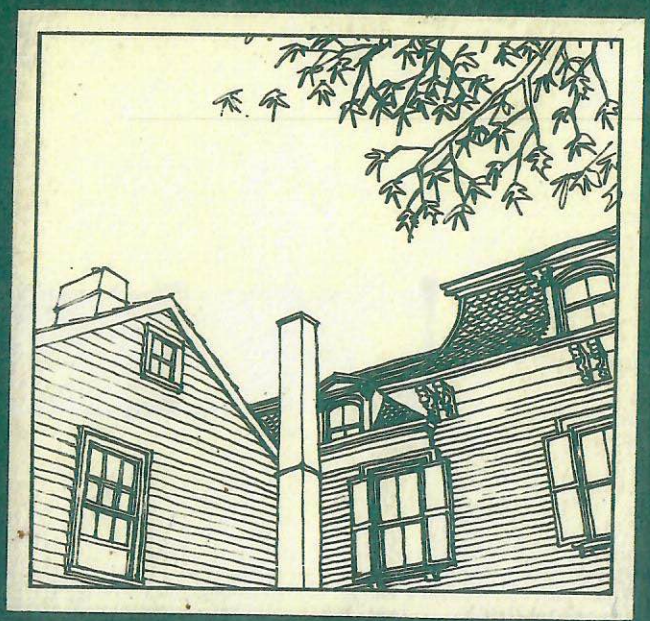
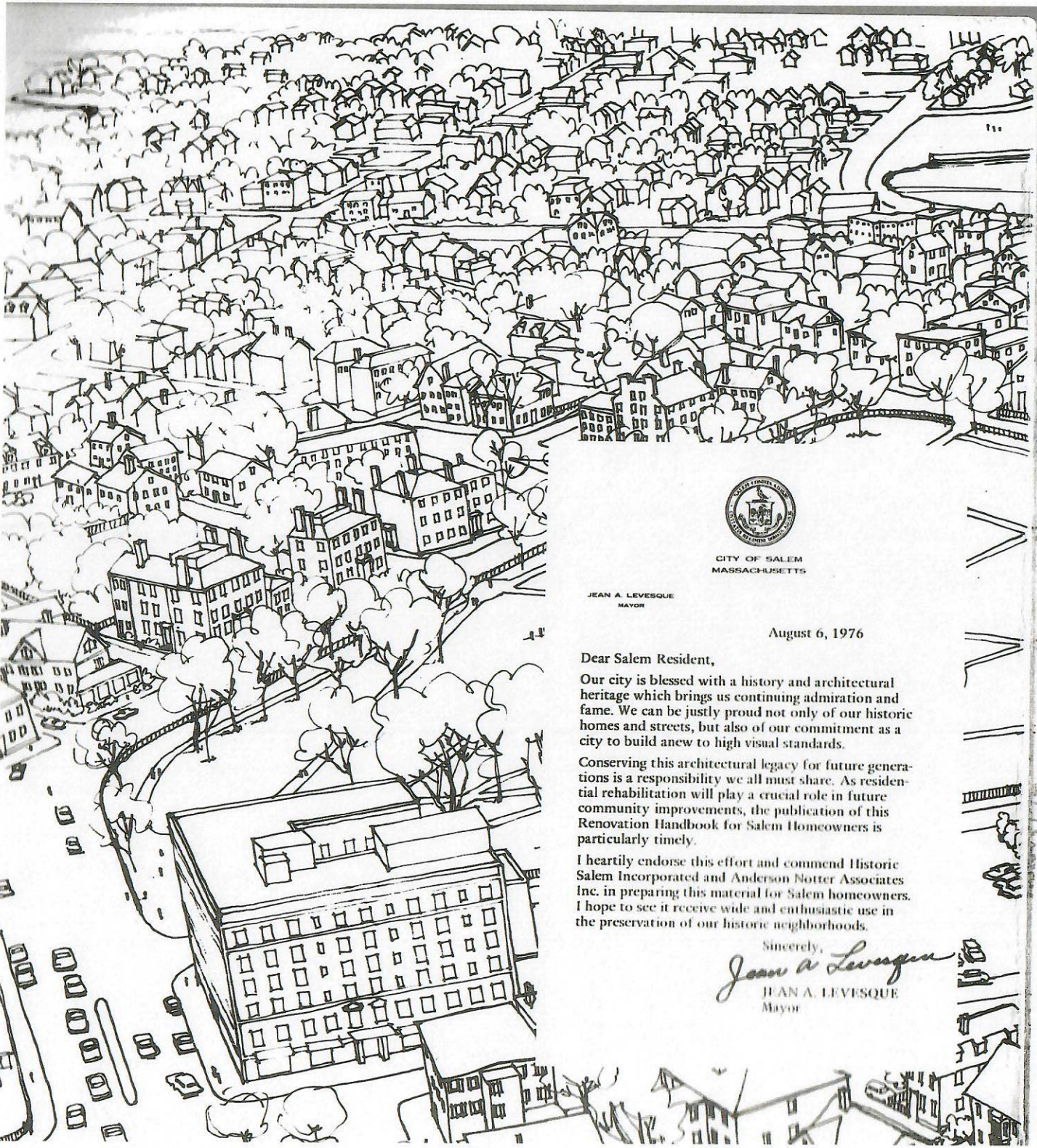
$5.95

THE SALEM HANDBOOK



A RENOVATION GUIDE FOR HOMEOWNERS



CITY OF SALEM
MASSACHUSETTS

JEAN A. LEVESQUE
MAYOR

August 6, 1976

Dear Salem Resident,

Our city is blessed with a history and architectural heritage which brings us continuing admiration and fame. We can be justly proud not only of our historic homes and streets, but also of our commitment as a city to build anew to high visual standards.

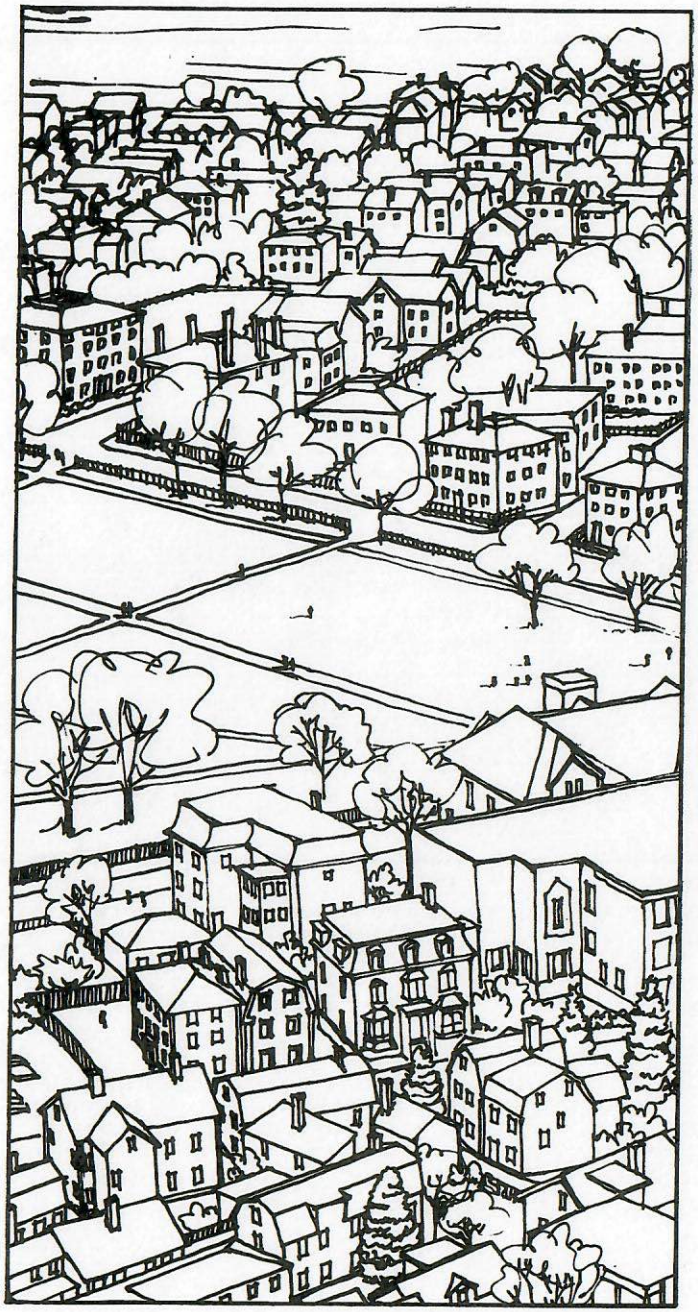
Conserving this architectural legacy for future generations is a responsibility we all must share. As residential rehabilitation will play a crucial role in future community improvements, the publication of this Renovation Handbook for Salem Homeowners is particularly timely.

I heartily endorse this effort and commend Historic Salem Incorporated and Anderson Notter Associates Inc. in preparing this material for Salem homeowners. I hope to see it receive wide and enthusiastic use in the preservation of our historic neighborhoods.

Sincerely,

Jean A. Levesque

JEAN A. LEVESQUE
Mayor



THE SALEM HANDBOOK

A RENOVATION GUIDE FOR HOMEOWNERS

CONTENTS

Prepared by:

Anderson Notter Associates Inc.

Historic Salem Incorporated

Acknowledgements

Historic Salem, Inc. prepared this handbook as part of its "East of the Palisades" neighborhood conservation planning project. Many people worked on this project, some of whom are listed below.

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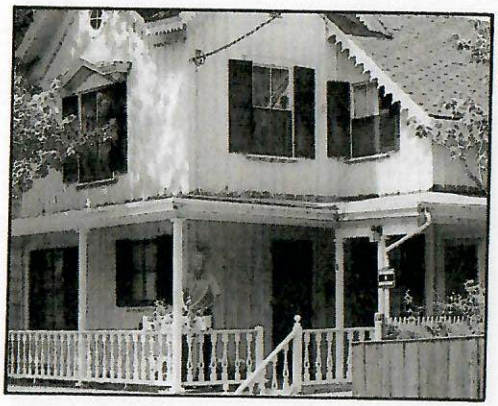
Printing	Bradford and Bigelow, Inc.

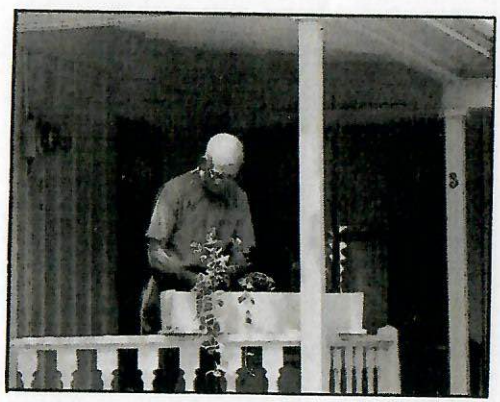
Purpose

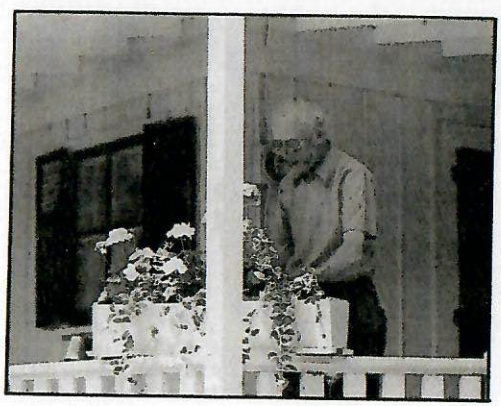
This handbook has been prepared to help homeowners in Salem. Part of the pride we share as residents of this city comes from living in or near old buildings. Our older neighborhoods bring the past alive for residents and visitors alike, creating a legacy to pass on to future generations. We all now appreciate Salem's architectural diversity and realize it cannot be replaced. However, taking care of these historic properties can be difficult. Questions frequently arise about a building's style, design, and upkeep.

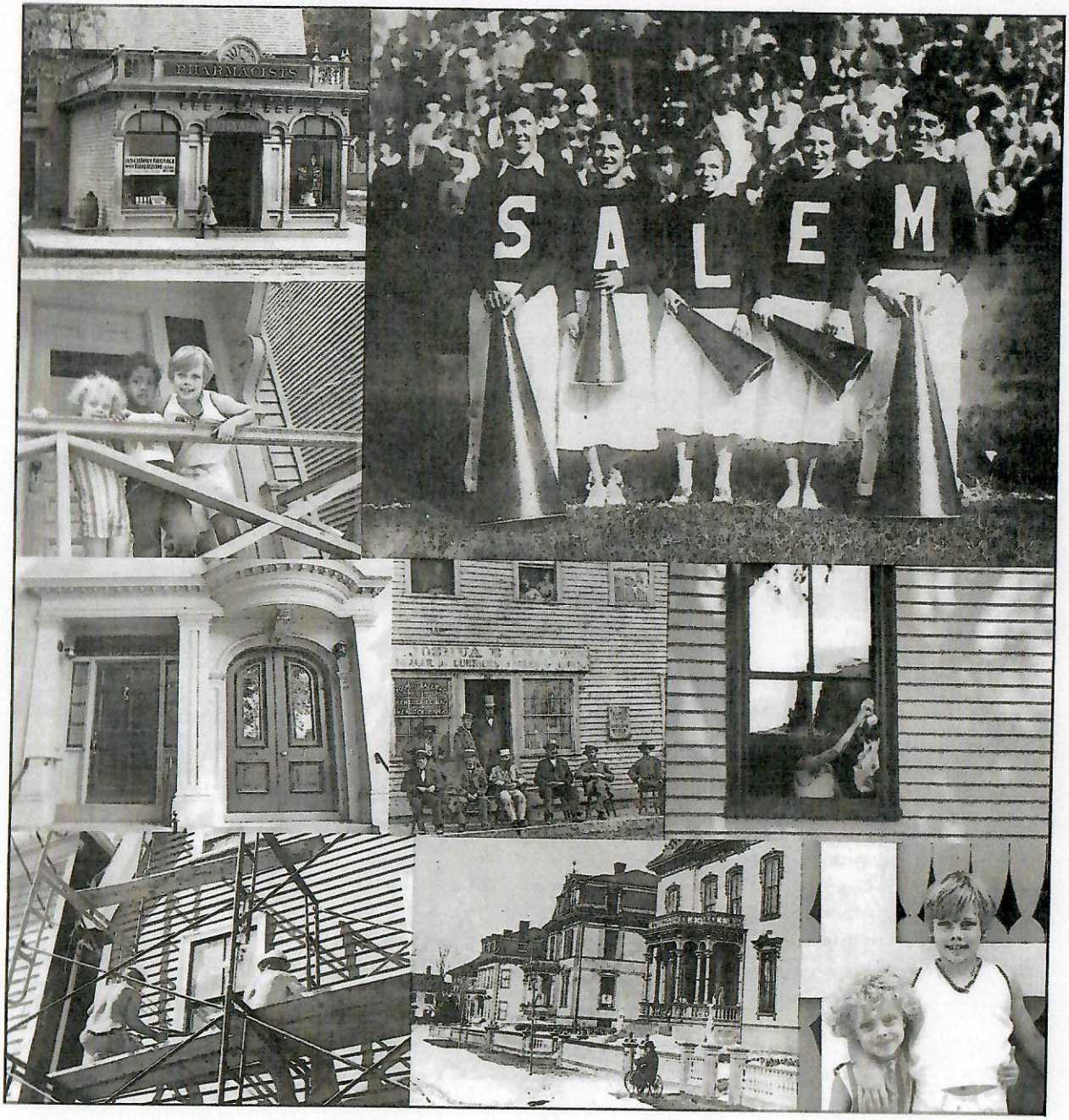
This manual addresses these three major concerns of preservation. First, we want to assist in identifying the stylistic features of Salem houses so that homeowners will take them into consideration before starting renovation and maintenance projects. Second, we provide design guidelines by suggesting ways a homeowner can treat architectural details, yards, parking areas, and sidewalks so these visible elements will enhance rather than detract from the rest of the neighborhood. And third, we direct attention to the basic structural problems that must be treated to avoid unnecessary deterioration of otherwise sound buildings.

Remember that the future of the environment depends on what you do to maintain or improve it. Look around you, consider what you see, and work with your neighbors. Salem has been here 300 years. She has something to say.








PHARMACISTS
SALEM

SALEM TODAY

Anyone familiar with Salem is aware that the city boasts a wealth of 17th, 18th, 19th, and early 20th century architecture. However, the variety of our environment is sometimes taken for granted. Indeed, until recently the vitality of our older buildings was not a major concern in local decision-making. For instance, Salem's first urban renewal plan came close to destroying the historic and architectural fabric of the city's core. Citizen protest halted this original scheme. A new philosophy followed which gave credence to preservation guidelines. As a result, the adaptive reuse of existing commercial buildings was encouraged. Salem's downtown now reflects a successful integration of old and new for all to enjoy.

Will the neighborhoods be protected?

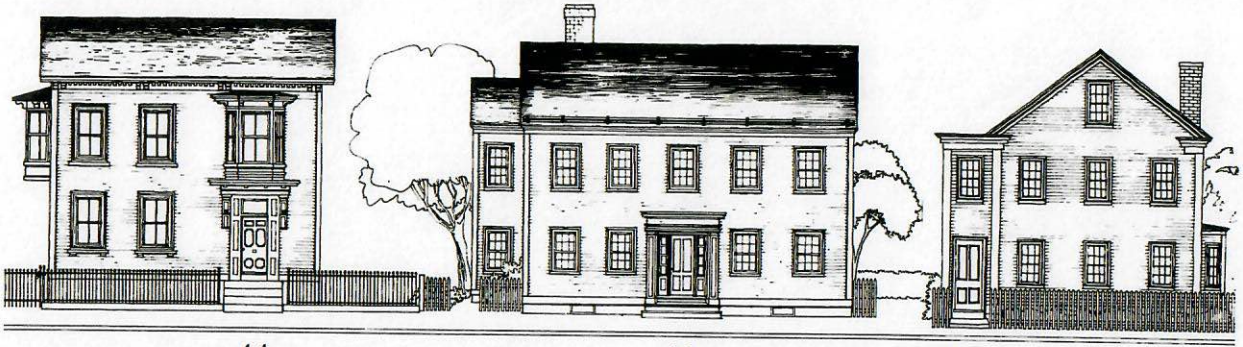
Beyond the commercial district lies another legacy that should be appreciated—our older neighborhoods. We must now consider how these residential areas can be protected. It is not important that these areas are called "historic." What *is* important is their value, for never again will houses be built with such high-quality materials and workmanship. As thousands of visitors flock to our city in search of this country's roots, we as residents should take note of their interest. Old buildings and their neighborhoods can help us understand the importance of our past by providing a shared history and a strong sense of community.

What can be done?

Salem is in transition. With the downtown urban renewal effort nearing completion and with signs of reinvestment emerging in other areas, the city stands at a critical crossroads. Many are optimistic about the future and are eager to work toward Salem's betterment. Yet there is the recognition that a "new Salem" requires a thoughtful commitment from all of us. Too frequently we have equated "new" with progress and have neglected our architectural inheritance in the process. As a result, Salem like other New England communities must still confront the effects a modern society imposes upon an environment of aging buildings. While change is inevitable in order for Salem to prosper, we should be assured that change will not undermine the unique character of our older residential areas.

You, the homeowner, will ultimately determine whether this character is retained. Only if you carefully consider how renovation and new construction will affect a building and its neighborhood will our older neighborhoods remain livable and attractive. Naturally, renovating an older house requires information that is not always readily available. In an effort to assist you, Historic Salem, Inc. has published this manual. We hope it will be an invaluable resource, guiding you in the improvement of your house and our city.

ESSEX STREET



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SALEM HOMES: A GUIDE TO THE STYLES

20

ESSEX STREET

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Introduction

Generally it is better to preserve than repair, better to repair than restore, better to restore than reconstruct.

Salem possesses an architectural legacy that is probably unexcelled in a small urban American setting. Fine homes of the 17th, 18th, and 19th centuries line our neighborhood streets. While many people admire this architectural variety, they are often at a loss to identify a particular style or to determine when it flourished. This guide to the styles is designed to familiarize you with the most common architectural styles in our city.

As you look about at Salem's homes, you will note that few buildings exhibit *all* the features of the styles as we have described them. Indeed, very few houses exemplify a style in its pure form. Just as there is individuality in architectural features today, each craftsman in the past expressed his own unique tastes and skill. As you become familiar with the basic features of each style, recognizing these individual variations will bring continuing surprise and appreciation.

Do note that this catalogue of styles is limited. We have described only those styles most frequently found in Salem and have not accounted for all the variations within a style. The dates too are approximate, although as a rule they indicate the time frame within which the style enjoyed its greatest popularity.

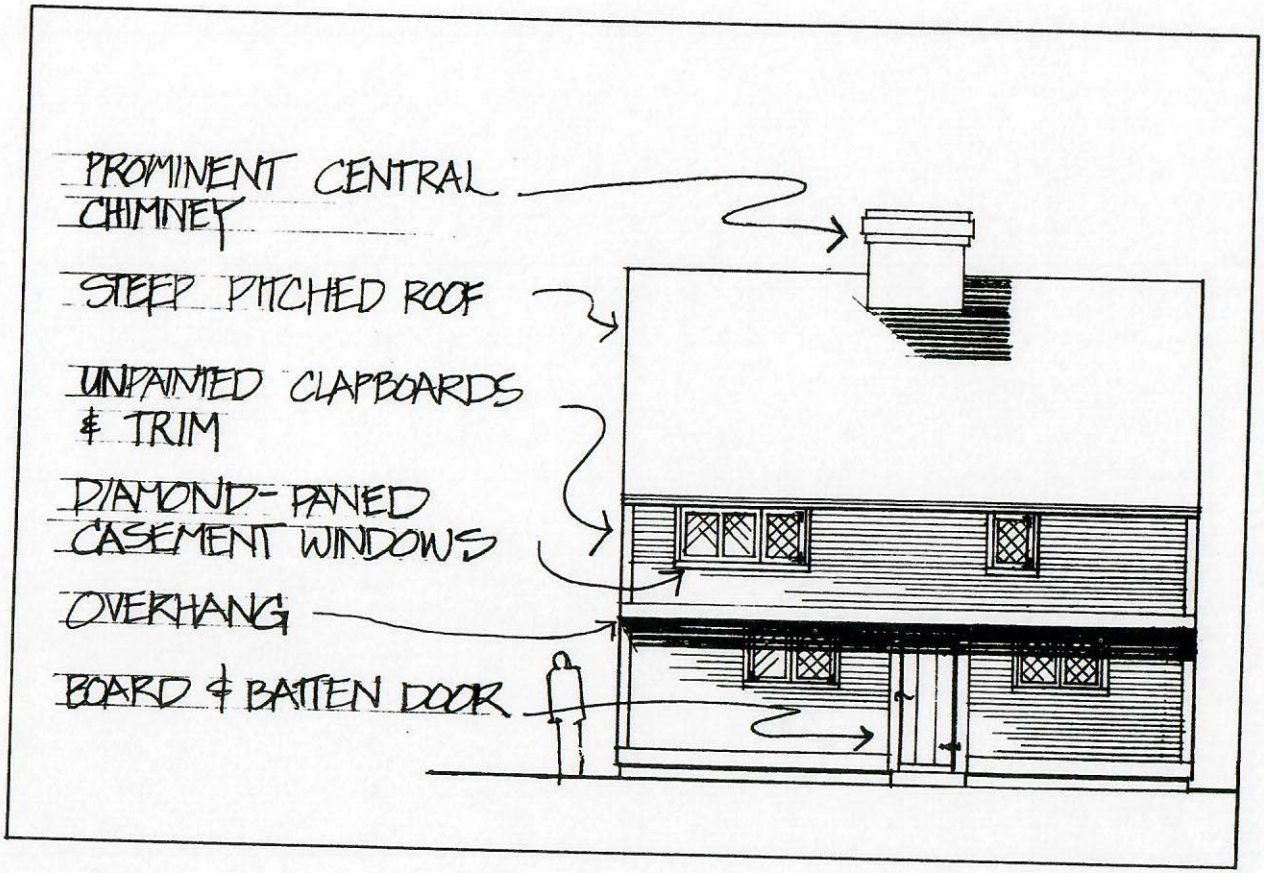
Why care about the architectural style of a building?

An appreciation of Salem's architectural styles should inspire homeowners to conserve their old properties, retaining the architectural integrity whenever possible. Renovation too frequently disregards or even destroys the character of a building and a house can be robbed of its original charm as well as its long-term aesthetic and economic value. With care and understanding, an older home's architectural richness can be preserved.

This guide is presented to aid you in recognizing the styles of your own and your neighbors' houses, and to increase your familiarity with Salem's architectural traditions.

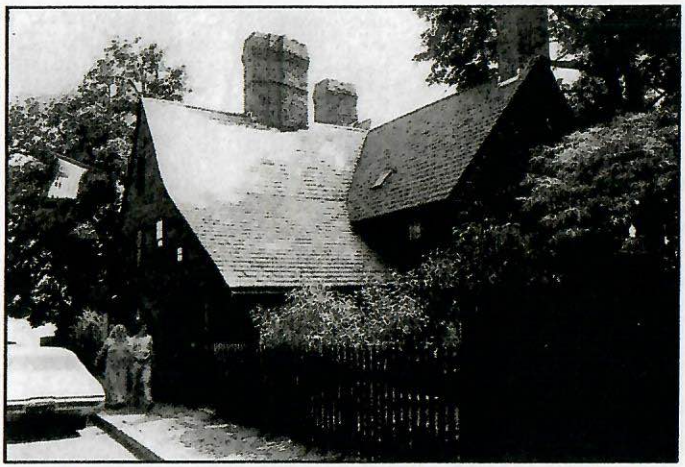
ESSEX STREET

20

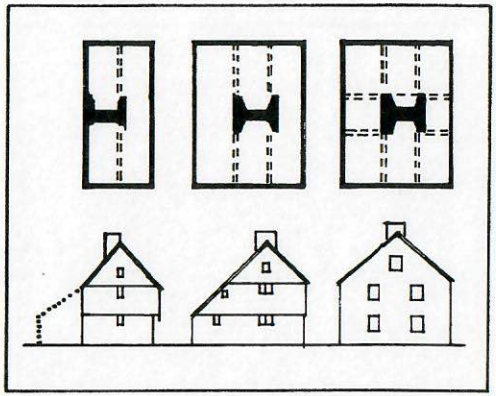


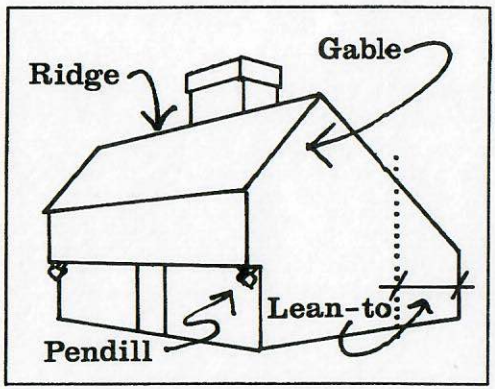
Seventeenth Century
1600s–1725

Salem is fortunate in having several fine examples of seventeenth century architecture. As in the sketch in the upper right, buildings of this period rarely survive minus the addition of wings, ells, lean-tos, and other changes in architectural details. Why? Through the years changing styles, needs, and financial resources led to major modifications to meet different conditions. Consequently, the style in Salem, initially an outgrowth of English custom, took on a distinctly New England character.



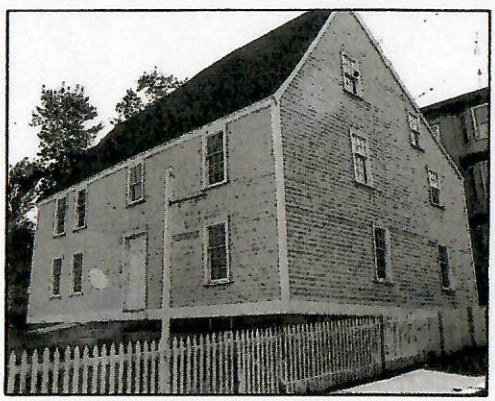
One of the most visited and famous buildings in New England, the House of Seven Gables exemplifies the larger house type with its multi-gables and chimneys.





CHARACTERISTIC DETAILS

Plan	Originally one room deep with prominent central chimney. Often a second story overhang on front and/or sides with lean-to added to rear of building.
Doorway	Entrance on long side of building with little concern for facade symmetry. Simple, serviceable board and batten door.
Windows	Small, few in number, and asymmetrically placed. Framed simply, the windows were usually casement with diamond-shaped leaded panes.
Roofline	Steep pitch, often with many gables. Massive oblong, central chimney was roofline focus.
Materials	Timber frame construction. Usually unpainted wood with narrow clapboards.
Decorative elements	Minimal exterior decorative treatment.



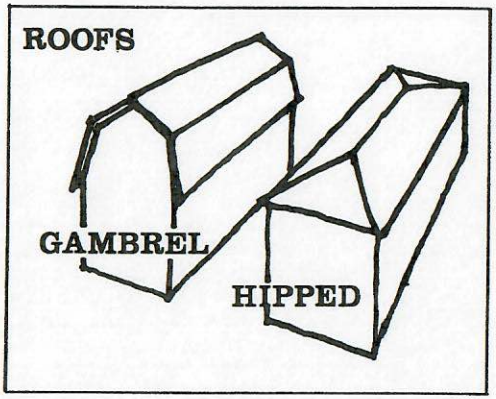
Georgian 1725–1775

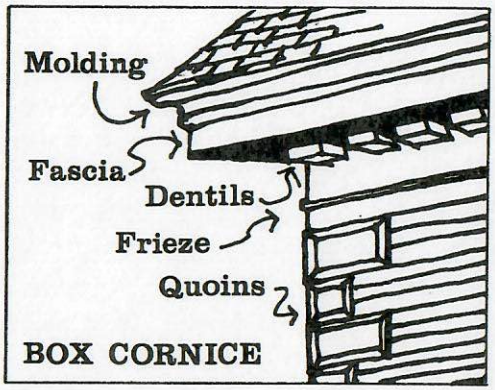
Although the community prospered during this period, Salem has few examples of high-style Georgian architecture, with its emphasis on heavy classical details and ornate richness. The Palladian window, so typical of the Georgian style in other areas of the country, is an infrequent sight in Salem as fine examples on Essex Street were razed. Instead, most Georgian houses here reflect characteristics of the Early Georgian style with vernacular local adaptations. These dwellings tended to be small, with one room on each side of the central chimney. Gambrel rooflines were common as was a simplicity of line and detail.

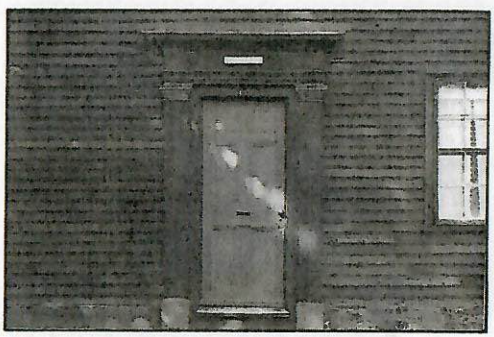
This photo shows the hip-roofed Georgian building at the corner of Hardy and Derby Streets.

CHARACTERISTIC DETAILS

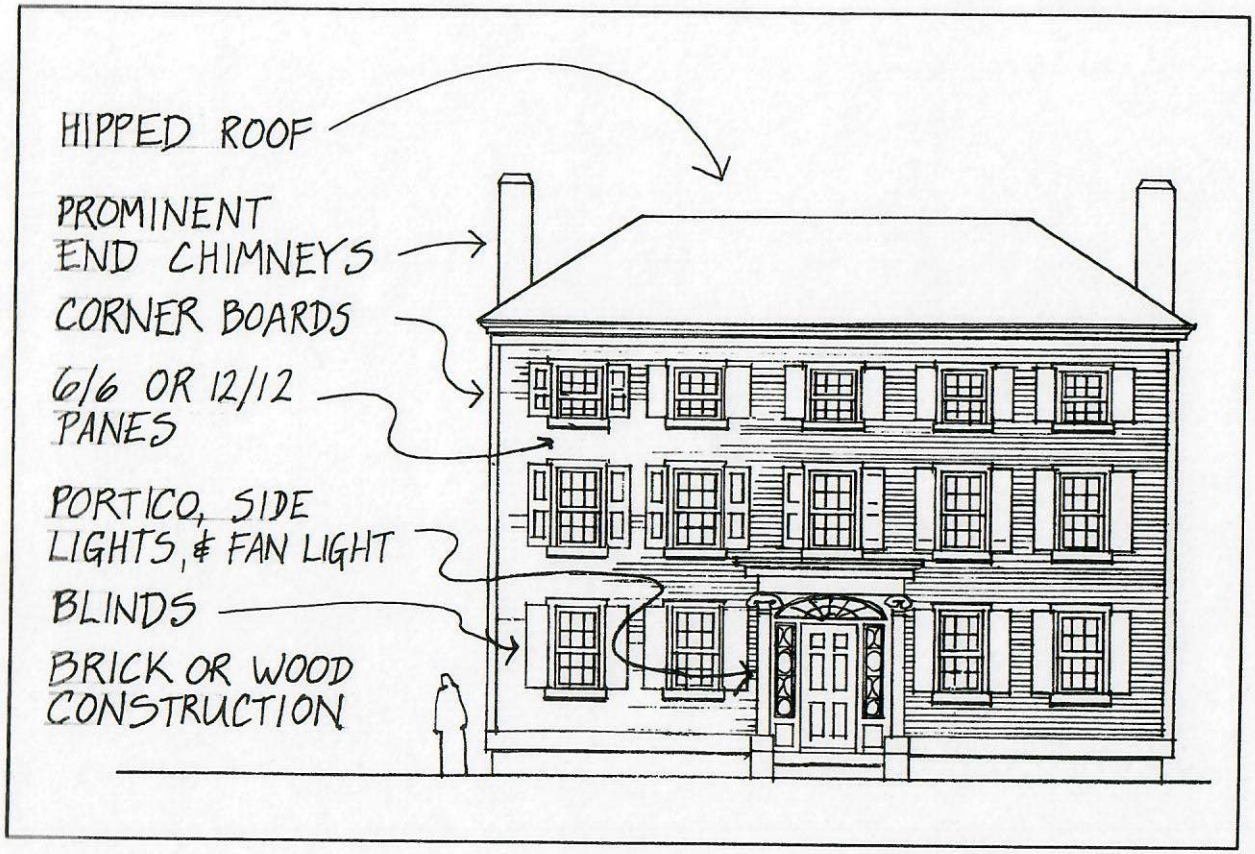
Plan	Classical symmetry of floor plan and facade composition. Central hall flanked by 1 or 2 rooms was common. Central chimney occasionally replaced by end/side chimneys.
Doorway	The main doorway often had a row of rectangular windows (called "lights") in the door itself or the transom above. Columns or pilasters capped by a cornice or triangular pediment frequently framed the door. Door had 6 or 8 panels with smaller panels in middle.
Windows	Usually double-hung sash. Symmetrical placement. Pedimented dormers often used in the attic. Upper story windows often flush against the frieze.
Roofline	Usually gambrel; sometimes gabled. Hip roof became popular around 1770.
Materials	Executed in wood or brick.
Decorative elements	On finer homes plain eaves were replaced with a molded cornice, often detailed with dentils and quoined corners.







A fine Georgian entrance on Turner Street. Notice the stained clapboards and trim.

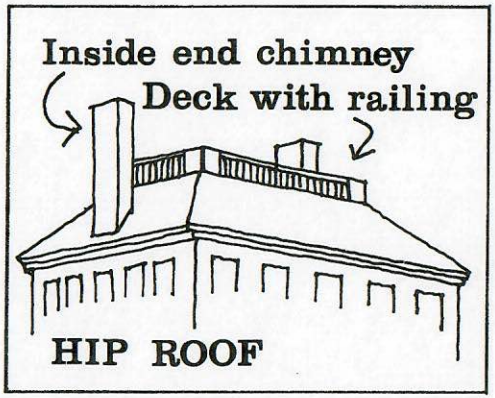


Federal 1780–1830

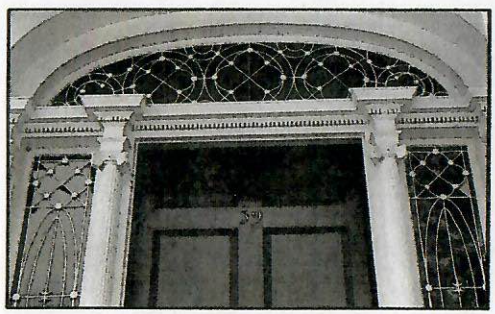
With the close of the Revolutionary War, Salem embarked on its era of greatest maritime glory. It was a period of architectural achievement manifested in the genius of a native son, Samuel McIntire. Indeed, Salem is perhaps best known for its Federal homes of the three-storied, four-square, hipped roof type. While Chestnut Street and the buildings facing the Common are the most familiar examples, fine Federal buildings are throughout the city. Equally prevalent is the vernacular Federal house—a gable-roofed, central chimney, wood frame structure of rectangular plan, simple in detail and smaller in size.

An imposing Federal brick residence, the Home for Aged Women, 180 Derby Street, commands a fine view of Salem Harbor.

CHARACTERISTIC DETAILS	
Plan	Usually a central hall plan, five-bay facade arrangement with central front door. Symmetry of Georgian style retained.
Doorway	Often had semi-elliptical or semi-circular fanlight with flanking sidelights. Frequently decorated by pilasters and/or columns with a flat entablature. Semi-circular or rectangular porticos were common. Usually six-panel door.
Windows	Narrow proportions with simple casing and slender mullions (often had stone lintels over windows).
Roofline	Gable or a shallow hip roof often hidden behind a balustrade. Tall, slender chimneys appeared at ends of building.
Materials	Executed in wood or brick. Sometimes flatboards on the front facade with brick on the sides and rear.
Decorative elements	Simplicity and lightness of detail. Much of the heavier classical decoration of the Georgian style was refined.



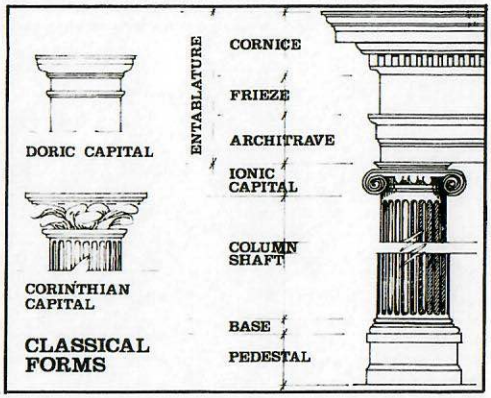
Palladian windows in Samuel McIntire's Hamilton Hall add to the architectural richness of Chestnut Street.

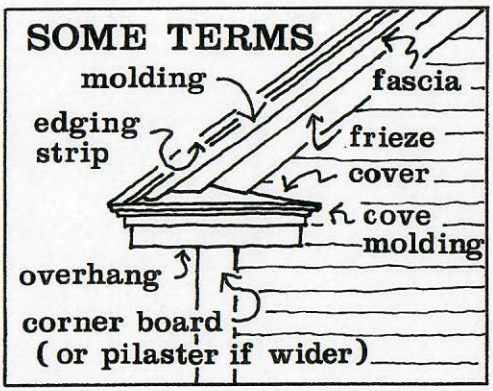


This Federal doorway was altered at the turn of this century to reflect the changing architectural styles.

Greek Revival 1825–1850

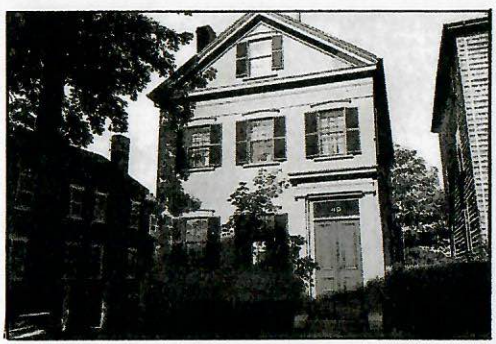
The Greek Revival style of architecture is often called the "first truly American style." Earlier styles were inspired by English building fashions and frequently built from "pattern books" imported from England. It arose out of the young nation's desire to identify with the ideals and architecture of the ancient Greek Republic, heightened by interest in the 1821 Greek Revolution. There are few "grand" examples of this style in Salem. The continuing influence of Samuel McIntire's work in the Federal style and the diminishing prosperity of the city during the 1820's and 1830's may account for this.



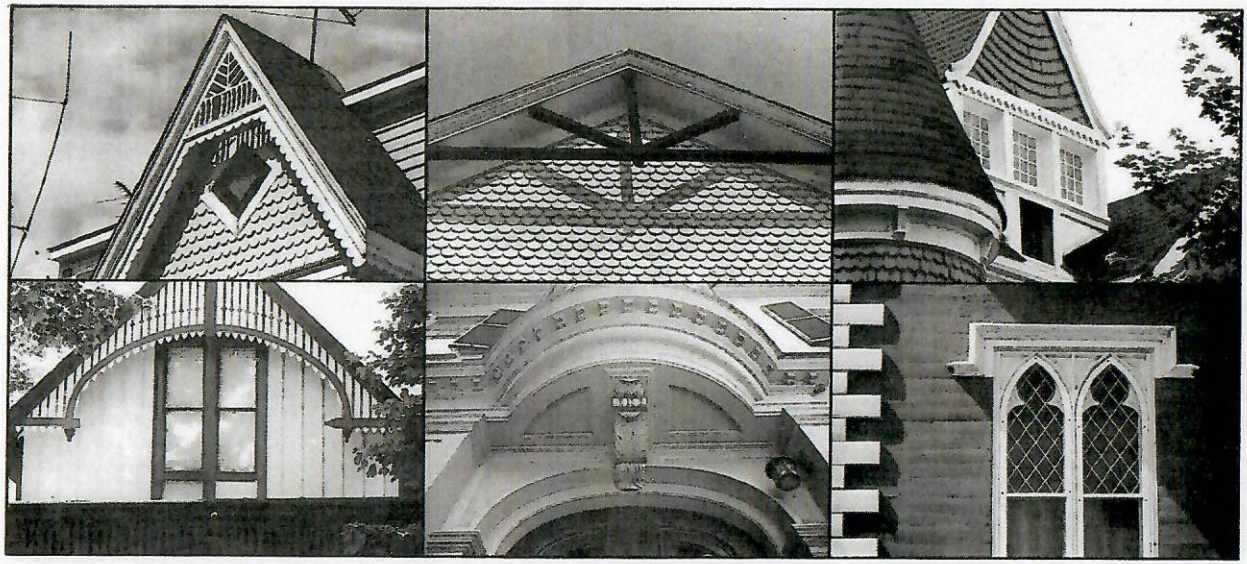


CHARACTERISTIC DETAILS

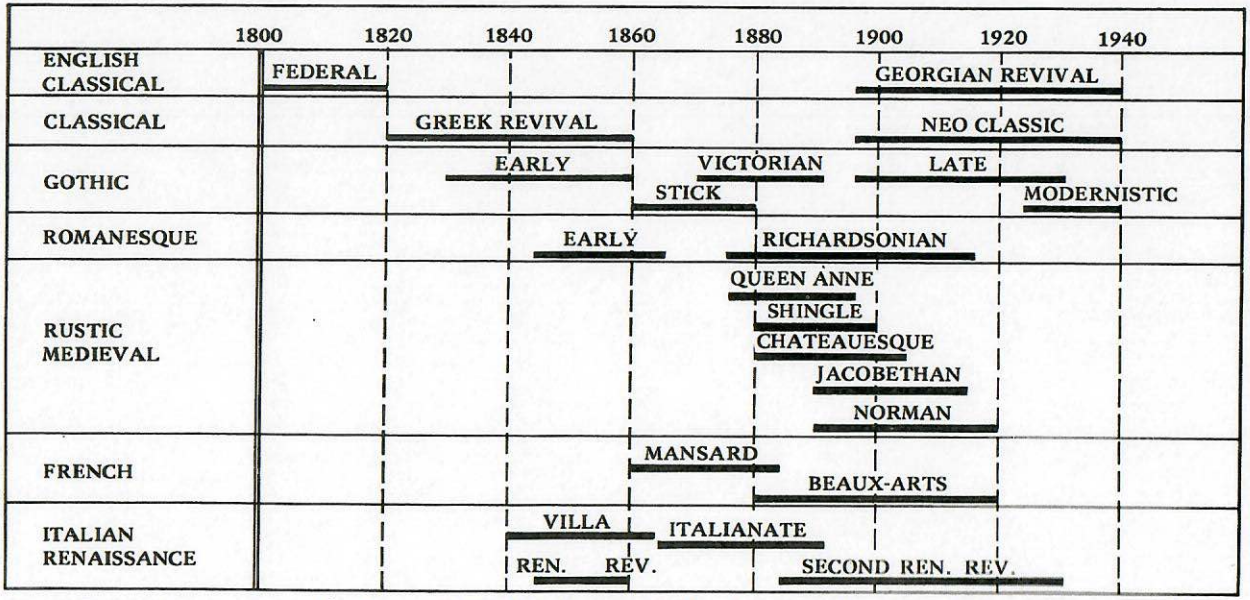
Plan	For the first time, the focus shifted from long side of house to short gabled end.
Doorway	Fanlights and other elaborate details of the Federal doorway were replaced by a recessed doorway. Framed by narrow, floor-length sidelights and a transom, it was usually flanked by flat pilasters and an architrave. Generally a four-panel door with smaller panels at bottom.
Windows	Elongated windows with 6-over-6 panes.
Roofline	Gable of medium pitch, sometimes with low, triangular pediment. Chimneys became small and insignificant.
Materials	Siding was usually clapboard. Matched flatboards designed to resemble stone also were often found on the facade.
Decorative elements	Simple lines resulted from concern for classical formalities. Massive pilasters or wide columns supporting a triangular pediment and a flat band under the eaves gave the appearance of a Greek temple.



49 Summer Street is a fine Greek Revival building with flat board siding.



The Styles of the Late 19th Century

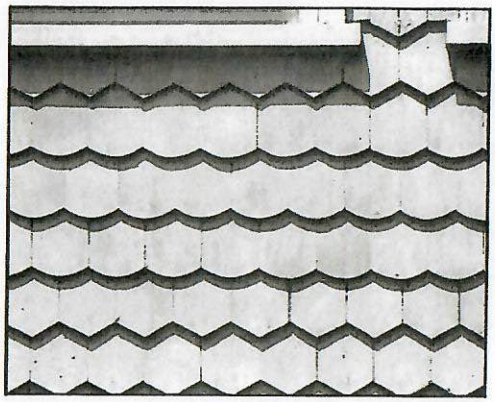


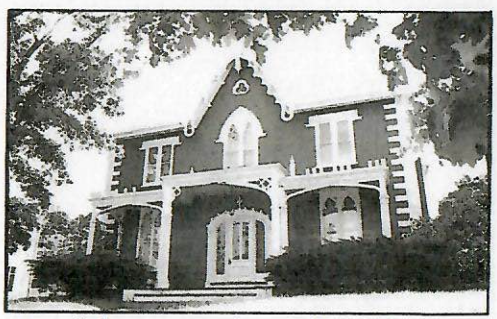
From *How to Love and Care for Your Old Building in New Bedford,* with the kind permission of the City of New Bedford and Maximilian L. Ferro AIA, RIBA, Architect, Society for the Preservation of New England Antiquities.

Introduction

The second half of the nineteenth century was characterized by a great diversity and richness of architecture. As the chart shows, the "proper" style was no longer limited to the English or classical tradition. Instead, builders now looked to many countries for inspiration. A number of inventive pattern books illustrating "Italian villas," "Gothic cottages," and "tasteful homes for the country gentleman" became available to instruct the local homebuilder. The widely read pattern books of Andrew Jackson Downing encouraged the homebuilder to reject the previous plain, symmetrical, box-like styles and to use decorative wooden brackets, projecting rooflines, and free-flowing spaces.

Builders felt free to combine many stylistic details into one house so, more than ever, a "pure" style had little meaning. However, several general statements can be made about the evolving architectural tradition. First, the invention of the jigsaw and other tools enabled craftsmen to give each house elaborate woodworking since unequaled. It also became possible to update houses of earlier periods by simply applying brackets and other decorative trim. Second, there was a marked increase in the variety of surface textures and colors. Inventive shingle and slate patterns became popular for walls and roofs. Cornices, doors, corners, and windows were embellished with ornamental wood details, often painted a number of different colors. Third, there was greater variety in floor plans as evidenced by projecting towers, porches, bays, turrets, multi-rooflines, and wings. Last, it should be noted that each house was an attempt to embody an image or "taste," so even a modest "cottage" displayed some decorative woodwork.

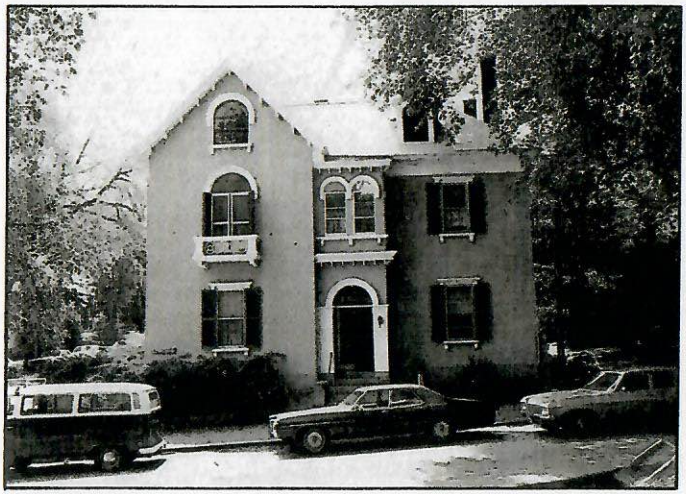




One of the many styles of the 19th century is the Gothic Revival. This house is located on Lafayette Street in Salem.

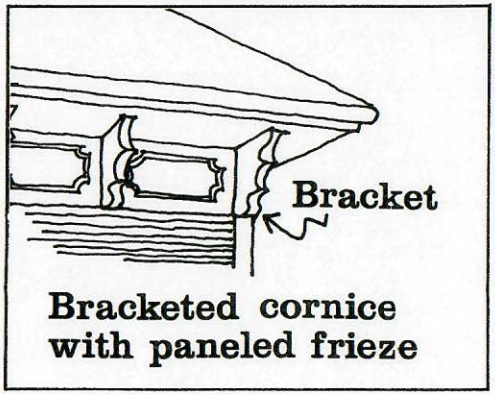
Italianate
1845–1860

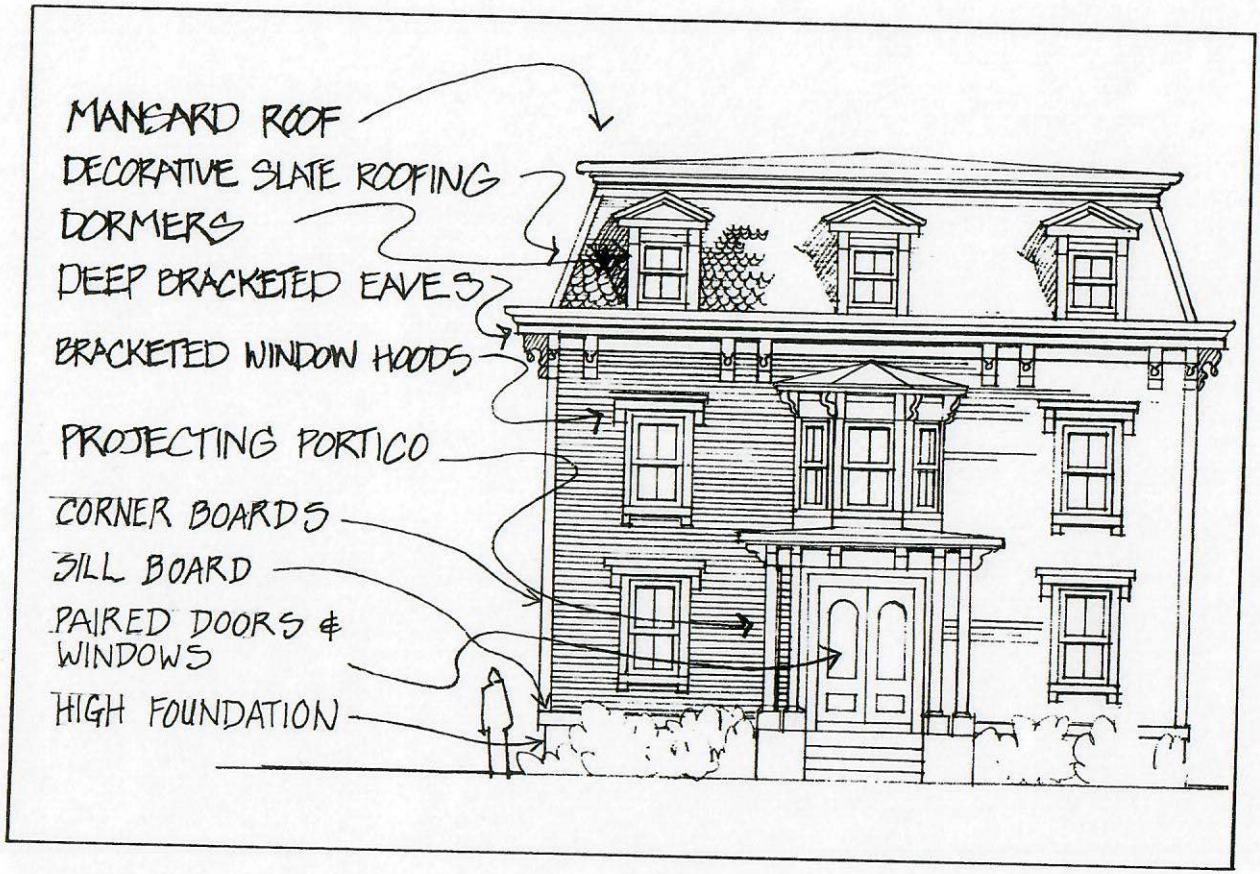
This style, inspired by the vernacular farmhouse architecture of the Italian country villas, is most frequently identified by heavy wooden brackets or pendants. While there are few Salem houses which exemplify the Italianate style, its influence is apparent in the use of bracketed details throughout the city. Because bracket-work became the trademark of Italianate-inspired houses, it can lead to a misconception of a building's age and style. For as the popularity of the Italianate style grew, bracketing was commonly added to Georgian, Federal, and Greek Revival houses in an attempt to modernize them.



CHARACTERISTIC DETAILS

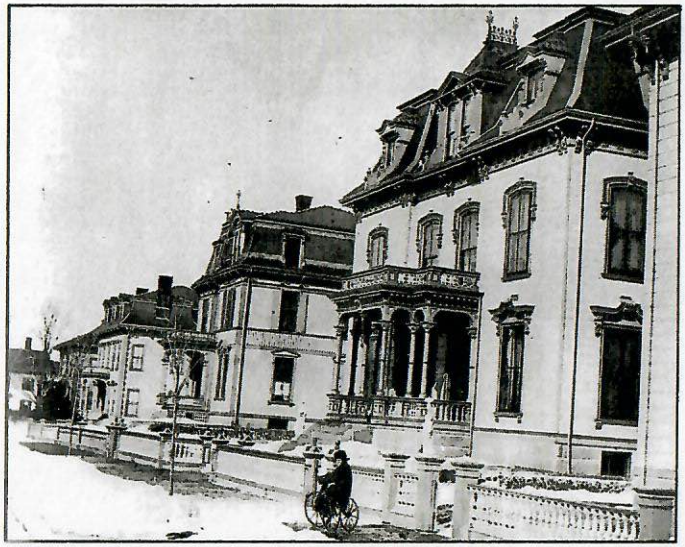
Plan	Less formal than Georgian or Federal styles. Asymmetrical massing reflects the interior floor plan. Use of wings, towers, and bay windows was common.
Doorways	Heavily molded doors, often double and asymmetrically placed. Heavy wooden bracketing over door was major decorative feature. Sidelights and transom disappeared.
Windows	Tall and slender, often 2-over-2. Round-headed, paired windows appeared. Use of bracketing.
Roofline	Slight pitch and usually gabled, hipped, or both.
Materials	Executed in wood with frequent use of flatboards.
Decorative elements	Identified by heavy wood brackets under the eaves as well as over the doors and windows. Took on a variety of forms such as the scroll bracket, the bracket with pendant, and the ornamental pendant.





Second Empire 1860–1880

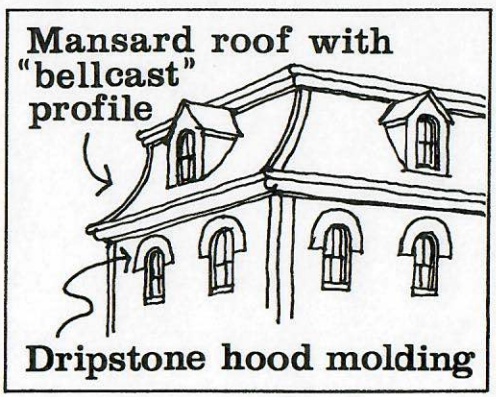
The Second Empire style took its name from the reign of Emperor Napoleon III. This style is popularly referred to as Mansard, for it was Mansart who introduced the characteristic double-pitched roof in his design of the Louvre Museum in Paris, France. Earmarked by this mansard roofline with dormers enclosing the top floor on all sides, the buildings of the Second Empire style are imposing, boldly modeled, and emphatically three-dimensional in effect. Fine examples of large Second Empire style houses can be seen on Lafayette and Essex Streets in Salem.

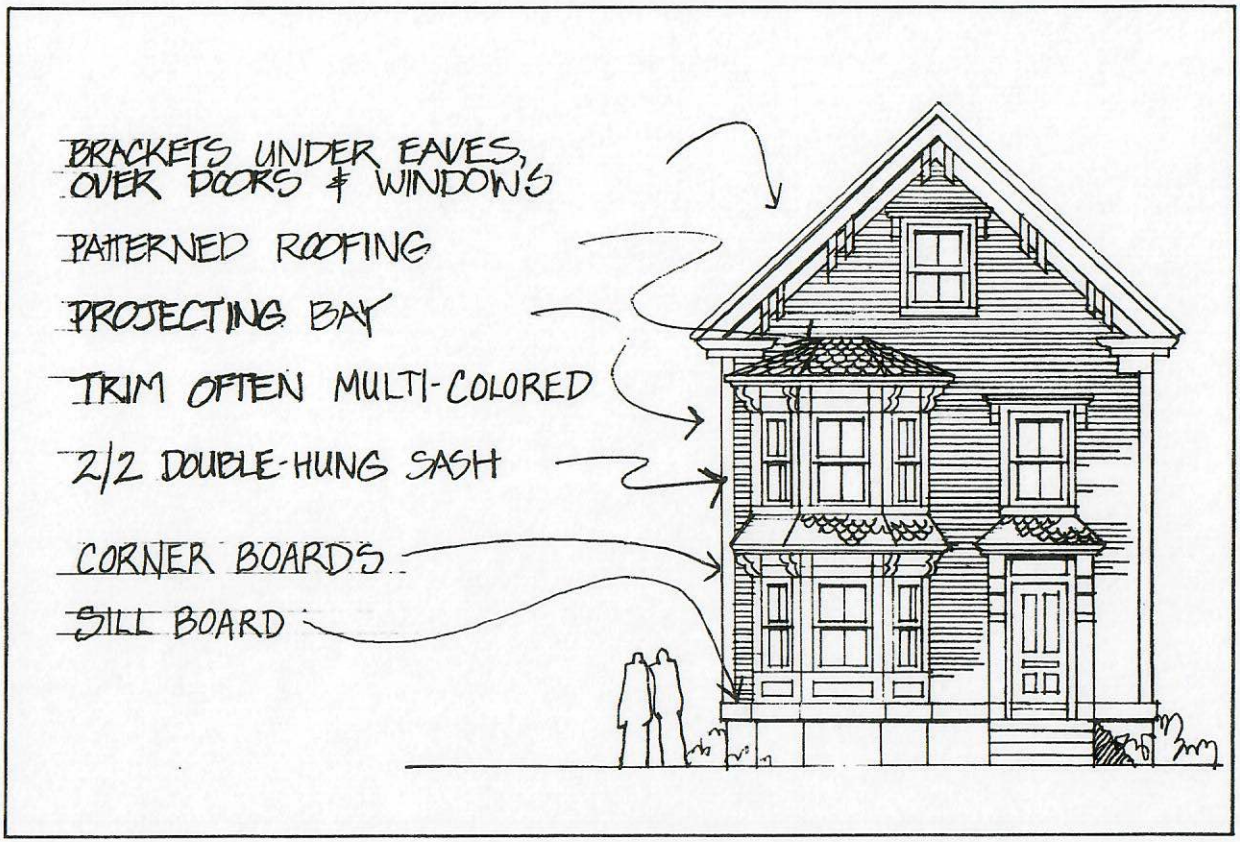


Above, Lafayette Street as it looked at the turn of the century.

CHARACTERISTIC DETAILS

Plan	Usually central hall plan. Three- or five-bay facade with center entrance. Buildings became asymmetrical in shape with additions of rooms and porches.
Doorway	Central doorway was no longer the dominant feature of the facade. With the exception of bracketing, detail was minimal.
Windows	Slender and elongated. Dormer windows became universal in a variety of shapes (rectangular, pointed, gabled, and rounded) and were often ornamented with pediments and brackets.
Roofline	Hallmark of the style is the high slate mansard roof, which increased the available floor space.
Materials	Primarily wood or brick. Flatboards commonly found on facade.
Decorative elements	Ornate moldings and brackets. Houses often had spacious porches or verandas.

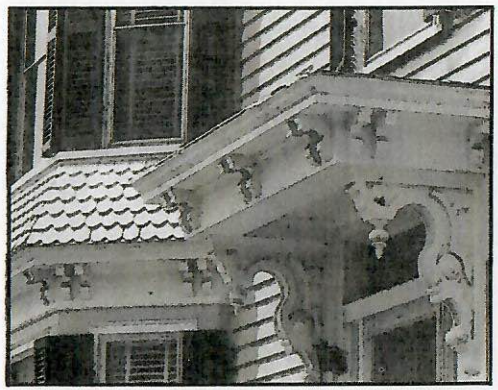




Late Victorian Eclectic

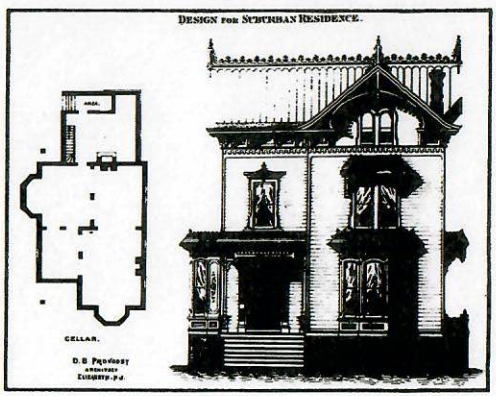
1875–1920

The term "Victorian" has often been used to refer to an architectural style while it merely should date the reign of Queen Victoria of England (1837–1901). Thus, when "Victorian period" (or "era") is mentioned in this handbook, it refers to a time, not a style. Instead, the term "Late Victorian Eclectic" has been coined to group the various styles of the late nineteenth and early twentieth centuries in Salem. This includes houses of the Stick style, found in the Willows area, and the Queen Anne style, scattered throughout the city. It also embraces the blending of styles typified by Boardman Street.



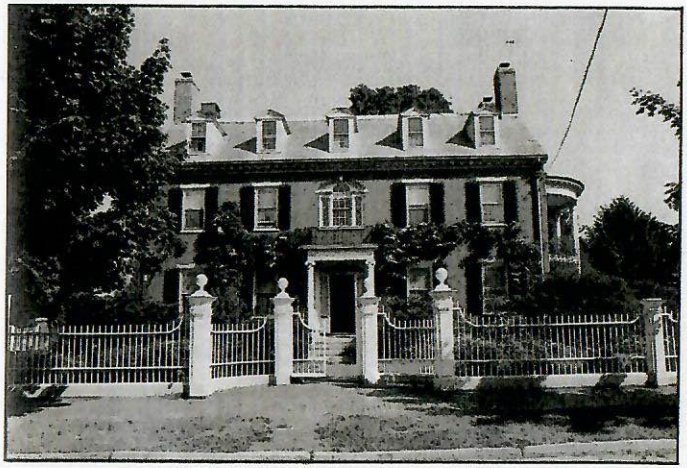
CHARACTERISTIC DETAILS

Plan	Irregular massing of exterior details reflected a free-form interior plan.
Doorway	Typically four-panel door with no or narrow sidelights. In Queen Anne style the upper half was often glass with small leaded panes.
Windows	Long and narrow. In the Queen Anne style bay and multi-shaped windows were common.
Roofline	Steep, with presence of multiple gables. Verandas, porches, and projecting eaves were typical.
Materials	Mixture of materials and textures. Variety in color was common in Queen Anne buildings.
Decorative elements	Predominance of "gingerbread" details (brackets, hanging pendants, and rows of spindles). Chimneys with paneled or molded brick, turrets, and colored-glass windows typified the Queen Anne style. "Stickwork" (clapboards overlaid with vertical, horizontal, or diagonal boards) is a feature of the Stick style.



Georgian Revival 1895–1930

After the 1876 Centennial an interest in returning to the simplicity of Georgian architecture inspired the Georgian Revival style. Characterized by a rectangular plan, a symmetrical facade, and classical detail, the style became quite popular in Salem. Scattered throughout the city, the buildings are recognizable by their grander scale and classical correctness. Note the fine Georgian Revival buildings lining Lafayette and Essex Streets.



CHARACTERISTIC DETAILS

Plan	Rectangular with a minimum of minor projections. Strict symmetry gave the building facade strong balance.
Doorway	Doorways frequently had very elaborate fanlights and sidelights with or without supporting pilasters. Sometimes a portico with free-standing columns framed the center entrance. Central bay of facade projected slightly and was sometimes crowned with a pediment.
Windows	Rectangular with double-hung sash. Palladian window often used as decorative focus. Semi-circular, multi-storied bay window often featured.
Roofline	Roofs are hipped, double-pitched, or gambrel. Chimneys placed to contribute to overall symmetry. Hipped roof often topped with a flat deck surrounded by a railing or balustrade. Sometimes a central cupola capped the roofline.
Materials	Executed in brick or wood.
Decorative elements	Classical cornice detail.

Good design by its example can be infectious; on the other hand, it only requires a few pioneers in the nastier forms of rehabilitation and "there goes the neighborhood"—and with it some of the value of each house, good or bad.

George Steven, *Remodeling Old Houses* (New York: Alfred A. Knopf, Inc., 1975), p. 15.

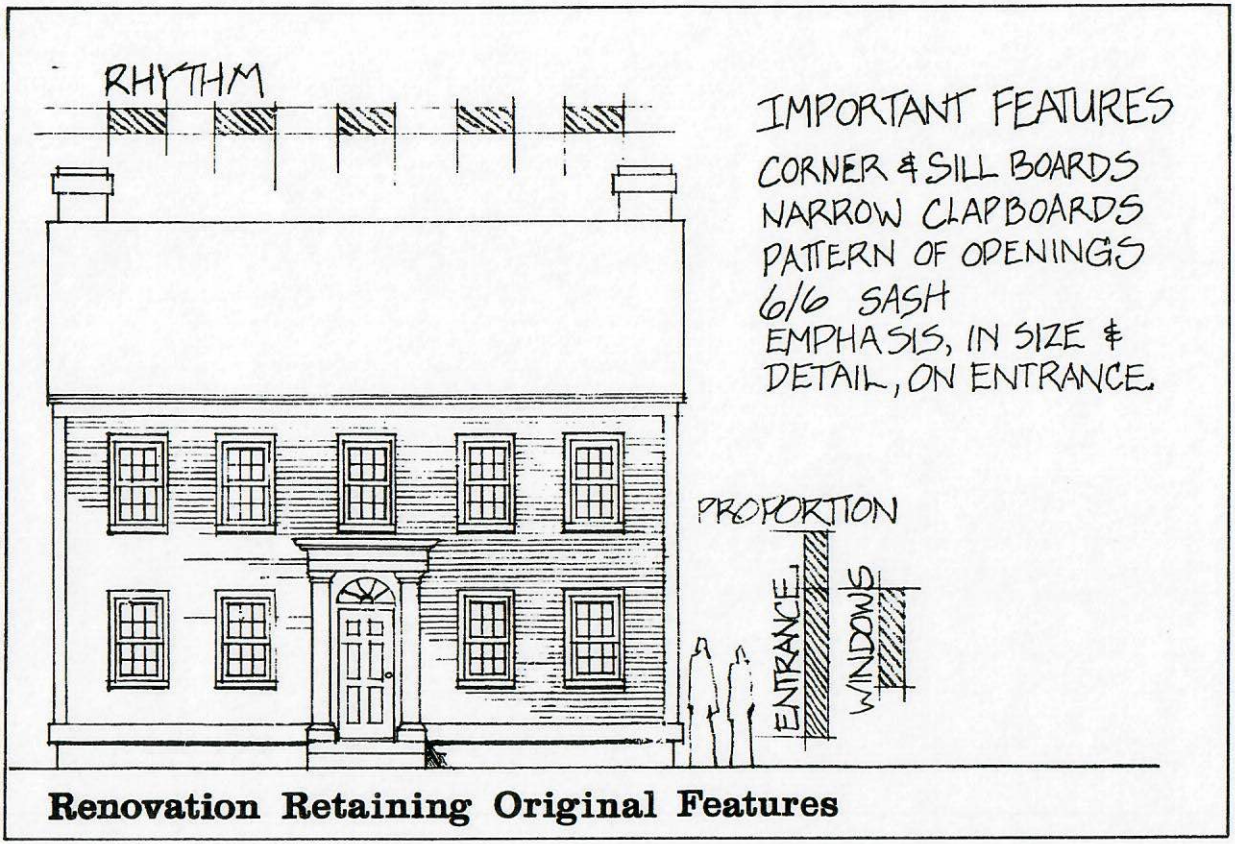
This section of *A Renovation Handbook for Salem Homeowners* deals in detail with design problems and choices commonly encountered when remodeling or restoring an old home. It is intended to illustrate the renovation choices affecting the *appearance* of a house and to guide you in making these choices. The following section, Maintaining Your House, provides basic information—the "nuts and bolts" of procedures, materials, and costs involved in fixing up an old home.

Restoring or remodeling your own home is a very personal undertaking that provides an opportunity to display your tastes and often your own handiwork. Just as there is a great variety and individuality among homes of the same style, there are numerous options for the homeowner contemplating changes to his house. Keep in mind there are no hard and fast "rules." What we attempt to illustrate and explain in the following sections are guidelines.

As a start remember these useful rules:

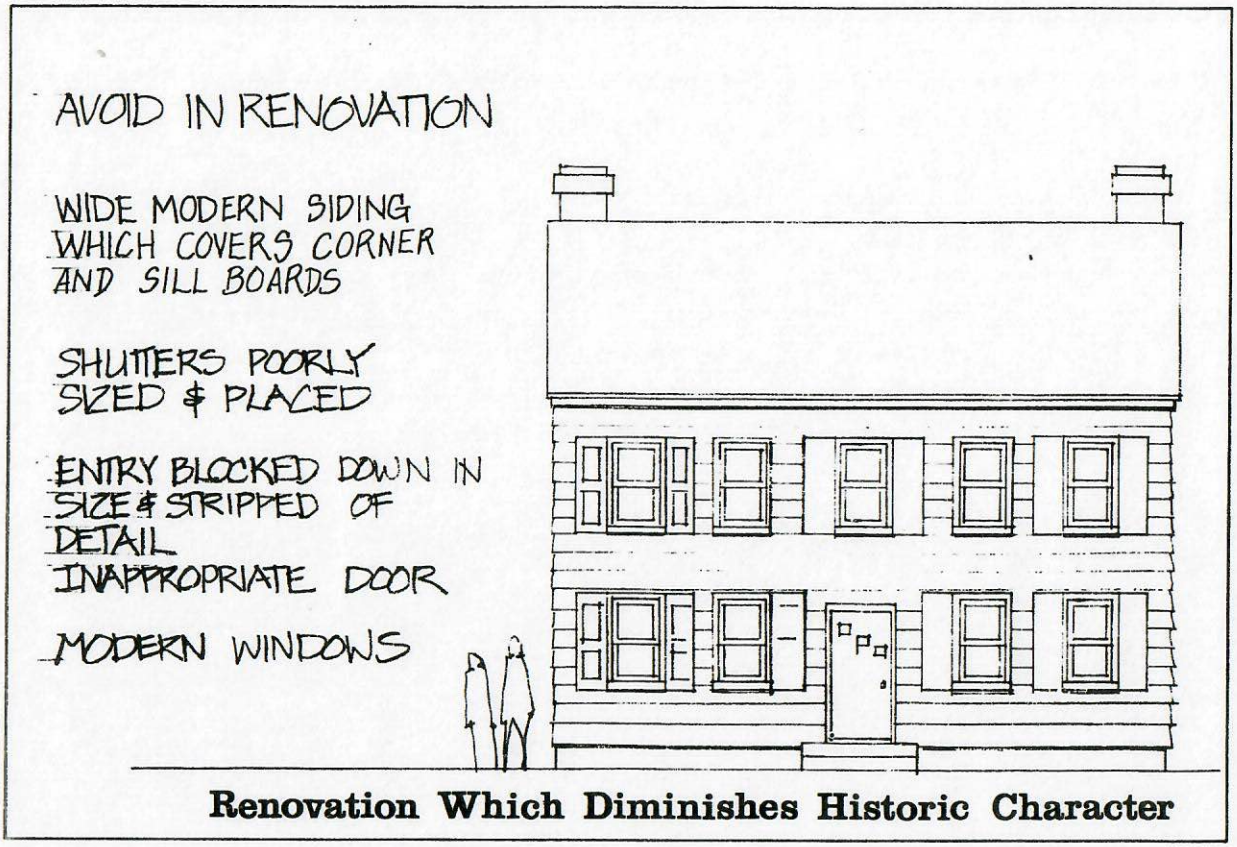
- Don't over-restore.
- Don't try to make a house look older than it is by using details from an earlier style.
- When in doubt retain as much as possible of the original.
- Don't assume a detail can't be saved.
- Good ideas and advice are all around you—houses, architects, and neighbors.

ARCHITECTURAL GUIDELINES



Renovation Retaining Original Features

The two sketches on these pages show a gable roofed, central entry house of the Federal style. In the sketch above, it can be seen that much of the attractiveness of the original design is due to the proportions and symmetry of the house and the pattern of its window and door openings. The dimension of the narrow clapboards and the multiple division of the window panes establish the scale elements of the house. The horizontal line of the clapboards is stopped and given "edges" by the vertical cornerboards.

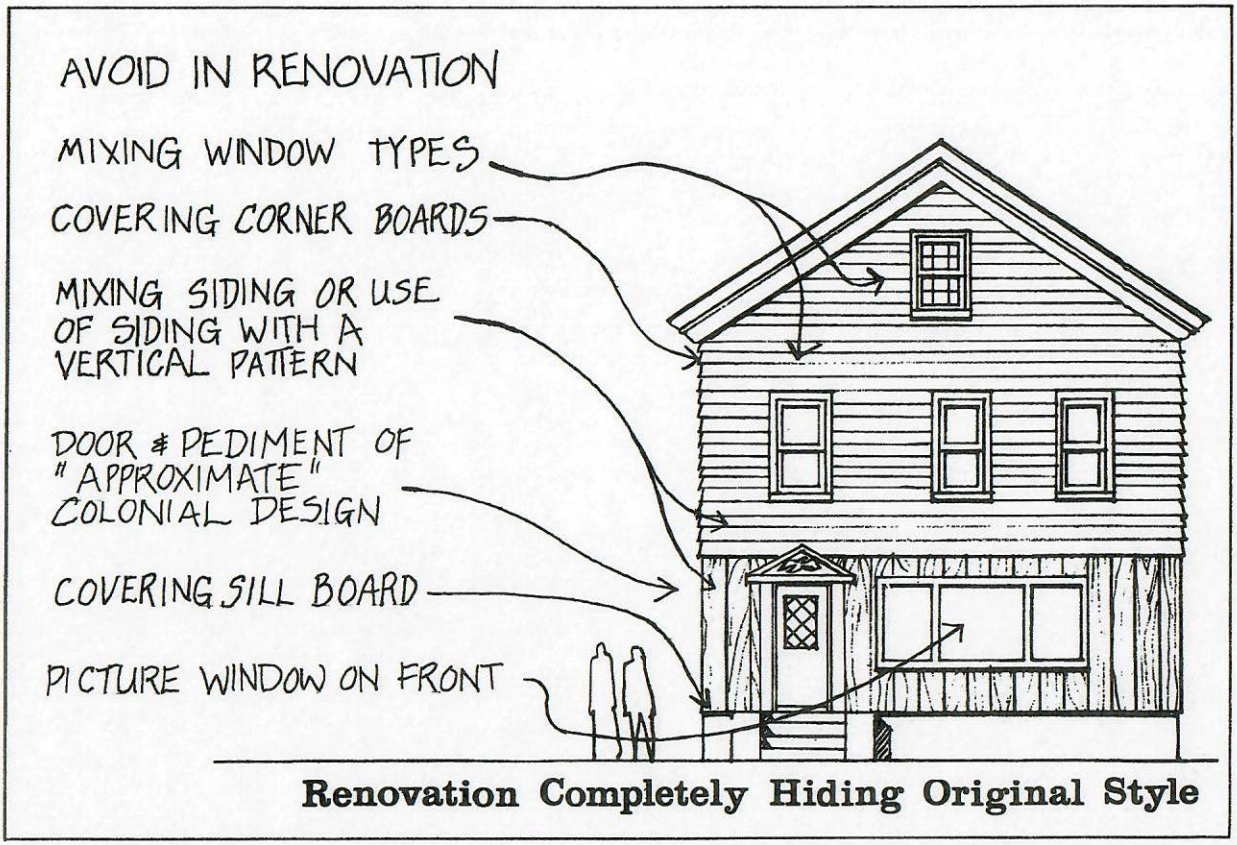


Renovation Which Diminishes Historic Character

In this sketch, the details have been obscured by the blocking down of the entry, by the replacement of siding with larger dimension asphalt which covers the cornerboards, and by the fewer-paned modern windows. The result is a less interesting house—a hodgepodge of elements that makes the house neither modern nor charming and old. Though shutters may not have been an original feature of this house and are optional, they are appropriate for houses of the Federal period.

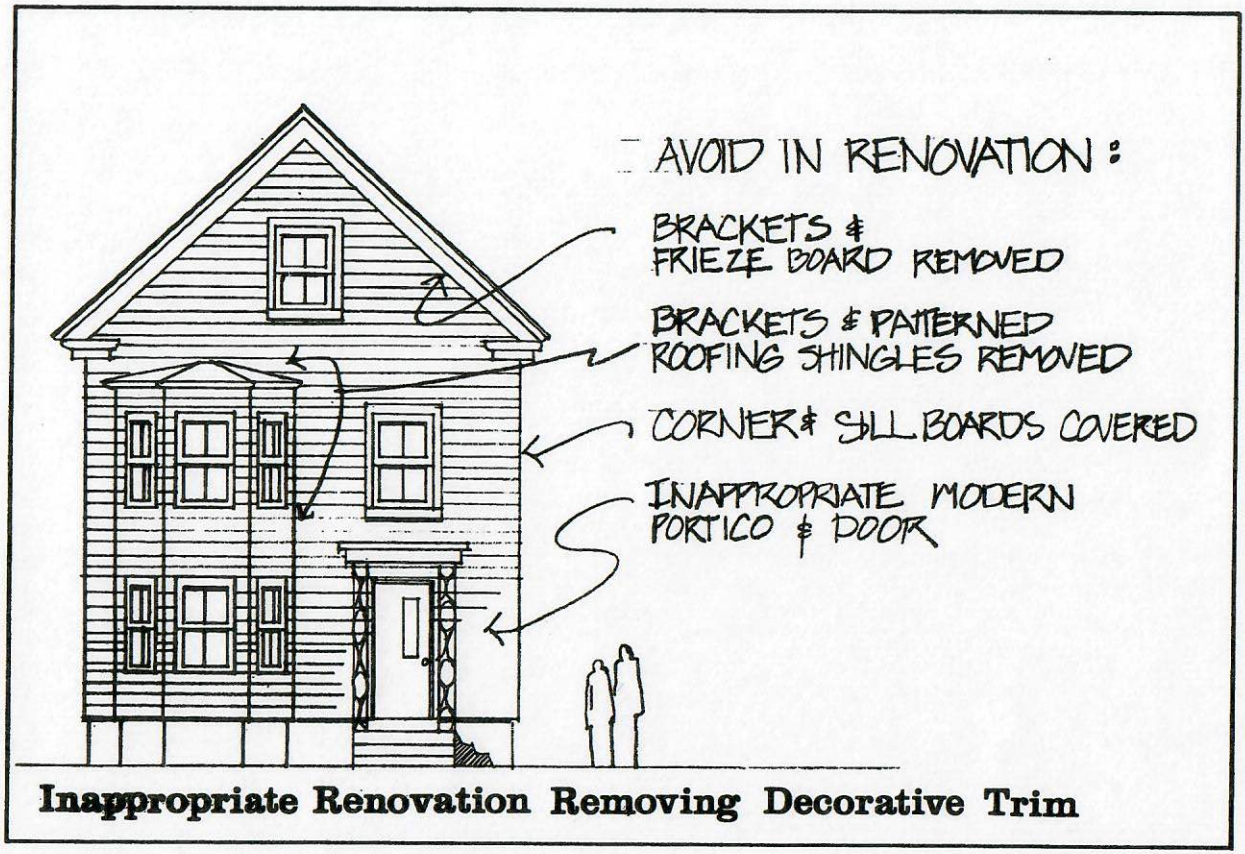
Renovation Respecting Original Features

These sketches illustrate a Greek Revival-style house. The sketch above shows a modern, simplified treatment of the house respecting the original design with all the details that give it character: narrow clapboards, wide cornerboards, wide trim around the windows, and the proportions of the original openings and entry. (See page 16 for the original house.) This example suggests that a simplicity of detail and trim, which retains the original proportions and dimensions, can have the same visual "weight" as the original features.



Renovation Completely Hiding Original Style

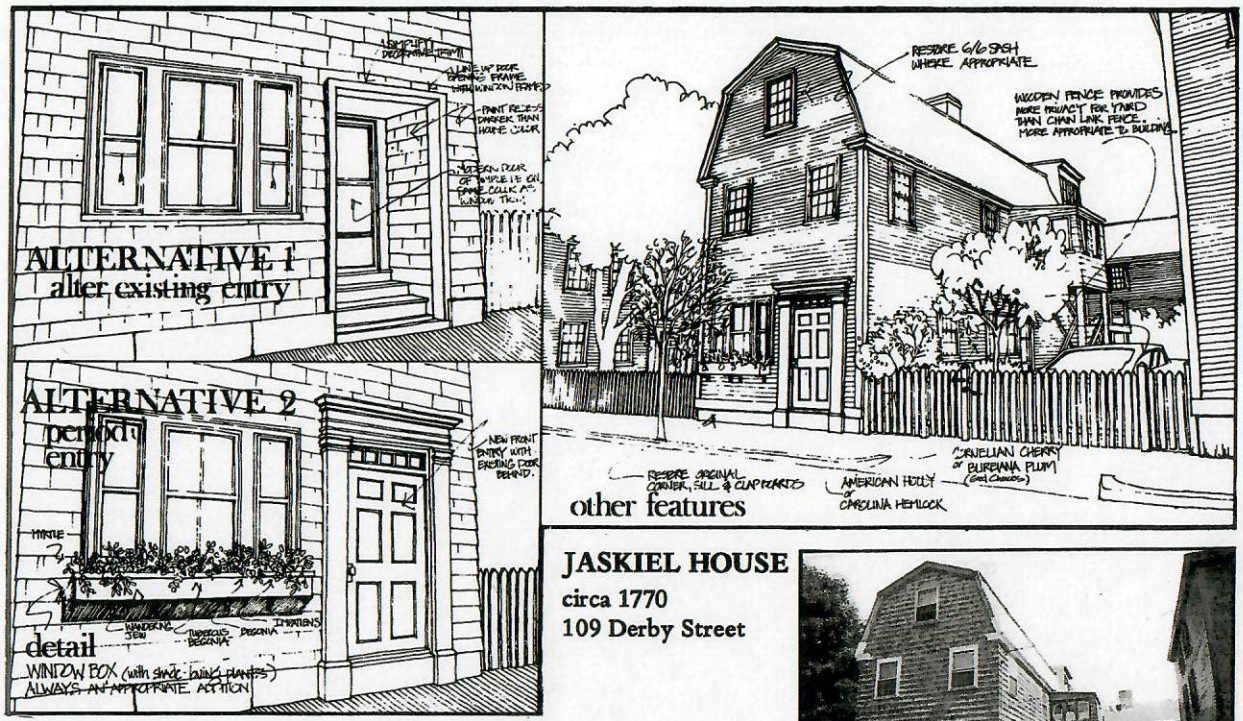
This sketch illustrates the loss of window symmetry resulting from the installation of a modern stock lumberyard "picture window." The blocking down of the door, the use of a fake pediment and eagle, and the diamond-paned door attempt to make the building look older than it is by using stock items of supposed Colonial design. The design has been further weakened in the sketch by the covering of cornerboards and by the use of different siding materials, giving a half-and-half appearance to the house facade.



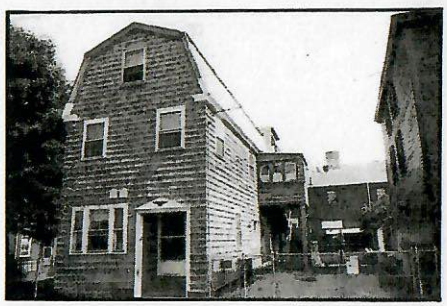
Inappropriate Renovation Removing Decorative Trim

The sketch above illustrates a "renovation" of a Victorian period house with bracketed trim and a bay window. (See original house, page 24.) This treatment could be called "faulty modernization." The facade has been stripped of many features that gave it interest. The cornerboards, window, and door trim have disappeared completely, as have the different textures on the bay which served to relate its size and shape to the rest of the house. The modern iron posts supporting the entry hood appear too delicate to support the weight of the hood. The design of these posts, and of the door as well, is "modern" only in its current availability.

What should the homeowner do when, through change of use or needed expansion, new major architectural features must be added to an older-style home?

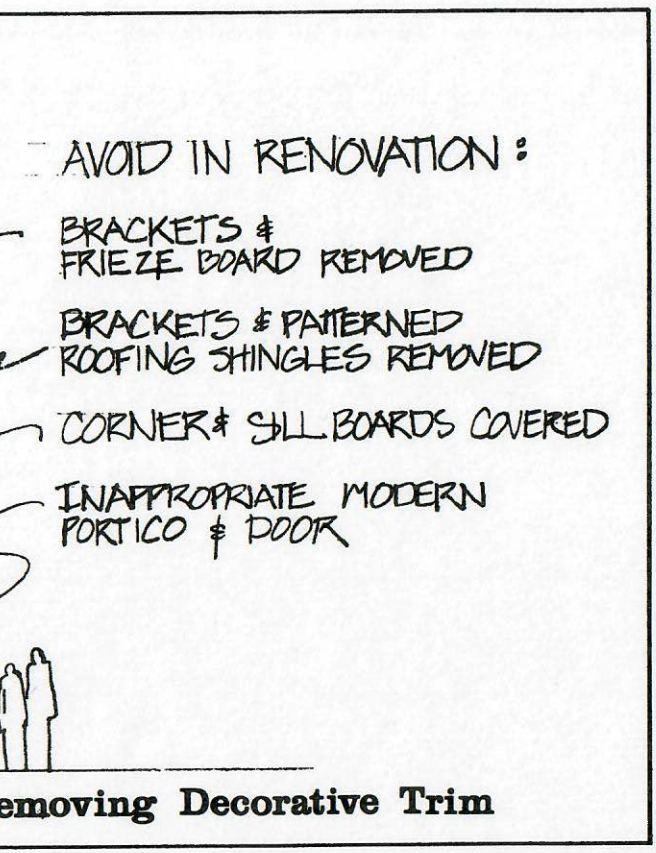


JASKIEL HOUSE
circa 1770
109 Derby Street



The photograph above shows a Georgian gambrel home with alterations: a picture window, a new front entry (the original "front" entry was on the side of the house), and a two-story porch allowing entry to the top floor apartment. As the front door in this location would not have been a correct feature of a Georgian house, a period treatment could be criticized as a "fake" addition. And since many original features of the Georgian style are now altered (cornerboards, clapboards, 6-over-6 sash windows), the restoration of the door alone would appear awkward on the house in its present condition. The best course would be to treat the new door in a modern way with simple details and with proportions that relate to other dimensions of the house.

As these renovation alternatives illustrate, there is a "language" of design features—doors, windows, and detailing—which determine the character and style of an older house. The following section discusses these separate features in an effort to acquaint you with the treatment alternatives for the details which will so directly reflect the care and effort you have invested in your home.



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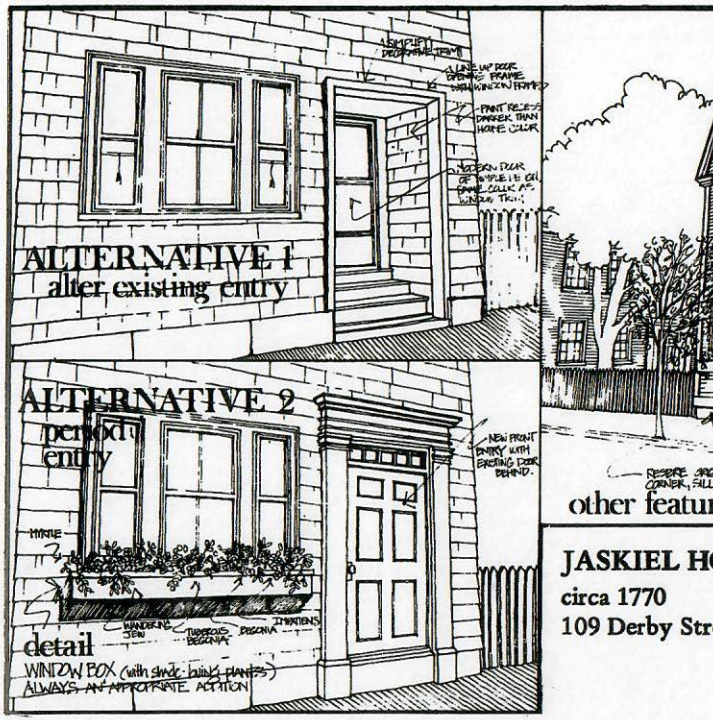

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As you look around Salem you can see that siding material contributes to or detracts from the overall attractiveness of a building. Since the choice of siding influences the appearance of your property to such an extent, consider the following points.

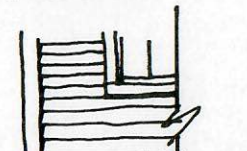
As a rule, nothing looks better than the original building material. In Salem, wood clapboards are the most common form of siding, casting distinctive shadow lines on the building's surface. If maintenance and/or finances dictate a replacement of clapboard siding, try to reproduce the original material as closely as possible. If you decide upon vinyl/aluminum siding, remember the following:

1. Both are imitation materials so they should look like the clapboards they imitate. The additional effects, such as wood graining, which do not appear on wood clapboards, are unnecessary.
2. The spacing between siding strips should be as close as possible to the original clapboards. When the spaces are widened, the scale of the house is changed and the appearance suffers.
3. Existing trim—cornerboards and window and door details—should not be hidden. Many houses have lost their character because their details were covered when siding was applied.

Siding materials that claim to imitate brick or stone should be avoided. Despite attempts to copy texture and color, they are generally unsuccessful. Similarly, asphalt and asbestos shingles should not be replacements for clapboarding. The fine horizontal lines of the clapboards are replaced by an overall texture of small, repetitive units. As a result the facade becomes choppy and details are obscured.

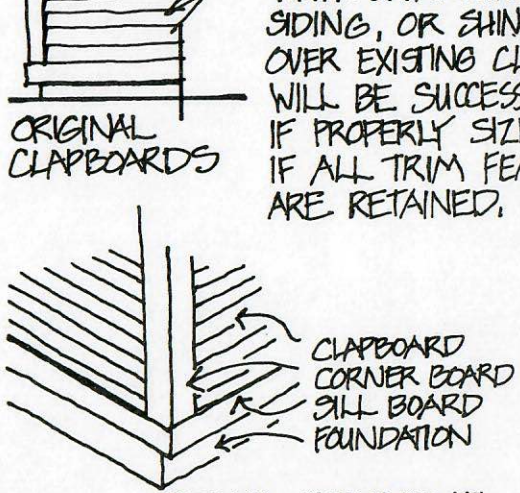
Some of the numerous inventive shingle patterns popular for homes built after the 1880's.

SIDING



ORIGINAL CLAPBOARDS

ORIGINAL SIDING & TRIM
ALWAYS THE BEST CHO
VINYL OR ALUMINUM
SIDING, OR SHINGLE
OVER EXISTING CLAPB
WILL BE SUCCESFUL
IF PROPERLY SIZED
IF ALL TRIM FEATUR
ARE RETAINED.



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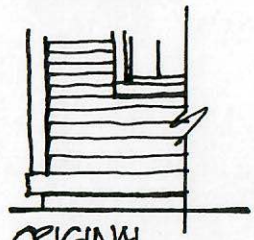
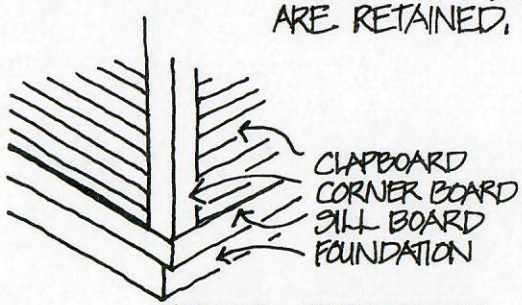


ORIGINAL CLAPBOARDS

ORIGINAL SIDING & TRIM ARE ALWAYS THE BEST CHOICE. VINYL OR ALUMINUM SIDING, OR SHINGLES OVER EXISTING CLAPBOARDS WILL BE SUCCESSFUL ONLY IF PROPERLY SIZED AND IF ALL TRIM FEATURES ARE RETAINED.



CORNER TREATMENT

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Visually the single-most important exterior detail of a building, the entrances of old homes are invariably characterized by fine craftsmanship. In renovation it is important to retain as much as possible of the original entrance treatment, especially its size and proportions.

Because the entrance is a key determinant of the character of the house, it is often a target for those seeking a quick "effect" when rehabilitating. Thus many entrances have been subjected to thoughtless revision when perhaps only a coat of paint was needed.

If you are unsure about the original or an appropriate treatment for your entrance, refer to the Guide to the Styles in this handbook. Professional help can also be sought—and don't overlook the wealth of good examples in Salem as they are the best teachers.

As you look at doorways in Salem you will notice that many have been altered in the last century by the addition of hoods and brackets over the doors. This was an early form of home improvement or "modernization." To strip these entrances of their special details by replacing wide boards, brackets and moldings with narrow strips of wood or aluminum destroys the appearance of the original craftsmanship. Though *few renovations look better than the original opening, frame and door,* these 19th century elements reflect changing tastes and can be retained for their added interest.

These Salem doorways reflect the change in style of almost a hundred years.

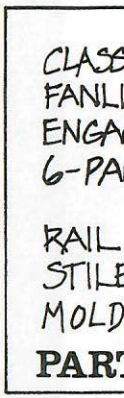
DOORS

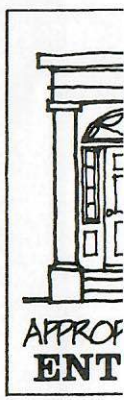
Most original doors in Salem were divided into panels, which helped to establish the proportional relationship between door and house. Every effort should be made to keep the original door. If a replacement must be made it should be the same size and type as the original. If selected with care, a stock door that captures the basic character of the original can usually be found. Flush doors without trim or panels or with diagonally arranged openings should not be used as they are visually incompatible with other features of the house.

DOOR OPENINGS

Do not "block down" the upper portion of a door opening to lower the height of a door, to eliminate a transom, or to conceal sidelights which framed the door. This unfortunate practice not only radically alters the entrance but also will spoil the general appearance of the house.

If you are looking for a decorative wooden door for your Victorian home, Gargoyles Ltd., 512 South Third Street, Philadelphia, Pennsylvania 19147, has an inventory of over 200 historic styles.





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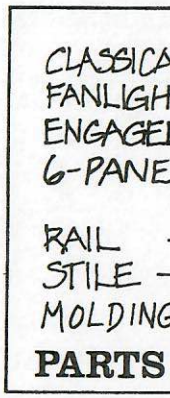
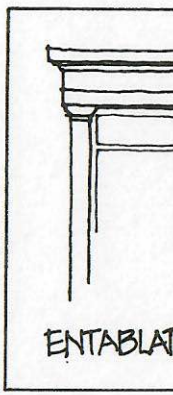
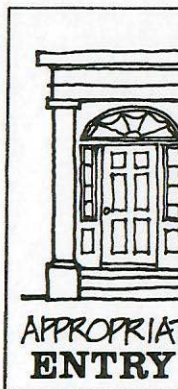




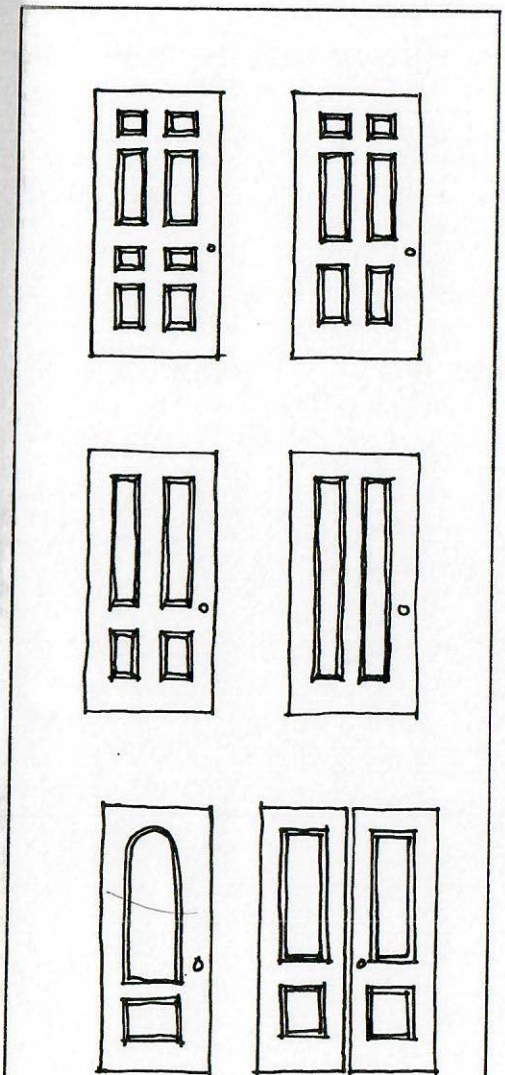


FRAMES AND PORCHES

Two entrances common in Salem are illustrated on the previous page. While the Greek Revival doorway has columns with a straight capping piece (the *entablature*), the Georgian entablature is crowned by a triangular pediment. These frames can take the form of a more or less flat frame around the door (in which case the columns are called *pilasters*) or of porches providing a covered entry for the doorway. When altering or restoring these features it is important to retain all essential parts. Avoid standard lumberyard items, which can be poorly designed. Also stay clear of unconvincing imitations such as the "Colonial" pediment with no entablature and misshapen moldings.

If it is necessary to replace original posts, columns on entries, or porches with new material, keep in mind this guideline: *replacements, simplified in detail, will work only if they have the visual weight of the original features.* Feathery "wrought iron" supports currently available will do the job structurally, but visually they will appear weak and inadequate under the substantial "lid" of the roof.

As a general rule, if you respect the original proportions, symmetry, and visual weight of the original doorway during renovation, the results will enhance your house. Maintaining the original entry is clearly the easiest way to accomplish this. The next best solution is to copy the original.



Traditional and appropriate doors

FRAMES AND PORCHES

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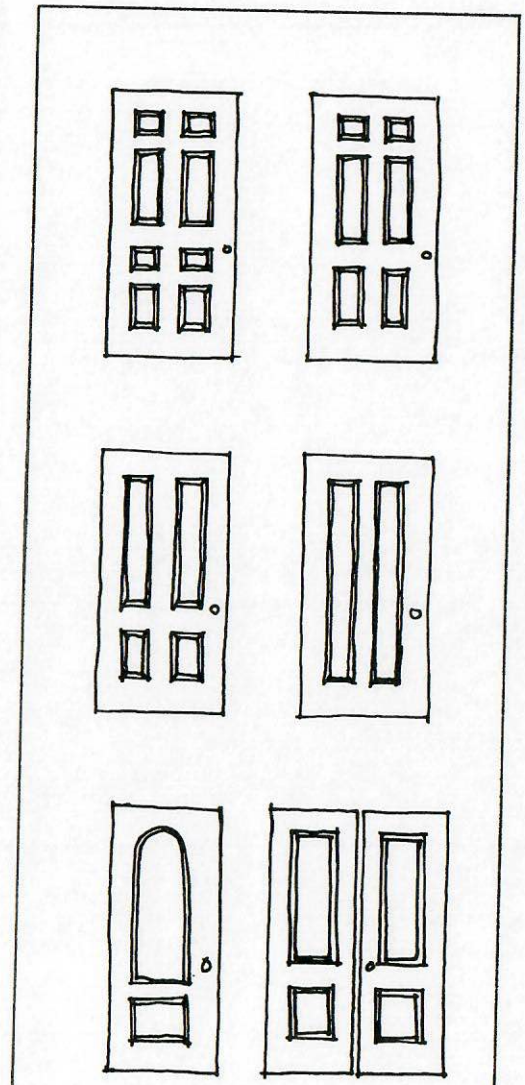
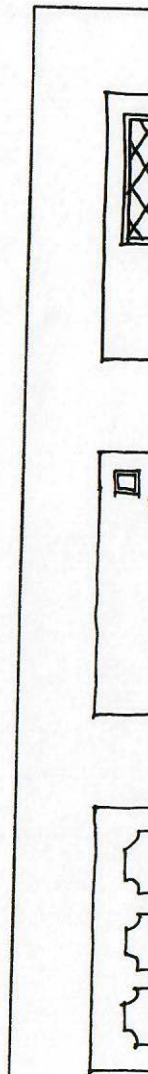


Traditional and appropriate doors



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Windows are an important design feature of each tyle and of your house. The greatest care must be aken when repair or replacement is undertaken. Carefully consider the following details: the original asing, size and proportion of the frames, size and umber of panes of glass in each sash, and use of linds or shutters.

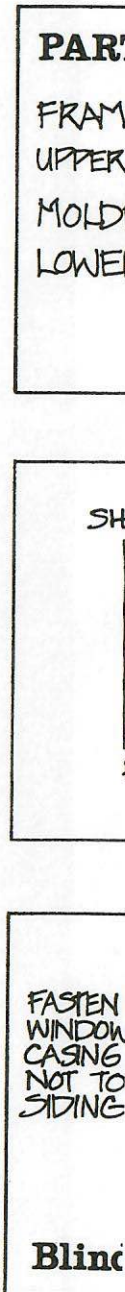
Window casings should not be stripped or replaced nless deterioration necessitates it; nor should they e covered when installing new siding. Try to dupli- ate the original casing if replacement casings are ecessary due to deterioration. If you are fortunate nough to have a Georgian house with molded win- ow sills, do keep them.

s with entrances, the temptation to block down or crease the size of an opening to accommodate a fferent window size or to hide a new ceiling that as been hung too low for existing openings, should e avoided. If an old window needs replacement and standard size will not fit, the added expense of rchasing a "custom" window will be well worth it that the overall symmetry and pattern of openings your house are kept intact.

these photographs suggest, a variety of ndow types are found on houses through- t Salem. Top: a Georgian 6/6 window th louvered blinds. Middle: an inventive ndow type often seen on Queen Anne and ner late 19th century homes. Bottom: a ladian window with blinds of the Geor- n Revival style.

The number of divisions in a window sash, defined by the panes, also varies with the style. Only the earliest Colonial homes had triangular leaded pane windows, and they are inappropriate on later buildings. Many older buildings in Salem have windows which have been "modernized" in the last century—a Georgian 12-over-12 sash having been replaced with Victorian period 2-over-2, for example. As a general rule, replacing an older sash with a more modern sash *as long as it is a simplified version of the original and has the same size and proportions, can be successful. Never install window types that are older than the house itself.*

The sketches on this and the following page illustrate windows commonly found on homes in Salem as well as some stock window types that should be avoided for older homes. If your existing window is of the common double-hung sash type, a casement window with its vertical appearance will look awkward on the house. A picture window can also spoil the look of an older house. Even if it has multiple "Colonial" panes, it is not authentic and will give the house the unsettling effect of being "betwixt-and-between" the traditional and modern styles.



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Window casings should not be stripped or replaced unless deterioration necessitates it; nor should they be covered when installing new siding. Try to duplicate the original casing if replacement casings are necessary due to deterioration. If you are fortunate enough to have a Georgian house with molded window sills, do keep them.

As with entrances, the temptation to block down or increase the size of an opening to accommodate a different window size or to hide a new ceiling that has been hung too low for existing openings, should be avoided. If an old window needs replacement and a standard size will not fit, the added expense of purchasing a "custom" window will be well worth it so that the overall symmetry and pattern of openings of your house are kept intact.

As these photographs suggest, a variety of window types are found on houses throughout Salem. Top: a Georgian 6/6 window with louvered blinds. Middle: an inventive window type often seen on Queen Anne and other late 19th century homes. Bottom: a palladian window with blinds of the Georgian Revival style.

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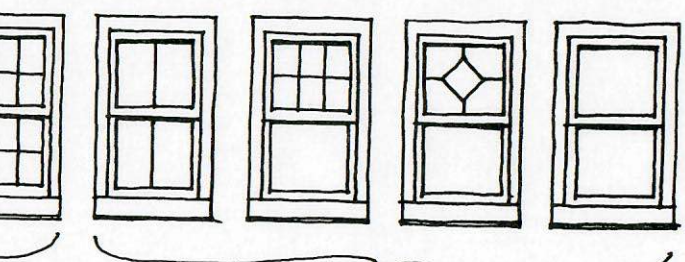
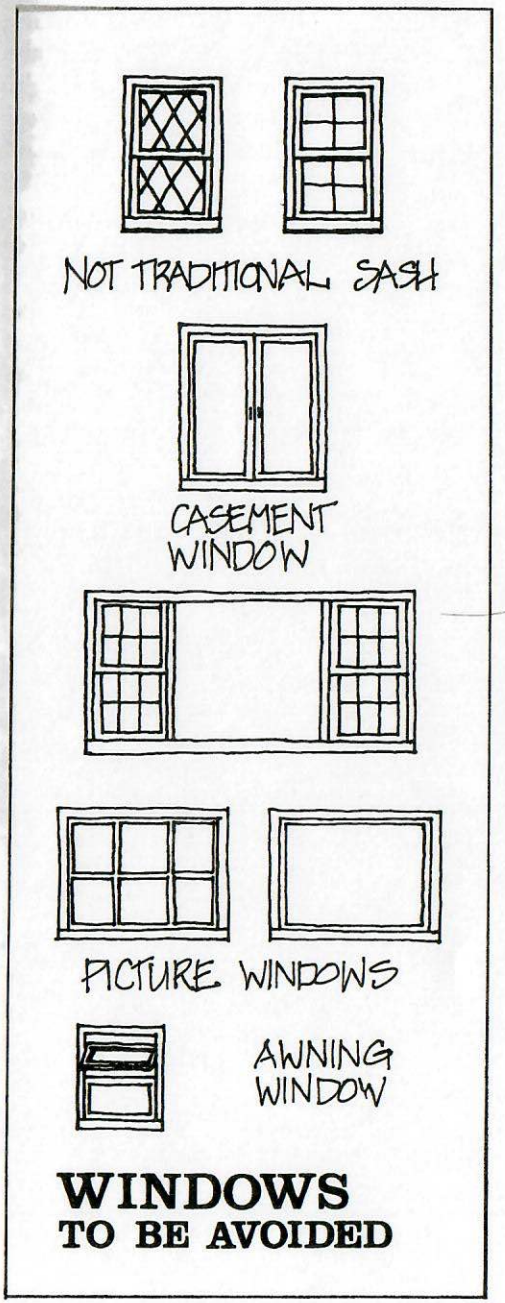
Blinds or shutters are always an optional feature on a house. They were first used locally during the Federal period to control the climate within the dwelling. Blinds increased in popularity during the Greek Revival period and reached their most widespread use from around 1840 to 1900. In the 18th and first half of the 19th century, shutters with a single panel were used. Later in the 19th century louvered blinds were used, first with fixed slats, later with adjustable slats (indicated by the vertical bar holding them at a constant angle). In the 20th century the use of blinds declined so that triple deckers were generally built without them. Blinds on contemporary homes are generally used as decorative devices.

Whether they actually hinge or not, blinds will not look right on your house unless they appear to work. Blinds should be large enough to cover the entire window if closed. This means that each blind should be the full height of the window opening (or an inch higher) and one-half as wide as the width of the opening (plus one-half to one inch for each blind). The blinds should be fastened to the window casing, not to the wall surface.





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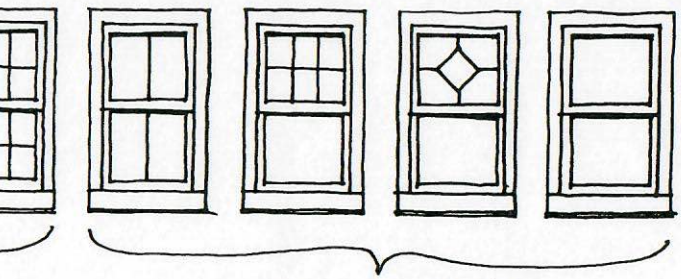
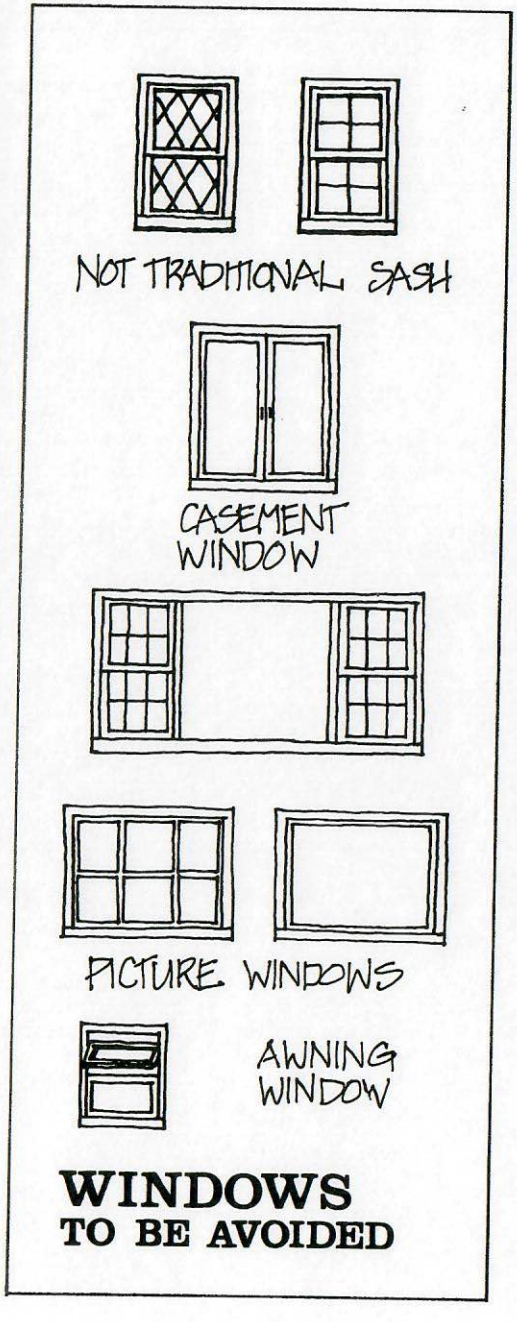
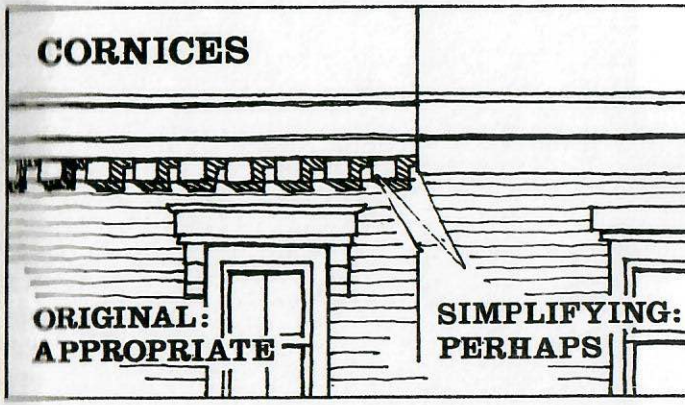


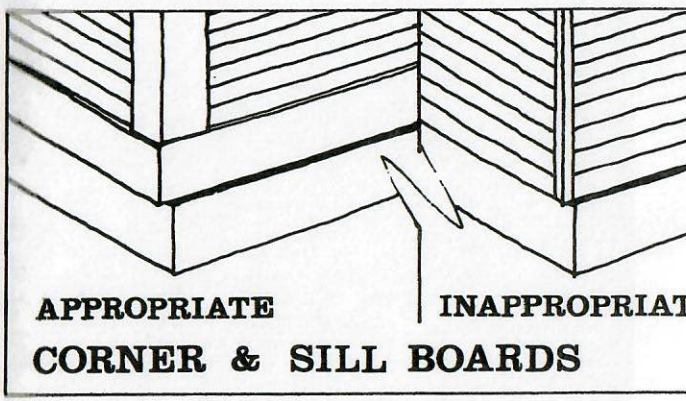


Trim refers to the ornamental details applied to a house—cornices with their dentils, frieze or bracket work, cornerboards, finials, pendants, barge boards, window and door casings. Old houses derive a good deal of their charm and value from the richness of this trim. Originally builders crafted such details by hand. However, by the Victorian period most trim was machine-produced. This ornamental trim, produced by sawing or turning on a lathe, was often peddled from door to door during the last century. As it was easily applied and could "update" the style of a home, one finds many old buildings in Salem enriched by these elements.

Cornices are an important design feature. Seventeenth century cornices were almost flush with the facade of the building, whereas cornices of the Federal and Georgian styles became very elaborate. As later styles evolved, cornices became more embellished so that the Greek Revival and the various Victorian styles exhibit a wide projecting cornice which caps the building.

Cornerboards are an important feature of early Salem homes. Visually, they "frame" the house by stopping the horizontal lines of the clapboard at the corners and giving the building its "edges." During the Italianate and Second Empire styles, quoins were sometimes used for this purpose. Then cornerboards took on added importance in Greek Revival buildings, where they are often very wide to look like the columns of a temple. Covering or narrowing the cornerboards destroys the integrity of the style of a house. Try not to do it.





Although each detail on a house is subtle by itself, the combination of these details forms a style. By studying the trim on your house, you will discover if and when it has been altered. All too often trim is removed or covered in a misguided attempt to make the house as maintenance-free as possible. The result diminishes the visual and financial value of the house. It is relatively easy to preserve or repair trim that is intact, but it is much more difficult and expensive to replace architectural detail once it has been thoughtlessly removed.

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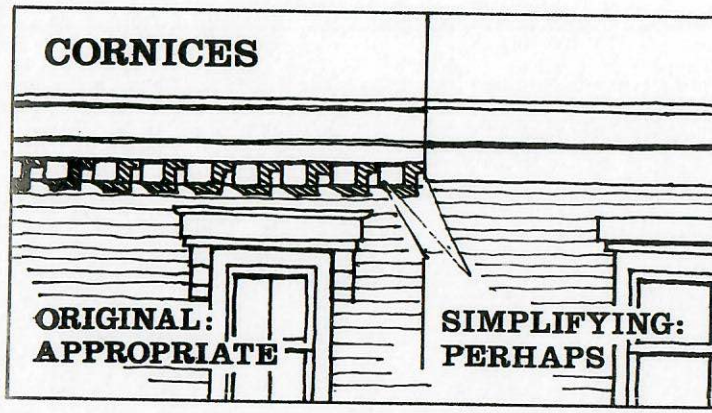

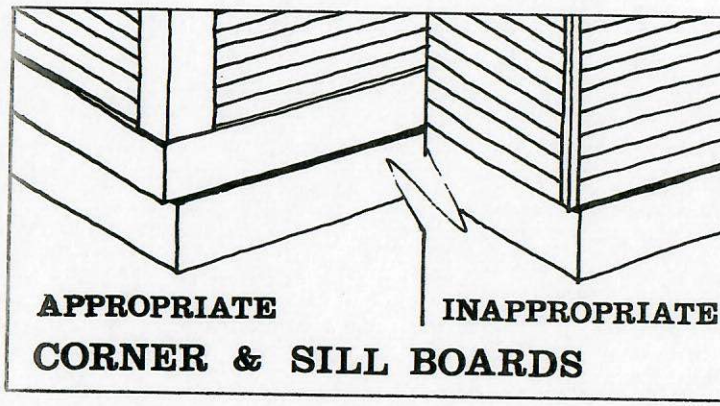

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In the previous sections we have tried to provide some general guidelines for the care of original features. The homeowner must decide for himself how accurately he wishes to follow the path of historical precedent. Everything old is not necessarily pleasing, nor is everything new to be avoided. Yet adding modern elements to an old house requires the greatest design ability if it is to be successful. As you look around Salem you will see that many alterations have spoiled original houses.

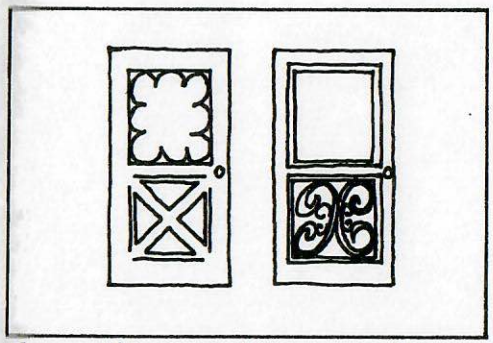
Often a change in use, or a growing family, will require the addition of wings, ells, porches, or dormers to provide extra space in an old structure. Due to lot size, these additions most often occur at the rear of the house, away from public view, where a greater design flexibility is possible than when the new additions will be seen from the street. If your addition is substantial or in public view, you will most likely seek professional help, since each solution will be unique and no general guidelines can be drawn.

As illustrated in the Guide to the Styles, the roof shape can be a hallmark of the building's style. The line and shape of the roof are key features of your house's appearance. Any additions here will have a dramatic effect. With the addition of dormers, there seems to be a misconception that since they are high up in the roof, they don't need to relate to the rest of the house. This is not true. If the house had no dormers originally, new ones are best placed on the off-street side of the house. If you must add dormers on the front, some general precautions can be given. Dormers should be kept small so as not to obscure the original roof shape. (Since the reason for adding dormers is to increase space, one is tempted to ignore this guideline—another reason for installing them at the rear.) The windows in the new dormer should relate in position, style, and width (not necessarily height) to those on the wall below. This insures that the dormers balance with the overall pattern of the house. Be sure to tour your neighborhood for ideas.

MODERN DETAILS

STORM DOORS AND WINDOWS

New England's weather and high heating costs make the use of storm doors and windows a necessity. Custom wood units of the same size are always a first choice, but their cost is often prohibitive. Stock aluminum doors and windows are the more common solution.



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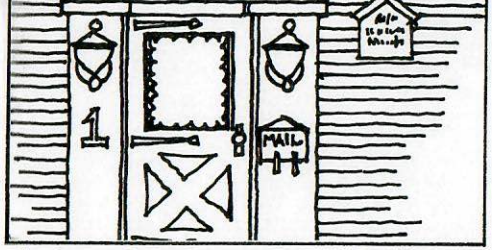

Think carefully about extras on the entrance —too many can give the house a cluttered look.

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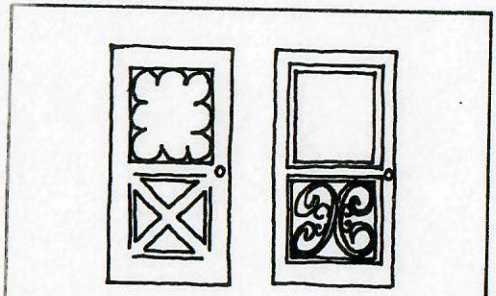

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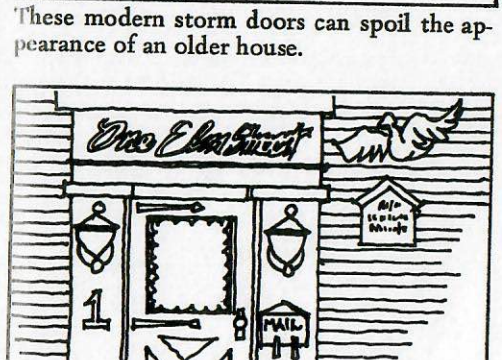

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1. *Avoid too many colors.*

Color has its greatest clarity when seen alone, or against a background of white, black, grey, or a muted tone. Two strong colors may be effective on a building. If you use more than two colors you can take away the effect of each color alone and create a garish look.

2. *Select the base color carefully.*

The color of the walls will dominate the house's appearance and, more than trim and door color, will determine how the house harmonizes with its neighbors. A muted tone for the base color is the wisest choice and will be the best complement to any bright colors you may choose to emphasize the trim of your home.

3. *Use bright colors sparingly and only for focal points such as the front door.*

Very bright colors, especially if a high gloss paint is used, are best avoided altogether. However, a semi-gloss bright colored door, when other colors on the house enhance it, can be very effective.

Choosing the paint for your house, especially if there are a number of colors involved, can be a bewildering task. The color of a paint chip versus the color on your house can be drastically different. A method for getting a better idea about how the house will look *before* you paint is to draw a "coloring book" type of sketch of your house (or trace a photo), outlining important features such as doors, windows, cornerboards, etc. It is then possible to paint in these features with samples of the colors you have in mind.

Don't overlook the roof. When you are painting, remember that the roof is a part of your color scheme and must relate to the rest of the house. Similarly, when you are roofing, choose a dark or neutral material that does not "compete" with the other house colors.

COLOR CHA

GEORGIAN

Base Color	*Trim Color*	*Door Color*
Natural	(Same as base color)	Dk. brown
Dk. brown		Black-green
Barn red		Dk. blue
Yellow ochre		Red
Dk. green		Dk. grey
Dk. blue		
Deep buff		

FEDERAL

Base Color	*Trim Color*	*Door Color*
Pale yellow	(Lighter than base color)	Black
Off-white	White	Natural
Soft beige	Buff	
Pale green	Pale yellow	
Medium grey	Medium blue	
Medium blue		

GREEK REVIVAL

Base Color	*Trim Color*	*Door Color*
White	Olive green	Dk. green
Buff	Grey-blue	Medium blue
Pale yellow	Dk. bottle green	Black
Green-grey	Green-black	
Blue-grey	Buff	
Pale grey	White	
	Black	

EARLY VICTORIAN

Base Color	*Trim Color*	*Door Color*
Buff	(Darker than base color)	Oak, frequently unpainted wood
Pink	Black	
Grey	Chocolate	
Mustard	Red	
	Dk. grey	
	Dk. green	
	Dk. brown	

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Later in the century a decided change in the use of color took place. Deep-hued base colors with trim either a much darker shade of the same color or a contrasting color became popular. Combinations included deep blue with golden yellow trim; medium grey with darker grey or green-black trim; dark ochre with dark brown trim, and tan with chocolate trim.

Houses built in the Stick style included combinations of three or four colors. Builder's specifications often called for a light slate base with beige trim accentuated in red with olive-green blinds, or a combination of a Venetian red base with Indian (brownish-red) trim and black detailing. Yellow was often used to accentuate window details. Indeed, from about 1860 to 1900 an interest in "polychrome" (many-colored) treatment of buildings was common in all the styles currently popular (see the style chart).

The Queen Anne style mixed natural materials (including stone, brick, and naturally finished shingles) with painted surfaces. A house could be masonry on the first story with natural or painted clapboards or shingles on the upper stories. The base colors used included white, buff, grey-green, grey-blue, and medium red with olive green, olive black, dark red, or white trim.

The century closed with the full development of the Colonial Revival style, which again made popular the Colonial and Federal color combinations of yellow, dark red, or dark brown base with white trim and olive black doors and shutters; dark red with white trim and black doors and shutters; light grey with white trim and dark green, dark red, or black doors and shutters; and white base with white trim and green, red, or black doors and shutters.

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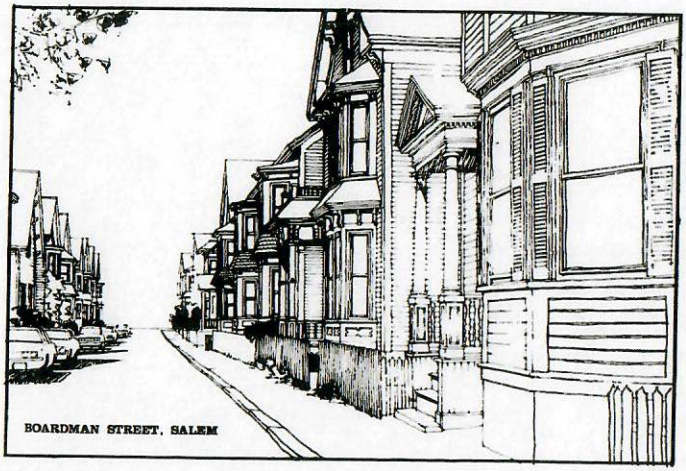
The century closed with the full development of the Colonial Revival style, which again made popular the Colonial and Federal color combinations of yellow, dark red, or dark brown base with white trim and olive black doors and shutters; dark red with white trim and black doors and shutters; light grey with white trim and dark green, dark red, or black doors and shutters; and white base with white trim and green, red, or black doors and shutters.



BOARDMAN STREET, SALEM

STREETSCAPE:

THE HOUSE IN ITS SETTING

The appearance of any house is strongly affected by its setting. How does the house fit on the land–does it look comfortable and sheltered or just "dropped on the lot"? What do the houses next to it look like? Do they fit together? The way in which the houses relate to one another to create a larger environment is called a *streetscape.*

As the sketches illustrate, an order created through a similarity in height, size, shape, and roof forms enables the houses along a street to look like "members of a family." This is the hallmark of a handsome streetscape. These elements of repetition and rhythm create a framework within which the individuality in smaller details (entrances, color, planting, etc.) becomes special. It is hoped that these sketches will help you to understand a little better how your house "fits" with its neighbors along your own street and to view the many fine streetscapes found in Salem's older neighborhoods with greater appreciation.

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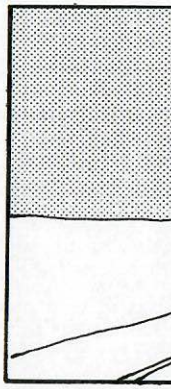
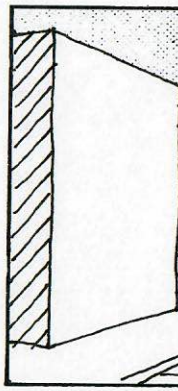
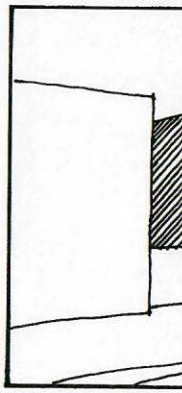
THE FRAMING OF A STREET



WITHOUT BUILDINGS
The space has no boundary, no definition.



WITH BUILDINGS
An enclosed space is created.



SENSE OF WALL
The fronts of the buildings define the space of the street. Fences carry this edge along between the houses.

ADD ROOFS AND CORNICES
The space now has a top and relates better to the size of a person.

ENTRANCES AND BAYS
Entrances, porches, and bays define individual houses and break up the length of the street.

SENSE OF LAYERS
Steps, hoods, brackets, planting, and other projecting elements soften the starkness of the "wall."

Variety in color, style, rooflines and even setback adds interest and excitement to a streetscape. But if the differences are *too* great, the sense of a shared order will be lost. A building that departs dramatically from the pattern established by its neighbors risks the danger of "sticking out like a sore thumb," and the rhythm that characterizes a handsome street will most certainly be diminished. Think carefully about being a "good neighbor" if you are either building a new structure, making alterations, or removing an old building.

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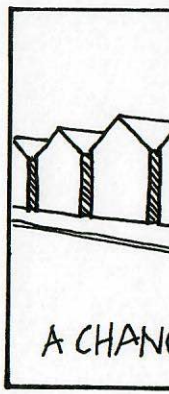


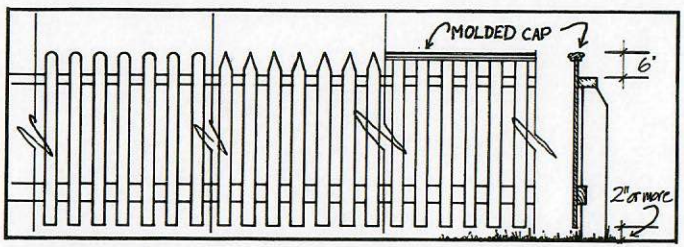
LANDSCAPING

Traditionally, fences have been a pleasant part of old neighborhoods. They add variety to the streetscape and set the boundary lines between public and private spaces. Fences should be chosen to harmonize with the house and street.

Low solid board fences and the simple painted picket fence have been popular since colonial times and are still a good choice for wood frame homes. Three Victorian period variations of the picket fence include the basic picket fence with a sawn geometric pattern (such as a semi-circle or half octagon at the top of each picket); the framed picket fence, with its square fence posts and top railing; and the flatboard fence with fancy cutouts.

Simple iron fences appeared during the Federal period. Ornate cast iron fences became popular in the 1840's. While originally inexpensive to build, a cast iron fence can be very expensive to duplicate today. These old fences are a splendid reminder of the past and their presence adds to both the appearance and the value of an older home. Many fine examples remain in Salem, and every effort should be taken to retain and preserve them.

While modern concrete, concrete block, or chain link fences do establish boundaries, they fail to "frame" a house attractively and are considered inappropriate in our old neighborhoods.



A traditional wooden fence painted the color of a house or its trim can really enhance a home. They can be made with a standard 2 by 4 for the rails and 1 by 3 for the pickets. Pickets are spaced about 5 inches apart whereas a post will be needed approximately every six feet.

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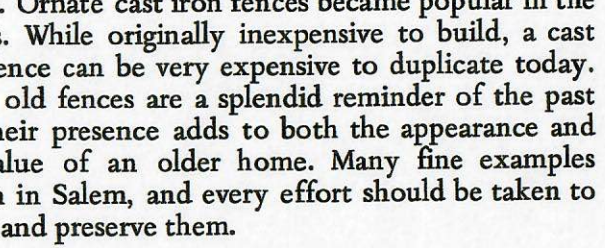

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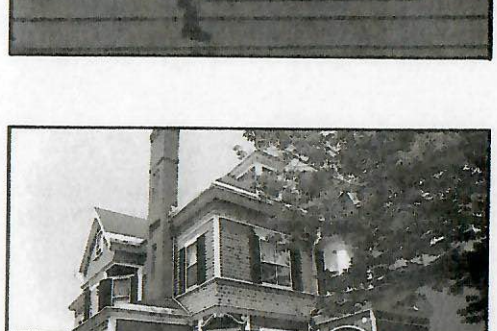

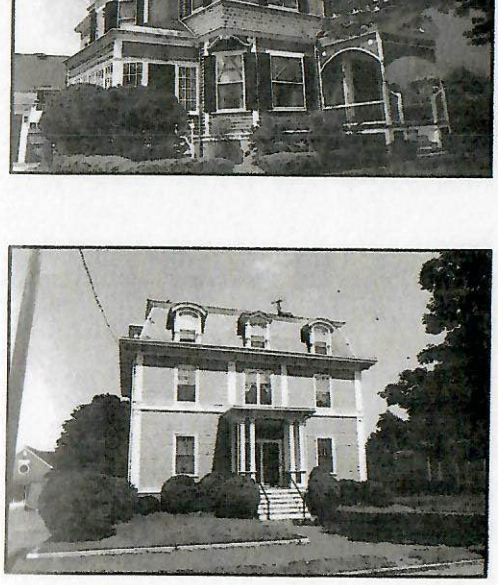

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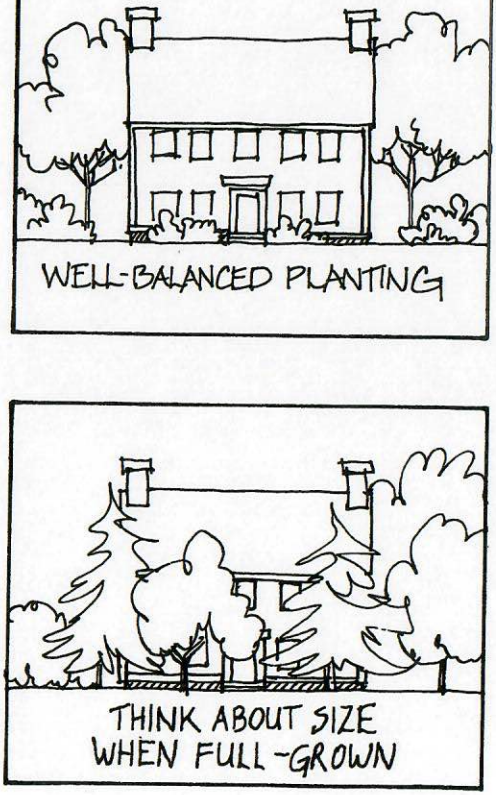

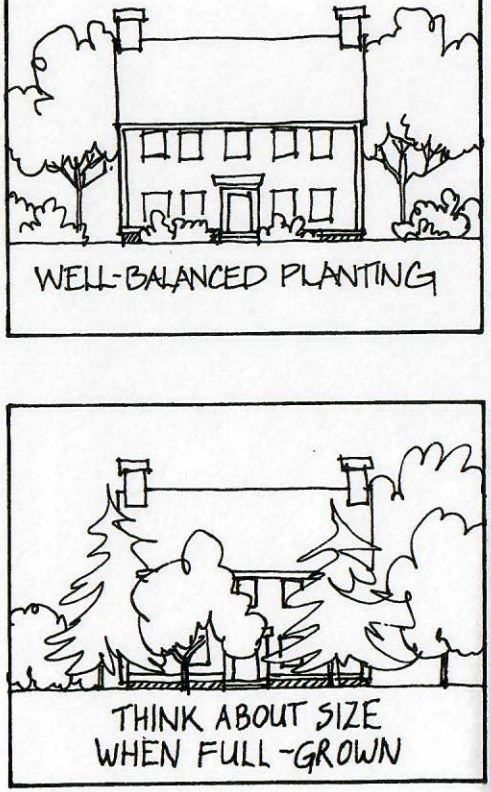

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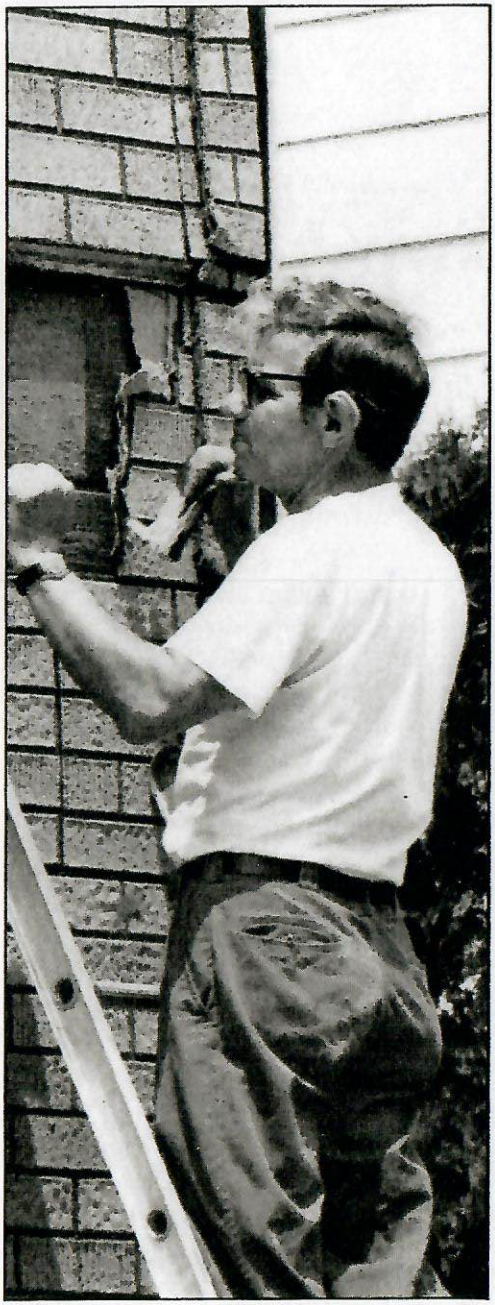

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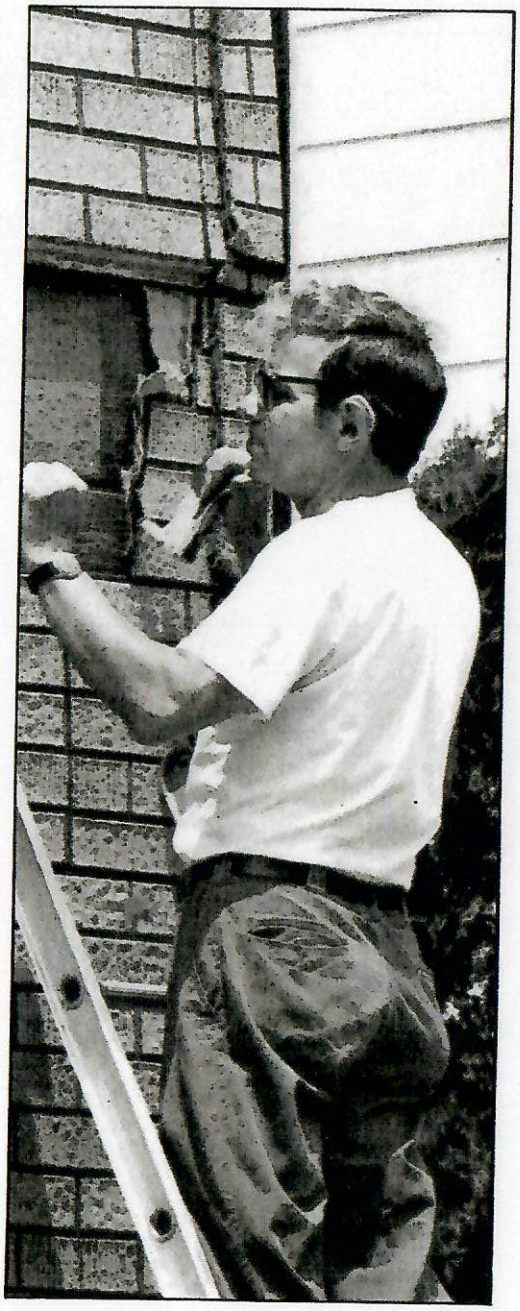


I

Siding

Entrances

Windows a

Trim

Roofing

Flashing, G

Foundation

Painting

Rehabilitati

Some suggestions on getting started:

1. Study your house carefully and establish when it was built, its style, and its most important features. What features are original? What has been added? What may have been removed?

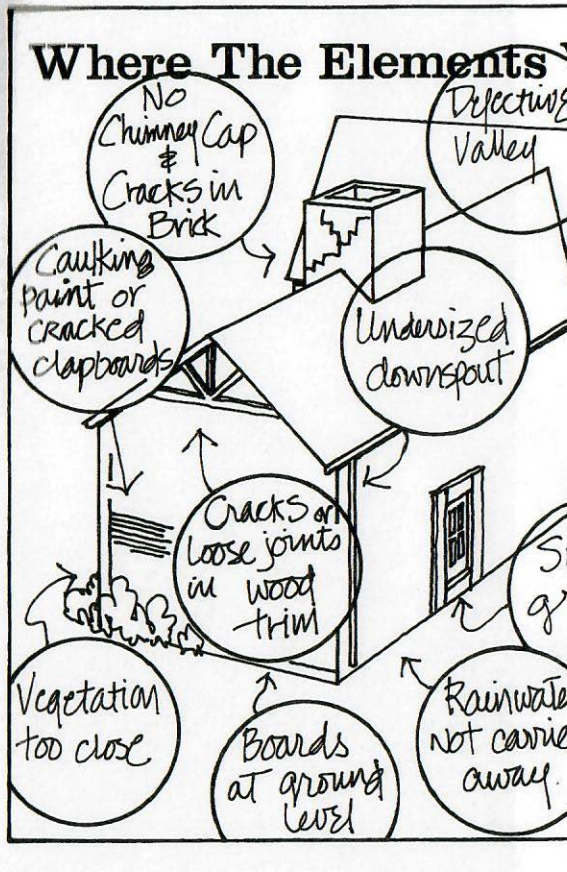
2. You may want to search for old photographs, postcards, or newspapers that can give information about your house. Title information at the Registry of Deeds and tax records filed at City Hall are useful resources. Also visit the Essex Institute, as its library houses the written and photographic history of Salem. And see the Peabody Museum for information on past seafaring owners.

3. Don't hurry! Live in your house and understand how it works, what its problems are, and what work you may wish to undertake—both inside and outside. Think carefully about changes. Live with your ideas for a while before rushing into any large undertaking. Most important, schedule the work sequence and timing realistically so you can be assured of pleasing results.

4. You may want to measure and draw the plan of your house before you begin any substantial interior work. Check your systems—heating, plumbing, electrical—and consult a professional if there are any problems.

5. Photograph your house before, during, and after your work. It will provide an interesting record of your efforts.

6. Do as much of the work as you can yourself to save money, but don't hesitate to consult your neighbors and professionals when needed.



The sketch above points out common trouble s
building's exterior. Routine inspection of these are
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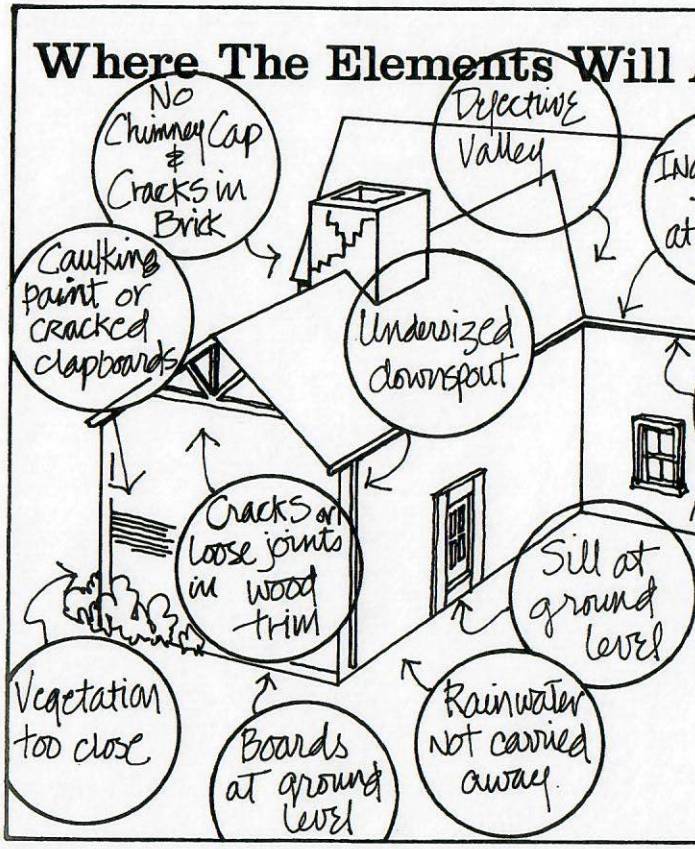

The sketch above points out common trouble spots of a building's exterior. Routine inspection of these areas can uncover minor problems before they become serious ones. Consult the Home Inspection Checklist in the Appendix as it provides a useful format for inspecting your house.

OF SIDING MATERIALS

USE	MAINTENANCE REQUIREMENTS	LIFE EXPECTANCY
	Paint every 6–8 years	Indefinitely if well maintained
	None if left to "weather" Paint every 6–8 years Stain every 4–6 years	30–100 years
	None	100 + years
ppriate	None	10–20 years
ppriate	None if left to "weather" Paint every 6–8 years Stain every 4–6 years	30–100 years
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priate g. 36–37)	None, but long-term durability unknown. May create moisture conditions that encourage rot of underlying structure	Untested

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BRICK

Although there are many superb brick h
Salem—Chestnut Street and the Common
mediately come to mind—most Salem ho
wood frame. Brick, if used at all, is for fou
only. Consequently, we have discussed mai
for brick in the section on foundations. If yo
is brick, refer to this section for appropriate
ing and maintenance techniques.

WOOD CLAPBOARD

The most popular type of exterior clad
Salem's early houses was the narrow wood c
attached to a layer of wood sheathing which
was nailed to the frame of the building.

Wood is easily worked, has natural insulati
ties, and is adaptable, plentiful, relatively ine
and resistant to denting. It can be patched, re
repainted, or stained. And it has its own
beauty. But, clapboard siding requires re
spection and maintenance to keep it in pro
dition. Check siding for decay where boards
to end, at corners, and around windows a
door frames. If clapboards seem deteriorated
repair, chances are that the situation looks wo
it actually is. Most clapboard siding can be
with a few simple techniques.

REPAIRING CLAPBOARD

(Reprinted with permission from the Milwaukee H
Commission from Mark Latus, *Preservation-Mind
Improvements: The Exterior,* 1974.)

Tools and materials the homeowner needs inc
following: extension ladder, small saw,
wood chisel, hand drill and small bit, screw
putty knife, wood wedges, medium size
nails, medium size wood screws, putty or wo
and roofing or asphalt cement.

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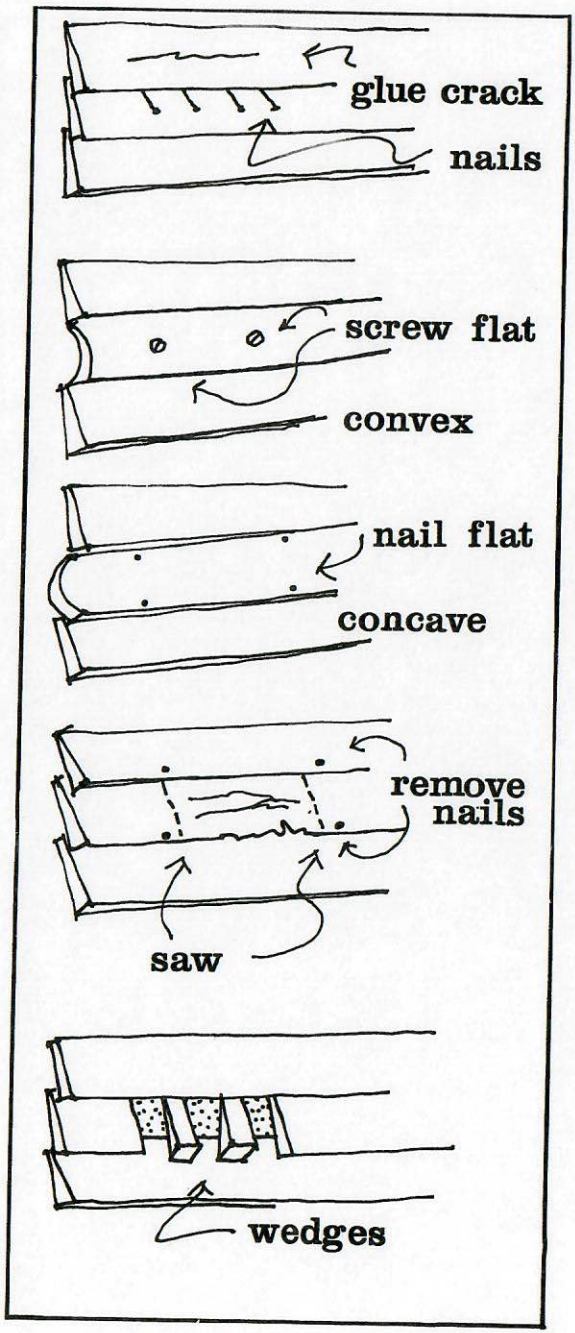
(Reprinted with permission from the Milwaukee Landmark Commission from Mark Latus, *Preservation-Minded Hom Improvements: The Exterior,* 1974.)

Tools and materials the homeowner needs include th following: extension ladder, small saw, hammer wood chisel, hand drill and small bit, screw driver putty knife, wood wedges, medium size finishing nails, medium size wood screws, putty or wood filler and roofing or asphalt cement.



WOOD SHINGLES

As with clapboard, deterioration of wood sh seldom so severe as to require total repla Single shingles can be removed and replace necessary.

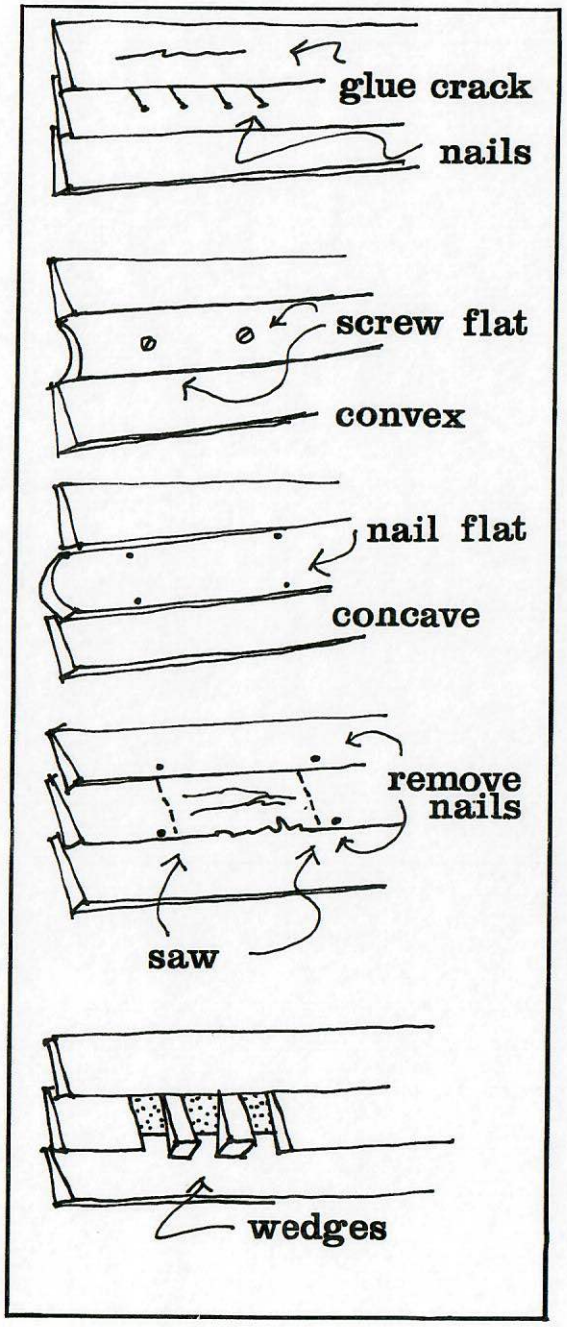
ASBESTOS SIDING

Throughout Salem one finds old homes th been re-sided with asbestos "shingles" or comp board in a pattern made to resemble brick. this material was inexpensive and required ess no maintenance, it was frequently used t neglected clapboard. As these materials were fastened directly to existing siding, they removed and the underlying clapboard re Unfortunately, it is impossible to know the co of the clapboard before removing the materia you will want to be prepared for unpredictab before committing yourself to this task.

ASPHALT SIDING

Once a popular siding, asphalt has recently be carded in favor of the synthetic sidings—alu and vinyl. Because asphalt and asbestos have properties, procedures for removal are comp Since asphalt was often used for its insulation ties, the clapboards underneath may very we excellent condition. Removing counterfeit b other asbestos siding is a simple but dirty task. sary tools include a wrecking bar and a claw ha

The top layer is pulled off first, revealing th lation board. This too is taken down, togeth any layers of tar or building paper. Be sure to p all nails. Once exposed, the clapboards m patched, repaired, and replaced as necessary. dition, each nailhole from the composition must be sealed with putty before paint is app the reclaimed clapboards.



WOOD SHINGLES

As with clapboard, deterioration of wood shingles is seldom so severe as to require total replacement. Single shingles can be removed and replaced when necessary.

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The top layer is pulled off first, revealing the insulation board. This too is taken down, together with any layers of tar or building paper. Be sure to pull out all nails. Once exposed, the clapboards must be patched, repaired, and replaced as necessary. In addition, each nailhole from the composition siding must be sealed with putty before paint is applied to the reclaimed clapboards.

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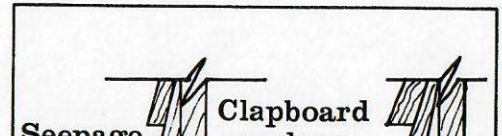


Wood preservatives—useful for *all* exterior wooden features—have been a great boon to the homeowner in the battle against water-induced rot. New exterior wood should always be treated with a preservative before installation. Pretreated wood that has been pressure-impregnated with preservative is best, but dipping new wood in a bucket of preservative for 15 minutes will provide adequate protection. Look for a preservative containing *pentachlorophenol*—it has the least objectionable odor and seems to do the best job.

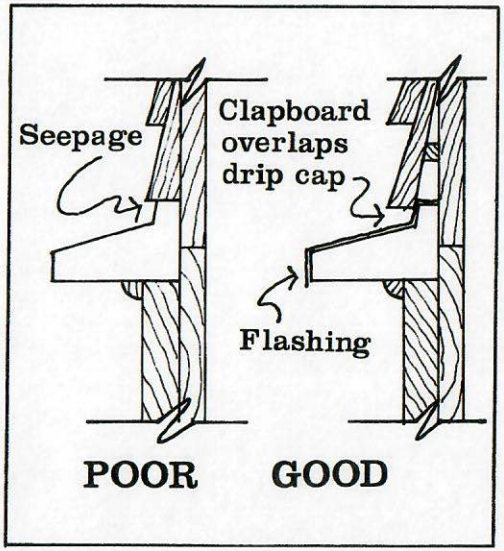
WINDOWS AND BLI

The wooden double-hung windows in mos houses can become especially vulnerable to tion from the elements. Through settling, caulking or worn paint, openings occur, allow wind-driven rain to penetrate and cause wood ration. Cracks will also produce air leaks a cause as much as a 20% increase in your heating costs.

To check the condition of your windows, b examining the joint between window frame a There should be no gaps. If caulking has cra fallen away, you will need to replace it. Rem old caulking with a knife and wire brush, and generous bead (about 3/8" thick) of fresh caul the joint. To extend the life of the caulking few days for a "skin" to form on its surface a paint it.

Examine the condition of the window frame for cracks. If openings are present, paint fir linseed oil and then patch with putty. Be remove any loose or peeling paint first. If lots wood has been exposed to the elements due ing paint, you would be wise to waterproof th with a good wood preservative before paint preservative such as "Wood-Good" containing chlorophenol will do.)

The next step is to check the putty around t ing (glass). The seal must be perfectly tight to water and air from leaking into the wooden s mullions. (Note: A machine that saves tir



Wood preservatives—useful for *all* exterior wooden features—have been a great boon to the homeowner in the battle against water-induced rot. New exterior wood should always be treated with a preservative before installation. Pretreated wood that has been pressure-impregnated with preservative is best, but dipping new wood in a bucket of preservative for 15 minutes will provide adequate protection. Look for a preservative containing *pentachlorophenol*—it has the least objectionable odor and seems to do the best job.

WINDOWS AND BLINDS

The wooden double-hung windows in most older houses can become especially vulnerable to destruction from the elements. Through settling, cracked caulking or worn paint, openings occur, allowing the wind-driven rain to penetrate and cause wood deterioration. Cracks will also produce air leaks and can cause as much as a 20% increase in your winter heating costs.

To check the condition of your windows, begin by examining the joint between window frame and wall. There should be no gaps. If caulking has cracked or fallen away, you will need to replace it. Remove the old caulking with a knife and wire brush, and install a generous bead (about 3/8" thick) of fresh caulk along the joint. To extend the life of the caulking, wait a few days for a "skin" to form on its surface and then paint it.

Examine the condition of the window frame and sill for cracks. If openings are present, paint first with linseed oil and then patch with putty. Be sure to remove any loose or peeling paint first. If lots of bare wood has been exposed to the elements due to peeling paint, you would be wise to waterproof the frame with a good wood preservative before painting. (A preservative such as "Wood-Good" containing pentachlorophenol will do.)

The next step is to check the putty around the glazing (glass). The seal must be perfectly tight to prevent water and air from leaking into the wooden sash and mullions. (Note: A machine that saves time and

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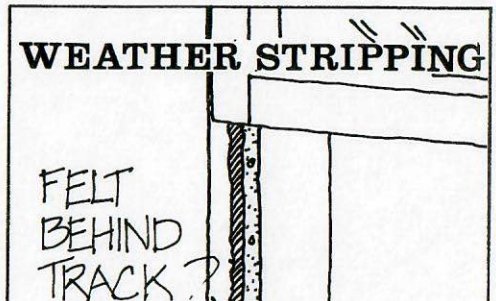

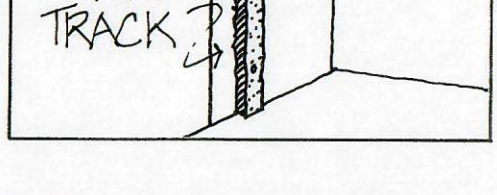

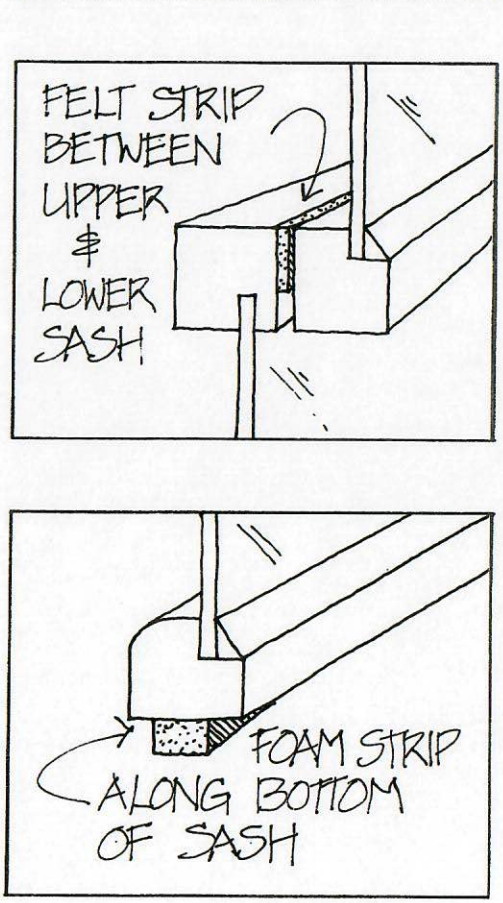

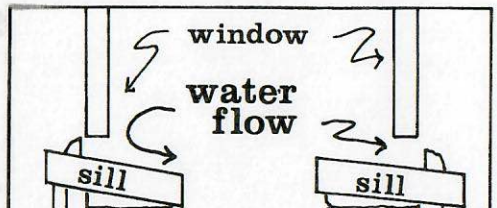

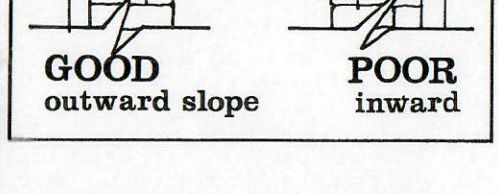

For comfort's sake as well as economy, preventing drafts and heat loss through windows is a very real concern. Our forefathers used interior shutters, shades, and heavy draperies to conserve heat. Today the most common solution is to install storm windows. Before installing storm windows, check the frame and sash of the existing windows for a weathertight seal.

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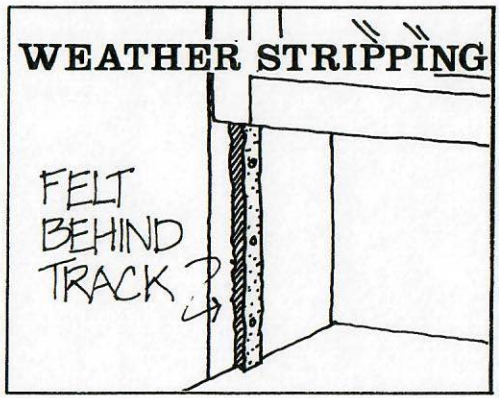

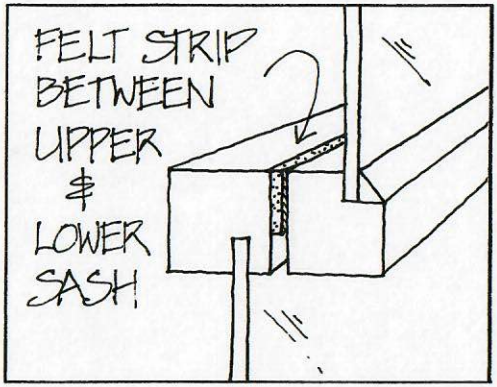

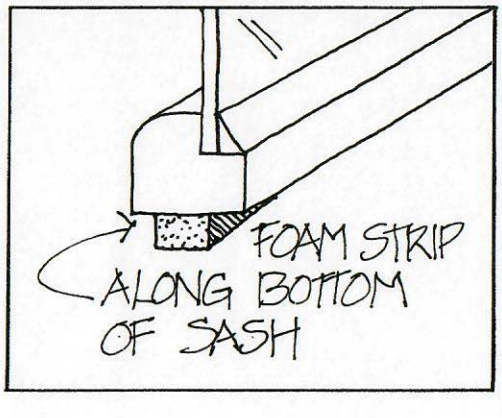

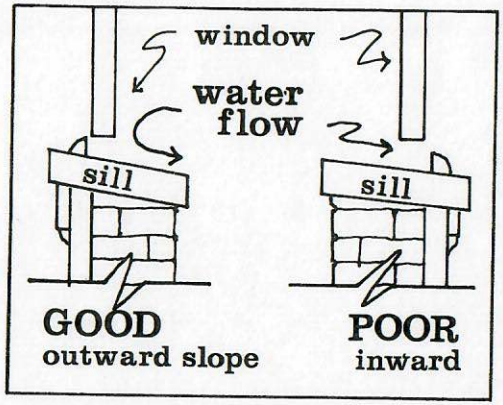

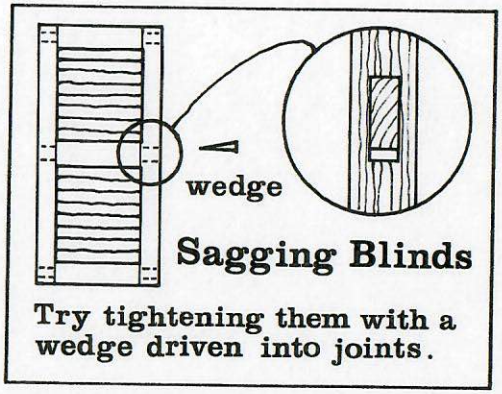

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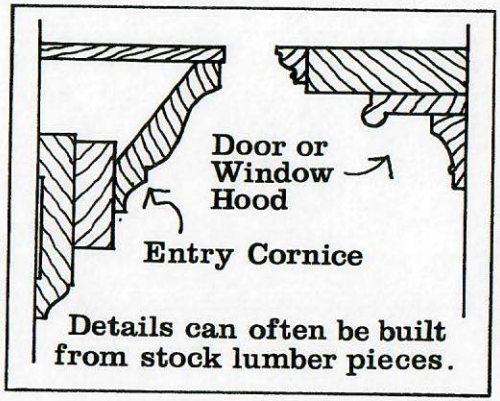


Details can often be built from stock lumber pieces.

Some of these resins allow partially rotted wood to regain its strength through impregnation. This is done by drilling holes in the end grain and soaking the wood through the holes. When the resin hardens, the wood is often tougher than it was originally.

If you cannot or do not wish to redo parts of your trim yourself, a local carpenter or woodworking firm may be able to repair or duplicate it. Whether you do the work yourself or have it done, the effort will be a substantial investment in and improvement to your property.

ROOFING

COMPARISON OF ROOFING MATERIALS

ROOFING MATERIAL	PERIODS OF LOCAL USE	LIFE EXPECTANC
Asphalt Shingles	c.1910–c.1930 Conditionally appropriate for all other periods	10–20 years Formerly up t 40 years when asphalt shingl were made fr rag stock
Red Cedar Wood Shingles	All periods	30–100 years
White Cedar Wood Shingles	Not recommended for roofing installation	10–30 years
Wood Shakes	Not historically appropriate	—
Slate	c.1870–present	Over 100 year
Asbestos Shingle	c.1885–c.1925 Not readily available	Over 100 year
Tin Sheets Terne Plate	c.1840–present	Over 70 years maintained by painting every 8–10 years

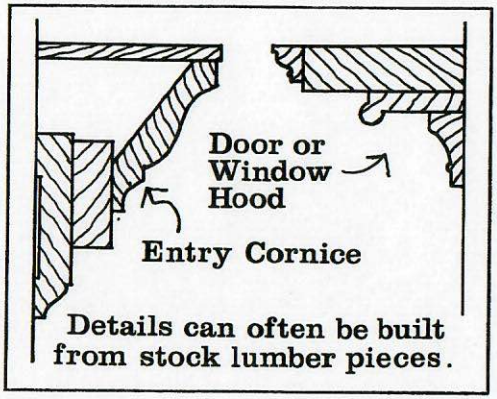
NOTE: Fire treated red cedar shingles which will give a Class "C" fire rating are available for use in densely built-up areas.

TRIM

Trim elements of doors, windows, and cornices (dentils, friezes, brackets, etc.) should be properly maintained to prevent their loss through deterioration. If replacement with new materials is necessary, try to match the original detail. If this is not possible, a simplified treatment that matches the original in size and proportion is the best solution.

Loose trim can be refastened by carefully drilling a hole, counter-sinking, and screwing the trim back on. Missing trim can be duplicated closely with a portable jigsaw and drill using standard sizes of white pine lumber. If you can't match it exactly, duplicate the mass and rhythm of the original. Remember that seemingly complex details can be built up from simple pieces. When dismantling a complex element for repair, note how it was put together. Sketches or photographs will be especially helpful when you make replacement parts.

With the advent of waterproof synthetic materials, it is now possible to preserve and recondition partially rotted wood details and ornaments. Epoxies, polyesters, and other synthetic resins can be used in filling and shaping, repairing details, and building up partially rotted areas of your house. In addition, it is possible to completely reproduce carved ornament such as brackets and barge boards in an inexpensive durable epoxy. Cracked doors can be re-laminated; missing brackets can be molded; and balusters can be reglued. Because these synthetic resins are waterproof, the repairs will not loosen in the rain.



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While early houses in Salem were protected by wood cedar shingles, sheet metal (with standing seams), or slate, material costs and building codes make duplication prohibitive for most homeowners. Fortunately, asphalt shingling is a relatively inexpensive, rot- and fire-resistant alternative which can be spaced to resemble wood shingles and slate.

The roof protects the house from the elements. Never wait for a leak to occur! Leaks often do not show until after they have done substantial damage. Although most roof coverings will last about twenty years, they should be periodically inspected for missing or cracked pieces. The southern exposure usually deteriorates the fastest due to the hot sun breaking down the asphalt composition or drying out the wood shingles. Cracks can develop, allowing rain to penetrate or wind to blow off the brittle roofing material.

In many cases it is not necessary to replace the entire roof as individual pieces can simply be replaced. However, when the roof must be redone, care should be taken in the selection of materials and color.

Keep in mind that labor accounts for the largest part of roofing costs, so if you intend to live in your house for many years, it is worth the initial added expense of high-grade materials. In addition, roof or gable vents should also be installed to assure proper ventilation, thereby extending the life of the roofing surface. Otherwise a roof will deteriorate prematurely due to excessive heat building up under its surface.

The most vulnerable part of any roof is at the edges where it meets chimneys, sewer vents, cornices, etc. No discussion of roofing would be complete without addressing the necessity of flashing and gutters to keep the flow of water away from these vulnerable areas.

Sources of Roof Leaks

- Loose flashing around chimneys and valleys
- Loose or missing shingles
- Cracks caused by settling rafters
- Water back-up from clogged gutters or from other debris
- Protruding nail heads
- Cracks in chimney masonry
- On flat roofs: bubbles and blisters; cracks where the roofing abuts vertical surfaces

A Caulking Checklist:

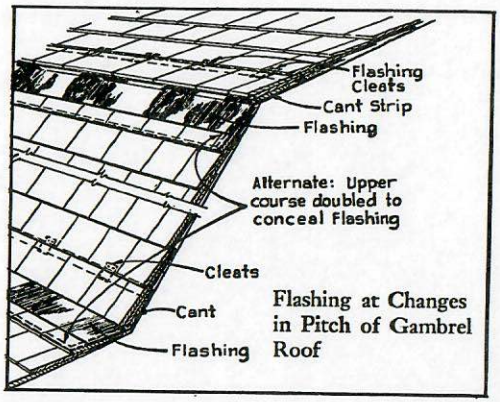
- At joints between masonry and woodwork
- Between siding and decorative molding
- Around columns, capitals and gingerbread details
- Between siding and drip caps on windows and doors
- Between siding and window sills
- Between siding and frames of doors and windows
- Between porches, masonry steps and house foundation

FLASHING, GUTTERS, AND DOWNSPOUTS

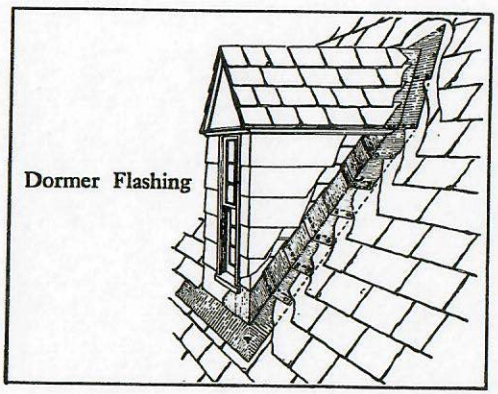
Where vertical elements penetrate the surface of the roof, the juncture must be flashed carefully or leaks will almost certainly occur. Flashing around chimneys is in two parts: base flashing, which is fitted into the shingles, and the upper (cap) flashing, which is built into the brickwork as the chimney is laid. One piece of base flashing should be used for each course of shingles, and it should extend onto the roof surface at least four inches. Flashing around dormers is similar, but cap flashing is omitted since the base flashing is turned up under the dormer wall covering. Where roofs change pitch it is necessary to flash the break. Generally, the flashing is carried under the upper course of shingles and out on top of the lower course, but it may be hidden by doubling the lower course of shingles. Nails driven into the flashing should be embedded in lead washers to prevent leakage.

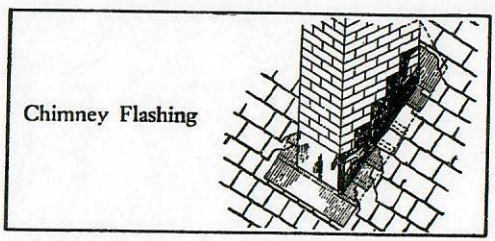
When checking the roof each spring, the homeowner should clean gutters of all dirt and leaves. If the gutters are clogged, water will spill down the wall, soon staining and deteriorating cornices and siding.

Hung below the eaves, gutters get heavy when filled with ice and should be supported every 30 inches to prevent sagging or collapse. Since metal will expand and shrink with changes in temperature, room must be left to allow gutters to expand free of their supports. Gutters must slope down about one inch for every 16 feet of length to insure proper drainage. Be sure to install a screen at the downspout opening to keep leaves out. If aluminum gutters and downspouts are used, select a colored anodized or baked enamel finish which blends well with the house colors.



Flashing at Changes in Pitch of Gambrel Roof





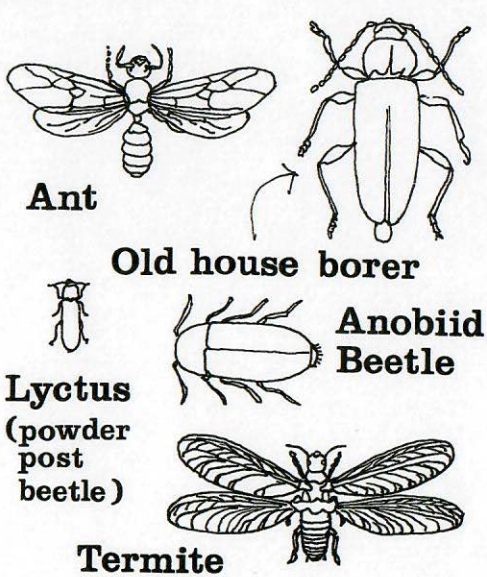
Drawings taken from *Dwelling House Construction* by Albert H. Dietz, 1971. Used by permission of the M.I.T. Press.

Signs of Severe Settlement

FOUNDATIONS

A sound and watertight foundation is essential to the maintenance of your house. If discovered early, problems can usually be corrected with simple procedures and minimal expense. But untreated foundation problems will cause irreversible damage like excessive settlement of the house or the infestation of termites or other insects.

Check your basement and foundation walls often enough to keep your peace of mind that all is in order (a few hours after a heavy rainfall is the best time to check). Armed with a light and ice pick, you will want to look carefully for any developing cracks, and check the soundness of mortar and wood structural members.



KNOW YOUR ENEMY

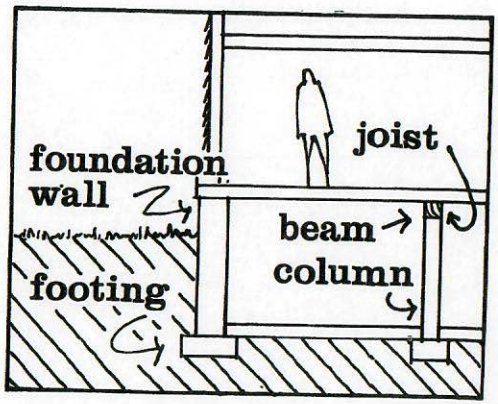
Long cracks in basement walls usually indicate settlement. Check the interior walls upstairs for cracks. If none appear, your house probably settled some when it was first built but is now stable. Recent or reappearing cracks (patched areas where cracks reappear) may indicate serious continued settling, and you will want to call in a professional at once.

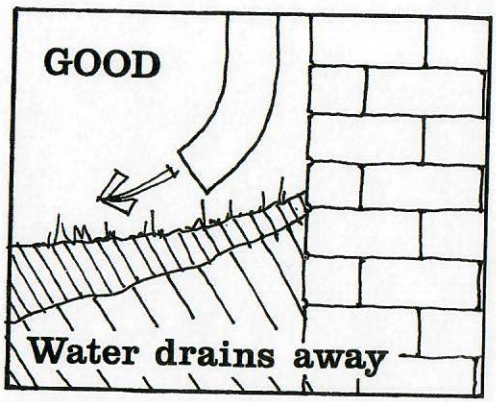
A basement suffering moisture problems should be waterproofed since persistent dampness may soon lead to structural deterioration. If excessive moisture is evidenced, begin by checking the outside of the foundation.

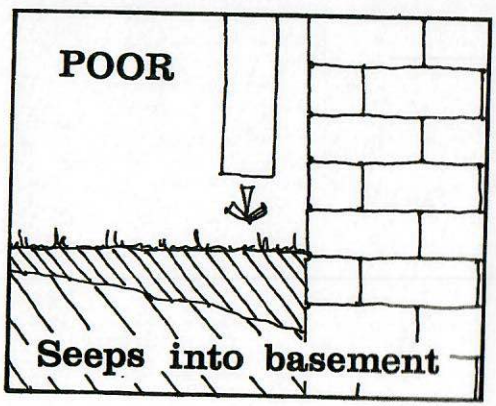
Watertables and downspouts are traditional means of directing rain water away from the edge of the building. Thirsty plants or gravel to aid run-off are also commonly used along foundations. While bricks and stone in walls are extremely weather-resistant, the joints between them can deteriorate slowly as water, ice, and temperature changes work on them. Deteriorated mortar joints will allow water (which, underground, is under great pressure) to work its way through the wall. Repointing the joints, thoroughly cleaning the wall, and then painting it with a standard basement waterproofing paint will usually solve moisture problems.

If the condition of your basement walls has deteriorated to the point that the exterior surface (below grade) needs sealing, or if excessive water pressure requires it, you will most certainly want the advice of a professional. Procedures to solve this problem are often expensive and require special materials and expertise.

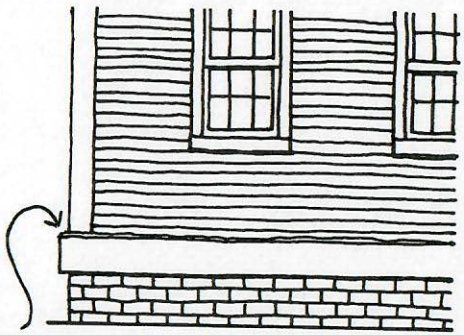
Unventilated and periodically wet wood invites dry rot, a fungus growth which, like termites, lives on wood cellulose. Undetected, termites or rot can eventually collapse a wood frame home, so periodic inspection for these pests is a necessity. Probe all vulnerable areas—where sill and joists rest on masonry walls and other areas where moisture is most likely to







be trapped. If you can easily penetrate the wood to about one inch, it is sufficiently damaged to warrant replacement. If you check your basement regularly and call in a professional exterminator at the first suspicion of trouble, these destructive pests can be stopped and considerable replacement expense avoided.



WATER TABLES:

A NOTE ON BRICKWORK

Because of its extreme durability as a building material, brick is often mistakenly thought of as a maintenance-free material. Older brick buildings and foundations will eventually require care, and in recent years some controversy has arisen about the best methods for cleaning and repairing older masonry structures. For those of you who would like some assistance in considering the different procedures, we have included a summary of the care of masonry.

The cleaning process may be one of three types:

1. *Steam Cleaning*

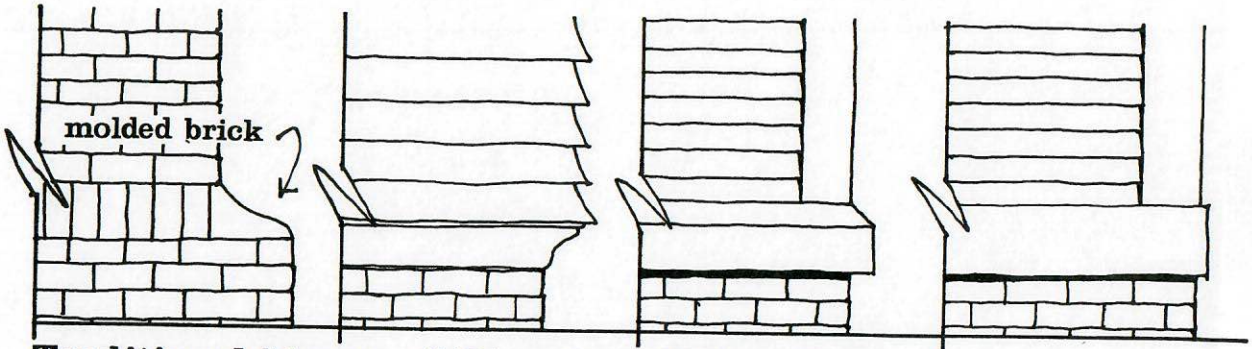
   Best done by a professional, this method is sufficient for removal of dirt, lichen, and rust stains. More severe stains or paint removal will require chemical solvents.

2. *Chemical Solvent Cleaning*

   This involves washing down and scrubbing with a solution usually containing muriatic or hydrochloric acid. It is a good general cleaning method which can easily be done by the energetic homeowner himself. Care must be taken to keep the solution off non-masonry surfaces to prevent staining or etching. The use of a high pressure water hose (300–500 psi), which can be rented, will greatly facilitate the process.

3. *Sandblasting*

   This method is expensive, requires professional help, and is generally *not* recommended. It destroys a bit of the top brick surface and leaves it porous and open to further weathering effects. It generally is a method used only for the most badly stained brick surface and should not be undertaken without professional help.



Traditional Means of Directing Water Away

If brick is to be painted, latex paint is best. It allows the brick to breathe and will not peel as quickly as oil paints, provided the surface is scraped clean of any existing oil paint before the new latex is applied.

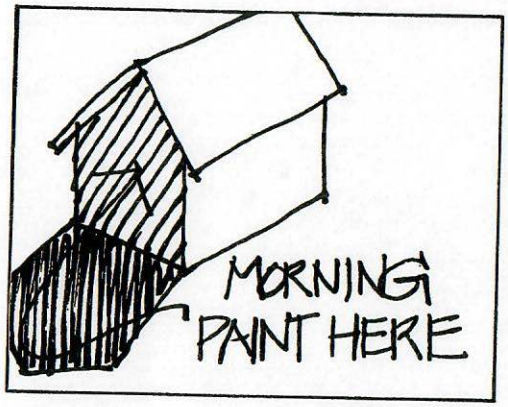
When bricks do need to be replaced, make every effort to match the size and color of the existing brick and set the brick in courses that match the original bond pattern.

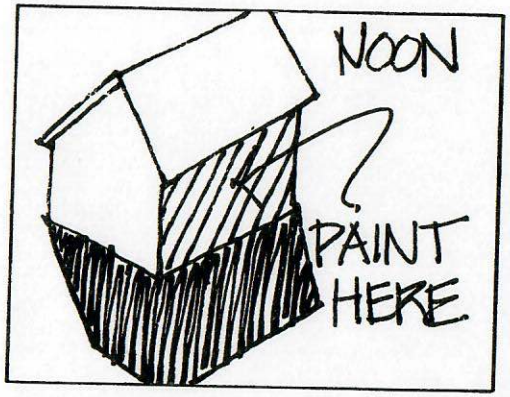
Never cover brick with another type of siding. Repointing costs no more than metal siding and will last longer.

A richly-textured brick wall is superb. For this reason a dark mortar is best as it emphasizes the wall as a whole rather than the individual bricks. When a light mortar is used, each brick appears to stand out.

If new brick is to be integrated successfully with an old wall, it must match each of these variables:

1. The color, texture, and size of the bricks themselves.
2. The width of the joints between the bricks.
3. The color and tone of the mortar in the joints.
4. The type of joint (it may be flush with the brick face or raked back to form a groove).
5. The bond of the bricks (the pattern in which bricks are laid).





PAINTING

Painting may well be the most common maintenance chore encountered in the care of a wood frame house. While new paint types have simplified this task somewhat, there is still much more to a "professional" painting job than a quick coat of the season's bargain paint. With a discriminating look you can read the extent of wear to your existing paint, and you can also usually determine the cause of problems that shorten the life of a paint job. The successive stages of wear to a painted surface are:

1. *Soiling*—dirt collects on the surface.
2. *Flatting*—gloss disappears.
3. *Chalking*—the surface becomes powdery. Accumulated dirt will wash off leaving the surface dull though fairly clean.
4. *Fissuring*—the surface either becomes checkered by small, superficial cracks that eventually penetrate the wood, or it develops major cracks, in which fissures pass through to the wood almost immediately.
5. *Disintegration*—either crumbling or flaking of the surface, causing pieces of the paint to fall away.

If you allow your paint to go beyond the chalking stage so that weathering reaches to the wood itself, it will be necessary to remove all old paint before new paint can be applied. This is an expensive and time-consuming task which is best avoided!

Check the list of some common paint problems and their causes. Often the life of a coat of paint will be shortened by poor application or moisture problems trapped behind the painted surface. To get the most from your time and money, it is best to know what mistakes to avoid when painting.

The paint defects described are of two types: defects caused by poor paint and defects caused by poor preparation of the surface or poor workmanship.

If there is evidence of one of these paint problems on your house, it is probably best to scrape the old paint and start fresh in order to gain the longest life from the new paint. Most old houses have probably been painted five or more times and the surface may have reached its saturation level—the point at which the thickness (.016 inches or greater) prohibits the passage of moisture through the surface. If not capable of "breathing," the paint coat will invariably soon peel or crack away from the underlying wood surface.

Removing old paint is a time-consuming job but will save maintenance costs and labor in years to come! Three removal methods are sanding, burning the paint off with a propane torch, and chemical removers. Sanding by hand is only for the most devoted old home buff—it takes time, time, time. An electric sander will do the job faster and just as well, provided you take care not to dig into the wood surface. If you use a torch to soften the paint with heat, be careful not to scorch the wood! Remove the loosened paint with a putty knife, then scrape and sand the surface. If chemical removers are used, remember to wear gloves and to wash down the surface well before preparing for the prime coat.

PAINT PROBLEMS

EVIDENCE	CAUSE
Heavy checking and "alligatoring"	Undercoats are too soft—either poor paint or insufficient drying between coats.
Heavy cracking and scaling	Paint pigments that promote brittleness and hardness are responsible.
Blistering and peeling	Moisture in the wood behind the paint—either because the wood was too wet when painted or because moisture worked its way behind the paint film.
Spotting or loss of gloss	Too thin paint films which cause absorption of oil by the wood and permit premature loss of gloss, fading, and chalking.
Wrinkling or sagging	Excessively thick coats which will skin over quickly without hardening underneath until a later time, when wrinkles develop.
Excessive soiling	The surface film contains too much oil and is apt to be soft and tacky and collect dirt in excessive amounts.
Mildew	Often mistaken for soiling, mildew is apt to occur in warm, damp, shaded areas in which ventilation is poor. A cleaning solution for mildew: 3 qt. warm water, 1 qt. bleach, 2/3 cup Borax, 1/2 cup detergent.

Tips on Painting

1. Choose your colors carefully. See the color chart and suggestions in the Design section of this handbook.

2. Determine whether you can repaint or will need to scrape off old paint. If you can repaint, determine the type of paint already on the house. If it is an oil base paint, the wisest choice is to repaint with an oil base—applying a latex (water base) paint over an oil base is inviting problems. If you must mix paint types, never apply a latex to a surface that is still glossy—wait until it has dulled for better adhesion. If you have decided to invest the energy in scraping the surface clean of old paint, prepare the surface carefully with two prime coats of a solvent-based primer, allowing drying time between coats. The first coat should be 4-to-1 (4 quarts of paint to 1 quart of mineral spirits) to drive the paint into the wood surface. (A 1-to-1 turpentine-linseed oil combination can also be used for the first prime coat.) The second coat should be full strength. One top/finish coat should be sufficient with proper priming. (If you are using a latex paint and mildew is a problem, two top coats should be used.)

3. When selecting a paint, remember that the primer and top coat should be considered *together*. If they don't mix well, you are painting on future problems. The safest course is to purchase a primer and top coat of the same brand.

4. Before you begin to paint make sure that you have taken care of any severe moisture problems, caulked where necessary to make all joints

watertight (see the checklist on page 78), and thoroughly cleaned and prepared the surface for painting.

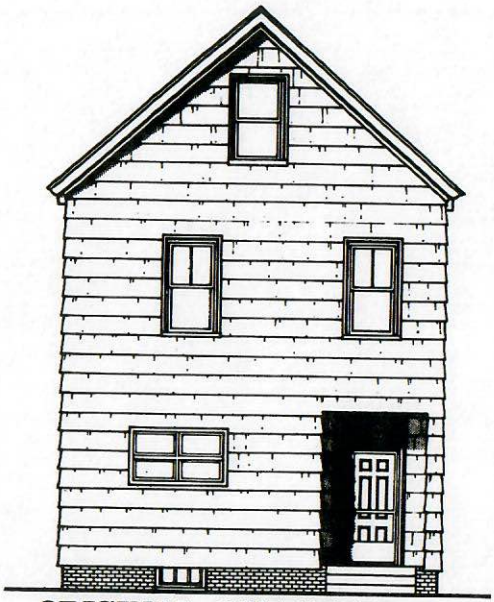
5. Choose a good day for the job—if it looks like rain, wait! Never paint in direct sun or excessive cold (above 40 degrees is best).

6. For doors and porches consider using a polyurethane finish in place of varnish or shellac. Do not use any other finish on top of the polyurethane without roughing up the surface with sandpaper or a wire brush first.

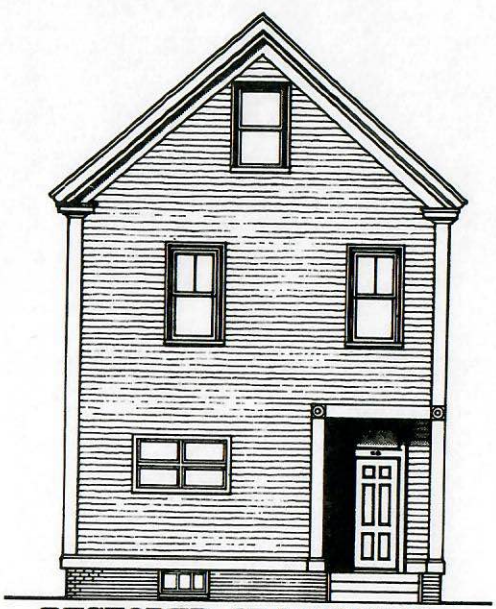
7. When cracking, peeling, and blistering are a recurring problem, consider using one of the new heavy-bodied opaque stains. These stains closely resemble the appearance of paint but often outperform a painted finish. The surfaces must be properly prepared (scraped, sanded, and primed as necessary) for the stain to be effective. Except in the case of very light colors being applied over very dark colors, one coat of opaque stain often completely covers the old paint. If you choose to use a stain, be sure to follow the manufacturer's instructions carefully.

8. You may want to seek restoration advice from either Historic Salem, Inc., SPNEA (The Society for the Preservation of New England Antiquities), or a qualified restoration architect.

9. Remember: you get what you pay for. Labor is the greatest expense in repainting, so don't skimp on the quality of your paint!



ORIGINAL CONDITION



RESTORED CLAPBOARD

REHABILITATION SURVEY

Throughout this handbook we have stressed style and design features that affect the overall attractiveness of a house. Though appearance will strongly influence any home improvement decision, the *cost* of the work may be an even more important consideration.

To give you a range of rehabilitation expenditures, three residences in Salem were used as models. All estimates are case-specific to the properties, reflecting their materials, condition, and size. Consequently, do not expect the itemized costs to be the same for your house. These are just examples so you can see the extent of work and type of expenses you might anticipate.

In each example, "basic" and "extensive" rehabilitation costs were compared. A basic rehabilitation includes those alterations which are necessary for a building to stand in safe, sound condition. While existing architectural details are repaired, none are replaced. Extensive rehabilitation, on the other hand, calls for the repair and replacement of original details. Because this involves more extensive work, the cost is substantially higher.

As you will note on each cost-out we have addressed only *exterior* work, and in each case the final figure includes materials and labor. Thus, the figure for replacing clapboard, trim, windows, etc. reflects the *entire* exterior cost. Also remember that cost varies depending on the degree of deterioration. Consequently, the repointing expenses of one foundation can be more or less than those of another. Finally, you should be prepared to expect up to a 25% increase in any estimate. This contingency allowance is a standard cost for all construction to account for escalating material prices and unforeseen problems.

For your reference, assumptions regarding unit costs have been listed.

Repointing brick	$10. per square foot
Repointing granite	3. per square foot
Cornice and trim repair	10. per square foot
Cornerboards (replacement)	$ 4. per linear foot
New roofing	150. per square

(A "square" [100 square feet] is the standard unit for both roofing and siding materials. For roofing material we have specified red cedarwood shingles treated with a fire retardant. The price includes the removal of nails and tarpaper and assumes 25% replacement of roof sheathing.)

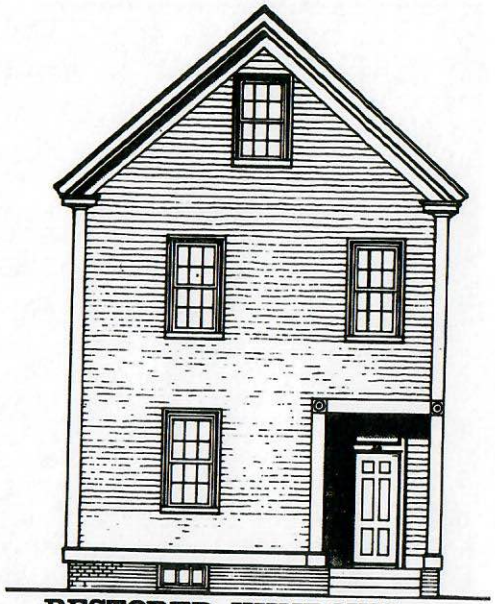
Window sash	$ 80. per unit (for 6/6)
	85. per unit (for 12/12)
Window frames	100. per unit

(Smaller basement windows will cost about $60. each for total replacement.)

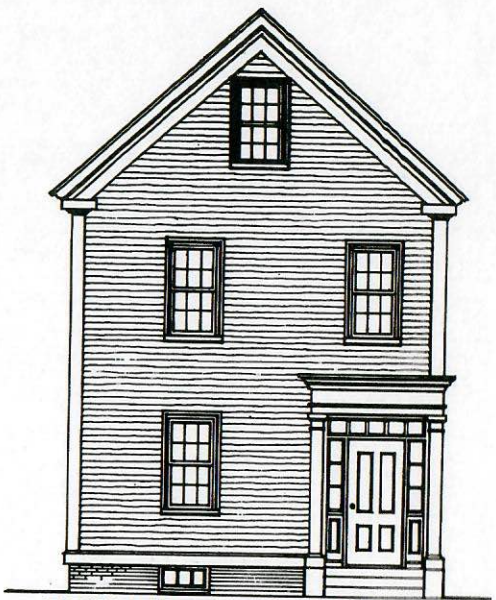
Clapboards	$125. per square
Painting	0.50 per square foot

(Price includes preparation of the surface and prime coat plus two coats of oil-based paint.)

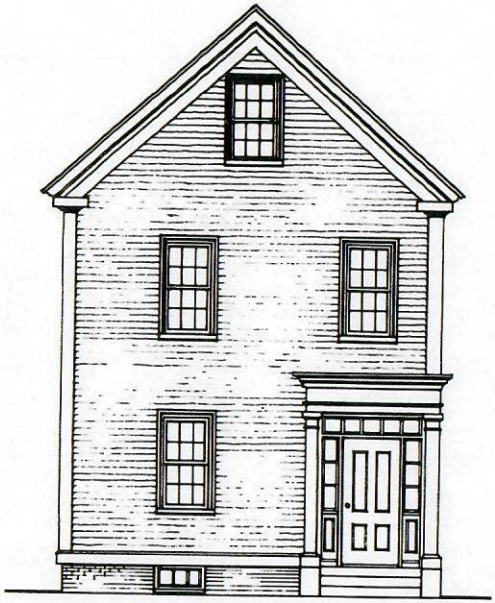
Wood gutters and leaders	$ 4. per linear foot
Picket fence	12.50 per running foot



RESTORED WINDOWS



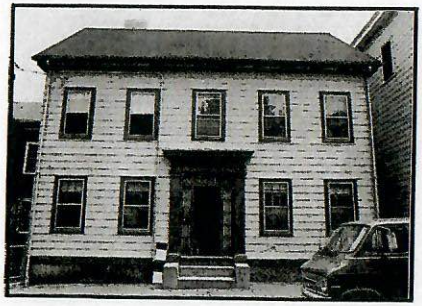
RESTORED ENTRANCE

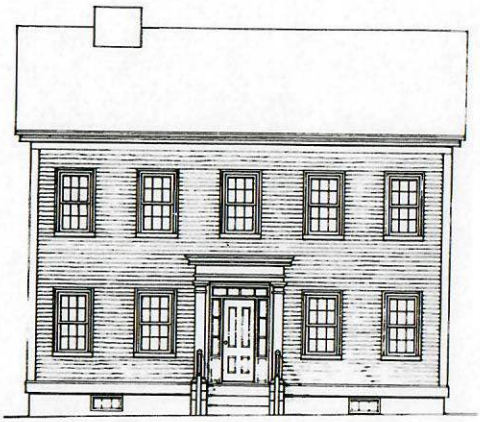


28 BECKET STREET is a much altered wood frame Greek Revival residence which illustrates dramatically how the building's appearance can improve from a given cash investment.

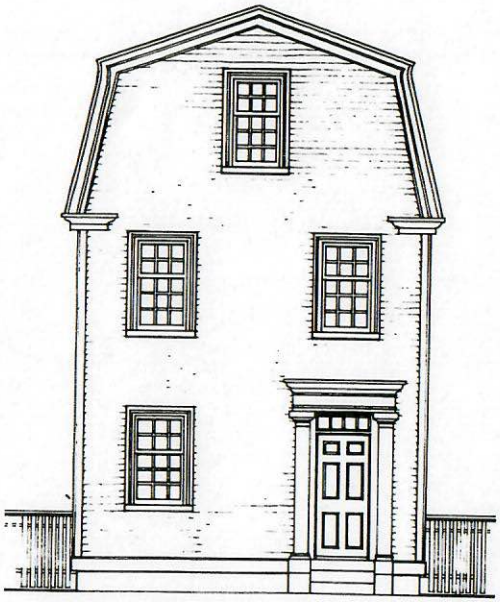
BUILDING COMPONENT	BASIC REHABILITATION ACTION	COST	EXTENSIVE REHABILITATION ACTION	COST
Foundation	Repoint all brick	$2000	Repoint all brick	$2000
Chimney	Repoint all brick	250	Repoint all brick	250
Stairs or Steps	—	0	New wooden steps for front entry	300
Roof & Flashing	—	0	New treated wood shingle roof	1500
Cornice & Trim	Patch and repair existing elements	1760	Repair or replace all trim. Add cornerboards and sill board	2080
Siding	—	0	New wooden clapboards on front and side (repair existing clapboards on rear and side)	1750
Windows	Repair 15 existing frames	1500	Replace first floor window (400) Replace 15 sashes to 6-over-6 (1200) Repair 15 frames (1500)	3100
Door	—	0	Replace with 4-panel wooden door (200) Rebuild entry out to street (1500)	1700
Painting	Paint all siding and trim	1500	Paint all siding and trim	1500
		$7010		$14,180

7 CARLTON STREET is a wood frame two-family Greek Revival residence. Although the granite foundation needs minor repointing and the basement windows need replacing, the building is in sound condition. The modern asbestos siding, altered entry, and unfortunate placement of the electrical supply line are masking the potential of this home.

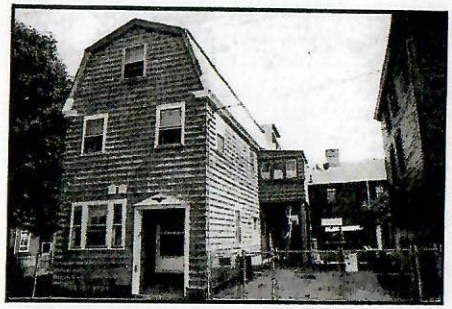




BUILDING COMPONENT	BASIC REHABILITATION ACTION	COST	EXTENSIVE REHABILITATION ACTION	COST
Foundation	Repoint all granite	$ 750	Repoint all granite	$ 750
Chimney	—	0	Rebuild	500
Stairs or Steps	—	0	Remove concrete steps and replace with wooden steps and handrail	650
Roof & Flashing	—	0	New treated wood shingle roof	1800
Cornice & Trim	Patch and repair all existing elements	1250	Replace trim and add cornerboards	2050
Siding	—	0	New wooden clapboards	3500
Windows	Repair 28 existing windows (2800) Replace 2 basement windows (120)	2920	Patch and repair 28 existing Replace 2 basement windows	2920
Door	Replace with 4-panel wooden Greek Revival style door	200	Replace door, transom, and sidelights	700
Painting	Paint all siding and trim	1400	Paint all siding and trim	1400
Additional	—	—	Relocate power supply line to off-street side of house	450
		$6520		$14,720

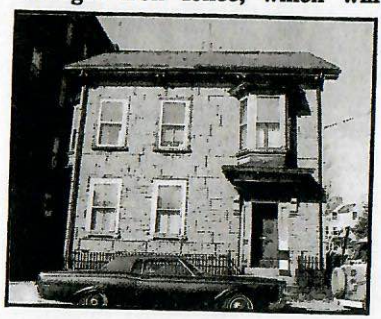


109 DERBY STREET is a wood frame two-family Georgian residence. As discussed and illustrated on page 35, retention of a modern front entry is recommended in renovation. Restoration, on the other hand, would involve replacement of both the entry and the modern window on the first floor, costing approximately $1400.

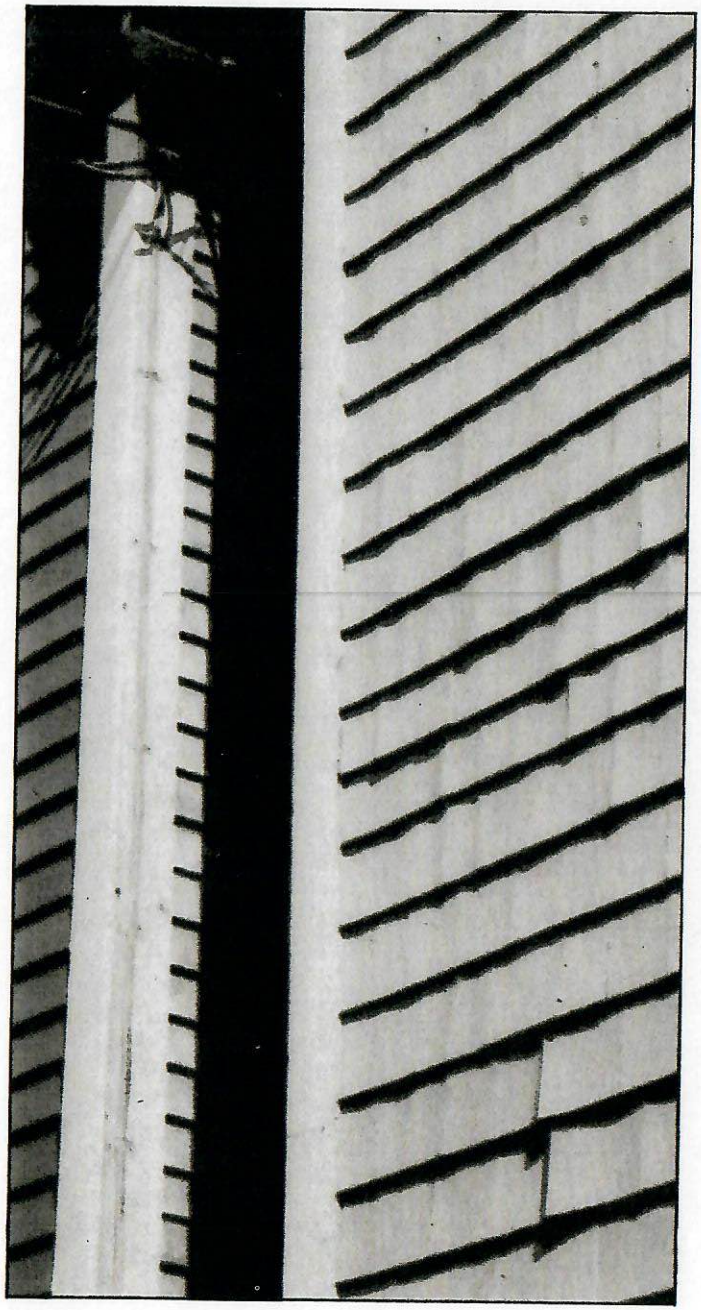


BUILDING COMPONENT	BASIC REHABILITATION ACTION	COST	EXTENSIVE REHABILITATION ACTION	COST
Foundation	Repoint all granite	$ 750	Repoint all granite	$ 750
Roof & Flashing	—	0	New treated wood shingle roof, new flashing	2500
Cornice & Trim	—	0	Add cornerboards and sill boards	2000
Siding	—	0	Replace shingles with new wood clapboards	3750
Windows	Replace one window sill and frame	180	Replace picture window on first floor (400). Replace 6-over-6 sash in 20 windows (1600) Replace 6-over-6 sash in 20 windows (1600)	2000
Door	Simplify existing entry (Alternative 1, page 35)	300	Replace with restored entrance and door	1000
Painting	Paint all siding and trim	1500	Paint all siding and trim	1500
Additional	—	0	Replace chain link with wood picket fence	250
		$2730		$13,750

44 ESSEX STREET is a two-family late Victorian Eclectic residence with many of the fine details that characterize this style: an ornate cornice under the eaves, bracketed door hood, and projecting oriel window bays. Fortunately, as is characteristic of Salem homes, little of major consequence has been done through the years to alter the historic character of the house. Removal of the asphalt siding, patching and repairing trim, and liberal use of paint could accomplish a dramatic restoration. The wrought iron fence, which will require minor repair, should be retained as an especially pleasing feature of this late nineteenth century house.



BUILDING COMPONENT	EXTENSIVE REHABILITATION ACTION	COST
Foundation	Granite in good condition. No work necessary.	$ 0
Roof & Flashing	Strip, sheath with plywood, and repaper; then reshingle	2500
Gutters	Gutters in poor condition Repair and replace	1000
Chimney	Good condition. No work necessary	0
Cornice & Trim	Rebuild fascia & soffit (350) Repair/replace cornerboards (300)	650
Siding	Peel off asphalt. Repair/replace clapboards (assume 30% replacement) Re-nail existing clapboards in good condition	1500
Windows	Rebuild 24 windows as necessary	1560
Door	Replace rotted soffit, dentil, and fascia. Rebuild frame	1000
Painting	Paint all siding and trim	1500
Porches	Repair	500
		$ 10,210



RESOURCES

HOME INSPECTION CHECKLIST *

Restoring an old house can be one of the most creative and exciting experiences of your life. But a house can also be a trap for the unwary. Behind that charming facade may lurk a host of mechanical and structural faults that will tax your patience and empty your bank account.

This guide is not designed to take the place of an evaluation by a professional house inspector. This Checklist will, however, help you eliminate from consideration those houses that are more than your budget can handle. If you already own an old house, use this Checklist as an annual check-up. Thorough inspections at regular intervals will help you catch little problems before they become big ones.

COME PREPARED

When setting out on an old house inspection, you should have with you: Flashlight, small magnet, plumb line (string with small weight will do), penknife, a pair of binoculars, pad and pencil, and this inspection checklist.

THE ROOF:

A sound, tight roof is the first line of defense against the #1 enemy of an old house: water. If the roof is in bad shape, you should plan to repair—or replace—it right away.

1. Type of roof on house (arranged in approximate order of longevity):

☐ Slate (1)	☐ Wood Shakes (6)
☐ Copper (2)	☐ Wood Shingles (7)
☐ Ceramic Tile (3)	☐ Galvanized Steel (8)
☐ Tar & Gravel (4)	☐ Asphalt Shingles (9)
☐ Asbestos Tile (5)	☐ Roll Roofing (10)

	YES	NO
2. Gable roof: Any sign of missing, broken or warped shingles or tiles? (This could mean roof will have to be replaced soon. It can also mean that there is water damage inside.)	☐	☐

Note: Binoculars can give you a good close-up view if it is impossible to actually get up on the roof.

3. Asphalt shingles: Are the mineral granules getting thin and do edges of shingles look worn?	☐	☐
4. Asphalt shingles: Does roof look new but lumpy? (New roof may have been applied directly over old shingles. No way to tell what sins may have been covered over.)	☐	☐
5. Flat roof: Any sign of bubbles, separation or cracking in the asphalt or roofing felt? (Roofing should be flat and tight; it shouldn't feel squishy under foot.)	☐	☐
6. Flashing around chimneys & valleys: Any sign of rusty, loose or missing flashing? (Flashing is the weakest part of any roof. Copper is the best flashing and will show a green patina.)	☐	☐
7. Chimneys: Is the masonry cracked or crumbling?	☐	☐
8. Do the old chimney flues have a tile lining? (If not, they could be a fire hazard in conjunction with wood-burning fireplaces.)	☐	☐
9. Gutters: Are there any loose, rotted or missing gutters?	☐	☐
10. Does the ridge of the roof sag? (This could be normal settling that comes with age—or it could be caused by rotted rafters. Check further!)	☐	☐

*Adapted with permission from *The Old-House Journal*, 199 Berkeley Place, Brooklyn, New York 11217.

	YES	NO
11. Cornice: Is there badly peeling paint on the cornice—especially the underside? (This can be sign of a roof leak that is spilling water into the cornice.)	☐	☐

EXTERIOR WALLS:

1. Do exterior walls seem plumb? (You can check with a plumb line; a weighted string will do. Out-of-plumb walls can be a sign of serious foundation problems.)	☐	☐
2. Sight along exterior walls. Any sign of major bulges? (This could signal major structural flaws.)	☐	☐
3. Do doors line up squarely in their frames? (Out-of-square doors can be another sign of possible foundation trouble.)	☐	☐

Note: Almost all old houses settle in a haphazard manner. So signs of sag are not necessarily a major drawback. But it does mean a thorough investigation should be made to find the root causes. Some sags require no remedy. Others can be cured with a few extra support posts. Still others may require major foundation surgery.

4. Is decorative woodwork firmly attached to house and tightly caulked to prevent water penetration?	☐	☐
5. Is exterior paint fresh and in good condition?	☐	☐
6. If paint is not new, is it powdering and chalking to a dull powdery surface? (This is the way old paint should look.)	☐	☐
7. Is paint peeling, curling and blistering? (This could mean a serious water problem—either a leak or lack of sufficient vapor barrier in wall.)	☐	☐
8. Are there open joints around door frames, window frames and trim? (These will have to be caulked.)	☐	☐
9. Are joints between dissimilar materials (e.g., wood and masonry) well protected with flashing or caulk?	☐	☐
10. Is putty around window glass sound and well painted?	☐	☐
11. Masonry walls: Any signs of cracks? (Horizontal cracks and hairline cracks in bricks are not a major problem; cracks that run vertically through bricks and mortar are more serious.)	☐	☐
12. Is mortar soft and crumbling; are bricks missing or loose? (Loose masonry is vulnerable to attack by water. . . and having a masonry wall repointed with fresh mortar is expensive.)	☐	☐
13. Has masonry been painted? (It will have to be re-painted about every 5 years, or else stripped—a major task.)	☐	☐
14. Stonework (especially sandstone): Any sign of spalling, cracking or crumbling of the stone? (This can be expensive to repair.)	☐	☐
15. Clapboards: Are many loose, cracked or missing? (This is an open invitation to water—and rot.)	☐	☐
16. Shingles: Are they thick and well nailed? (Thin, badly weathered shingles may have to be replaced.)	☐	☐
17. Do shingles have a natural finish? (Natural finishes are easier to re-apply to shingles than is paint.)	☐	☐

TERMITES & ROT:

1. Termites: Any sign of veins of dirt on interior or exterior walls? (These are termite mud tunnels. Look for them on foundation, under porches, steps and on cellar walls.)	☐	☐
2. Does wood near the ground (both outside and inside) pass the "penknife test"? (Wood should be probed with penknife to test for soundness. Check areas such as cellar window frames, sills, floor beams and posts, porches and steps.)	☐	☐

YES NO

Note: Unsound wood can be caused by either termites or rot. Rot can be arrested by shutting off the source of moisture. Termites call for chemical warfare. If unsure about the cause of bad wood, call in the experts.

3. Is all exterior wood at least 6–8 in. above the ground? (If not, this is an inviting target for termites and/or rot.) ☐ ☐

4. Is there any vegetation close to the house? (Vegetation holds moisture in wood. Be sure to check behind it for rot.) ☐ ☐

5. Any signs of rot in cornice or attic beams? (Leaking roofs and gutters often spill water into top of house where it goes undetected for long periods.) ☐ ☐

THE ATTIC:

1. Any sign of leaks (such as dark water stains) on the underside of roof, especially around chimneys, valleys and eaves? ☐ ☐

2. Is attic adequately vented? (Check especially for signs of mildew on underside of roof boards.) ☐ ☐

INSULATION:

Note: Most houses built before 1940 had no built-in insulation. However, some old houses will have had insulation added. Houses with brick or stone walls rarely have any wall insulation. With cost of fuel soaring, a well-insulated house is a big asset.

1. Attic: Any loose fill insulation visible between attic floor joists? (This is best place for attic insulation.) ☐ ☐

2. Has insulation been blown into side walls? (In cold weather you can tell how good wall insulation is by feeling the inside of an exterior wall and comparing with temperature of an interior partition. They should feel about the same.) ☐ ☐

INTERIOR SPACES:

1. Are there any signs of damp plaster? ☐ ☐

YES NO

(This means leaks coming either from roof or internal pipes. Check especially top-floor ceilings, the inside of exterior walls, and ceilings and partitions under bathrooms.)

2. Is there any loose plaster in walls or ceilings? (Cracks in plaster are par for the course—but plaster that is spongy when you push on it will have to be repaired or replaced.) ☐ ☐

3. Is there a noticeable bounce to the staircase when you jump on it? Are there any noticeable gaps between treads, risers and side stringers? (Substantial vibration may mean structural problems that will be quite costly to correct.) ☐ ☐

4. Is flooring original and in good repair? (Floors covered with carpet or linoleum can harbor many problems—especially if you want to restore the original flooring.) ☐ ☐

5. Do floors have a pronounced sag or tilt? (This could just be normal settling or serious structural flaws. Check for cause.) ☐ ☐

6. Do floors vibrate and windows rattle when you jump on floors? (This is symptom of inadequate support. Among possible causes: Undersized beams, inadequate bridging, cracked joists, rotted support posts. Often this can be cured fairly simply with a few new support posts.) ☐ ☐

7. Windows: Do sashes move up and down smoothly? ☐ ☐

8. Do window frames show signs of substantial water leakage? (Look for chipped and curling paint at bottom of sash and sills. This can be cured with caulk, putty and paint.) ☐ ☐

9. Are there smoke stains on the front of mantels? (This is a sign of a smoky fireplace. It can be cured—but it is a bother.) ☐ ☐

FOUNDATION: YES NO

1. Is there a dug cellar with wood sills resting solidly on a masonry foundation well above ground level? (Some old structures have "mud sills"—heavy beams resting directly on the ground. These eventually have to be replaced which is a major undertaking.) ☐ ☐

2. Is mortar in foundation soft and crumbling? (This is not necessarily serious if there is no sign of sag in the structure; ditto for foundation walls laid dry—without mortar.) ☐ ☐

3. Are there any vertical cracks in the foundation wall? (This could be serious, or it could be from settling that stopped years ago. Have an engineer check it.) ☐ ☐

4. Does ground slope away from foundation so that rain water drains off? ☐ ☐

5. Do downspouts have splash blocks to divert water away from house? (If downspout goes into ground, be sure it isn't pouring water into the earth next to the foundation—a flooded basement is the likely result. ☐ ☐

THE CELLAR:

1. Do sills (the wood beams at the top of the foundation walls) show signs of rot or termites? (Probe with penknife.) ☐ ☐

2. Any sign of dampness on the underside of floors around pipes? (If leaks have gone undetected for some time, there could be substantial wood rot.) ☐ ☐

3. Does basement show signs of periodic flooding? (It's a good sign if current owner stores important tools and papers on cellar floor. Bad signs: Rust spots, efflorescence or mildew on walls, material stored on top of bricks to raise it above floor level.) ☐ ☐

4. Any sign of sagging floors, rotted support posts or jury-rigged props to shore up weak flooring? ☐ ☐

5. Are the water pipes and large waste pipes in good condition? (The cellar is the best place to evaluate the over-all condition of the plumbing. For example, look for patches on the waste pipes; it's an indicator of advanced age. Replacement is expensive.) YES NO ☐ ☐

ELECTRICAL SYSTEM:

1. Does wiring in cellar appear to be a rat's nest of old frayed wires? ☐ ☐

2. Does main power box in cellar have at least 100 amp. capacity? (An up-to-date installation will have capacity marked on it. An old fuse box with only 3-4 fuses in it means there may only be 30-40 amp.—far too little. A rewiring job will be needed.) ☐ ☐

3. Do all ceiling light fixtures have wall switches? ☐ ☐

4. Is there at least one electrical outlet on each wall in every room? ☐ ☐

5. Is there any sign of surface-mounted lampcord extension wiring? Multiple cords plugged into a single outlet? (This is a tell-tale of underwiring. Expect to hire some electricians.) ☐ ☐

PLUMBING:

1. What is the material of your piping? A magnet and small knife will tell you quickly. If it is copper, brass or lead, a magnet won't stick. When scratched with a knife, copper shows an orange-gold color; brass a yellowish-gold; and lead a silvery-gray. If the piping is galvanized/cast iron, the magnet will stick. ☐ ☐

2. Is water pressure adequate? (Test by turning on top floor sink faucets; then turn on bathtub and flush toilet. If water slows to a trickle, piping may be inadequate or badly clogged with scale.) ☐ ☐

3. Is plumbing connected to a city sewer system? ☐ ☐

YES NO

4. If there is a septic tank, was it cleaned in the last 3–4 years? (Overloaded septic tanks are a common source of trouble. It's best to call serviceman who did last cleaning and get his opinion of the system. Repairs can easily run over $1,000.) ☐ ☐

5. Is water supply from:

☐ City main ☐ Drilled well ☐ Shallow well

Notes on water supply: City main is the most dependable source; shallow (dug) well is the least desirable. If water is from a well it is best to get it analyzed by the County Agent for fitness. If water is from a spring, beware of claims that "spring never runs dry" unless you can verify it. You may end up paying to drill a well during a long dry summer.

HEATING SYSTEM:

1. Was heating plant originally designed to burn coal? (If so, it is probably more than 25 years old and may be a candidate for replacement.) ☐ ☐

2. Does heating system operate satisfactorily? (You can test the system even on a summer day: Move thermostat setting above room temperature. Heat from a hot-air furnace should appear at registers within a few minutes; in a steam or hot-water system, radiators should heat up in 15–20 min.) ☐ ☐

3. Will fuel bills present you with any unpleasant surprises? (Copies of fuel bills from the last heating season are the best measure of the heating system's efficiency.) ☐ ☐

4. Is capacity of hot water heater at least 40 gal.? (This is minimum required by a family of 4 with an automatic clothes washer.) ☐ ☐

5. Any sign of leaks or rust spots on the hot-water heating tank? (Check by peeking through small door that gives access to the pilot light.) ☐ ☐

YES NO

6. On steam heating systems, do floorboards around radiators show signs of black stains and rot? (This comes from leaks and indicates system hasn't been well maintained.) ☐ ☐

PRESERVATION AGENCIES

The following are useful resources for information on legislation, publications, national and state funding, as well as for assistance with local historic preservation issues.

The MASSACHUSETTS HISTORICAL COMMISSION is the state historic preservation agency. As such it is responsible for compiling the state inventory of historic assets; administering the National Register program; and coordinating with local historical commissions. Contact: 294 Washington Street, Boston, MA 02108. (617) 727-8470.

The SOCIETY FOR THE PRESERVATION OF NEW ENGLAND ANTIQUITIES (SPNEA) is the oldest and largest regional preservation organization in the country. Besides operating a large number of historic house museums, it has a Consulting Services Department which offers technical assistance to those seeking to make conservation or renovation plans for older buildings. Contact: 141 Cambridge Street, Boston, MA 02114. (617) 227-3956.

The NEW ENGLAND FIELD SERVICE OFFICE (jointly sponsored by the National Trust and SPNEA) serves as a clearing house for information concerning the legal, economic, and organizational strategies needed by preservationists. Contact: 141 Cambridge Street, Boston, MA 02114. (617) 227-8054.

HISTORIC SALEM INCORPORATED is a non-profit preservation organization concerned with conserving historic sites and buildings and increasing community appreciation of our architectural heritage. Contact: P.O. Box 865, Salem, MA 01970. (617) 745-0799.

BOOKS TO GUIDE YOU

This bibliography has been prepared with two objectives in mind. First, we have selected resources that expand on subjects discussed in this handbook. Second, we have listed only those publications that are readily available. Titles marked with an asterisk (*) are available from the National Trust Preservation Bookshop, 740-748 Jackson Place, N.W., Washington, DC, 20006. (202) 638-5200.

ARCHITECTURAL HISTORY

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*Kimball, S. Fiske. *Domestic Architecture of the American Colonies and of the Early Republic.* New York: Charles Scribner's Sons, 1922.

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*Whiffen, Marcus. *American Architecture Since 1780. A Guide To The Styles.* Cambridge, Massachusetts: M.I.T. Press, 1969. Concise guide to historical background and architectural trademarks of American stylistic tradition.

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Bullock, Orin M., Jr. *The Restoration Manual: An Illustrated Guide to Preservation and Restoration of Old Buildings.* Norwalk, Connecticut: Silvermine Publishers, Inc., 1966.

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Gladstone, Bernard (ed.). *The New York Times Complete Manual of Home Repairs.* New York: Macmillan Publishing Co., Inc., 1966.

*Greater Portland Landmarks, Inc., Advisory Service. *Living With Old Houses.* Portland, Maine: Greater Portland Landmarks, Inc., 1975.

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Hart, David. "How Old Is Your House? Methods to Determine Its Age." *Yankee Magazine* (July, 1976).

Judd, Henry P. *Before Restoration Begins: Keeping Your Historic House Intact.* Technical Leaflet 10.67. Nashville, Tennessee: American Association for State and Local History, in *History News,* Vol. 30, no. 1 (October 1973).

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Phillips, Morgan W. "The Eight Most Common Mistakes in Restoring Historic Houses (. . . And How to Avoid Them)." *Yankee Magazine* (December, 1975).

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*Stanforth, Deirdre, and Stamm, Martha. *Buying and Renovating a House in the City.* New York: Alfred A. Knopf, Inc., 1974.

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Williams, Henry L., and Williams, Ottalie K. *Old American Houses: How to Restore, Remodel and Reproduce Them.* New York: Crown Publishers, Inc., 1957.

PERIODICALS

The Old-House Journal. Brooklyn, New York: The Old-House Journal Company. (Subscriptions $12/year. c/o The Old-House Journal, 199 Berkeley Place, Brooklyn, NY 11217.) Addresses renovation and maintenance techniques for older homes, ranging from wood timbering to wallpaper identification.

Historic Preservation and *Preservation News.* Washington, DC: The Preservation Press. (These quarterly and monthly publications are free to members of the National Trust. Write to the National Trust for Historic Preservation, 740-748 Jackson Place, N.W., Washington, DC 20006, for additional information.) Covers historic preservation issues and projects across the country.

Technology and Conservation. Boston: The Technology Organization, Inc. (Subscriptions $8/year. c/o Technology and Conservation, One Emerson Place, Boston, MA 02114.) Focuses on the application of science and technology to the analysis and conservation of cultural objects and architectural structures.

Bulletin of the Association for Preservation Technology. Ottawa, Ontario. (Subscriptions $20/year. c/o The Association for Preservation Technology, Box C.P. 2487, Station D, Ottawa, Ontario, Canada.) Deals with the development of architectural preservation techniques.

Small Towns. Ellensburg, Washington: Small Towns Institute. (Subscriptions $15/year for members. Write to Small Towns Institute, P.O. Box 517, Ellensburg, WA 98926.) Excellent resource for the planning and political dynamics of small towns.

RELATED MATERIALS

**Neighborhood Preservation: A Catalogue of Local Programs.* Prepared by the Real Estate Research Corporation through a research contract from the Office of Policy Development and Research of the U.S. Department of Housing and Urban Development, February, 1975.

**A Standard Bibliography for Historic Preservation.* Compiled by Philip D. Spiess, II. Washington, DC: Preservation Press, 1975.

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Building the Future From Our Past. A Report On the St. Paul Historic Hill District Planning Program. St. Paul, Minnesota: Old Town Restorations, Inc., 1975.

College Hill. Providence, R.I.: Providence City Planning Commission, May 1967.

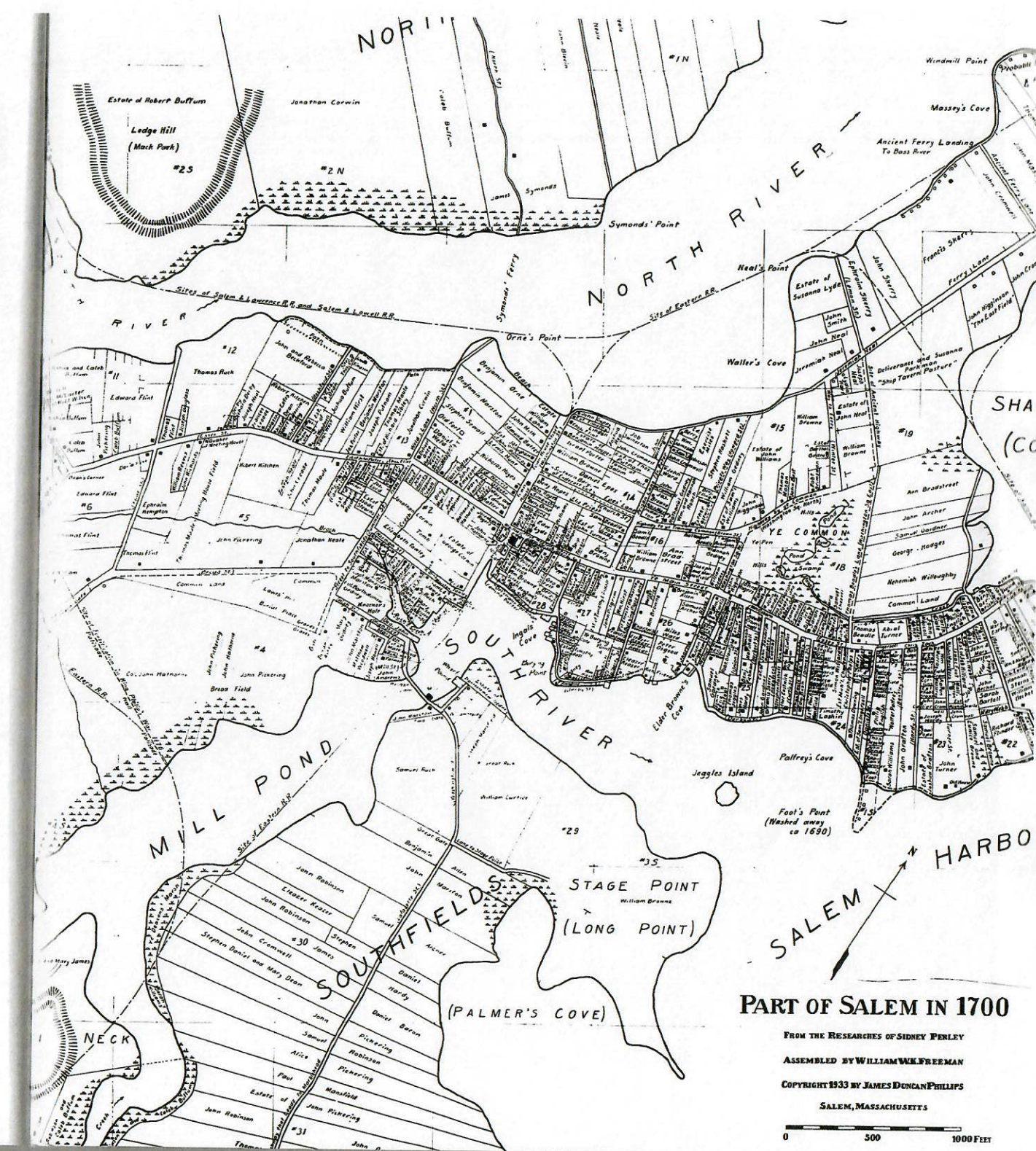
Old Anacostia, Washington, D.C. A Study of Community Preservation Resources. Edited by Anatole Senkevitch, Jr. Prepared by the School of Architecture at the University of Maryland, 1975.

Historic Preservation Plan. Savannah, Georgia. Prepared in conjunction with the neighborhood renewal study of Old Savannah, 1966.

The Urban Design Plan. Historic Hill, Newport, Rhode Island. Prepared for the Redevelopment Agency of the City of Newport by the Providence Partnership, Providence, R.I., and Russell Wright, A.I.P., 1971.

Maps of five old neighborhoods are available for public use. Please call the Historic Salem office and ask to see the EAST OF THE PALISADES INVENTORY.

The library at the ESSEX INSTITUTE houses a wealth of information about the history of Salem and its houses. Similarly, consult the main library for a reference copy of the REARDON REPORT, an architectural and historical building survey of Salem.



PART OF SALEM IN 1700

FROM THE RESEARCHES OF SIDNEY PERLEY

ASSEMBLED BY WILLIAM W.K. FREEMAN

SALEM, MASSACHUSETTS

0 500 1000 FEET

HOW TO GET THINGS DONE IN SALEM

HOW TO OBTAIN A BUILDING PERMIT

WHEN A BUILDING PERMIT IS REQUIRED

Ordinary repairs to a structure such as painting and minor carpentry can be made without application or notice to the Building Inspector. However, if you are in doubt about a planned "cosmetic" change, consult the Building Inspector at One Salem Green. He can quickly tell you whether or not the proposed change requires a building permit. Do remember that shingling, roofing, and the installation of siding all require a building permit. Likewise, any partitioning or cutting away of walls and changes in the means of egress necessitate a building permit. Finally, if the proposed change entails extensive structural renovation, a registered architect or engineer could be required. This would be left to the discretion of the building inspector.

PROCEDURE

Once it is determined that a building permit is required, proceed with the following steps:

STEP 1: Pick up an "Application for Permit for Alterations, Repairs, and Demolition" from the Building Inspector's office at One Salem Green. You can usually fill it out there. Although a licensed contractor may obtain the application and permit, ultimate responsibility for obtaining a permit rests with the owner of the property.

STEP 2: When you have completed the form, the Building Inspector will determine the plans necessary for submission. All plans (site and/or building) are requested in quadruplicate. This shows the Building Inspector how the proposed changes will affect the site, thereby alerting him to any potential zoning problem.

STEP 3: If the proposed renovation/alteration does not violate any zoning, building code, or historic district regulation, the Building Inspector grants a building permit. Although the Inspector frequently gives the building permit upon the receipt of the plan specifications, he must respond within 10 days.

STEP 4: The petitioner then pays a $5.00 application fee, and an additional $2.00 is paid for each $1000 estimated work to be done. The petitioner then proceeds to other departments to obtain any other necessary permits (electrical, plumbing, etc.). If an owner is qualified to undertake structural work, he may do so without a license. However, if someone is hired to assist him, that person must be licensed in Salem. This protects the property owner and the City of Salem from disreputable contractors and poor workmanship.

STEP 5: If the building permit is denied due to zoning violations, the applicant can petition the Board of Appeals for a variance or special permit. If the building permit is denied because code regulations are not met, the applicant can appeal to the State Building Code Commission. Or the applicant can simply re-work the proposed plan until the changes comply with the zoning or State Building Code regulations and a building permit from the Salem Building Inspector can be granted.

Note

- If alterations and/or repairs made within a 12-month period cost in excess of 50% of the building's physical value (based on the assessed value*) *or* if damage by fire and/or other cause costs in excess of 50% of the physical value of the building before the damage was incurred, then the repaired and/or renovated building must conform to the full requirements of the State Building Code.

*Section 106.5 of the State Building Code does provide that "current replacement cost less physical deterioration" may be substituted for assessed value provided satisfactory evidence is furnished. This should be done by a qualified independent appraiser.

HOW TO OBTAIN A VARIANCE OR SPECIAL PERMIT

WHEN EACH IS REQUIRED

Appointed by the Mayor and subject to City Council confirmation, the Board of Appeals in Salem consists of five members and two alternates. It is the responsibility of the Board to review all requests for variances or special permits. Because the zoning ordinance is designed to reflect long-range land use goals for the community, the granting of special permits and variances should be the exception rather than the rule. Variances, in particular, will be given only if unique conditions warrant it. Thus when a property owner proposes changes to his property (land, building, or structures) which do not conform to the zoning ordinance requirements, he must appear before the Board of Appeals at a public hearing. Then on the basis of hardship and/or the intent of the law, the Board has the sole authority to grant or deny the petitioner's request.

How does one know if one needs a variance or special permit?
Before you proceed with any plans for the property, you should consult the applicable sections of the Salem Zoning Ordinance. Copies are available at the office of the Building Inspector, One Salem Green, for your purchase and/or use. Depending upon the specific circumstances, changes in the use of a structure or the land itself may require a variance or special permit.

When is a special permit granted?
Special permits may be issued *only* for uses in harmony with the general purpose and intent of the zoning ordinance. Before the special permit is granted, conditions, safeguards and limitations on time or use may be imposed which further restrict the applicability of the permit.

When is a variance granted?
The conditions required for the granting of a variance are far more restrictive than those of a special permit. A property owner must show substantial hardship, financial or otherwise, which directly affects his or her property. The property owner must show that a unique hardship runs with the property (land, building, or other structure) owing to circumstances which influence his parcel *specifically* but do not impinge upon the zoning district as a whole. The property owner must also show that a variance can be granted without substantial detriment to the public good or substantial degradation to the purpose of the zoning ordinance. Just as the conditions, safeguards, and limitations of time and use may accompany the granting of a special permit, similar restrictions may accompany a variance. However, unlike the special permit, limitations based on the continued property ownership cannot be attached to a variance.

PROCEDURE

Once it is determined that a special permit or variance will be required, follow the steps outlined below:

STEP 1: *Special permit*
An application can be obtained from the Building Inspector's office at One Salem Green. This application will then be filed with the Board of Appeals.

Variance
First, you must apply to the Building Inspector for a building/occupancy permit. Because of the zoning violation, it will be denied. From this denial, you can then appeal to the Board of Appeals for a variance via an application from the Building Inspector's office. This appeal application must be filed within 30 days of the denial decision by the building inspector.

STEP 2: Prepare the official forms in triplicate along with two copies of a certified site plan. Generally a site plan must accompany a request for a special permit or variance, though in the former instance it might not be required if only minor changes are sought. All applications shall be accompanied by a check payable to the local newspaper to cover advertising fees.

STEP 3: Notice of the variance or special permit request must be given in the newspaper once in each of two successive weeks. The first notice and publication will be posted in City Hall and published in the local newspaper no less than 14 days prior to the Board of Appeals public hearing. Furthermore, notice by mail shall be sent to the petitioner, to all property owners within 300 feet of the petitioner's property, to the Planning Board, and to the planning boards of adjacent cities and towns. The notification of all affected abutters will be undertaken by the Board of Appeals. However, in the near future the petitioner may be required to bear the cost of notification.

STEP 4: Within 65 days after the filing of a special permit or variance application, the Board of Appeals must hold a public hearing. A copy of the rules of the Board of Appeals outlining the procedure of the conduct of this hearing is on file in the City Clerk's office. Generally the application is processed and placed upon the Board of Appeal's agenda within a month's time. However, circumstances could necessitate a lengthier consideration; consequently 65 days is allocated for advisement by the Board of Appeals if circumstances warrant it. Between the filing of the special permit or variance request and the public hearing the Board may seek recommendations from other Boards and agencies, such as the Planning Board, the Board of Health, or the Conservation Commission. Any recommendations must be made within 35 days from receipt of the petitioner's request. Otherwise it is assumed there is no opposition.

STEP 5: The granting of a variance or special permit will require the affirmative vote of at least four members of a five-member board and a unanimous vote if only four members are in attendance. A decision must be made regarding a special permit within 90 days of the public hearing. Failure to take final action to reach a final decision means the automatic granting of the petitioner's request for a special permit. Regarding a variance, a decision must be made within 75 days after the filing date of the petitioner's appeal. Failure to do so is deemed a granting of the variance, subject to possible judicial appeal. Usually the Board of Appeals rules on the petitioner's request the evening of the public hearing after all petitioners have been heard. Occasionally a petition will be taken under consideration, allowing Board members additional time to consider the request. Notice of the decision will be mailed to the petitioner, and to all property owners within 300 feet of the petitioner's property. Other interested parties may request that the secretary also notify them.

STEP 6: Within 14 days of its decision on said variance or special permit, the Secretary must file it with the City Clerk's office. After the decision has been filed by the Secretary, an interested party may contest the decision. To do so, the party must register this appeal within 20 days of the Secretary's filing at the Essex County Superior Court.

REAPPLICATION

No petition which has been unfavorably acted upon by the Board of Appeals can be reconsidered within two years unless the following conditions are met. First, the petitioner must request permission from the Planning Board and show new evidence substantially altering the grounds of the petition. At least eight members of the Planning Board must agree new evidence has been provided. Second, four of the five Board of Appeals members must also agree that there has been a change in circumstances if it is to act upon said petition within two years.

HOW TO AMEND THE ZONING ORDINANCE

The Salem Zoning Ordinance may be changed by amendment, addition or appeal by the following procedures, as documented in Chapter 808 of the Massachusetts General Laws.

STEP 1: A zoning change may be initiated by any of the following: the City Council; the Board of Appeals; an individual owning land to be affected by the change; ten registered voters of Salem; the Planning Board; or the regional planning agency.

STEP 2: The request for a zoning change is initially submitted to the City Council. Within 14 days of the receipt of this request by the Council, the amendment proposal must be submitted to the Planning Board for a hearing.

STEP 3: Within 65 days after the zoning request is submitted to the Planning Board, a public hearing will be held to give interested parties an opportunity to be heard. The City Council must also hold a hearing on the proposed zoning, which may/may not be held jointly with the Planning Board. If the hearing is to be held at a separate time, then the notice requirements set out below must be followed. It is the responsibility of the City of Salem to publicize adequately the hearing in keeping with the procedures established in the state enabling act. Notice of the public hearing (time, place, subject matter) shall be published in the local newspaper once in each of two successive weeks, the first publication not less than fourteen days before the hearing. Notice will also be given by mail to all planning boards of abutting towns and the regional planning commission. All expenses incurred during the serving of the public hearing notice shall be borne by the City of Salem.

STEP 4: Within 21 days after the public hearing, the Planning Board has the option of submitting a report with recommendations on the proposed zoning change. Upon receipt of the report and/or lapse of the 21 days, the City Council can adopt, reject, or amend the proposed zoning change. The City Council must take action within 90 days of their public hearing. If final action is not taken within 90 days of this Council hearing, then a new hearing must be held according to the above procedure.

STEP 5: If the City Council favors the proposed zoning amendment, a two-thirds passage by all Council members is required before it becomes law. If a written protest against the proposed zoning change is filed with the City Clerk prior to final action by the City Council, the change in the zoning ordinance shall require a three-fourths passage by all Council members. This written protest must state the reasons for opposition and be signed by owners of: (1) at least 20% of the land to be included in the proposed zoning change; or (2) at least 20% of the land which falls within 300 feet of the proposed zoning change. The date of Council approval stands as the effective date for the adoption of the zoning change.

STEP 6: If the City Council rejects the proposed amendment, it cannot be reintroduced for two years after the denial—unless the Planning Board recommends the adoption of said change in its final report.

HISTORIC DISTRICTS IN SALEM

DIFFERENCES BETWEEN A NATIONAL REGISTER HISTORIC DISTRICT OR PROPERTY AND A LOCAL HISTORIC DISTRICT

A National Register historic district or National Register individual property may be recommended by the Salem Historical Commission. Generally, the local historical commission evaluates Salem's historic and/or architectural assets and establishes priorities for National Register nominations. However, the nomination and ultimate approval rest upon action taken by the Massachusetts Historical Commission and the National Park Service. Following review by the Massachusetts Historical Commission, properties are nominated to the National Register by the State Historic Preservation Officer. Although a property owner is notified of this nomination, consent of residents or the local governing body is not required as it is in a local historic district.

There are two advantages to National Register listing. First, National Register properties are afforded protection from encroachment by any projects receiving federal government monies. Second, National Register properties are eligible for National Park Service matching grants-in-aid assistance.

A local historic district is proposed by the Salem Historical Commission whose members are appointed by the Mayor and approved by the City Council. The establishment of a local historic district must be made by the Council with the creation of an ordinance. Once enacted, the Salem Historical Commission is responsible for the carrying out of the law as outlined in Chapter 40C of the Massachusetts General Laws.

PROCEDURE FOR ESTABLISHING A LOCAL HISTORIC DISTRICT

A useful technique of preservation planning entails the establishment of local historic districts in areas of architectural and/or historic distinction. The Salem Historical Commission has the responsibility of conducting the survey, delineating boundaries, and preparing a preliminary historic district report. This report is reviewed by the Planning Board and the Massachusetts Historical Commission. Approximately 60 days after the proposal has been sent to the Massachusetts Historical Commission, a public hearing is held to acquaint property owners with the intent of historic districting and with the responsibilities of the Historical Commission. If a majority of the residents approves the proposed district, the proposal goes before the City Council. Upon approval by two-thirds of the Councillors, the historic district is created. The Salem Historical Commission is given the authority to review all proposed changes in the exterior appearance of properties within the district. This review procedure insures the compatibility of new construction and/or alterations with the existing character of the historic district.

RESPONSIBILITIES OF THE SALEM HISTORICAL COMMISSION

Within a local historic district the Salem Historical Commission has jurisdiction over the exterior changes of a building. Specifically, no building or structure, including stone walls, fencing, steps, permanent signs, and other appurtenant (meaning subordinate or adjunct) fixtures visible from a public street or way, can be erected, altered, reconstructed, moved, restored, or demolished without approval by the Salem Historical Commission. Walks, driveways, or other similar structures at grade level are not subject to review. Likewise, storm doors, windows, screens, window air conditioners, antennae, and similar items are not subject to the Commission's scrutiny. Although the Commission has control over reconstruction, in those cases where buildings are destroyed by fire or other disaster, reconstruction within a year can take place without review. The Commission has control over construction and demolition in the

historic district unless the building inspector determines the public safety is in jeopardy due to an unsafe or dangerous condition. The Commission does *not* have control of the ordinary maintenance and repair of any exterior architectural features. However, if such maintenance or repair leads to changes in the design, the materials, or the outward appearance of the building, then review by the Salem Historical Commission is required.

PROCEDURE

If a property owner of a historic district plans to make exterior changes, these steps should be followed.

STEP 1: The property owner must apply for a Certificate of Appropriateness. Copies of all forms, general information on historic districts, the names of the Commission district representatives, and maps outlining the geographic boundaries are on file at the office of the Building Inspector. One can also obtain the necessary forms from the main public library or by writing the Salem Historical Commission, c/o City Hall, Salem, MA 01970.

STEP 2: Within 7 days after the resident files for a Certificate of Appropriateness, the Commission will notify all abutters and other properties materially affected by the proposed changes. Abutters and "materially affected" are interpreted by the Commission as including: (1) those adjacent to the property; (2) those directly across the street; and (3) those properties abutting the applicant's land were property lines extended to the center of the street.

Note: If the proposed change is viewed as undesirable by the abutters, the Commission will hold a public hearing within 30 to 60 days after the filing of the Certificate of Appropriateness to look over any detailed plans and specifications. However, if the proposed change is not contested by abutters, the Commission exercises its right to waive public hearing.

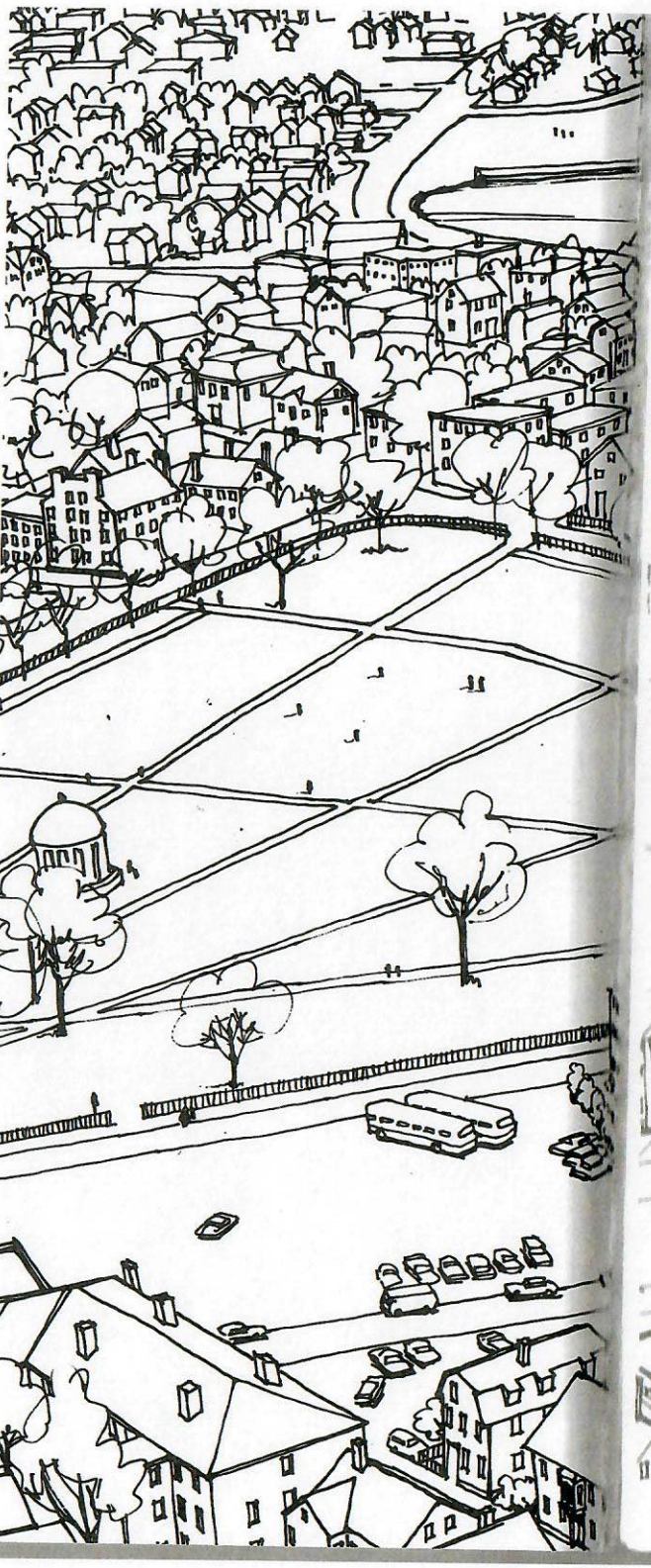
STEP 3: At the Commission's next regular meeting, the request for a Certificate of Appropriateness is considered. It is the Commission's responsibility to determine whether the proposed construction, alteration, or demolition is in keeping with the general character of the historic district.

STEP 4: If the Commission is in agreement with the application, it will notify all abutters and "materially affected" property owners. If no one contests the waiver within 10 days, the Commission can issue the Certificate of Appropriateness.

Note: To accelerate the process, the applicant may obtain the approval of all abutters and those "materially affected" before the Historical Commission meeting. This is done by getting each person's signature on a "waiver of public hearing" form. As a result, the 10-day waiting period is avoided and the Certificate of Appropriateness can be issued at the meeting, provided no reservations exist among Commission members.

STEP 5: If the Certificate of Appropriateness is approved, the property can proceed with the proposed construction, alteration, or demolition, assuming the necessary permits are granted by the other city departments.

STEP 6: If the Certificate of Appropriateness is denied, the Commission must state the reasons for denial. Within 120 days after such decision, an aggrieved property owner may appeal the decision to the Superior Court of Essex County.



A NOTE ABOUT "EAST OF THE PALISADES"

In 1675, palisades were built to protect local villagers f
along Boston, Essex, Broad, and Jackson Streets, these fo
limits of 17th century Salem. Because Historic Salem's pla
architectural and historic value of several older areas in the
was chosen. Specifically, the land east of the palisades
Bridge Street, Boston Street, and Broad-Federal Street r
more than 2,000 properties in these five areas were invent
style and preservation merit was collected on each property
of these inventory maps available for public use at the fo
One Salem Green, Salem; Salem Public Library, 370 Ess
Essex Street, Salem; Historic Salem, Inc., 15 Summer Stree