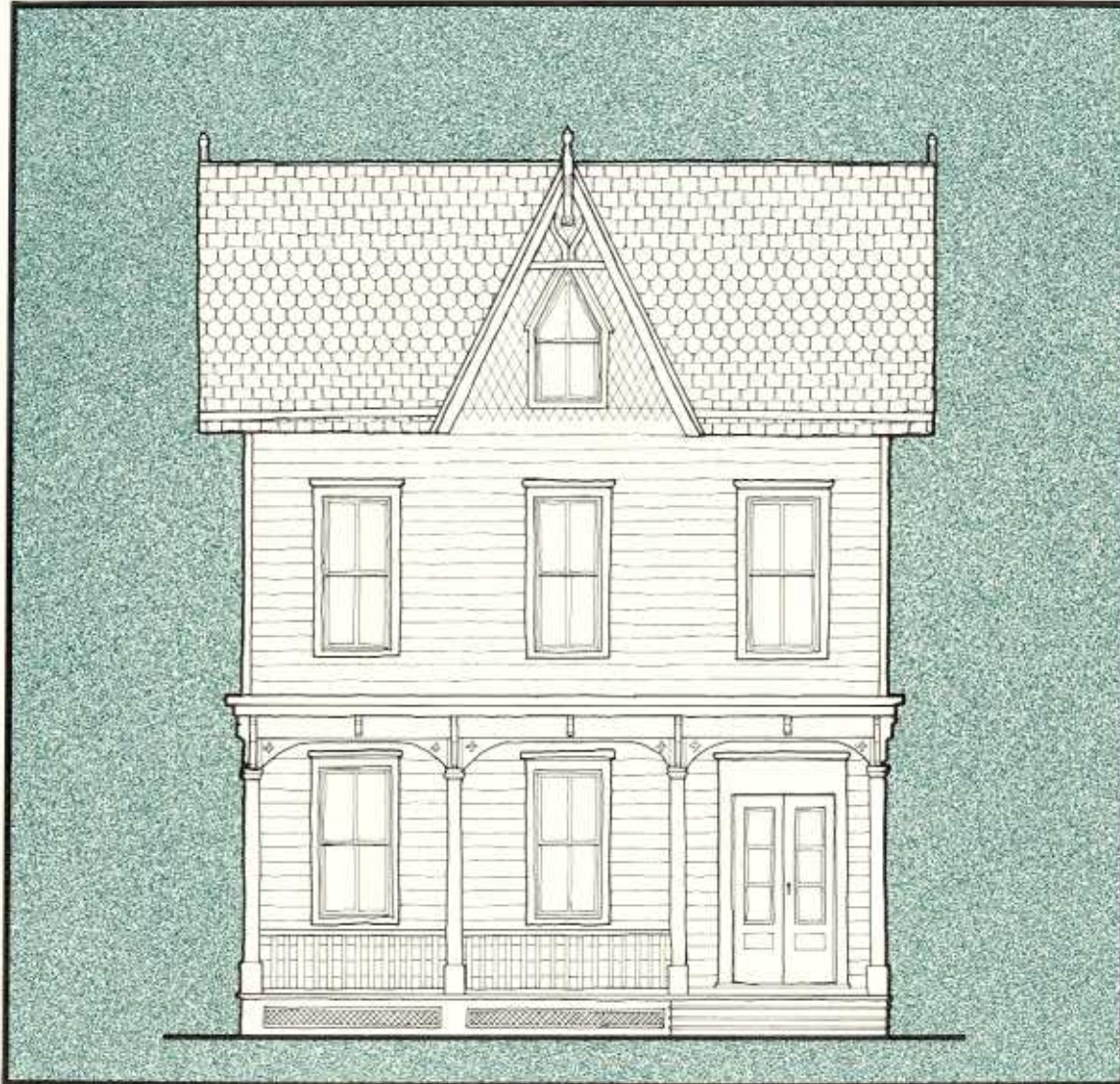


THE GOTHIC REVIVAL STYLE



THE Gothic Revival is the first of a series of picturesque styles to nostalgically look back to English medieval building forms and traditions while freely interpreting and adapting them to indigenous conditions. Carpenter Gothic is a vernacular builder's version of this style. As America grew and became increasingly industrialized, a nostalgia for the simple, rural wilderness emerged. This came on the heels of the English romantic period in art and literature, a movement fostered by the writings of Sir Walter Scott. The highly influential Scott built his own home, Abbotsford, in Scotland, in a romantic, castellated style evocative of the medieval era.

Alexander Jackson Davis, upon his return from a visit to Scott at Abbotsford in 1832, designed Glen Ellen, near Baltimore, the first documented fully developed example of the style in the United States. Davis was the first American architect to champion the Gothic as a style for residences, as well as its most prolific practitioner. His comprehensively illustrated *Rural Residences*, published in 1837, was dominated by Gothic examples. Andrew Jackson Downing whose tremendously popular *Cottage Residences*, published in 1842 and reissued twelve times during the following half century was instrumental in popularizing the style. It contained illustrations of much of Davis' work. Davis' Rotch House, built in 1846 in New Bedford, Massachusetts, was the basis for much of the Carpenter Gothic.

The Carpenter Gothic which enjoyed popularity in Haddonfield for the last half of the nineteenth century is characterized by a combination of evocative forms and details. More inventive than most other styles based on previous modes of building, Carpenter

Gothic structures were at once romantic interpretations of the past and exuberant celebrations of the carpenter's craft. The form is dominated by a steeply pitched cross gabled roof and adorned with fanciful ornamentation executed in readily available wood by carpenters using technologically advanced equipment such as scroll and jig saws. While different in execution, the inherent contradictions between nostalgic forms and details and up-to-date technology that created them are similar to those found in the previous Italianate and French Second Empire styles.

Haddonfield's Carpenter Gothic houses are typically two-and-a-half story clapboard structures sporting



prominent steeply pitched central cross gabled roofs which form wall dormers articulated by patterned shingles. These dormers typically contain pointed windows which impart a Gothic quality. They are trimmed with lacy wooden bargeboards carved in patterns reminiscent of Gothic tracery.

The entries of these houses are articulated by highly decorated one story porches, either in line with the central gable or full width. These porches are supported by columns, which are often connected by flattened Gothic arches or brackets that mimic arches, and capped by curvilinear standing seam metal roofs which are reminiscent of canopies. Inventive intricate trim, either incised or applied, further enlivens these porches. The entry itself usually consists of paired doors not unlike those of the Italianate which often feature glass panels and Gothic wood details.

Windows are two over two paned double hung sash offset from their wall planes by simple trim and sometimes further articulated by shutters. The gable end window is the most ornamented, often featuring a pointed arch or steeply pitched triangular top offset by more decorative trim. Roofs may be accented by polychrome or fancy butt slates and overhang the structure to create shadows that add to the visual interest of the compositions.

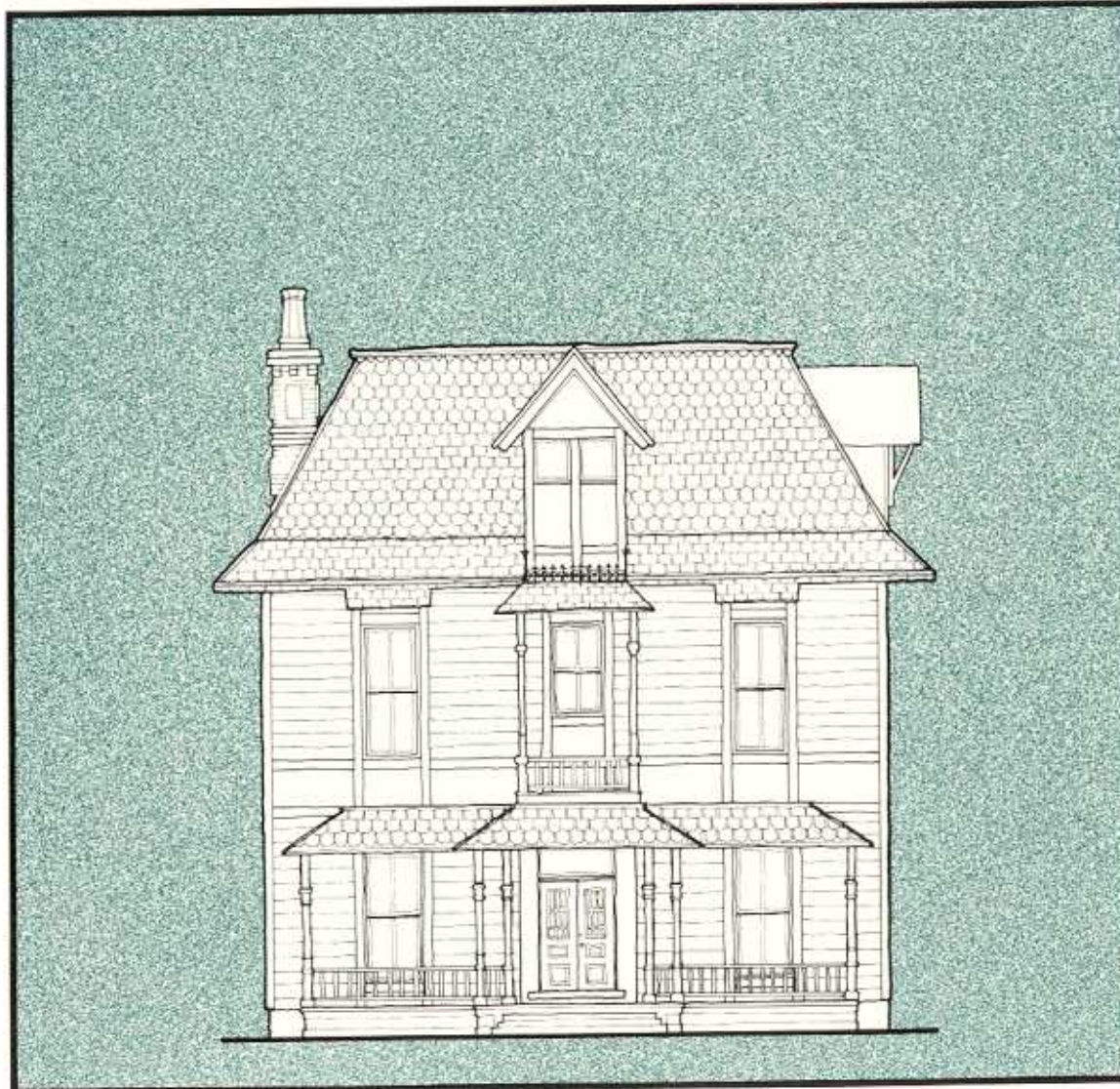
CHARACTERISTICS:

- two-and-one-half stories
- clapboard siding
- double doors; and chimneys with corbelled tops
- elongated windows with two over two double hung sash and simple trim
- highly decorated porches with flattened Gothic arches and pierced quatre-foi motifs
- pole gutters
- steeply pitched cross gabled roofs
- wall dormers containing pointed windows articulated by patterned shingles
- lacy wooden barge boards

*far left:
124 Walnut Street*

*Jacob Clement House, 1852
264 King's Highway East*

THE STICK STYLE



THE Stick Style, perhaps one of the most purely American styles of the nineteenth century, reflects the continued abstraction of forms associated with medieval England begun as part of the Carpenter Gothic. The Stick Style, like the Carpenter Gothic, has its roots in the picturesque ideals advocated and disseminated by Andrew Jackson Downing. His last book, *The Architecture of Country Houses*, first published in 1851 includes a Stick Style design by Gervase Wheeler. Wheeler, an early proponent of the style, published a broader range of Stick Style designs the following year in his own *Rural Home* which was reissued nine times through 1868. In addition, Henry W. Cleveland's *Village & Farm Cottages* published in 1856 was a highly popular pattern book which featured many Stick Style designs. A mature level of the style was exhibited at the Philadelphia Centennial Exposition in structures such as the New Jersey Pavilion.

The Emlen Physick House in Cape May, New Jersey is one of the most exuberant examples remaining of the Stick Style. The Stick Style is represented in Haddonfield by the work of nationally prominent architect Samuel Sloan.

Although not as widespread as Carpenter Gothic or Queen Anne, the Stick Style had a strong presence in Haddonfield in the 1870's. It differed from predecessor modes in that wood was integral to the style. Unlike the Carpenter Gothic facades, the wall surfaces of Stick Style structures feature a "basketry of sticks" framing a variety of wood sheathing, thereby making the wall an ornamental element rather than a plane supporting decorative detail. Its vertical and diagonal sticks suggest a structural frame reminiscent of medieval half timbering; in fact, Stick Style houses are

framed with tightly spaced small machine cut members held in place by nails. This relatively new framing technology makes possible an unprecedented interplay of form which contributed to the picturesque qualities of Stick Style structures. The technology is applied to create a style that was at once new, and romantically nostalgic.

Stick Style houses are characterized by irregular silhouettes which are reinforced by the pronounced vertical orientation of their often surprisingly symmetrical facades. They rest on substantial masonry bases which are clearly articulated from the timber elevations above. In turn, these facades feature multi-textured wall surfaces ranging from clapboards to vertical siding to shingles in a variety of elaborate patterns, all contained within a framework of applied timber framing.

Entries are typically shielded by long covered porches supported by stick-like posts, often featuring diagonal struts or brackets. Doorways often feature double doors incised with elaborate geometric patterns.

Windows fill large vertically oriented areas defined by timber framework with somewhat overscaled two over two double hung sash. At the second floor, they are often topped by shed roofed projections reminiscent of dormers. These roofs sometimes extend further to create balconies. Steeply pitched, tall roofs sheathed with patterned, multi-colored slatework, and punctuated by elaborate overscaled dormers often dominate Stick Style houses, reinforcing their irregular, picturesque qualities.



CHARACTERISTICS:

- two-and-one-half stories
- irregular silhouettes
- vertically proportioned facades
- double doors incised with elaborate geometric patterns
- porches supported by stick-like posts
- multi-textured wall surfaces
- timber framework defines window and door openings
- elongated windows with two over two double hung sash
- broad overhanging eaves with strut-like brackets
- pole gutters
- steeply pitched tall roofs
- patterned slate roofing
- large overscaled dormers
- elaborately corbelled, boldly projecting brick chimneys

(at left)

*William Coffin Shinn House,
1873*

200 Washington Avenue

*141 Warwick Road,
Samuel Sloan, Architect.*

THE QUEEN ANNE STYLE



THE Queen Anne Style represents the culmination of Victorian era styles. It owes its origins to the highly popular British architect Richard Norman Shaw who focused attention on the architecture of the end of the medieval period. This architecture of the Elizabethan and Jacobean eras is characterized by the application of classical ornaments and motifs to buildings of fundamentally medieval form. The style's name is a misnomer since it has little to do with Queen Anne or the architecture of her time.

The Queen Anne Style was introduced to the American public at the Philadelphia Centennial Exposition by the British government's two essays in the style. In addition, traditional builders' guides such as Palliser's *Model Homes for the People* or Pierce and Bockstader's *Modern Buildings at Moderate Cost* were joined by a series of catalogs and portfolios of Queen Anne designs created for prospective home buyers. This phenomenon was joined by yet another new media, the architectural magazine, with publications such as the *American Architect and Building News* helping to disseminate the style of the day to professionals.

Henry Hobson Richardson, a leading architect of the late nineteenth century, produced significant work in the Queen Anne Style, while adapting it to America. His Watts-Sherman house built in Newport, Rhode Island in 1874 is generally recognized as the first example of the style in the United States. The style prevailed in Haddonfield from the 1880's through the turn of the century.

Like the Stick Style, buildings of the Queen Anne Style employ wall surfaces as decorative elements. Less expressively articulated than wall planes of the Stick Style buildings, the Queen Anne facades are

more unified by the variety of materials ranging from brick and terra cotta to wood shingles, all in a variety of patterns. Heightened asymmetry of elevation enlivens what would otherwise be a "calmer" composition. The introduction of free interpretations of classical motifs such as Palladian windows in the gable end in place of Gothic windows or Classical columns replacing sticks supporting porches is logical since this style was looking at the end of the medieval era during which precisely such combinations were common.

Queen Anne houses feature ornate, opulent facades which possess a rich variety of forms and materials. Towers and turrets with elaborate bell shaped crowns typically project above dramatically intersecting roof planes. The irregularity of the silhouette is accentuated by boldly projecting chimneys featuring decorative brickwork.

A rich variety of textures supplements this pot-pourri of forms. Typically, rugged stone sheathes the base while brick, clapboard and/or decorative shingles cover the stories above. Classically detailed verandas or large porches, often featuring their own irregular roof forms, add to the composition's variety.

Windows occur either as single elements or in groups and range from simple rectangles to a variety of arched forms. Generally, one over one plate glass glazes the windows. However the upper sash sometimes consists of smaller stained glass panes, which, framed in lead or wood, form either rectangular or diamond shaped patterns. Throughout the facade, delicate classical details such as swags and dentil courses adorn these complex compositions providing a counterpoint to their rugged wall materials.



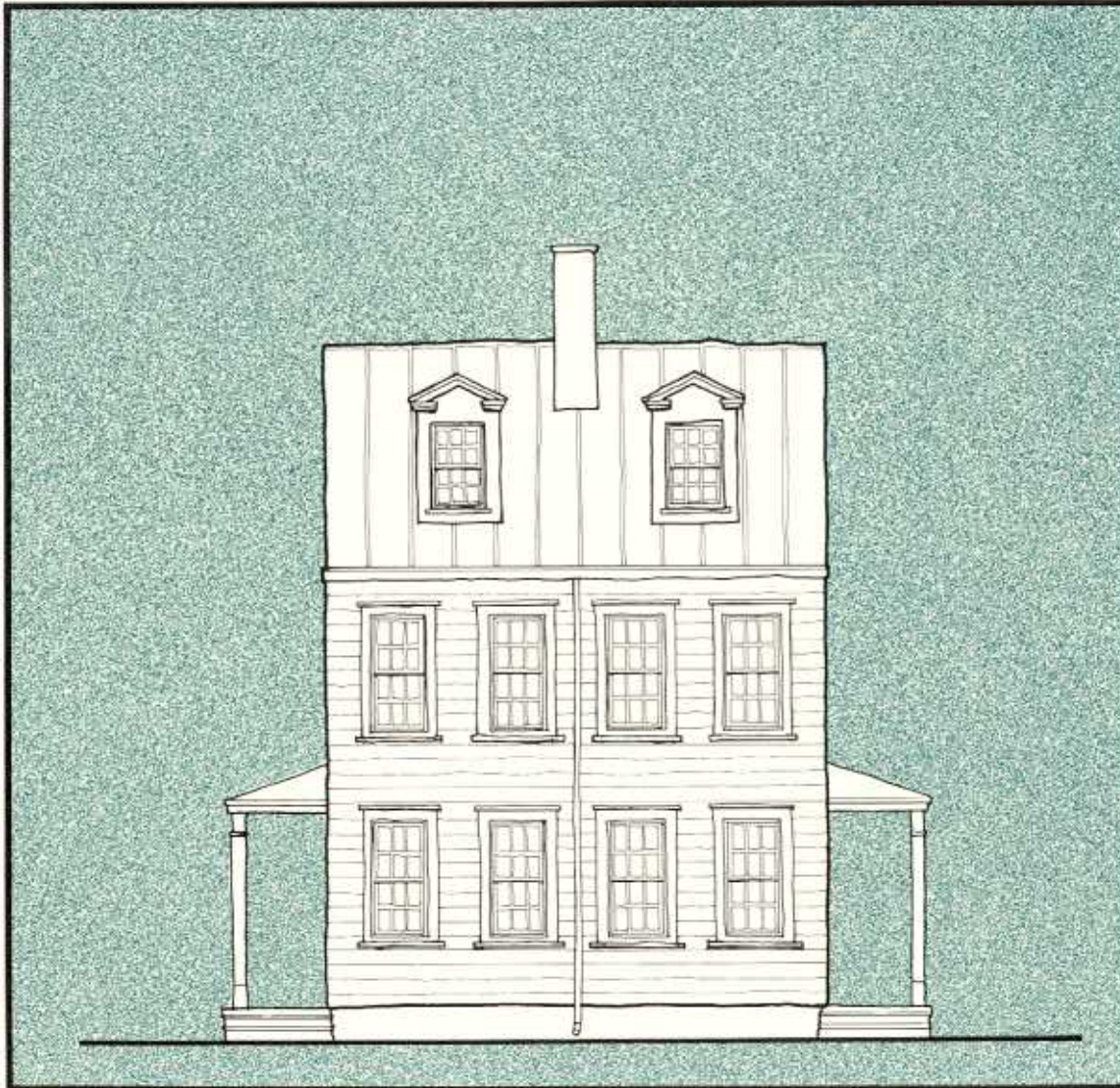
CHARACTERISTICS

- two-and-one-half stories
- irregular silhouettes punctuated by towers and turrets
- multi-textured wall surfaces of clapboards and patterned shingles offset by delicate classical details
- glazed doors with small panels
- broad continuous porches with pediment marking entry
- variety of window shapes and sizes
- double hung sash with elaborate small panes in upper sash, single plate glass in lower sash
- pole gutters
- gable ends with double or triple windows
- steeply pitched elaborate roof forms
- patterned slate roofing
- boldly projecting chimneys with decorative brickwork

far left:
235 Washington Avenue

133 Euclid Avenue

THE VERNACULAR



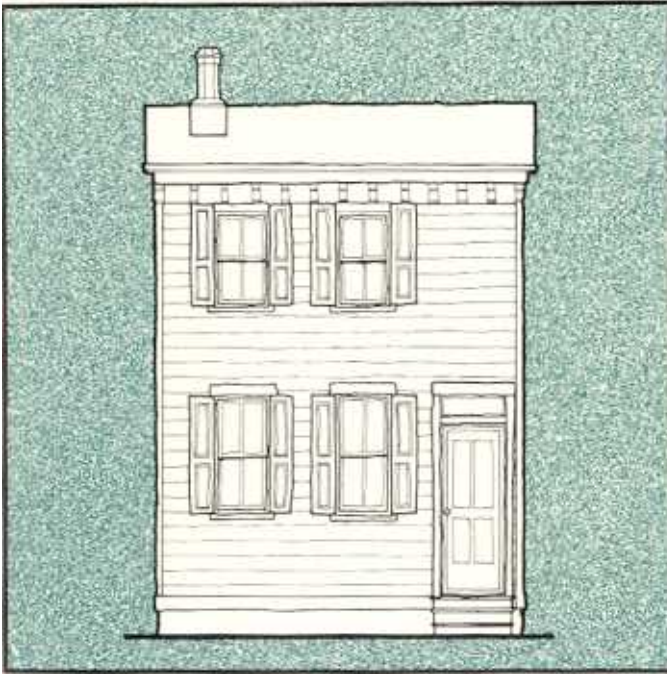
THE Vernacular building tradition parallels the development of high style structures. Influenced by the more elaborate stylistic themes in architecture, Vernacular houses of the nineteenth century represent the evolution of the folk tradition transformed by popular culture in the industrial age.

Haddonfield's examples of Vernacular architecture are urban manifestations of the type. These modest wood clad, narrow, two story houses are often found in attached pairs that share a common wall and roof but have separate entries.

High style architectural elements are often part of vernacular structures. When present, such features are used naively and playfully. For instance, 61 Center Street features a simple Italianate bracketed cornice. Because of the reduced scale of this Vernacular house, however, there is no space above the windows to accommodate both the window lintel and the cornice. As a result, they are naively combined in a fashion characteristic of Vernacular structures.

Architectural elements are also used pragmatically. The windows on the Birdwood Tenant Houses for example, are placed to complement the interior function of the structure rather than in accordance with principals of formal composition. The detailing of stylistic elements is also simplified.

Vernacular structures tend to be stylistic hybrids which combine stylistic elements from various periods in architecture. The simple clapboard facade of 61 Center Street is of the form associated with Colonial or Federal eras while its two over two double hung windows, bracketed cornice and decorative chimney are associated with the later styles. This mixture of ele-



ments associated with various styles requires careful attention when preserving a house. Modifying a Vernacular building's basic elements in an attempt to create a high style structure is not good preservation practice.

Often modest, Vernacular houses are easily overlooked. Their original materials and small scale, combined with their special characteristics, are important and contribute to the overall streetscape.



CHARACTERISTICS:

- two or two-and-one-half stories
- often attached twins with central chimneys
- clapboard siding
- flat simple door and window trim
- double hung sash
- irregular window and door spacing
- gable roofs

*far left:
21-23 Grove Street*

*center left:
61 Center Street*

*Birdwood Tenant Houses
1811*

THE COLONIAL REVIVAL STYLE



THE Colonial Revival marks a rediscovery of our country's architectural heritage that began with the colonial, classically inspired Federal and Greek Revival of a century and a half before. A more freely interpreted classical theme appears in the Colonial Revival Style, based not on the nostalgia associated with Europe, but this time on associations with our own country.

This rediscovery of our nation's architectural heritage is said to have been sparked by the Philadelphia Centennial Exposition. Following this international event which focused on our country, the renowned architectural firm of McKim, Mead & White embarked on a widely publicized study tour of colonial era structures in New England.

The style began as a relatively faithful interpretation of colonial era architecture with structures like McKim, Mead & White's Appleton House of 1883-84 in Lennox, Mass. It was popularized by the relatively new phenomenon of architectural journals, such as *The American Architect and Building News* which in 1898 featured folios of photographs and measured drawings of various colonial era buildings, as well as publications of a new type, architectural monographs, perhaps typified by the *White Pine Series* which began publication in 1915.

The style evolved to a more inclusive eclectic mode of design which drew from a range of styles and details associated with previous styles. Colonial Revival persisted, reemerging albeit radically simplified at the end of the depression era in the post World War II years.

The Colonial Revival represents an abandonment

of the picturesque and a rediscovery of the formal classical language of architecture. This return to Classicism was by no means unaffected by the intervening picturesque styles. Classical ornament was experimented with toward the end of the Queen Anne Style and this experimentation continued in a more subdued fashion. The forms onto which these elements were applied were more symmetrical, without the surface ornamentation characteristic of the Stick and Queen Anne styles, and had very regular silhouettes. The roof pitches, however, are steep; the once demure Federal era dormers are radically more pronounced, dominating the roof planes. In addition, to be perceived on their modified forms, details of the Colonial Revival are oversized, exaggerated in proportion, often appearing as caricatures when compared side by side with their prototypes.

In Haddonfield these houses dominated at the turn of the century, taking the form of elaborate free standing re-statements of elegant brick structures of the Federal era as well as of semi-detached rows of twins or double houses.

Faced with wood or brick these two and one half story houses feature steep gable roofs punctuated by large dormers. Varied window treatments are common featuring double hung sash of an exploded scale, nine over one windows, often housed within a projecting bay which dominates the composition. Crowning pediments and window surrounds are fashioned from wood trim featuring large, pronounced profiles.

Like Queen Anne buildings, broad wooden front porches composed of loosely classical elements characterize these buildings. A series of columns are surmounted by a classical entablature which defines the

porch. Especially in the case of rows, where a portion of the significance comes from the rhythmic repetition of units, it is important that preservation be undertaken cooperatively with neighbors.



CHARACTERISTICS:

- two and one-half stories
- brick walls with quoins at corners
- porches supported by classical columns
- large double hung sash, often nine over one or twelve over one
- broad classically detailed cornices
- pole gutters
- steeply pitched gable roofs
- large dormers often with multiple windows and over-sized trim
- slate roofing
- end chimneys

*far left:
239-241 King's Highway
East*

125 King's Highway West

IV. Preservation Techniques & Standards

AVOIDING MISTAKES

"It is better to preserve than to repair, better to repair than to restore, better to restore than to reconstruct."
A. N. Didron, 1839.

A structure's architectural elements, its materials, detailing and proportions, play a key role in defining its historic character and style. These features should always be preserved. They make the house special, contribute to its character, and therefore to both its visual and economic value.

It is therefore important to become familiar with the stylistic elements of your house before beginning work. A successful preservation project will address a building's problems, while preserving its character. In general, when dealing with older structures, the most conservative approach is the best. It is better to repair original historic building fabric than to replace it with substitute materials. Follow the maxim: "If it's not broken, don't fix it."

A historic house can be successfully updated without eliminating the old. A carefully thought out plan will accommodate present day needs while respecting and preserving the qualities and details that contribute to a house's charm.

Before undertaking any project, ask yourself: Is the change in keeping with the character of the house, or will it alter, or eliminate distinctive features that add charm and economic value to the houses? For instance, don't replace an old panelled door with a modern flush one. Will the change actually improve the functional aspects and utility of the house? Don't install substitute siding; it may well cause more problems than it solves. Will the change stand the test of time or is it a fad that could in the long run have a detrimental effect on the value of the house? Does the project incorporate advice available from neighbors, preservation architects and contractors, and the Historic Preservation Commission?

Inspection and minor repairs must be performed at regular intervals, but they can be accomplished at a relatively low cost. Deferring small repairs will often result in their becoming major projects which involve considerable expense. It is the latter type of project that usually prompts a homeowner to consider total replacement with new substitute materials which promise a "permanent" solution to building maintenance. The recommendations in this guide stress the inherent economy of regular inspection and repair which will result in a lower total cost and a greater likelihood of preserving the original materials and architectural qualities which distinguish the houses of Haddonfield.

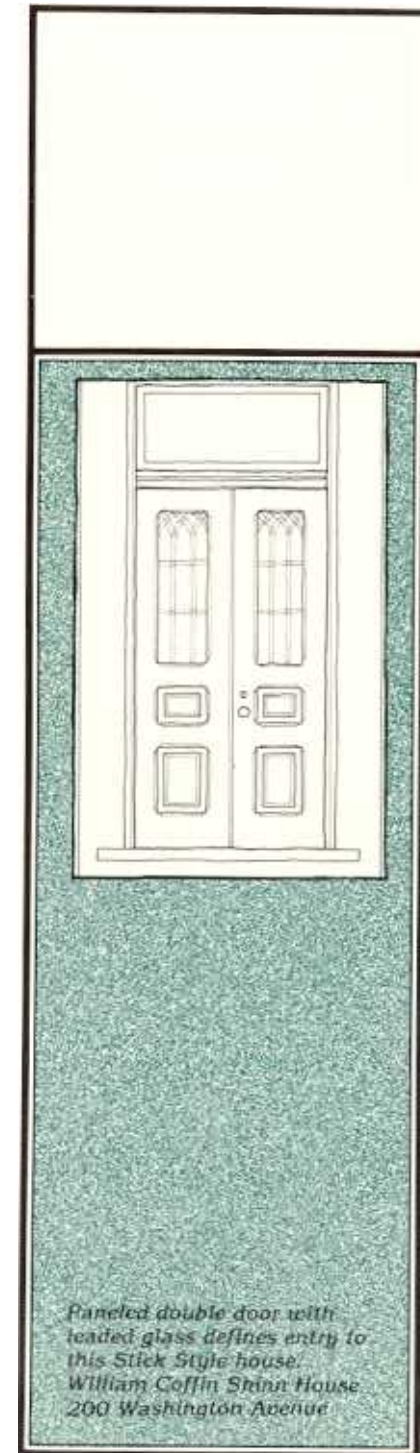
PRESERVATION STANDARDS

Standards have been developed by the Secretary of the Interior for review of historic preservation projects. They have been incorporated into the borough's historic preservation ordinance. They are used by the Historic Preservation Commission and the Planning Board in reviewing Certificates of Appropriateness.

1. Every reasonable effort shall be made to provide a compatible use for a property which requires minimal alteration of the building structure or site and its environment, or to use a property for its originally intended purpose.
2. The distinguishing original qualities or character of a building, structure, or site and its environment shall not be destroyed. The removal or alteration of any historic material or distinctive architectural features should be avoided when possible.
3. All buildings, structures, and sites shall be recognized as products of their own time. Alterations that have no historical basis and which seek to create an earlier appearance shall be discouraged.
4. Changes which may have taken place in the course of time are evidence of the history and development of a building, structure, or site and its environment. These changes may have acquired significance in their own right, and this significance shall be recognized and respected.
5. Distinctive stylistic features or examples of skilled craftsmanship which characterize a building, structure, or site shall be treated with sensitivity.
6. Deteriorated architectural features shall be repaired, rather than replaced, wherever possible. In the event replacement is necessary, the new material should match the material being replaced in composi-

tion, design, color, texture, and other visual qualities. Repair or replacement of missing architectural features should be based on accurate duplication of features, substantiated by historic physical or pictorial evidence rather than on conjectural designs or the availability of different architectural elements from other buildings.

7. The surface cleaning of structures shall be undertaken with the gentlest means possible. Sandblasting and other cleaning methods that will damage the historic building materials shall not be undertaken.
8. Every reasonable effort shall be made to protect and preserve archaeological resources affected by or adjacent to any project.
9. Contemporary design for alterations and additions to existing properties shall not be discouraged when such alterations and additions do not destroy significant historical, architectural or cultural material, and such design is compatible with the size, scale, color, material and character of the property, neighborhoods or environment.
10. Wherever possible, new additions or alterations to structures shall be done in such a manner that if additions or alterations were to be removed in the future, the essential form and integrity of the structure would be unimpaired.



Paneled double door with leaded glass defines entry to this Stick Style house. William Coffin Shinn House 200 Washington Avenue

ROOFS



*Colonial Style Shed Dormer
penetrating wood shingled
gambrel roof,
Guard Houses
258-260 King's Highway
East*

WHILE a structure's roof serves the fundamental purpose of keeping the weather out, it is also a major stylistic feature. A roof's materials and form combine to create a stylistic statement that is important to respect in a building's preservation.

Moisture penetration may be the result of problems with the roofing material, but they are as likely to be the result of faulty gutters or downspouts or deterioration of flashing at the intersection of roof planes or penetrations such as dormers, vents or chimneys. This makes the thorough analysis of a roofing problem necessary to save costly, and often unnecessary, repairs. If patching a roof, match existing materials. If a roof must be replaced, use original materials. Since labor is the largest single expense in roof repair, it is not cost effective to substitute lesser materials.

Houses constructed in early styles such as the Colonial, Federal and Greek Revival as well as later Vernacular and Period Revival variations feature relatively simple roofs, punctuated only by simple dormers. These roofs are usually gabled, comprised of two pitches sloping from a central ridge. On occasion houses from this era feature gambrel roofs with two slopes on either side of the ridge. Materials employed in roofs of this type include wood shingle and standing seam metal. While roofs of these eras are often not the visual focus of the building, it is important to try to preserve the original roof form and materials.

With the emergence of the French Second Empire Style characterised by mansard roofs featuring steeply sloping, ornately decorated, slate surfaces, the roof becomes a visually critical part of the stylistic composition. Emphasis is added to the visual cap by the use of slates of a variety of colors and patterns. The

roof is often topped with a decorative cast iron cresting.

The steeply pitched tall and often complex roofs of the picturesque, medieval inspired Carpenter Gothic, Stick and Queen Anne Styles feature a complex interplay of roof forms that make the roof a key visual element. Slate roofs dominate often featuring decorative multi colored patterns. The Stick Style features over-scaled dormers, roof projections, and turrets capped by rectilinear roof forms. Turrets of Queen Anne houses are dominated by curvilinear forms, while the irregular roof forms of their verandas carry the visual excitement of the roof to the street level. The Carpenter Gothic further features decorated entry porches capped by curvilinear standing seam metal roofs reminiscent of canopies.

Roofing materials include wood shingles, metal, slate, and the more recent asphalt and fiberglass roof sheathings. **Wood** is one of the oldest roofing materials and consists of individual tapered shingles or shakes, each of which are fastened separately in an overlapping, staggered pattern to keep the weather out. They are appropriate to Colonial, Federal and early Victorian era buildings. They have a life expectancy of 25 to fifty years and must be preservative treated. Since wood shingles must breathe, soaking in moisture and then drying, they should never be painted; they can however be stained.

Metal roofing usually takes the form of a standing or flat seam roof composed of sheets 18 to 24 inches wide which are joined by folding the sheets perpendicular the ridge to form a soldered seam. These roofs are generally appropriate for relatively shallow slopes as found in Federal and Greek Revival Houses, as well as

on the entry porches of Carpenter Gothic houses. Sheet iron, steel or stainless steel plated with tin or terne, an alloy made up of lead and tin, as well as copper are the primary metal roofing materials. They are available in a variety of thicknesses or gauges measured in decimals of an inch. If properly protected against corrosion, by painting every eight to ten years, metal roofs have a life expectancy of seventy to one hundred years.

Slate is considered a premium roofing material because of its durability, fireproof and decorative qualities. A quarried stone, split into layers, slate is relatively expensive, but requires little, albeit skilled maintenance and has a life expectancy of one hundred years. Damaged slates must be removed by clipping the nails which fasten them. A metal tab is then inserted and covered by replacement slate which is held in place by the tab which is bent up and over the bottom edge of the new slate. Since it is essential that a slate roof not be walked on, maintenance must be performed from an L shaped ladder placed across the ridge. Slate came into its own in the Victorian era, and dominates French Second Empire, Stick Style, and Queen Anne and Colonial Revival style houses.

Asphalt and Fiberglass roofing materials are substitutes for historic roofing materials, and therefore are not appropriate replacements for historic roofing. When used to replace non-historic roofing, black or dark shades of brown or gray should be used since they are less conspicuous and therefore pose fewer visual problems. These types of roofing come in long strips designed to give the appearance of individual shingles. This synthetic material, nailed to the roof deck combines paper, fiberglass and tar with a mineral or sand

coating. It is measured in pounds per square, and ranges from 235 to approximately 400 pounds which have a life expectancy of between 15 and 35 years respectively.

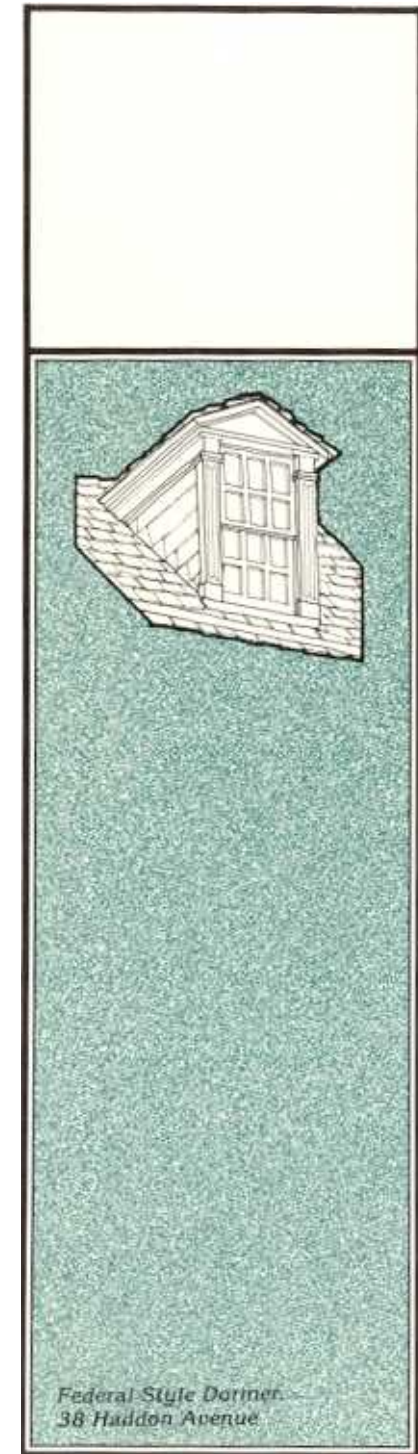
FLASHING

Flashing consists of metal roofing which is found at the intersection of roof planes, such as peaks, valleys, dormers and at all penetrations such as dormers and chimneys. It diverts water from these areas toward gutters and downspouts. Since these are the most vulnerable parts of a roof, it is important to maintain flashing. Flashing should be overlapped by a minimum of four inches of roofing material and should be protected with a metal preservative paint.

Small holes in flashing can be repaired with sheet metal patches. Sections of deteriorated flashing should be replaced. Replacement flashing metals should be the same as original materials since contact between non-compatible metals creates the flow of electric current, known as galvanic action, which results in corrosion.

GUTTERS

Gutters collect water at the roof's edge directing it to downspouts which in turn lead to the borough's storm sewer system. A gutter and downspout system must provide a path for water to flow from a roof without penetrating the building or running down, and thereby staining its facade. External gutters are hung at the edge of a roof pitching toward downspouts at a slope of one inch for every 16 feet. They are available





in the same metals as flashing in either the more historically appropriate half round configuration or in a modern rectilinear shape featuring a molded profile along the face, typically referred to as “K” gutters. They are available in a variety of baked enamel colors or primed to receive paint. It is important that hung gutters not interfere with a structure’s architectural detail. Internal gutters were devised to keep a structure’s cornice clear of appurtenances. One type of internal gutter is a pole gutter in which a pole at the roof’s edge is sloped toward the downspout. A second type of internal gutter is the built-in gutter in which the cornice slopes inward toward the roof slope or the gutter is let into the cornice blocking.

Downspouts should be as inconspicuous as possible. They should be the same color as the facade and to the extent possible, should not be placed on a structure’s front facade, but rather on adjacent side elevations. The downspout should be compatible with the gutter in both configuration and material. Round downspouts should be used with half round and pole gutters while rectangular downspouts should be used with some forms of built-in gutters.

DORMERS

Dormers are roof appurtenances which, while punctuating a structure’s roof, reinforce its stylistic theme. They consist of their own roofs and side wall or cheeks and are dominated by their vertical windows which admit light and air to the attic, maximizing the living space within. Dormers typically echo the stylistic motifs characteristic of the structures they cap.

Dormers adorning Colonial houses are either shed

roofed extensions of their gambrel roofs or gabled projections from gabled roofs, containing six over six paned double hung sash. Federal dormers are similar to the later Colonial, but feature classically inspired pediments in the dormers’ gabled ends or segmentally arched hoods and roofs with pilasters flanking the six over six double hung sash. Colonial revival dormers are similar to the gabled Federal counterparts, but are of larger scale, sometimes making use of pilasters to define three bays of one over one double hung sash within a large dormer.

Dormers are integral parts of the Mansard roofs which top French Second Empire structures. Their curvilinear tops echo the curves of the mansard, with large single paned or two over two double hung sash



dominating these roof penetrations.

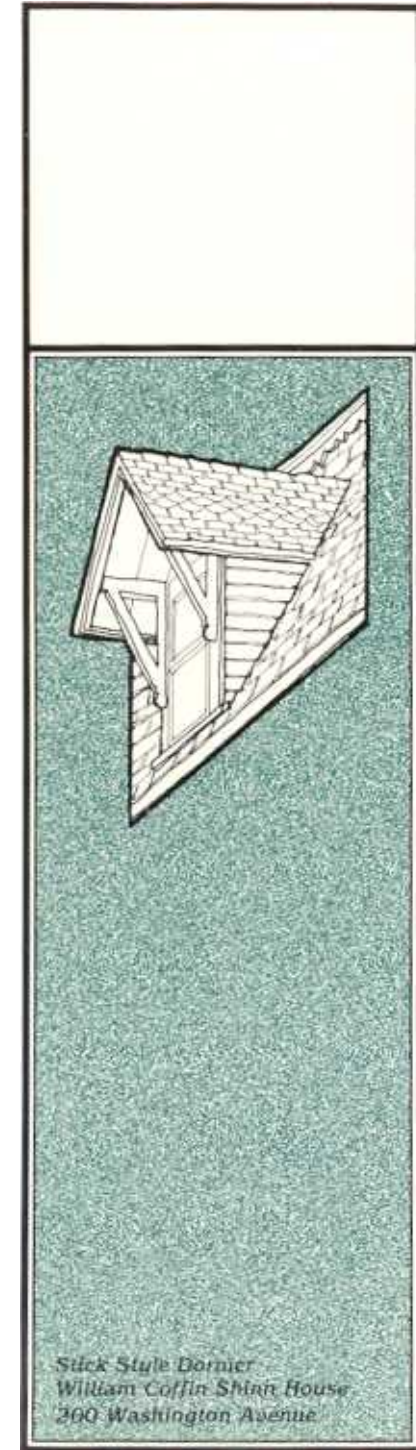
Gothic Revival houses are characterized by steeply pitched central gabled wall dormers, often articulated by patterned shingles. These dormers typically contain a single pointed window, imparting a Gothic quality which is reinforced by lacy wooden bargeboards that accent their silhouettes.

The highly irregular, picturesque qualities of Stick Style compositions are often the result of a combination of wall dormers extending vertically beyond their roof planes and elaborate, overscaled gable and shed roofed dormers dominated by large areas of glazing and decorated by elaborate stick work. Queen Anne houses often feature large gabled dormers as an integral part of their roofs. Turrets, so characteristic of the style, are at once dormer-like projections and integral parts of the facade, creating a key visual element.

Dormers are important stylistic elements which serve important practical functions. They should therefore be maintained and preserved as an integral part of the house.

Additional Sources:

- *Roofing for Historic Buildings*. Sarah M. Sweetser. Preservation Brief # 4. Technical Preservation Services, U.S. Department of the Interior, Washington, D.C.: GPO, 1978.
- *Roofing Simplified*, Donald R. Brann. Rev. ed. Briarcliff Manor. N.Y.: Directions Simplified, 1977.



FACADE MATERIALS



A structure's most visible element, its exterior wall or skin, encloses and insulates the house while contributing significantly to its overall appearance. Because of the visual importance of a structure's facade material, it is always best to retain and preserve the original facade. Substitute materials have the potential for causing more problems than they solve.

Although a majority of residential structures in Haddonfield are of wood frame construction, a substantial number are masonry. **Masonry** may be brick, stone, or stucco while wood siding includes clapboards and shingles.

In Haddonfield both types of exterior materials are in evidence. The early styles, including the Colonial, Federal, and Greek Revival, feature either brick masonry or wood clapboard. In the Victorian era, wood siding was dominant in the Italianate and French Second Empire styles. As the architecture of medieval times emerged as a stylistic influence in the nineteenth century, wood continued to be the most popular exterior material. In Gothic Revival houses, clapboards are combined with patterned shingles, giving focus to areas of visual importance such as the gable end. In Stick Style houses, applied timber reminiscent of medieval framing delineates areas of clapboard, shingle, vertical and lap siding all combined in a single dynamic facade. With the emergence of the Queen Anne, masonry materials, such as rugged stone and decorative bricks, are added as accents in foundations and chimneys in juxtaposition to a variety of wood clapboard and patterned shingles above.

WOOD SIDING

THE majority of Haddonfield's houses are wood sheathed. Clapboard siding is the most prevalent type of wood facade material. It consists of narrow tapered boards which overlap each other horizontally to keep the weather out. Corners of clapboard covered walls are typically accentuated by vertical corner boards. Ship lap siding is a related horizontal sheathing in which flat faced horizontal boards are bevelled at their lap joints.

Wood shingles are individual tapered members which overlap each other, creating a visually important rhythm and shadow effect on the facade. This pattern is often highlighted in key areas by fish scale, diamond, or other shaped shingles.

Wood siding can last virtually indefinitely if well maintained. Maintenance consists of surface preparation and painting which, if done properly, can last up to ten years. Portions of the house that are most exposed to the elements may require repainting more often. When repainting, deteriorated members should be repaired or replaced with wood that matches the size and shape of the original siding. Small fissures can be repaired with putty or caulk while wider cracks, particularly in clapboards, can be repaired by the application of a strong wood glue along the crack's edges.

In cases of severe deterioration, damaged members should be removed and replaced. If only a portion of a long clapboard is being replaced, the damaged area must be isolated by making vertical cuts in the board with a backsaw. Nails must be removed, the board or shingle above pried up, and the now detach-

ed, deteriorated piece removed. A like piece is inserted and nailed into place. In order to allow for desired movement, it is best to nail through the new member directly to the underlayment, avoiding nailing through adjacent members above or below in the area of overlap. Nails should be countersunk, the juncture of existing and new materials sanded and caulked in preparation for paint.

ARTIFICIAL SIDING

Over time a variety of substitute materials have been introduced offering “permanent, low maintenance” alternatives to original sheathing materials. It has become evident that these substitutes are not permanent and in fact introduce a series of new problems, some of which are far more serious than those they sought to eliminate.

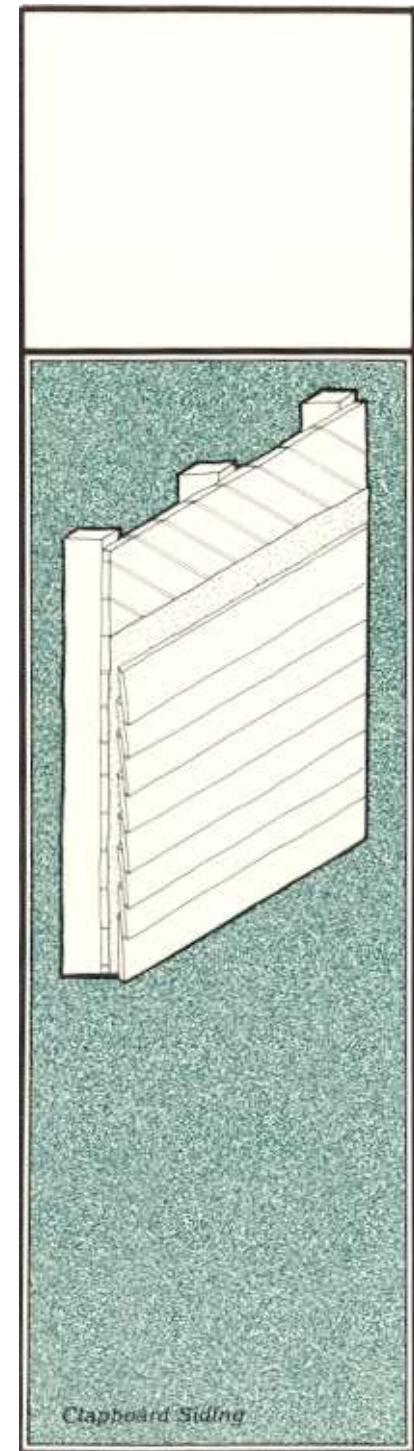
Asbestos shingles, often installed directly over clapboard in the 1940s through 60s, offered instant modernization and eliminated the need for paint. Over time, however, these shingles have cracked and themselves required paint. Because of this, and since they obscured much of the detail and charm of the houses to which they were applied, in recent years, asbestos shingles often have been removed. **Asphalt shingles**, a variation of the roofing material, were in vogue for a time and have covered the sheathing of many structures. In Haddonfield’s Historic District many houses are re-emerging from behind their “garb” of these types of artificial siding.

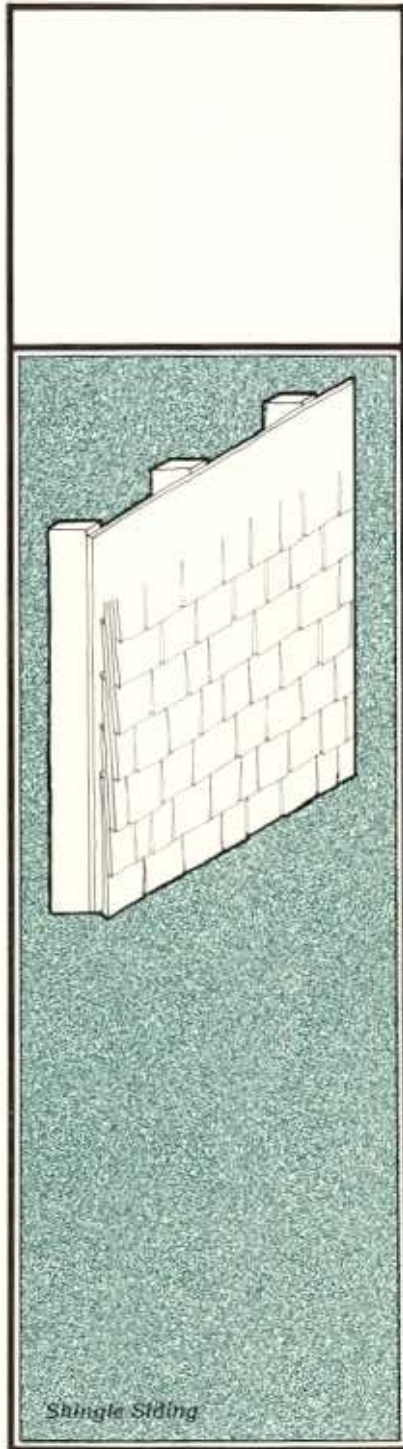
Today **aluminum** and **vinyl siding** are said to offer many of the same advantages as their earlier artificial counterparts. In many ways, they raise more problems than their predecessors. Both newer artificial sheathings require a substantial initial investment. In return, they are often seen as an alternative which will eliminate the need for maintenance and painting, improve a structure’s thermal efficiency, and solve a host of technical problems.

In fact, artificial siding has often been found to dent and dull, requiring partial replacement and painting after about fifteen years, therefore only lasting the life

Additional Sources:

- *Epoxies for Wood Repairs in Historic Buildings*. Morgan W. Phillips and Judith E. Selwyn. Technical Preservation Services, U.S. Department of the Interior. Washington, D.C.: GPO, 1978.
- *Old House Woodwork Restoration: How to Restore Doors, Windows, Walls, Stairs, and Decorative Trim to Their Original Beauty*. Ed Johnson. Englewood Cliffs, N.J.: Prentice-Hall, 1983.





of two paint jobs, on average. Vinyl siding has been known to crack in cold weather.

Artificial siding is also often perceived as improving the thermal efficiency of older houses. Over eighty per cent of a structure's heat loss is through its roof. Insulating the attic or roof, therefore, as well as caulking exterior joints at windows and maintaining storm windows will do far more to conserve energy than will the wall insulation often installed in conjunction with artificial siding.

Technical problems causing serious damage to a structure can also accompany the application of artificial siding. Lack of air circulation between the original and replacement sheathing can cause pockets of moisture to be trapped within a wall, potentially causing fungal growth and serious deterioration which can go undetected behind the artificial siding.

Artificial siding can also pose serious safety hazards in case of fire. Aluminum siding will hide the path of the fire as it travels within a wall, while intensifying heat levels within the structure. Vinyl siding melts under the heat of fire, emitting noxious fumes which pose a serious health hazard.

Finally, when buildings are re-sided with materials other than the original, much of their character is lost. Important architectural elements are often removed to accommodate the new materials which are themselves incompatible with the historic structures they sheathe. The resulting change destroys the architectural and historic significance of the house and disrupts its sense of permanence. Artificial sheathing should therefore be avoided.

MASONRY

It is important to preserve a structure's original masonry skin. Where extensive preservation is required, it is sometimes necessary to re-work a section of a brick wall. In cases of severe damage unsympathetic remodelings, such as the substitution of large expanses of glass for smaller windows, bricks must be replaced with new brick that match the original in size, color, and texture.

Dirt is a chief contributor to masonry deterioration. It can take the form of soot or particles of smoke, bird droppings, rust or copper stains, or organic materials such as ivy or moss. Improper care and cleaning can leave facades discolored and hasten masonry deterioration. Soiled masonry retains more water than clean masonry; this excess trapped water can freeze in the stone and cause breakage. Trapped water also promotes fungal growth in warm weather. Dirt can hide open joints, cracks, and general deterioration.

CLEANING MASONRY

There are three methods of cleaning masonry: **water**, **chemical**, and **abrasion**. The choice of the most appropriate method is dependent upon the material and its condition.

Water cleaning is recommended in most cases because it is gentle and effective. Water techniques are the most versatile, simple, and cost effective methods for cleaning a building. The water wash softens the dirt and rinses the deposits from the surface. Water cleaning can take the form of soap and water and a scrub brush, a high pressure wash, or steam cleaning. Each

of these methods begins by scrubbing water-loosened dirt from the masonry with a soft-bristled brush. The surface of the building should be wet down and scrubbed with a solution of Ivory soap, developing a lather, and then rinsed.

If the surface is too dirty for the soap and water technique, pressure washing may be necessary. With this method, water is forced by a compressor, loosening the dirt and allowing it to be scrubbed. The amount of water sprayed on any given area should be limited to avoid complications associated with water seepage.

Steam cleaning is the best method for cleaning carved details and decorative brickwork. Steam, rather than liquid, reduces the possibility of water damage and usually makes rinsing unnecessary. Unlike the water wash and pressure methods, steam cleaning requires special equipment.

Although water methods are preferable for cleaning masonry, they are not without potential problems. Porous masonry can absorb excess water during cleaning causing interior or "within-the-wall" damage. Excess water can cause salts to rise to the surface from within the masonry; minerals, such as iron and copper, in the water supply can also damage stone and brickwork. Water washes cannot be used in cold weather as the moisture within the masonry can freeze and cause cracking.

The two types of **chemical cleaning agents**, acidic and alkaline, can attain very favorable results when used with care. A specialist is generally required to reduce the risks involved with the application of chemical cleaners. Acidic cleaners work well on sandstone and granite but may destroy terra cotta or limestone. Alkaline cleaners are best for limestone and marble. Chemical cleaners may leave a residue; and because

most chemicals are water based, precautions must be taken to avoid the problems associated with water cleaning.

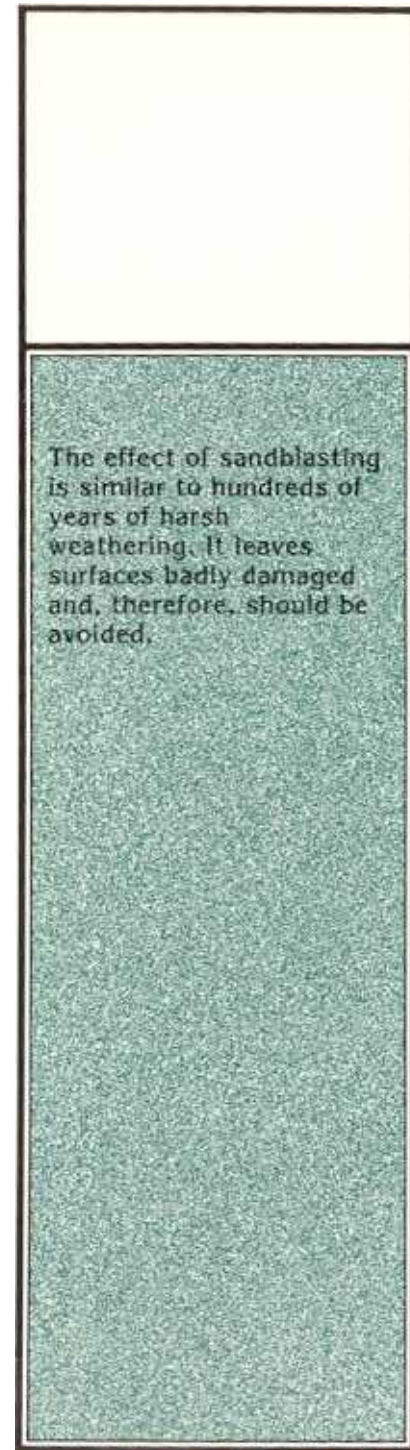
Mechanical cleaning or abrasion is not an acceptable method of masonry cleaning. Grit blasters, grinders, and sanding discs work by abrading dirt from the surface instead of lifting it as do water and chemicals. Masonry erosion is unavoidable with mechanical methods, especially sandblasting. With brick, soft sandstone, carvings, or smooth stone surfaces, this erosion is aesthetically and physically unacceptable. Brick is harder on the outside than the inside; removing the bricks' hard outer skin exposes the soft inner part to greater deterioration. Sandblasting carvings results in a loss of detail, while abrading smooth stone removes its polished quality.

The effect of abrasive cleaning is similar to hundreds of years of harsh weathering. It leaves surfaces badly damaged and, therefore, should be avoided.

REPOINTING MASONRY

Maintenance of the mortar is as important as the care of the masonry itself. Repointing is the process of removing the old mortar from masonry joints and replacing it with new mortar. If done correctly, repointing improves the appearance of the masonry and makes it more structurally sound. If done incorrectly, the process can cause serious physical damage.

Repointing should be undertaken after cleaning the building. Old mortar should be scraped from the joints to a depth of about one inch with a chisel then filled with new mortar. The mortar used to replace the old



The effect of sandblasting is similar to hundreds of years of harsh weathering. It leaves surfaces badly damaged and, therefore, should be avoided.