorsement.


Masons applying a finish coat of stucco.

**Ask for references** for several recent projects that are similar to yours. If possible, try to make arrangements to see these projects, and check these references for quality of work, attention to the historic fabric of the building, finishing on budget and on time, and willingness to work with the homeowner.

**Narrow the possibilities** by concentrating on reputable companies that have been in business at least several years. A newly formed company could be considered if it comes highly recommended and has done projects similar to yours.

Call each firm on your list and **schedule an interview** with the person who would be overseeing your project. Determine what warranties and guarantees cover workmanship and materials, and who is responsible for subcontractors. Ask to be shown the contractor's license and permit, proof of state workman's compensation coverage, and insurance certificates.

For larger projects, **receiving three or more competitive bids is advisable.** Along with bids, obtain the specifics of the job in writing, including a thorough explanation of how the work will be executed. An architect can provide bid documents, including plans and specifications, for you. Don't automatically take the lowest bid. Look for the best value combining a competitive

price with experience and a thorough understanding of the project and of the special characteristics of the architecture of the house.

A signed contract, along with plans and specifications, should include a description of the work, the payment schedule, acceptance of responsibilities, insurance, warranties, provisions for additional work, trash removal, compliance with ordinances and statutes, obtaining of permits, arbitration of disputes, time of completion, and acceptance and occupancy by the client.

Remember that the building owner has ultimate responsibility to obtain a permit that covers all the work to be undertaken. If you have asked your contractor to get the permit, have him or her give it to you to post in the window.

With the help of qualified architects, engineers, and contractors, old house owners in the historic district can ensure that their homes meet their needs now and in the future, while preserving the charm and architectural integrity of their historic properties.

**Adapted by: Robert J. Hotes, AIA, Susan Maxman & Partners** from: *Ridley Park Design Guidelines* (Preservation Alliance for Greater Philadelphia, 1995); *Invest in a Dream with Your Architect* (AIA, 1992); How to Hire a Contractor by Marjorie Roth (*Old House Fair Resource Guide,* 1997)

# Architectural Styles in the Society Hill District

***"Style" is one of the most used — and abused — words in the English language, particularly when pressed into service in the study of architectural history.*** *(What Style is It?: A Guide to American Architecture,* 1983)

The densely developed blocks of Society Hill reflect the evolution of domestic architecture in Philadelphia from its earliest days through the mid-20th century. Within its boundaries stands everything from modest Georgian to high-style Federal; Greek Revival houses to contemporary rowhouses and international style high-rises — many by prominent architects. But very few buildings are pure expressions of one single style.

Many of the houses that fill so much of the district are simple, vernacular buildings constructed with minimal attention to style. Some buildings are mixtures of stylistic motifs, reflecting a transition from one period to another; others have been altered and "modernized" over the years. And those modernizations themselves can be worth preserving.

For those reasons, the Philadelphia Historical Commission in its deliberations rarely takes purity of architectural style into account. Documentary evidence – old photographs, drawings, and other accounts, many of which are available at the Commission – is far more reliable as a basis for rehabilitation. So is a careful study of structures built at the same time. Observation and solid historical evidence will yield clues to what is appropriate for each house, without a blind adherence to the dictates of style.

What follows, then, is a very brief look at the styles that most influenced the architecture in the Society Hill District. For a more thorough discussion of architectural styles, refer to the books in For Further Reading.

Historic photographs are a better basis for restoration than reliance on architectural style manuals. See Preservation Resources for places to view old images.

The earliest houses in the district exhibit characteristics of **Georgian** architecture (c. 1740s-1780), although some are simple vernacular (left) and others are high-style examples (right). Typical characteristics include bold, Flemish bond, red brick walls with glazed headers, gambrel or steeply pitched gable roofs, shed or gabled dormers, box cornices, pent eaves above the first floor, and multi-pane wooden sash windows. With the growing accumulation of wealth and sophistication, colonial Philadelphians constructed buildings in the Georgian high-style popular in England. Besides the basic Georgian features, these incorporate such Renaissance elements as doorways with columns and entablatures, pedimented dormers, modillioned cornices, and horizontal stringcourses expressed in brick or stone.

In the Federal period, Society Hill experienced a continued accumulation of capital that fueled construction. **Federal** style (c. 1780-1805) houses, while still rendered with Flemish bond, gabled roofs, and the classical ornaments of Georgian houses, have generally larger, flatter, and more attenuated details.

Simple and symmetrical, **Greek Revival** buildings (c.1800-1850) incorporated motifs from Greek temple architecture. Typical elements include marble water tables and door entablatures, six-over-six, double-hung windows, and dentiled cornices.

Although no vacant land remained in Society Hill by 1855, several fine **Italianate** houses replaced earlier dwellings in the district. Influenced by the Italian Renaissance, Italianate (c.1840-1870) is characterized by bold, projecting ornamentation, especially the cornices, which often have elaborate brackets, and at the arched lintels above windows and doors.

The architecture of the late-19th century is characterized by a proliferation of styles that went rapidly in and out of fashion. Many buildings combined elements of various styles, defying definition. **Victorian Eclectic** (c.1870-1910) is a catchall term for these lively structures.

Minimal ornamentation characterizes the **International Style** (c. 1920-1960). Born in Europe and extending to the United States in the 1920s, its typical features include flat roofs, smooth surfaces, and bands of windows. Strong rectilinear lines prevail.

New houses built during Society Hill's Redevelopment period were either contemporary or neo-colonial. The **neo-colonial** (c. 1950-1970) style freely interprets Georgian and Federal architecture; sometimes even a trained eye can be fooled.

**Contemporary** (c. 1950 - 1985) architecture takes license with basic building elements, such as fenestration, door patterns, and rooflines, to create a style with no historical precedents. Within the Society Hill district, contemporary design was shaped by Redevelopment Authority guidelines to respect the massing and materials of the older architecture.

# Glossary

**architrave** The lowest part of a classical *entablature*.

**areaway** The below-grade space between a *rowhouse* and the sidewalk, usually providing light or access to the basement.

**awning** A projecting shading device mounted on the outside and above a door or window.

**baluster** One of a series of short vertical posts, often ornamental, used to support a rail.

**balustrade** A railing composed of *balusters* and a top rail running along the edge of a porch, balcony, roof, or *stoop*.

**bay** A regularly repeating division of a façade, marked by *fenestration*.

**bay window** A projecting structure containing windows that rises from the ground or from some other support, such as a porch roof; see also *oriel*.

**bituminous roofing** A type of sheet roofing material made from bitumen, a class of cementitious substances found in asphalts and tars.

**bracket** A projecting angled or curved form used as a support, often ornamental, found in conjunction with balconies, *lintels*, *pediments*, *cornices*, etc.

**brick molding** A milled wood trim piece covering the gap between the window or doorframe and masonry.

**bulkhead** Exterior cellar entry with masonry cheeks and wood doors.

**cap flashing** A waterproof metal sheet that seals the tops of *cornices* and *parapet* walls.

**capital** The topmost member, usually decorated, of a *column* or *pilaster*.

**casement** A window *sash* that is hinged on the side.

**cast iron** A type of iron, mass-produced in the 19th century, created by pouring molten iron into a mold; used for ornament, garden furniture, and building parts.

**clapboard** Wood siding composed of horizontal, overlapping boards, the lower edges of which are usually thicker than the upper.

**colonnade** A row of regularly spaced columns supporting an *entablature*.

**colonnette** A diminutive *column* which is usually either short or slender.

**column** A vertical cylindrical support. In classical design it is composed of a base (except in the Greek *Doric* order), a long, gradually tapered shaft, and a *capital*.

**console** A scroll-shaped projecting *bracket* that supports a horizontal member.

**coping** A protective cap or cover of a wall *parapet*, commonly sloping to protect masonry from water.

**corbel** An architectural member which projects upward and outward from a wall that supports a horizontal member.

**Corinthian** One of the five classical orders, characterized by slender fluted *columns*, and ornate *foliate capitals*.

**cornice** A projecting *molding*, the crowning member of an *entablature*, located above the *frieze*. On a house, a cornice covers framing members at the juncture of roof and wall.

**cresting** A decorative element, frequently of iron, usually located at the peak or edge of a roof.

**crocket** An ornamental *foliate* form placed at regularly spaced intervals on the slopes and edges of the spires, pinnacles, *gables*, and similar elements of Gothic buildings.

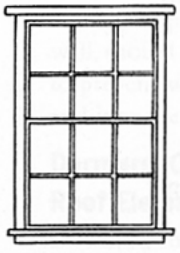
**cupola** A small dome on a base crowning a roof.

**de-lamination** The splitting apart of the outer surface of natural stone into thin layers that peel off, also called exfoliation.

**dentil** A small, square, toothlike block in a series beneath a *cornice*.

**Doric** One of five classical orders, recognizable by its simple *capital*. The Greek Doric *column* has a fluted shaft and no base; the Roman Doric *column* may be fluted or smooth and rests on a molded base.

**dormer** A vertical structure, usually housing a window, that projects from a sloping roof and is covered by a separate roof structure.


double-hung window

**double-hung** A type of window with two *sash*, one above the other, each sliding on vertical track.

**downspout** A horizontal or vertical cylinder, usually made of metal, which carries water from the *gutter* to the ground; also called a *leader*.

**drip molding** A projecting *molding* around the head of a door or window frame, often extended to the sides of the frame, intended to channel rain away from the opening; also called a drip *lintel*. In masonry, a projecting brick course intended to shed water away from a wall or structure below such as a *pent eave*.

**dutchman** A patch cut to size, glued, and sanded in a location where deteriorated material has been removed.

**eave** The overhanging edge of a roof.

**efflorescence** White powdery soluble salt deposits on masonry, caused by slow seepage of water.

**egg and dart** An ornamental band molding of egg forms alternating with dart forms.

**elevation** An exterior face of a building; also a drawing thereof.

**enframement** A general term referring to any elements surrounding a window or door.

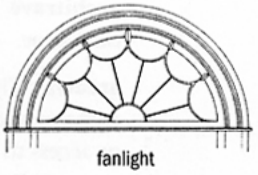
**English bond** A pattern of brickwork with alternate courses of *headers* and *stretchers*.

**entablature** In classical architecture, a major horizontal member carried by a *column(s)* or *pilaster(s)*; it consists of an *architrave*, a *frieze*, and a *cornice*. The proportions and detailing are different for each order.

**eyebrow dormer** A curved *dormer* with no sides, covered by a smooth protrusion from the sloping roof.

**façade** The main exterior face of a building, sometimes distinguished from the other faces by elaboration or architectural or ornamental details.

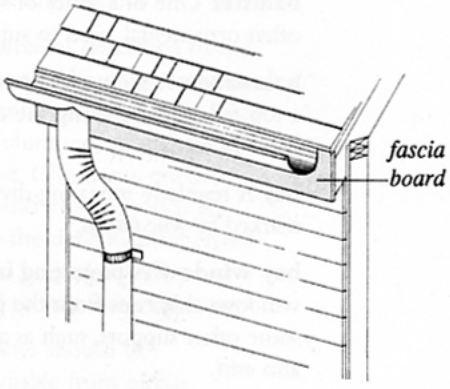
**fanlight** A semicircular or semielliptical window above a door, usually inset with radiating *glazing bars*.


fanlight

**fascia** A horizontal, flat element, often combined with a *cornice* or *architrave*.

**fenestration** The organization and design of windows in a building.

**festoon** A carved ornament in the form of a band, loop, or wreath, suspended from two points; also called a "garland" or a "*swag*."




**finial** The crowning ornament of a pointed element, such as a spire.

**flashing** Strips of sheet metal bent to fit the angle between any two roof surfaces or between the roof and any projection, such as a chimney.

**Flemish bond** A pattern of brickwork in which each course consists of *headers* and *stretchers* laid alternately; each header is centered between the stretcher above and the stretcher below it.

**flue** Channel in a chimney for conducting smoke to the outside.

**foliate** Decorative leafage, often applied to *capitals* or *moldings*.

**French door** A tall *casement* window that reaches to the floor usually arranged in two leaves as a double door.

**frieze** 1. The middle horizontal member of a classical *entablature*, above the *architrave* and below the *cornice*. 2. A similar decorative band in a *stringcourse*, or near the top of an interior wall below the *cornice*.

**gable** The upper portion of an end wall formed by two slopes of a roof.

**galvanized iron** Iron that has been coated with zinc to inhibit rusting, usually coated with paint to further inhibit rusting.

**glazing** Glass panes set in a framework.

**glazing bar** See *muntin*.

**Gothic sash** A window sash pattern composed of *muntins* that cross to form pointed arches.

**grille** A decorative, openwork grating, usually of iron, used to protect and/or to provide ventilation through a window, door, or other opening.

**gutter** A shallow channel of metal or wood set immediately below and along the *eaves* of a building to catch and carry off rainwater. Also, see *pole gutter*.

**header** A masonry wall unit of brick, which is laid so that its short end is exposed.

**hood** A projection that shelters an element such as a door or window.

**Ionic** One of the five classical orders characterized by *capitals* with spiral elements called "*volutes*," a fasciated *architrave*, continuous *frieze*, *dentils* in its *cornice* and by its elegant detailing.

**jamb** Upright piece forming side of door or window opening.

**jigsaw carving** An ornament cut with a thin narrow-saw blade.

**joist** One of a series of parallel timber beams used to support floor and ceiling loads, and supported in turn by larger beams, girders, or bearing walls; the widest dimension is vertically oriented.

**key** A block, often used in a series, which projects beyond the edge of the *enframement* of an opening and is joined with the surrounding masonry. A block handled in such a manner is keyed to the masonry; see *quoin*.

**keystone** The central wedge-shaped member of a masonry arch; also used as a decorative element on arches in wood structures.

**latticework** Thin strips of wood arranged in a netlike grid pattern, often set diagonally.

**leaded window** A window composed of small panes, usually diamond-shaped or rectangular, held in place by narrow strips of cast lead.

**leader** See *downspout*.

**light** A window pane.

**lime** Crushed limestone, used as a binder in *mortar* mixes when combined with an aggregate, usually sand.

**lintel** A horizontal structural element over an opening which carries the weight of the wall above it.

**loggia** 1. An arcaded or *colonnaded* structure, open on one or more sides, sometimes with an upper story. 2. An arcaded or colonnaded porch or gallery attached to a larger structure.

**lunette** A crescent-shaped or semicircular area or opening on a wall surface.

**mansard** A roof having a double slope on all four sides, the lower slope being much steeper. In *rowhouse* design, a double-sloped roof on the building front, below a flat roof.

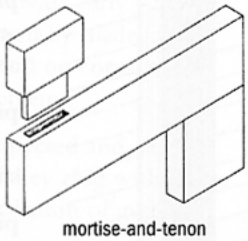
**meeting rail** The horizontal rail of a *double-hung* window *sash* designed to align with the adjacent rail of the other *sash*.

**modillion** A simple horizontal block or a projecting scroll-shaped *bracket* arranged in series under the *soffit* of a *cornice*.

**molding** A decorative band of varied contour; used to trim wall planes, and openings.

**mortar** Material used for *pointing* and bonding brick and other masonry units; made of cement or *lime* with aggregate (sand) and water.

**mortise-and-tenon** A joinery technique formed by a projecting piece (the tenon) fitting into a socket (the mortise).


mortise-and-tenon

**mullion** A vertical primary framing member that separates paired or multiple windows within a single opening.

**muntin** A thin framing member that separates the panes of a window *sash* or glazed doors.

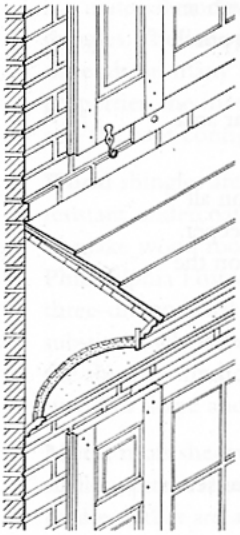
**newel** The main post at the foot of a stairway or *stoop*.

**oriel** A projecting bay window carried on *corbels* or *brackets*.

**Palladian window** A three-part window opening with a tall, round-arched center window flanked by smaller rectangular windows and separated by posts or *pilasters*.

**panel** A portion of a flat surface recessed, or raised from the surrounding area, sometimes distinctly set off by *molding* or some other decorative device.

**parapet** A low wall that serves as a vertical barrier rising above the edge of the roof, terrace or other raised area; in an exterior wall, the part entirely above the roof.



pent eave

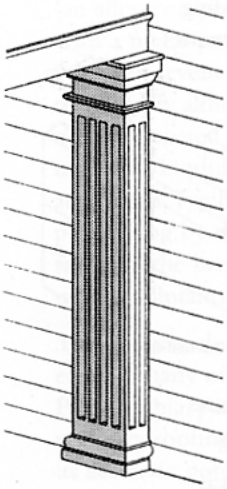
**party walls** In *rowhouse* construction, the walls shared by two adjoining houses.

**paver** A block of masonry used in sidewalk or *areaway* paving.

**pediment** 1. In classical architecture, the triangular space forming the *gable* end of a roof above the horizontal *cornice*. 2. An ornamental *gable*, usually triangular, above a door or window.

**pent eave** A small pitched roof, projecting from the *façade* between the first and second floors.

**pier** 1. A *column* designed to support a concentrated load. 2. A member, usually in the form of a thickened vertical section, which forms an integral part of a wall; usually placed at intervals along the wall to provide lateral support or to take concentrated vertical loads.



pilaster

**pilaster** An engaged *pier* or pillar, attached to a wall, often with *capital* and base.

**pintle** Vertical rod attached to a window frame to carry a shutter strap hinge.

**pitched** Sloping, especially referring to a roof.

**plinth** A platform base supporting a *column* or *pilaster*.

**pointing, repointing** The treatment of joints between bricks, stone, or other masonry components by filling with *mortar*; also called *tuck-pointing*.

**pole gutter** A *gutter* that is usually set on the roof, above the *cornice*, leading to an internal *downspout* at one end of the *façade*.

**portico** A small porch composed of a roof supported by *columns*, often found in front of a doorway.

**psi** Abbreviation for "pounds-per-square-inch," a term generally used when describing water pressure when cleaning a building.

**quoin** A structural form, usually of masonry, used at the corners of a building for the purpose of structural or visual reinforcement, frequently imitated for decorative purposes.

**relief** Carved or molded ornament that projects from a flat surface.

**repointing** See *pointing*.

**return** The part of a *molding*, *cornice*, or wall surface that changes direction, usually at a right angle, toward the building wall.

**reveal** The side of an opening for a door or window between the frame and the outer surface of a wall, showing part of a wall's thickness.

**rock-faced** Masonry treated as a rough surface that retains or simulates the irregular texture of natural stone.

**rosette** A round floral ornament, usually carved or painted.

**round arch** A semicircular arch.

**rowhouse** One of a group of an unbroken line of attached houses that share common side walls, known as *party walls*.

**rubble stone** Irregularly shaped, rough-textured stone laid in an irregular manner.

**rustication, rusticated** Stonework composed of large blocks of masonry separated by wide, recessed joints; often imitated in other materials for decorative purposes.

**sash** The framework of a window, which holds the *glazing* (glass panes) in place; may be operable or fixed; usually constructed of horizontal and vertical members; sash may be subdivided with *muntins*.

**secondary façade** The *façade* or *façades* that do not face a public thoroughfare or courtyard.

**segmental arch** An arch that is in the form of a segment of a circle.

**semidetached** A building attached to a similar one on one side but unattached on the other; a "twin."

**shaft** The vertical segment of a *column* or *pilaster* between the base and the *capital*.

**shed dormer** A *dormer* window covered by a single roof slope without a *gable*.

**shingle** A unit composed of wood, cement, asphalt compound, slate, tile or the like, employed in an overlapping series to cover roofs and walls.

**shouldered arch** An arch composed of a square-headed *lintel* supported at each end by a concave *corbel*.

**shutter dog** Metal attachment, often ornamental, which holds shutters in an open position against the face of a building.

**sidelight** A vertically framed area of fixed glass, often subdivided into panes, flanking a door.

**sill** The horizontal member at the bottom of a window or door.

**soffit** The exposed underside of any architectural element, especially an *eave*.

**spalling** The chipping or erosion of masonry caused by abuse or weathering.

**spandrel** A panel between the top of one window and the *sill* of another window in the story directly above it.

**stile** One of the vertical pieces in framing or paneling into which the secondary members (rails) are tenoned. See *mortise-and-tenon*.

**stoop** The steps which lead to the front door.

**stretcher** A masonry unit or brick laid horizontally with its length parallel to the wall.

**stringcourse** A narrow horizontal band of masonry, extended across the *façade*, which can be flush or projecting, and flat surfaced, molded, or richly carved; also called a "beltcourse."

**stucco** A coating for exterior walls made from Portland cement, *lime*, sand, and water, sometimes referred to as cement plaster.

**subframe** A secondary frame set within a masonry opening.

**sugaring** A term describing the deterioration of stone caused by the breaking up or dissolving of the stone surface.

**surround** The ornamental frame of a door or window.

**swag** A carved ornament in the form of a draped cloth or a *festoon* of fruits or flowers.

**terra cotta** Hard-fired clay, either glazed or unglazed, molded into ornamental elements, wall cladding, and roof tiles.

**tie rod** A metal tension rod connecting two structural members, such as *gable* walls or beams, acting as a brace or reinforcement; often anchored by means of a metal plate in such forms as an "S" or a star.

**tracery** An ornamental configuration of curved *muntins* in a *Gothic sash*.

**transom** 1. The cross-bar separating a door from the window, *panel*, or *fanlight* above it. 2. The window above a *transom bar* of a door.

**transom bar** A horizontal element that subdivides an opening, usually between a door and window.

**trefoil** A three-lobed decorative form used in Gothic architecture.

**tuck-pointing** See *pointing*.

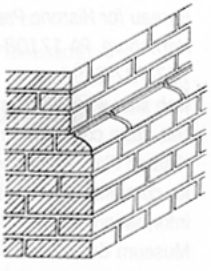
**turret** A small tower, usually supported by *corbels*.

**volute** A carved spiral form in classical architecture; often used in pairs as in the *capitals* of *Ionic columns*.

**voussoir** A wedge-shaped component of an arch.

**water table** A ledge or projection, usually at first-floor level, that protects the foundation from water running down the wall of a building.

**wrought iron** Iron that is worked by being forged or hammered.



water table

**Reprinted, with additions, from the New York City Landmarks Preservation Commission *Rowhouse Manual*.**

# Preservation Resources

**A number of resources exist to help provide useful information to owners and stewards of historic properties.**

## Government Agencies

**Philadelphia Historical Commission**
*1515 Arch St., 13th Floor, Philadelphia, PA 19102*
*215-683-4590; fax 215-683-4594*
The Historical Commission is the city agency responsible for designating and regulating city-certified historic properties and historic districts. It provides technical advice, maintains records and lists, and serves in an advisory capacity to the mayor and City Council on matters regarding historic preservation.

**National Park Service**
*Northeast Field Office, Customs House, 3rd Floor,*
*Philadelphia, PA 19106*
*215-597-0652*
*web site: www.nps.gov*
The National Park Service is a federal agency within the Department of the Interior. It serves as steward of National Historic Parks, manages the National Register of Historic Places and National Historic Landmarks, and reviews applications for federal tax credits for compliance with *Secretary of the Interior's Standards*. Technical Preservation Services in Washington specializes in technical assistance and publications and can be reached by phone at 202-343-9594; fax 202-343-3921 or email hps-info@nps.gov. On the World Wide Web, Heritage Preservation Services is at www2.cr.nps.gov

**Pennsylvania Historical and Museum Commission**
*Bureau for Historic Preservation, P.O. Box 1026,*
*Harrisburg, PA 17108-1026*
*717-787-2891*
*web site: www.phmc.state.pa.us*
This state commission reviews nominations to the National Register of Historic Places, conducts initial review of federal tax credit applications for compliance with *Secretary of the Interior's Standards*; and provides information and technical assistance. Its Pennsylvania History and Museum Grants and Keystone Historic Preservation Grants are available to eligible organizations.

## Membership Organizations and Advocacy Groups

**Preservation Alliance for Greater Philadelphia**
*1616 Walnut St., Suite 2110, Philadelphia, PA 19103*
*215-546-1146; fax 215-546-1180*
*email: historic@libertynet.org*
*web site: www.libertynet.org/historic*
The Alliance is the Philadelphia region's non-profit preservation leader, dedicated to the protection and appropriate development of Greater Philadelphia's historic resources -- buildings, communities, and landscapes. A membership organization, Alliance programs include public advocacy, the acquisition and maintenance of preservation easements, and the provision of grants and technical assistance to stewards of historic house museums. The Alliance sponsors the annual Preservation Achievement Awards and conducts monthly insider tours of historic places, publishes *Preservation Matters*, a quarterly newsletter, maintains an award-winning web site with the latest in preservation news, and has a number of publications available to the public.

**American Institute of Architects**
*Philadelphia Chapter, 117 South 17th St., Philadelphia, PA 19103*
*215-569-3186; fax 215-569-9226*
*email: architect@aiaphila.org*
*web site: www.libertynet.org/aia*
The local chapter of the national organization has a long history of preservation advocacy: its Preservation Committee monitors endangered landmarks, advises the chapter on important issues and policies, and bestows the annual Landmark Building Award. Resumes and portfolios of architects with expertise in historic preservation are kept on file at the Resource Center of the AIA Bookstore and Design Center at 17th and Sansom.

**Association for Preservation Technology**
*P.O. Box 3511, Williamsburg, VA 23187*
*540-373-1621*
*web site: www.apti.org*
This membership organization is devoted to the dissemination of technical information on preservation topics; members include architects, conservators, contractors, engineers, stewards of historic properties, and preservationists. The national organization publishes a scholarly journal and holds an annual conference, training sessions, and tours. The local chapter organizes monthly events, including tours, lectures, and conferences

**The Foundation for Architecture**
*1737 Chestnut St., 2nd floor, Philadelphia, PA 19103*
*215-569-3187; fax 215-569-4688*
*web site: www.dca.net/ffa-phila*
The Foundation, a membership organization, promotes appreciation of the built environment and architectural history through its Architecture in Education Program, which brings courses and workshops to schools, and through its extensive roster of walking tours and educational programs available to the public.

**National Trust for Historic Preservation**
*Northeast Field Office, 6401 Germantown Ave., Philadelphia, PA 19144*
*215-848-8033; fax 215-848-5997*
*email: adrian_fine@nthp.org*
*web site: www.nationaltrust.org*
The field office of the private, non-profit organization chartered by Congress in 1949 serves Pennsylvania, Delaware, and New Jersey. The Trust encourages public participation in preservation, provides limited financial assistance through grant and loan programs, and publishes widely.

**Partners for Sacred Places**
*1700 Sansom St., 10th floor, Philadelphia, PA 19103*
*215-567-3234; fax 215-567-3235*
*email: partners@sacredplaces.org*
*web site: www.sacredplaces.org*
Partners is a national, non-profit, non-sectarian organization founded in 1989 to help Americans embrace, care for, and make good use of older and historic religious properties. Partners' goals are to help congregations and their communities be good stewards of their sacred places, to develop an effective national network of advocates for sacred places, and to enhance public understanding of the value of sacred places as irreplaceable centers that create and sustain community life.

**Preservation Pennsylvania**
*257 North St., Harrisburg, PA 17101*
*717-234-2310; fax 717-234-2522*
*email: ppa@preservationpa.org*
*web site: www.preservationpa.org*
This statewide membership organization assists Pennsylvania communities and groups to protect and utilize the historic resources they want to preserve. It also monitors state legislative activity, publishes a newsletter, and administers a grant program for Philadelphia preservation projects.

**Tri-State Coalition of Historic Places**
*c/o Preservation Alliance for Greater Philadelphia,*
*1616 Walnut St., Suite 2110, Philadelphia, PA 19103*
*215-546-1146; fax 215-546-1180*
Tri-State is a consortium of historic sites in southeastern Pennsylvania, southern New Jersey, and northern Delaware that are open to the public. Its purpose is to work for the preservation and continuing interpretation of historic sites through education, advocacy, collaborative marketing, technical support, and exchange of information.

## Libraries/Research Facilities

**The Athenaeum of Philadelphia**
*219 S. 6th St., Philadelphia, PA 19106*
*215-925-2688; fax 215-925-3755*
*email: laverty@libertynet.org*
*web site: www.libertynet.org/athena*
The Athenaeum holds an extensive collection of architectural plans and drawings by noted Philadelphia architects and other materials useful in researching old Philadelphia houses.

**Fisher Fine Arts Library**
*University of Pennsylvania, 220 S. 34th St., Philadelphia, PA 19104*
*215-898-8325*
*email: finearts@pobox.upenn.edu*
*web site: www.library.upenn.edu*
The Fisher Fine Arts Library is open to the public, and has an extensive collection of books and periodicals on architecture, architectural history, and historic preservation.

**Free Library of Philadelphia**
*1901 Vine St., Philadelphia, PA 19103*
*215-686-5322*
*email: webteam@library.phila.gov*
*web site: www.library.phila.gov*
The Social Science and History Department provides access to some of the periodicals related to historic preservation and to the techniques involved in alteration, repairs, and rehabilitation of historic structures. The Map Collection and Print and Picture Department contain resources that may help in researching historic houses.

**Historical Society of Pennsylvania**
*1300 Locust St., Philadelphia, PA 19107*
*215-732-6200; fax 215-732-2680*
*email: hsppr@aol.com*
*web site: www.libertynet.org/pahist*
The Society is an excellent source of materials on Philadelphia history, including census records, old newspaper articles, family histories, maps, and atlases. The Society also has a large collection of watercolors and early photographs of various buildings and landscapes throughout the Philadelphia area.

**The Library Company of Philadelphia**
*1314 Locust St., Philadelphia, PA 19107*
*215-546-3181; fax 215-546-5167*
*email: refdept@librarycompany.org*
*web site: www.librarycompany.org*
The Library Company's half-million printed books and 75,000 graphics document every aspect of American culture from the colonial period to the end of the 19th century. Of special interest to those researching old Philadelphia houses are local histories, maps, atlases, and early images of the city.

**Philadelphia City Archives**
*3101 Market St., Philadelphia, PA 19104*
*215-685-9401; fax 215-685-9409*
*email: archives@phila.gov*
*web site: www.phila.gov/phils/carchive.htm*
The City Archives contains deeds and mortgages from the founding of Philadelphia to 1952, birth, death, and cemetery records up to 1915, and an excellent early photograph collection, all invaluable in researching an old Philadelphia house.

**Philadelphia Department of Records**
*City Hall, Room 154, Philadelphia, PA 19103*
*215-686-2260*
The Department of Records stores records of property transfers between 1865 and the present, useful in establishing a chain of title for an old house.

**Urban Archives**
*Temple University, Paley Library, Philadelphia 19122*
*215-204-8257, 215-204-5750; fax 204-3681*
*email: bgallowa@nimbus.temple.edu or urban@www.library.temple.edu*
*web site: www.library.temple.edu/urbana*
The Urban Archives exists to document the social, economic, and physical development of the Philadelphia metropolitan area from the mid-19th century to the present. Among the holdings are books on Philadelphia's history and growth, city directories and atlases, and newspaper clippings, including those from the *Philadelphia Bulletin*.

# For Further Reading

The National Park Service publishes widely on preservation topics. Publications listed with GPO stock numbers are available from the Government Printing Office, Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15250-7954. Phone 202-512-1800 Fax 202-512-2250; Preservation Briefs 1-14 can only be purchased by the set; GPO stock number: 024-005-01026-2.

Other National Park Service preservation publications listed with NTIS order numbers are available from the National Technical Information Service, Attn: Order Dept., 5285 Port Royal Rd., Springfield, VA 22161. Phone 1-800-553-6847.

For further information on ordering, the Park Service's Heritage Preservation Services can be reached by phone at 202-343-9594; fax 202-343-3921 or email hps-info@nps.gov. On the World Wide Web, Heritage Preservation Services is at www2.cr.nps.gov


**Introduction:**

*The Secretary of the Interior's Standards for Rehabilitation with Guidelines for Rehabilitating Historic Buildings.* Technical Preservation Services, National Park Service, US Department of the Interior. Unillustrated, 1990. GPO stock number: 024-005-01061-1. $3.50.

*The Secretary of the Interior's Standards for Rehabilitation with Illustrated Guidelines for Rehabilitating Historic Buildings.* Technical Preservation Services, National Park Service, US Department of the Interior. 1992. GPO stock number: 024-005-01091-2. $13.

*The Secretary of the Interior's Standards for the Treatment of Historic Properties with Illustrated Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings.* Technical Preservation Services, National Park Service, US Department of the Interior. 1996. GPO stock number: 024-005-01157-9. $13.

*(Video) Working with the Past with the Secretary of the Interior's Standards for the Treatment of Historic Properties.* Sold by the Historic Preservation Education Foundation. Write: HPEF, P.O. Box 77160, Washington, DC 20013. $15.

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Leeke, John. "Controlling Old-House Maintenance." *Old-House Journal* (July-August 1993): 40-45.

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**The Society Hill (and Pennsylvania Hospital of Washington Square West) Historic District:**

Cotton, J. Randall and Jeffrey A. Cohen. "The Philadelphia Trinity House." *Old-House Journal* (May-June 1992): 92.

Webster, Richard. *Philadelphia Preserved.* Philadelphia: Temple University Press, 1976.

Weigley, Russell F. *Philadelphia: A 300-Year History.* New York: W.W. Norton & Co., 1982.

**Roofs, Cornices, and Related Elements:**

Cotton, J. Randall. "Flashing Points: A Primer on Protecting Roof Junctures." *Old-House Journal* (November-December 1995): 42-45.

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Sweetser, Sara M. "Roofing for Historic Buildings." *Preservation Briefs 4.* Technical Preservation Services, National Park Service, US Department of the Interior, 1978.

**Masonry:**

Arndt, Jacob. "Mastering Brick Maintenance." *Old-House Journal* (May-June 1994): 38-42.

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Garskof, Josh. "Brick by Brick: An Old-House Brick Glossary" *Old-House Journal* (May-June 1994): 36-37.

Grimmer, Anne E. "Dangers of Abrasive Cleaning to Historic Buildings." *Preservation Briefs 6.* Technical Preservation Services, National Park Service, US Department of the Interior, 1979.

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—. *Keeping it Clean: Removing Dirt, Paint, Stains, and Graffiti from Historic Exterior Masonry*. Washington: Government Printing Office, 1987. GPO stock number: 024-005-01035-1.

London, Mark. *Masonry: How to Care for Old and Historic Brick and Stone*. Washington: The Preservation Press, 1988.

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**Stoops, Railings, Paving, and All The Rest:**

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Southworth, Susan and Michael Southworth. *Ornamental Ironwork: An Illustrated Guide to Its Design, History and Use in American Architecture*. New York: McGraw Hill, Inc., 1992.

Wallace, Philip B. *Colonial Ironwork in Old Philadelphia*. New York: Dover Publications, Inc., 1970.

**Storefronts:**

Auer, Michael J. "The Preservation of Historic Signs." *Preservation Briefs 25*. National Park Service, US Department of the Interior, 1991.

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"The Preservation of Historic Pigmented Structural Glass (Vitrolite and Carrara Glass)." *Preservation Briefs 12*. National Park Service, US Department of the Interior, 1984.

The following publications are available from the Center City District Foundation, 917 Filbert St., Philadelphia, PA 19107. Phone (215) 440-5500; Fax (215) 922-7672.

*Enhancing Storefront Design* ($5)

*Security Grilles: City Requirements and Design Recommendations* ($4)

**New Construction:**

Bock, Gordon. "Making Sense of Sensitive Additions." *Old-House Journal* (May-June 1995):33-37.

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Weeks, Kay D. "New Exterior Additions to Historic Buildings: Preservation Concerns." *Preservation Briefs 14*. National Park Service, US Department of the Interior, 1986.

**Selecting and Working with Building Professionals:**

The *New Old House* Starter Kit. National Trust for Historic Preservation Information Series, 1997. Order Number 2196 from Information Series, National Trust for Historic Preservation, 1785 Massachusetts Ave. NW, Washington, D.C. 20036. Phone (202)-588-6296; Fax 202- 588-6223.

A number of publications are available from the American Institute of Architects Philadelphia Chapter, 117 South 17th Street, Philadelphia, PA 19103 (215-569-3186), or by calling AIA National at (202)-626-7300.

**Architectural Styles in The Society Hill (and Pennsylvania Hospital of Washington Square West) Historic District:**

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Preservation Alliance for Greater Philadelphia
1616 Walnut Street, Suite 2110
Philadelphia, PA 19103
215-546-1146
fax: 215-546-1180
email: historic@libertynet.org
web site: www.libertynet.org/historic