Doors

The front door defines public from private space and contributes to a building's architecture and scale. It provides security for the inhabitants and can often be an element in providing natural ventilation, through cross-breezes, to aid in the cooling of the house. They also display historic craftsmanship and some buildings have doors that are important decorative features with elaborate enframements, stained glass, and/or ornate panels.

A range of door styles are found throughout Newark's historic districts and landmark buildings. Residential historic doors are typically wood paneled and sometimes paired and/or arched. Beginning in the mid 19th century, doors might have glazed sections. The scale of the wooden members of the door frame varies according to the style and date of construction. Newark's 20th-century buildings may have wood doors, or they may have historic metal ones, especially for commercial buildings

Commercial doors tend to have more glazing, typically a single glass pane. Decoration can include raised panels, beveled glass, or small panes.

When a building still has its original doors, every effort should be made to preserve them as they are an integral part of the building's historic fabric. Problems related to energy efficiency can frequently be solved by installing weather stripping, repairing broken glass, re-caulking around frames, and installing storm doors.

A few of the historic buildings in Newark have replacement doors. When these replacements are not compatible with the architectural significance of the building, the Newark Landmarks and Historic Preservation Commission encourages property owners to replace them with ones that enhance the building's historic architecture. However, replacement of altered features is not required.

Individuals interested in replacing doors on a landmark structure and buildings in historic districts must make application to the Commission for review. Commission approval is not required for ordinary repairs and maintenance of doors using the same materials but requires a review by the Historic Preservation Officer. Exempt work includes weather stripping, caulking, painting, and repairs using the same materials and resulting in no change in appearance. The installation of storm doors that are compatible with the architectural period or design of the building requires Commission approval.







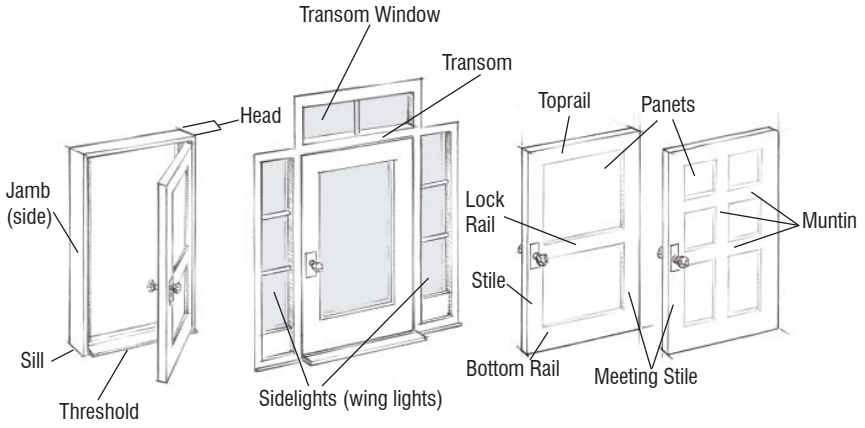

Guidelines

1. Retain and repair existing historic or original wood door(s), transoms, fanlights, and surrounding wood trim.
2. Replace historic doors that are beyond repair with a new or salvaged door(s) of the same size, design, material and type as used originally, or sympathetic to the building style, including number and orientation of panels and location and size of any glass.
3. A storm door, if used, should meet the following guide lines:
   a. Construct storm doors of wood or a composite material that can be painted the same color as the main door.
   b. Relate openings for screen or glass panels to the proportions of the door.
   c. Use the same overall dimensions for the storm door as the existing door.

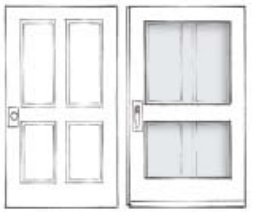
Protect Doors with a Routine Program of Maintenance

1. Conduct routine inspections.
2. Maintain a sound paint film on wood and metal.
3. Ensure that caulk and glazing putty are intact and that water drains off the sills.
4. Install and maintain weather stripping around doors to increase energy efficiency.
5. Inspect to ensure water does not enter building around doors.
6. Ensure that all hardware is in good condition.

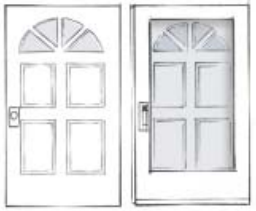
Parts of a Door



Storm Doors / Screen Doors



1.



2.

Choose storm doors that either follow the same door pattern and/or style as the door (1), or choose a door that is mostly glass so that the door behind can show through (2).

Inappropriate Treatments

1. Do not use generic or "stock" replacement doors of an inappropriate style with details that provide a false sense of historic accuracy.
2. Do not replace original trim with trim that conveys a different period, style, or theme.

Roofs

Historic roof shapes are frequently the most character-defining feature adding to the architectural significance of historic buildings, structures, and districts. Roof shapes can be gabled, hipped, or flat, with each having several subtypes. In many cases, the roof form and materials can identify an architectural influence or style. For example, a hipped roof is commonly associated with a Colonial Revival style while a multi-gable roof is often found on Queen Anne-style houses.

Sloping Roofs

Gable
The most commonly found sloping roof on residential buildings is the gable roof. This type of roof is formed by two sloping planes rising from the side walls, meeting at a central ridge. The junction between the sloping planes and the walls often contains overhanging eves. The roof's gable ends are sometimes finished with wood bargeboards or other decorative features.

Mansard
A Mansard roof, found on many row houses in Newark, has steeply sloping planes extending from a flat roof. The roof provides a large amount of useable space in the attic.

Hipped
A hipped roof is formed by four sloping roof panes extending from the walls to a ridge. Hipped roofs will often have overhanging eaves on all four sides.

Gambrel
A gambrel roof is similar in design to a gable roof. However, rather than having a single ridge at the peak, a gambrel roof has three ridges, one at the peak and two along the sloping sides. This roof form is often found on residential buildings with finished attics.

Shed
Shed roofs are formed by a single sloping plane rising from one wall to the opposite wall. Typically, shed roofs are found on secondary buildings, such as residential garages or sheds.

Pyramid *Conical* *Dome*

Flat Roofs

Many row houses, commercial and institutional buildings have flat roofs. Flat roofs are rarely absolutely flat; rather they slope gradually toward the rear of a building to help drain water. Since a flat roof cannot be seen from the street, it does not normally contribute to the character of the building. Rubber roofing or rolled roofing is most commonly used.

On commercial structures, it is common to find a slight gable or flat roof behind a parapet wall. The cornice, parapet, pent roof, or other feature at the edges of a flat roof are almost always visible and contribute to the character of the building. Any alterations to these features must comply with these guidelines.

Roof Elements and Details

Newark's historic buildings have various defining roof features, depending on the architectural style of the structure. Some of the most commonly found roof elements and details include cornices, parapets, pent roofs, eaves, dormers, towers, chimneys, finials, cresting, gutters and downspouts.

Eave

The portion of a sloped roof extending beyond a wall is called an eave. Functionally it serves to protect the upper wall from rain and snow and provides a place to attach gutters. Visually, the eave creates a transition between the vertical wall and the sloping planes of a roof. Eaves are usually made of wood, decorated with brackets or other details.

Dormer

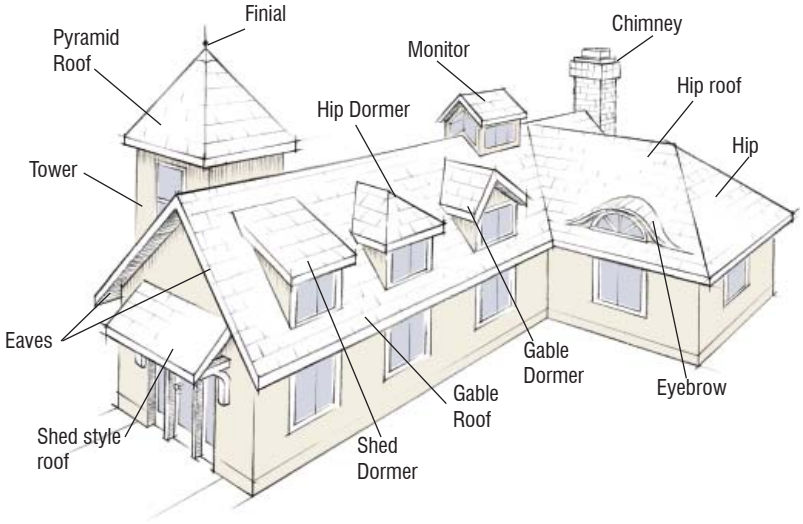
A dormer is a separately framed roof element that projects from a sloping roof, contains a vertical window or vent, and is covered by its own roof. The front of the dormer is designed as an extension of the wall below, almost always using the same materials as the wall. Dormers on historic dwellings allowed the attic story to be used for sleeping rooms by providing ventilation and light to the space.

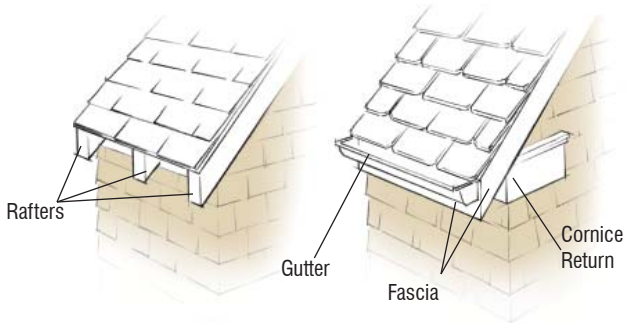
Towers

Towers are prominent character-defining features of the roofs of some of Newark's historic structures. Towers are often terminated by pedimented, mansard, conical, pyramidal, or flat roofs.

Chimneys

Chimneys are often prominent character-defining elements on free-standing residential buildings. Chimneys are commonly made of brick, although stone and stucco are sometimes used. A chimney may be located on the front, side or rear walls projecting above the eave, or through roof slopes or ridges.





Finials and Cresting
Finials and cresting, sometimes found on historic buildings, provide important decorative elements for roofs. Both are usually made of metal, although finials of stone and other materials are also found.

Gutters and Downspouts
Gutters and downspouts are the primary means of channeling water from the roof to the ground or directly into storm sewers. Properly maintained gutters and downspouts are critical to providing a watertight building. Their design is often important to the appearance of a building. Historic roof gutters on buildings in Newark are generally of boxed or open roof design. Boxed gutters are sunken behind the eaves and are not readily visible, while open roof gutters are attached to the eaves of a house. Round gutters and downspouts are more appropriate for older homes but are generally harder to find than standard square corrugated gutters and downspouts.

Cornices
Cornices cover the area where the wall of a building meets the roof, making this junction between the wall and roof weather-tight. Acting as a visual terminus to the top of the wall, cornices are often richly decorated with brackets and other ornamentation. They often serve as gutters to direct rainwater to downspouts. Cornices are commonly designed in a number of styles, employing elaborate designs constructed out of wood, sheets of metal, brick, or terra cotta.

Parapets
Parapets are commonly found on flat roof buildings. Far less elaborate in design and detail than cornices, parapets give a building greater visual height, as well as provide a weather-tight junction between the roof and wall.

Pent Roofs
Pent roofs are prevalent on row houses and other flat roof buildings. A pent roof that encloses usable attic space often contains dormer windows or attic vents. Other pent roofs visually increase the height of the front elevation but do not enclose usable attic space. Pent roofs are commonly covered with slate, asphalt shingles or clay tile.

Roof Materials

In addition to the shape, elements and detail, the materials used to cover sloping roofs are important to defining the character of a historic building and can be indicators of a building's architectural evolution. Original roof materials during the late 19th century included wood shingles or shakes, clay tile and slate. By the early to mid 20th century the use of composition shingles became popular and was the most common roof material after 1910. Newark is fortunate to have a number of buildings which retain handsome patterned slate roofs or tile roofs. However, most of the historic buildings have replacement modern roofing materials, typically asphalt shingles.

Built-up and Rubber Roofing
Built-up and rubber roofing are used to cover flat roofs. Built-up roofing is traditionally made of two or three layers of felt, tar, and gravel. The felt and tar act as the watertight barrier while the gravel functions as ballast to ensure that the roof does not lift during high winds. Modern flat roofs may use a single membrane system commonly referred to as a rubber roof. Because flat roofs are normally not seen, their materials are usually not considered to be character-defining.

Slate
Slate is mined in quarries throughout the U.S., primarily in the northeast. Slate quarried in different areas has different characteristics and color. The most common colors are grey, blue-grey, black, various shades of green, deep purple, brick red, and mottled varieties. All types can be found on Newark's houses. Color is no indication of durability or life span but slate quarried in different areas has different estimated life.

Clay Tile
Clay tile is commonly found in a variety of shapes including English, mission, French, Roman, rounded, and barrel. It is also found in a variety of colors with red, green, and gray being the most common. Tile is often found on sloping roofs of turn-of-the-century free-standing residential buildings and pent roofs of row houses. It may also be found on commercial, institutional, and government buildings.

Asphalt Shingles
In the late nineteenth century, asphalt shingles were introduced as an inexpensive roofing material. By the mid-twentieth century, asphalt shingles became the most commonly used material for sloping roofs. Asphalt shingles come in a variety of shapes with rectangular, diamond, and hexagonal being the most common. Asphalt shingles may be red, green, gray, or black.

Siding

A building's historic character is a combination of its design, age, setting, and materials. The exterior walls of a building, because they are so visible, play a very important role in defining its historic appearance. Wood clapboards, wood shingles, log, brick, stone, stucco, glass, and architectural metals are the original exterior wall materials in Newark's historic structures and are an integral part of their distinctive historic character.

Synthetic materials can never have the same patina, texture, or light-reflective qualities as the original wall cladding materials, and therefore, detract somewhat from the district's historic character.

Substitute siding materials that may have been used in the districts and landmark structures changed over time and include asbesdtos, vinyl, and aluminum. These materials were created to simulate the appearance of original siding materials and sold with the promise of reduced maintenance when compared to the original material.

The Landmarks and Historic Preservation Commission will use the following criteria in evaluating new materials: (1) durability; visual compatibility of the proposed materials to existing material; (2) trim of material, especially for siding applications; joining of materials; and (3) the availability and permanence of color. Material review will also take into consideration whether the material is to be used for rehabilitation, an addition, or new construction.

Asbestos

Asbestos may be found in either roof or siding materials. The first question to ask is whether or not it is necessary to remove the material. Asbestos is only a hazard if it is disturbed. Otherwise it is a long-lasting and often character-defining twentieth-century substitute material.

Vinyl and Aluminum Siding

Vinyl and aluminum siding will not be approved for use as a replacement material or over existing wood siding in the districts.

When possible, remove synthetic siding and restore the original wood siding underneath. By revealing the original siding you may uncover hidden maintenance issues earlier than they would otherwise be detected.

The following list covers a number of misconceptions associated with vinyl siding:

a) Often, property owners wish to install artificial siding because of the desire to avoid maintenance issues associated with repainting. The vinyl industry offers artificial siding as a maintenance-free solution that will solve your exterior building problems for a lifetime.
b) Vinyl siding is usually guaranteed for 20 years (guarantees over 20 years are usually prorated). Two or three quality paint jobs may cost approximately the same as replacement siding. Good quality latex exterior paint applied according to the manufacture's instructions may have a warranty of 15 years or more. Properly maintained wood siding has been found to last hundreds of years.
c) Painting of vinyl or aluminum siding can be a challenge, as paint may not adhere well to these materials. Painting may also void your warranty.

d) Vinyl and aluminum siding are not weatherproof. Time and extreme temperatures can take an immense toll on artificial siding. Over time, some artificial siding may dent, warp, cup, become brittle, buckle, break, fade, and become dirty due to numerous environmental factors.
e) Unlike wood, substitute siding materials are difficult to repair to match the existing. Factory colors, styles, and finished change over time.

Cementitious Siding

Cementitious siding will not be approved as a replacement or repair material for wood siding on existing structures. It may be approved for additions to historic structures or for new construction.

Maintenance
1. Conduct routine maintenance on historic siding materials by inspecting for cracks in the mortar or stucco, and peeling caulking or paint.

Inappropriate Treatments
1. Do not cover historic, character-defining features of the building including wood siding, brackets, cornices, window architraves, doorway pediments, and their finishes and colors.

Guidelines
1. Repair historic materials and features.
2. Replace severely damaged or deteriorated historic materials and features in-kind.
3. If in-kind replacement is not possible, a substitute material must be compatible in form, detail, and overall appearance with the original, historic material.
4. The application of in-kind or substitute materials should not damage, destroy, or obscure historic features.

Signage

Signs play a vital role in Newark's historic districts and on landmark buildings. Through these guidelines, Newark strives to strike a balance between the need to draw attention to individual businesses and the need for a positive image for the entire district. The Commission's mission is to retain existing historic signs and have new signs that are compatible with the historic architecture and streetscape.

Signs can both add and detract from the character of a building depending on their design, placement, quantity, size, shape, materials, colors, and condition. Historically significant signs should be retained even if the business is no longer associated with that particular structure.

Signs must also comply with the underlying zoning for the area in addition to the following guidelines. A sign permit is required for the erection of any sign within the city.

Maintenance Guidelines

1. If possible, maintain and repair significant historic signs even when the business changes.
2. Keep painted signs from peeling and flaking by painting often.
3. Signs that are not properly maintained and that have no historical significance should be removed, as should signs of businesses that no longer occupy a building or storefront.

Inappropriate Treatments

1. Do not cover a historic design element, window, or balus trade with a sign.
2. Avoid neon, formed plastic, internally lit signs and moving signs.
3. Roof-mounted signs are not appropriate in the districts.
4. Avoid hand-painted signs, except for glass painting by a skilled professional.
5. Avoid signs that overpower the building façade.
6. Do not install signs that continue inappropriate alteration.

Design, Compatibility and Execution

Guidelines

1. The design of signs in historic districts should reinforce and re late to the existing architectural character and era of the building
2. Design the sign to enhance the significant architectural features of the building and streetscape, rather than responding to later inappropriate alterations. Consider having the shape of the sign, the lettering (fonts), and graphic illustrations suggest the overall design and historic period of the building, as well as the business's image.
3. Ensure that the sign does not overpower or shadow adjacent structures.
4. Ensure that signs are readable and convey an image appropriate for the business. Sign painters, sign manufacturers or graphic designers can assist with sign design.
5. Signs should be executed by sign professionals who are skilled at lettering and surface preparation.
6. Properly attach signs to buildings. Fittings should penetrate mortar joints rather than brick and signloads should be properly calculated and distributed.

Size and Number

Guidelines

1. Limit the number of signs to encourage compatibility with the building and discourage visual clutter. A limit of two to three signs, which can be of different types, is appropriate for most buildings in historic commercial areas.
2. A building should have only one wall sign per use per street frontage.

Shape, Color, Materials and Lighting

Guidelines

1. A projecting sign may take the shape of the product or service provided, such as a shoe for a shoe store.
2. Use colors that complement the materials and color scheme of the building, including accent and trim colors. A three color limit is recommended, although more colors may be appropriate in exceptional and tastefully executed designs.
3. Use traditional sign materials such as wood, wood composites, glass, or metal. Gold leaf, raised individual metal or painted wood letters, or painted lettering may be appropriate dependent on the style of the individual sign and building architectural style.

4. Place building-mounted lighting for signs in an unobtrusive location.
5. Situate ground-mounted sign lighting where it can be screened from public rights-of-way.
6. When multiple signs are permitted for a business, have a uni fied graphic appearance. Use the same lettering, colors, logos, and other design features for all signs, wall, window, ground, directory wall, awning, freestanding, banners, and temporary signs.
7. When a building contains multiple storefronts of different businesses, relate the signs of the different businesses to each other in terms of type, height, and proportion. Use compatible colors, lettering, and background values.

Maintain general uniformity while permitting limited, compatible variety to give each business a distinct identity.

Lettering Styles

There are many lettering styles that may be appropriate for signage in Newark's historic districts and landmark buildings.

Guidelines

1. Use letter styles that relate to the era of the building's architecture.
2. Ensure that the lettering style chosen for the sign is easily read from a distance.
3. Use graphically simple signs with few words.

Wall-Mounted Signs

Wall-mounted signs are panels or individual letters mounted to the wall or cornice. Large wall signs can be read by pedestrians from a distance and from passing motorists. For commercial buildings, it is appropriate to locate a wall-mounted sign above the storefront, within the frieze of a storefront cornice, on a pier that frames a display window, or on unadorned flat surfaces of the façade.

For residential buildings used for commercial purposes, wall mounted signs can be attached to the wall at the first floor level or suspended from the porch cornice and centered between porch columns.

Inappropriate Treatment

1. Do not paint the sign directly onto the wall surface unless it is in an effort to professionally rehabilitate a historic painted wall sign.

Guidelines

1. Place wall-mounted signs in the building's sign band whenever possible.
2. Size wall-mounted signs so that they do not obscure existing architectural details or windows.
3. Place a flat, wall-mounted directory sign at each primary building entrance to represent any upper floor tenants.
4. Coordinate all wall-mounted signs in terms of size, placement, lettering, color, and overall design in buildings with multiple storefronts.

Window/Door Signs

Painted onto or adhered to display windows or entrance doors, these signs are intended for pedestrians.

Guidelines

1. Use vinyl letters for window signs or employ a professional sign painter.

Projecting Signs

Projecting signs can be hung from brackets or otherwise mounted so that they hang perpendicular to the building. They may also be attached to the underside of an approved awning. Projecting signs are intended for viewing by pedestrians from a moderate distance.

Guidelines

1. Place a sign no higher than the top of the porch
2. When used for a residence converted to professional use, attach a small projecting sign to the wall at the first floor or to a porch or column. Do not place a sign higher than the top of the porch. If the building has a large setback, a lawn sign will be more appropriate.

Awning and Canopy Signs

A sign can be painted, screened, or applied to the front panel or valance area of an awning. Awnings must be made of canvas or a canvas-like material. Matte textured vinyl may be acceptable.

Inappropriate Treatment

1. Avoid hand-painted or individually made fabric letters that are not professionally applied.
2. Avoid backlit awning signs.
3. Glossy vinyl material and fluorescent colored material are un acceptable.
4. Fluorescent colored paints are unacceptable.

Guidelines

1. Size letters to allow for one open space at both the top and bottom of the valance.

Freestanding Signs

Freestanding signs are mounted to posts or other supports and placed in front of buildings that are deeply set back from the street. They may also be placed in the front yard of a residence converted to commercial or office use. Freestanding signs are appropriate for set back buildings in a predominantly commercial area.

Guidelines

1. Sign design and mounting should be appropriate to the architecture of the main building.

Slate Roofs

Slate roofs are well known for their durability and visual quality. Their pattern, detailing, and craftsmanship are important design elements to historic buildings. They reached peak popularity as a roofing material in 1915, although they are found throughout Newark on buildings of all time periods. Known for their extreme durability, many of Newark's slate roofs are reaching the end of their useful lives. The continued maintenance of existing slate roofing is highly encouraged and less expensive than replacement with a substitute material. The replacement of severely deteriorated historic slate roofing with new slate roofing is also highly encouraged.

All Slates Are Not the Same

Slate is mined in quarries throughout the U.S., primarily in the northeast. Slate quarried in different areas has different characteristics and color. The most common colors are grey, blue-grey, black, various shades of green, deep purple, brick red, and mottled varieties. All types can be found on Newark's houses. Color is no indication of durability or life span but slate quarried in different areas has different estimated life.

There is a grading system for the various slate types and the grade of the slate should always be specified by a contractor when a roof is being repaired or replaced. The grading system is very simple: S-1 means the slate will last 75 years, S-2 slate is meant to last 45 to 75 years and S-3 is meant to last 45 years or less. However, slates of all three grades generally do last longer than the required minimums.

Many original and replacement slate roofs are still serviceable. If you have a slate roof, you can extend its life with frequent inspections and diligent repair. The continued maintenance of existing slate roofing is highly encouraged and less expensive than replacement with a substitute material.

The natural weathering of roofing slate shows as a slow process of chipping and scaling along the layers of the stone. Paper thin layers flake off the surface of the slate and the slate eventually becomes soft and spongy as the inner layers begin to come apart, or delaminate. Over time, the chemical and physical changes that occur as the slate weathers cause an increase in absorption and a decrease in both strength and toughness. Slate roof repair is viable for localized problems and damaged roofs with reasonably long serviceable lives remaining but the repairs need to be performed by roofers that are experienced working with slate.

Repairing Slate Roofs

Broken, cracked, and missing slates should be repaired promptly by an experienced roofer in order to prevent water damage to interior finishes, accelerated deterioration of the roof and roof sheathing, and possible structural degradation to framing members. However, if installed properly, slate roofs require relatively little maintenance and will last 60 to 125 years or longer depending on the type of slate that was used, the roof slope, and exposure. Some slates have been known to last over 200 years.

Replacing Slate Roofs

If 20% or more of the slates on a roof or roof slope are broken, cracked, missing, or sliding out of position, it is usually less expensive to replace the roof than to execute individual repairs. This may be a big financial undertaking but it a worthwhile investment in your home and your neighborhood.

If at all possible, homeowners must replace a severely deteriorated slate roof with new slate. If there is enough remaining good slate left on the roof, we recommend you remove the slate, replace the underlying sheathing and flashing, and then replace the slate shingles on portions of the roof visible from public areas. Simulated slate can be used on portions of subordinate roof lines and on parts of the roof not visible from the street.

If these options are too expensive, the next best choice is to use man-made simulated slate on the entire roof. Substitute slate can be made out of a slate/resin composite, fiber cement, recycled rubber, concrete, or clay tiles. The new, substitute material should match the details and craftsmanship of the original, as well as the color, surface texture, surface reflectivity, and finish of the original material.

Sometimes property owners cannot afford to use natural or synthetic slate materials when reproofing their structure. Although not recommended, the Landmarks and Historic Preservation Commission may consider the use of asphalt shingles designed to look as much as possible like slate. Always use dark colors to suggest the original slate. Dark colors also contrast better with the sky and provide a more pleasing appearance. Note that asphalt shingles are not preferred and property owners must submit the criteria located in the sidebar on page one, including adequate evidence of a financial hardship.

A few examples of simulated slate include:

Majestic Slate by EcoStar

SlateLook Shingles by CertainTeed

Saxony Slate by Century Roof Tile

Berkshire by Owens Corning

Laramite by TAMCO

Storefronts

Storefronts play an important role in the architectural landscape of many of our historical districts and landmarks. Because they are often located along prominent roadways, the condition and appearance of storefronts are paramount in displaying the revitalization efforts of the city.

Most of the historic commercial buildings in Newark date to the late nineteenth century. Newark's downtown district, for example, is an eclectic mix of buildings that display Newark's rich history as the commercial center of New Jersey. These structures were typically built for first-floor retail with two to three stories of residential uses above. There was typically a large transparent area on the ground level for merchandise display. Most of the historic commercial buildings in Newark's districts are vernacular adaptations of this form.

Throughout Newark you find both altered and unaltered storefronts. In some cases the residential space above many structures has remained vacant for several years, and the building may be in a state of disrepair. Even so, when making changes to the building it is important to preserve, or give reference to, the buildings' historical past by making design choices that are sensitive to the original architectural character of the storefront and building.

Inappropriate Treatments

1. Do not remove or cover character-defining storefront elements including display windows, partially glazed period doors,or bulkheads, even if no commercial use is proposed in the new plan.
2. Avoid creating false historical appearances or other designs that include inappropriate elements not available when the storefront was constructed. These include fixed aluminum aw nings, visible security gates, vinyl or aluminum siding, mirrored or tinted glass, artificial stone and brick veneer.

Guidelines

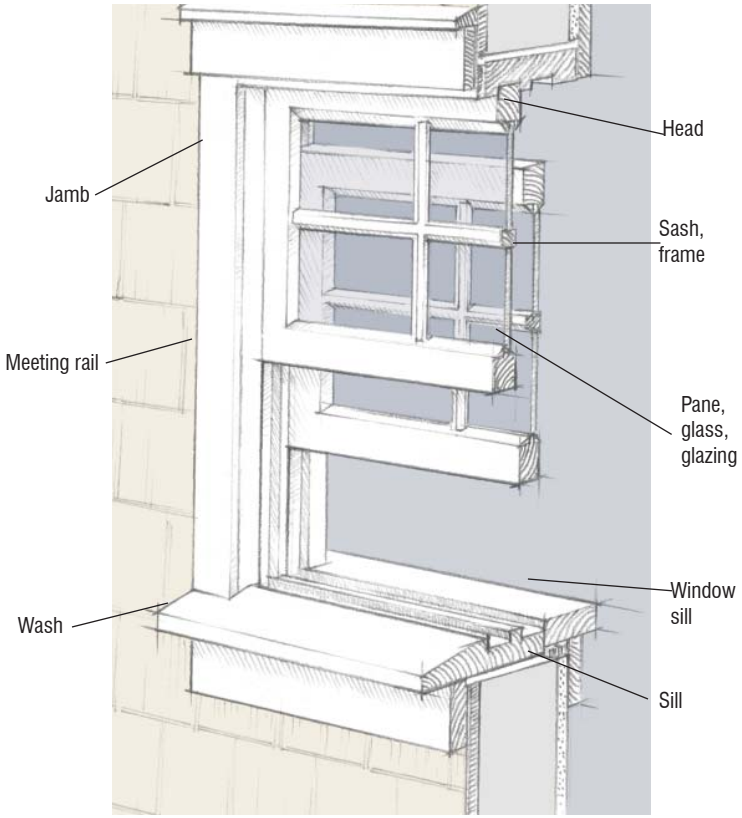
1. Remove any inappropriate materials, signs, or canopies covering the façade.
2. Retain all elements, materials, and features that are original to the building or are historically appropriate additions, and repair as necessary.
3. Repair, or when necessary, replace original storefront elements with materials equivalent in construction, shape, and quality.
4. Reconstruct missing original elements such as cornices, windows, and storefronts if documentation is available. If not, design new elements that respect the character, materials, and design of the building.
5. Maintain paint on wood surfaces and use appropriate paint placement and signage to enhance the inherent building design.
6. When designing new elements, conform to the configuration, materials, and scale of the traditional storefront.
7. Where no significant architectural features remain, use simple, generic, compatible storefront features including simple framing and panels, large glass areas and transom units, cornices, sign boards, and simple doors.
8. Simplify secondary design elements such as graphics and awnings to avoid visual clutter to the building and its streetscape.
9. Use glass in doors, transoms, and display areas to allow for visibility into and out of the store.
10. Respect the historic frame of the storefront and its relationship to the façade and streetscape.
11. Install signs that are compatible with the historic building. These should not cover or obscure significant architectural detailing or features.
12. Respect the horizontal separation between the storefront and upper stories. A cornice or fascia board traditionally helped contain the store's sign.

Windows

Windows add light to the interior of a building, provide ventilation, and allow a visual link to the outside. The window sash, framing, and architectural detail surrounding the window play a major part in defining the style, scale, and character of a building.

When original windows survive, every effort should be made to preserve them as they are an integral part of the building's historic fabric. Problems related to energy efficiency can frequently be solved by installing weather stripping, repairing broken glass, re-caulking around frames, and installing storm windows.

Some of the historic buildings in Newark have replacement windows. When these replacements are not compatible with the architectural significance of the building, the Newark Landmarks and Historic Preservation Commission encourages property owners to replace them with ones that enhance the building's historic architecture. However, replacement of altered features is not required.



Individuals interested in replacing windows on a landmark structure and buildings in historic districts must make application to the Commission for review. The application should include information on the number of windows, whether each window is original or replaced the material, type, hardware and finish, and the condition of the frame, sash, sill, putty and panes. Representative photographs showing the condition of all windows should also be submitted with the application so that the Commission can gain a clear picture of the project's scope.

Commission approval is not required for ordinary repairs and maintenance of doors using the same materials. Work includes weather stripping, caulking, painting, and repairs using the same materials and resulting in no change in appearance. The installation of storm doors that are compatible with the architectural period or design of the building does not require Commission review and approval. Rather minor alterations such as these can be approved administratively by appointed staff members. The Newark Landmarks and Historic Preservation Commission recommends that the property owners of contributing buildings in the historic districts and landmark buildings informally meet with staff to determine whether the proposed door is compatible.

Because of the rich variety of architectural styles and periods in the historic districts, there is a corresponding variation of styles, types, and sizes of windows.
The guidelines on the following pages will ensure that alterations, new construction, and restorations are congruous with the special character of each historic district.

Window Styles
Openings are arranged consistent with the architectural style of the structure. Early styles from the Federal through Italianate periods usually present a balanced arrangement of openings. The Queen Anne style breaks this tradition with an asymmetrical yet visually balanced arrangement and is most common. Early styles reflect the high cost of glass with small panes gradually increasing in size until mechanization made large single or double panes common in the Victorian era.

History and Benefits of Historic Wood Windows
Double-hung windows, the first form of air conditioning, date to the 1400s. By raising the lower sash on the cool side of the structure and the upper sash on the warmer side, cross ventilation allowed the cooling of the room.

First growth wood, from which many original windows are fabricated, has dense growth rings that may provide for better resistance to water and insect damage. Properly restored and cared-for wooden windows should last another 100 years before full restoration is needed again.

Replacement Windows
Approximately 36 percent of your total energy cost comes from heating your home, according to the U.S. Department of Energy. By figuring out what your actual costs are you can more accurately asses the cost savings and payback associated with the purchase of storm windows or replacement windows.

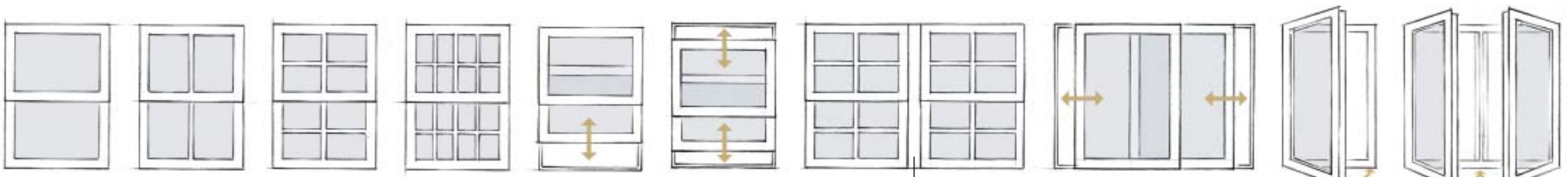
Window Replacement
Window replacement means replacing both the frames and the sash.

Sash Replacement
Sash replacement means replacing just the moveable parts of the window and may be a less costly alternative to full window replacement.

Background Information

- Thirty-percent of windows being replaced each year are less than ten years old.
- Some replacement windows must be fully replaced if any part fails due to modern construction techniques and materials.
- Single-seal replacements windows may fail in two to six years.
- Jamb-liners for tilt-in windows often fail in six to ten years.
- PVC/vinyl is toxic, can't be recycled, and may last only 16 to 18 years.
- Metal-clad wood (especially finger-jointed) may trap moisture, leading to rot.

Common Double Hung Window Types



Protect Windows with a Routine Program of Maintenance

1. Conduct routine inspections
2. Maintain a sound paint film on wood and metal.
3. Ensure that caulk and glazing putty are intact and that water drains off the sills.
4. Install and maintain weather stripping around windows to increase energy efficiency
5. Inspect to ensure water does not enter building around win dows and doors.
6. Ensure that all window hardware is in good condition.

Inappropriate Treatments

1. Do not replace historic windows for improved thermal performance or energy efficiency. Storm windows and appropriate weather stripping can improve thermal performance of historic windows.
2. Do not install replacement windows that do not fit the opening.
3. Do not use materials or finishes that radically change the sash, depth, reveal, muntin configuration, reflective quality or color of glazing, or the appearance of the frame.
4. Avoid using clip-in or false muntins or removable internal grilles as they do not present a historic appearance. Muntins must be affixed to the exterior.
5. Do not change the number, location, size, or glazing pattern on the primary elevation(s) visible from the street.
6. Do not install horizontal, picture, round, or octagonal win dows not appropriate to the architectural style of the house.
7. Avoid cutting new opening(s).
8. Do not block in existing windows.
9. Avoid covering or obscuring wood sills and exterior frames during installation of replacement wood siding.
10. Do not use muntins in storm windows.
11. Do not use unpainted metal finishes.
12. Do not install skylights in roof locations that are visible from the street.

The Case for Storm Windows and Their Materials

A well-maintained original wooden window with an exterior storm window may provide as good if not better insulation than a double-paned new window. Storm windows can save energy and provide increased comfort by reducing air leakage. They also provide an insulating air space between the storm and primary window.

Wood

- Insulates better than metal
- Can be painted to match trim
- Easily repaired
- Available with glass and screen inserts

Aluminum

- Lighter weight than wood
- Integrated glass and screen panels
- Should be repainted to match the color of the window frame

Guidelines

1. Retain and preserve windows that contribute to the overall his toric character of a building, including their functional and deco rative features such as frames, sash, trim, glass, stained glass, lin tels, muntins, sills, shutters, surrounds, and hardware.
2. Retain the glass if the window is no longer needed. Screen or shutter the backside so that it appears from the outside to be in use.
3. Repair original windows by patching, splicing, consolidating or otherwise reinforcing. Wood that appears to be in bad condition because of peeling pain or separated joints often can, in fact, be repaired rather than replaced.
4. Uncover and repair covered-up windows and reinstall windows with their original dimensions where they have been blocked in.
5. Retain existing wood window frames when replacing windows. This reduces damage to interior and exterior historic materials.
6. Replace only those features of the window that are beyond re pair. Use sash replacement where wood windows are badly dete riorated. By placing a track and a new sash in the old frame no trim is removed so there is no need to repaint woodwork or adja cent walls.
7. Replace the window unit in-kind if replacement of a deteriorated window is necessary by matching the:

a. Design and dimension of the original sash

i. Maintain the original size and shape of the windows. These sash frames rarely maintain the overall appearance of historic sash.

ii. Fit full window replacements to the height and width of the origi nal openings.

iii. Retain the appearance of a double-hung window whether one or both sashes are operable.

iv. Do not reduce the glass surface area.

b. Pane Configuration

i. Maintain the original number and arrangement of panes.

ii. Give depth and profile to windows by using true divided light muntins, or three-part simulated divided lights with integral spacer bars and interior and exterior fixed muntins.

c. Detailing

i. Small variations such as the width and depth of the mun tins and sash may be permitted if those variations do not significantly impact the historic characteristics of the win dow design.

ii. Finish windows in a historically appropriate paint color.

d. Materials

i. Replace a wood window with a wood window.

ii. Substitute materials may be allowed only if the original material is no longer available.

iii. Use translucent or low-e glass.

8. Base reconstruction of missing windows on old photo graphs and drawings and similar examples in the neigh borhood.
9. Storm windows should meet the following criteria:

a. Match divisions to sash lines of the original windows.

i. Use meeting rails only in conjunction with double-hung windows and place them in the same relative location as in the primary sash.

ii. For interior storm windows, no mullions, muntins, or wide frames should be visible from the exterior of the building.

b. Size exterior storm windows to fit tightly within the exist ing window openings without the need for a subframe or panning (a filler panel) around the perimeter.

c. Choose designs with ventilation holes and/or removable clips to ensure proper maintenance and avoid condensa tion damage.

d. Match the color of the frame with the color of the primary window frame.

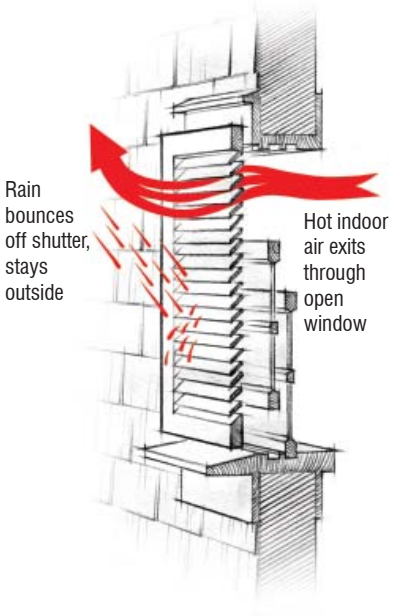
e. Use only clear glass or other transparent material.

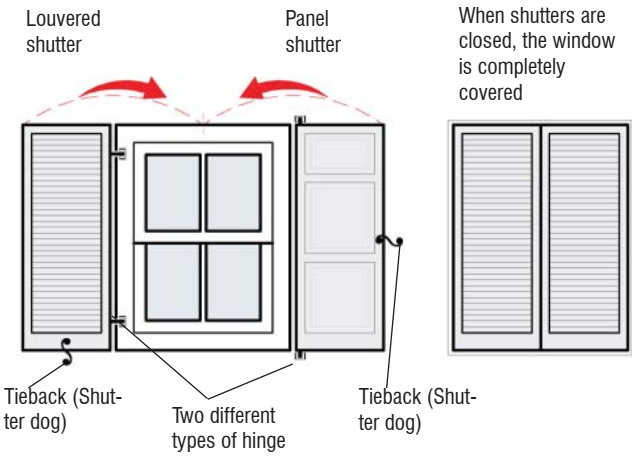
f. Set the exterior storm sash as far back from the plan of the exterior wall surface as practicable.

10. Consolidate original windows on the most visible side(s) of the house. If a window on the front of the house must be replaced and an original window of the same style and size is identified on a secondary elevation, place the historic win dow in the window opening on the primary façade.

Shutters

Shutters originally functioned as a means to control the amount of light and air entering a structure, as well as providing privacy and protection from the elements. Operational shutters can wok with double-hung sash windows to provide you with a variety of options for controlling the interior temperature of your home without air conditioning.





Guidelines

1. Retain original shutters and hardware.
2. Regularly maintain and repair shutters.
3. Replace shutters that are beyond repair in-kind according to the following criteria:
    a. Shutter should be constructed of wood or a composite material that retains the characteristics of wood and is able to be sawn and painted.
    b. Shutters should be sized to fit the window opening and result in the covering of the window opening when closed.
    c. Mount shutters on hinges to give them the appearance of being operable.
    d. Replace original hardware with non-rusting metal in the same design.

Inappropriate Treatments

1. Do not use vinyl, plastic, or aluminum shutters or exterior blinds for any historic structure.
2. Avoid shutters on multiple or bay windows.
3. Do not nail, screw, or permanent ly secure a shutter in the open position and eliminate its hardware.
4. Avoid shutters on multiple or bay windows.