



STANDARDS

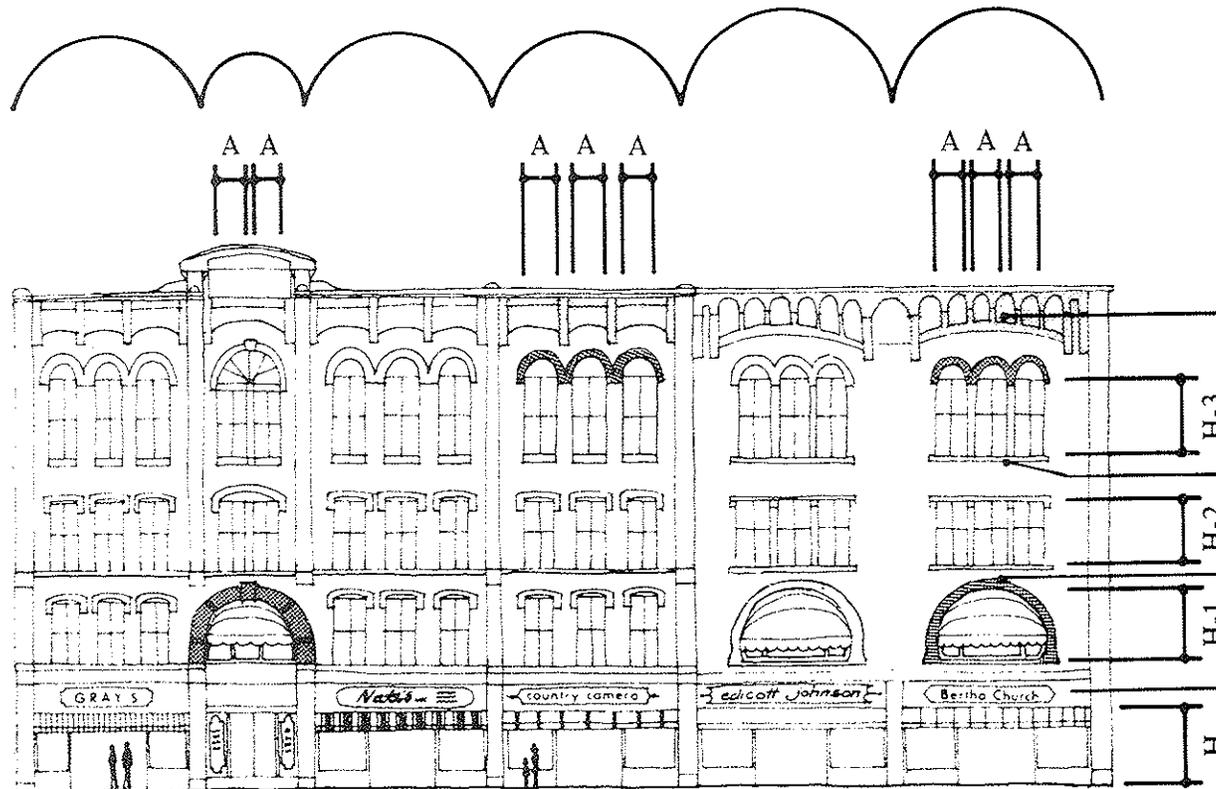
NEW OR REPLACEMENT CONSTRUCTION STANDARDS

New or replacement construction should contribute to the unity of the Montpelier Cityscape. The City has a distinct downtown-commercial area, governmental area, and residential areas, all of which have their own unique qualities. The City's character is the sum of all these qualities. It has been stated earlier that many of the buildings in Montpelier have historical significance, are assets to the City, and should be preserved. These original buildings form a very strong physical environment in the City. It is important that new buildings be compatible

with the historical context, while at the same time, expressing the thinking and values of the time in which they are built. Virtually every street in Montpelier contains some elements that create relationships and a rhythm that gives the street its unity and character. Every new construction situation will be different, but an awareness of the adjacent environment is a basic step towards successful design solutions.

The typical building in the commercial district is three stories high with a storefront on street

level, separated from the upper building by a horizontal sign entablature band. See the adjoining diagram. This basic framework has created in the City a tradition of handsome buildings that achieve their variety through detail and a strong relationship of repetitive elements. The rhythm and repetition of materials like brick, stone, and wood, and elements such as window openings, cornices, sills, lintels, bays and other decorative details provide unity to entire blocks.



Basic Facade Elements

Rhythm of Major Elements

Decorative Cornice Detail

Proportion of Basic Elements

Sill Detail

Lintel Detail

Sign Entablature

Storefront

The diagram indicates buildings built at different times that are very closely related through the repetition and recalling of various elements. The unity of an existing street or block is a major consideration in the design of any new or replacement construction. This is of particular importance in the commercial district where buildings adjoin one another to create overall building forms that are an assembly of many parts. The new building must relate in materials and colors, form, massing, proportion, and rhythm of common elements to those that are present on adjacent buildings. This is not to say that adjoining details and design motifs should be copied, but only that enough of these elements be carried on in contemporary terms to maintain the unity of the block. It is also very possible that a new or replacement building can provide the transition element between apparently unrelated elements along a street or block.

The following guidelines have been developed to aid those contemplating new or replacement buildings in Montpelier. Each new construction situation will have its own unique problems. It is the intent of these guidelines only to try to point the way toward design solutions. The ultimate responsibility for the built environment rests with those who interpret and act upon the actual conditions in each situation.

Guidelines for New or Replacement Construction:

1. It is of prime importance to analyze the elements that provide visual continuity on a street or block in order that an overall unity be maintained or enhanced.
2. New construction should be a product of its own time and not be a copy of an older architectural style with associated details no longer practical.
3. In buildings of close proximity, entire blocks are considered to be one facade. Therefore, materials and colors, rhythm of neighboring facade elements, and common details must be recognized.
4. The massing of a new building must maintain the existing wall line or setback line of a street facade. Variations in setback are acceptable as long as the general street facade line is maintained.



5. In the commercial district, it is important to maintain the cornice line and the sign entablature line of existing buildings in a block.
6. The area of a commercial building below the sign entablature line, referred to as the storefront zone, may depart in design from the building above, as long as materials used are compatible with the entire building and its neighbors.

It is assumed that the primary storefront material will be glass, and a recessed entrance offering protection from the weather is recommended. Refer to the storefront section of the Restoration Standards for further suggestions on storefront design.

7. The use of retractable awnings is to be encouraged as part of a storefront. Awnings add color and movement to the street, and provide pedestrian protection from the weather, as well as provide sun control for displayed merchandise.
8. Signs on a new building should relate in size and character to others on the block. See the Streetscape Standards for sign recommendations.

It is urged that as new construction takes place in the City, particularly in the downtown area, that the areas in front of buildings be considered an important part of the project. Pedestrian amenity in the form of paving, planting, benches, etc. is desirable not only for its pleasant effect on individual buildings, but for its effect on the quality of the City as a whole. Refer to the section on Streetscape Standards.

RESTORATION STANDARDS

Montpelier is unique in that its nineteenth century buildings are nearly all intact. There are excellent commercial and residential examples of many architectural styles, and it is these fine buildings that give Montpelier its special character. The purpose of this section is to provide guidelines and alternatives for quality restoration of architecturally or historically significant buildings. As thoughtful restoration is carried out, a beneficial contribution is made to the individual property and to the total community as well, by preserving for the future the best of the past.

In consideration of a building restoration effort, the following general statements should be kept in mind:

1. Buildings must function to meet today's needs just as they met certain needs at the time they were built. The changes required to meet new demands should be a compromise between the existing integrity of the structure and the new functions. Good preservation seeks both of these goals.
2. Every attempt should be made to preserve as much of a building's original design, architectural details and building materials as is possible. Such materials are often irreplaceable; they offer an integrity and genuineness which cannot be duplicated or copied.
3. When it is necessary to introduce modern elements or components to an original building exterior, every effort must be made to maintain the building's overall architectural character.
4. If there is any doubt as to what should be

done to accurately maintain or restore a building, it is strongly urged that the owner seek professional advice. Too often buildings have been rehabilitated without any regard for their real historic or architectural assets.

The Restoration Standards Section is organized to first talk about the architectural styles in Montpelier and what is unique about the kinds of buildings in each style. Once the correct style with its proper elements is determined, the standards then outline restoration guidelines for the major building elements. Refer to the following section on Restoration Techniques for detailed information on the reconditioning of various building materials.



FEDERAL STYLE

The Federal style was the direct outgrowth of the Georgian style. Because Vermont was not settled until the end of the eighteenth century when the Georgian style was generally out of vogue and settlers were more concerned with survival than with architectural styles, for all intents and purposes there are no examples of the Georgian style within the state. The Federal style is based almost exclusively on the classical Orders (Doric, Ionic, Corinthian, and Composite) of Roman architecture as interpreted and defined by the English architect, Robert Adam.

The ENTRANCE is usually the single most important architectural feature of the Federal style and may include any of the following:

1. A semi-circular or elliptical fanlight. Semi-circular fanlights are usually no wider than the width of the entrance door while elliptical fanlights span the side lights.
2. A transom light no wider than the width of the entrance door.
3. Side lights which are an integral part of the entrance.
4. Narrow side windows, either fixed or double-hung, which flank either side of the entrance and illuminate the entrance hall but which are not attached to the entrance.

The entrance may be framed by pilasters on either side and a full or partial entablature across the top. The entrance entablature may be straight, curved to match the fanlight, or in the form of a broken pediment surrounding a fanlight. On a brick building, the surrounding enframing may be in stone.

WINDOWS are usually plain and without architectural detail. The window directly above the entrance on the second floor may be either a Palladian window or a window which is slightly larger and of a different shape than the others. Semi-circular and quarter-round windows and vents are common features in the gables. On wood frame buildings, there may be an entablature either with or without ornament above the window. The ornament is usually raised but may be incised. On a brick building, there may be flat, semi-circular, or elliptical arches with radiating brick voussoirs above the windows, or straight stone lintels with diagonal ends.

Classical DETAILS are either of low relief or shallow incision but may be similar to classical Greek Revival style details in basic configuration. Columns and pilasters are usually slender or attenuated.

CORNICES usually return horizontally around the corners of the building on the gable ends but seldom continue across the gable to form a pediment as on Greek Revival style buildings. Cornices almost always are limited to the cornice band of the classical entablature and do not include the frieze and architrave bands usually found on Greek Revival style cornices.

On BRICK buildings, the exterior wall surface may be divided into a series of recessed panels each the width of a single bay — one bay representing one window or door opening in the wall — and each defined by plain brick pilasters and elliptical arch. Parapets are common on Federal style commercial buildings and are occasionally found on brick domestic buildings.



Residential
99 State Street

Commercial
2 State Street



FRENCH SECOND EMPIRE STYLE

This style is also based on the architecture of the Italian Renaissance, but with a slightly more ornate French detailing characteristic. The French Second Empire style was named for the French Second Empire of Napoleon III (1852-1870) and is, for all intents and purposes, nothing more than the Italianate style with a mansard roof. By the Civil War when both the Italianate and the French Second Empire styles were just coming into vogue, building technology had developed to the point where standard architectural components were being mass produced in a variety of materials and were available on a catalog mail order basis. The developments of new roofing and flashing materials also made it possible to cover almost any roof configuration with a weathertight surface. The tendency, therefore, whether because of the new technology or as a result of it, was to design buildings which were more elaborate than the conventional box-like shapes characteristic of most buildings erected in the first half of the nineteenth century.

In general, the best rule of thumb for determining whether or not a building is in the French Second Empire style is if the building has a mansard roof. Buildings without a mansard roof, but with mansard roof towers, may also be in this style. Individual architectural components, such as brackets, are more elaborately detailed than in the Italianate Revival style. The only major difference between the two styles is the use of dormer windows which, almost with exception, are a standard feature on mansard roofs.



Residential
138 Main Street

Commercial
19 Pitkin Court



QUEEN ANNE STYLE

The Queen Anne style was the second of the most commonly practiced styles in Vermont without roots in the classical past. The first building in the style was erected in England in 1868 by Richard Norman Shaw, but the popular success of the style in the United States dates from the Centennial Exposition of 1876 in Philadelphia.

In spite of the fact that the name is a misnomer, it was intended to imply the style's supposed medieval origins. Generally denying the rigid symmetry usually adhered to throughout the century by most of the previous styles, the Queen Anne was characterized by irregularity of plan, the often complex grouping of different geometric forms, and the articulation of the wall surface with a variety of decorative elements — polychroming, patterned roof and wall coverings, projecting windows, dormers, chimneys and porches, and the combination of building materials. In its most vernacular form, however, the style was nothing more than a veneer applied to the standard building types.

Sophisticated woodworking machinery, especially those incorporating the use of the scroll saw, the lathe, and the router, was producing such a wealth of standard, ready-made architectural components that in large part, vernacular architecture was nothing more than a decorative art.

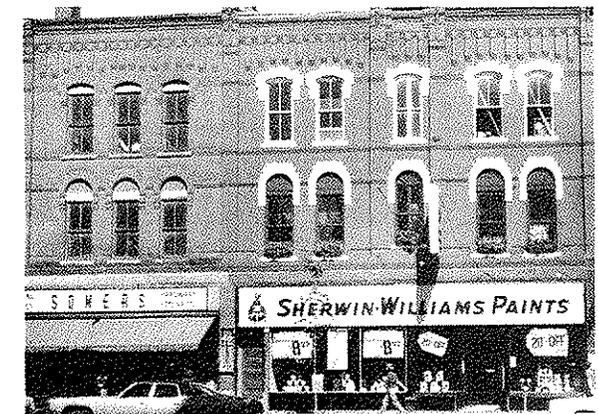
The general attitude which was responsible for the Queen Anne style also fostered the variety of "Victorian" architectural styles in vogue from the Civil War until the turn of the twentieth century. "Character" was the adjective of

Victorian taste and the most sought after quality in "Victorian" architecture. "Character" no longer meant, as it had in the eighteenth and early nineteenth centuries, that a building's design expressed, or its style was suitable for, its function. Instead, "character" meant that it possessed the attributes of a man, for instance, who has character — forcefulness, and the other qualities that make their possessor hard to overlook or to forget. (Marcus Whiffen).



Residential
154 Main Street

Commercial
42-52 Main Street



GREEK REVIVAL STYLE

The temple portico with free-standing columns supporting either a pedimented or a straight entablature is the most easily identifiable Greek Revival feature. With the rare exception of some church architecture, the portico always runs across the entire width of the main facade.

Other than the column, the two most common identifying features are:

1. The temple form, either with or without a temple portico. If one of the gable elevations of a building is also the main facade, or front elevations, then the building has a temple form. Starting with the Greek Revival period, there was a general trend toward orienting a building's gable elevation toward the street. Previously, the sloping surface of the gable roof was oriented toward the street.
2. The use of pilasters on the corners of a building to visually support an entablature directly below the eaves. The entablature usually returns horizontally around the corners of the building on the gable ends and may continue across the gable to form a pediment. On brick buildings, the corner pilasters were almost always left off. On a brick building, the pediment may also be defined by a series of consecutively smaller, triangular panels recessed into the gable.

The ENTRANCE is another important architectural feature. On wood frame buildings, the entrance is usually framed by pilasters on either side and a straight entablature across the top. On a brick building, there is almost always a straight stone lintel above the entrance and oc-

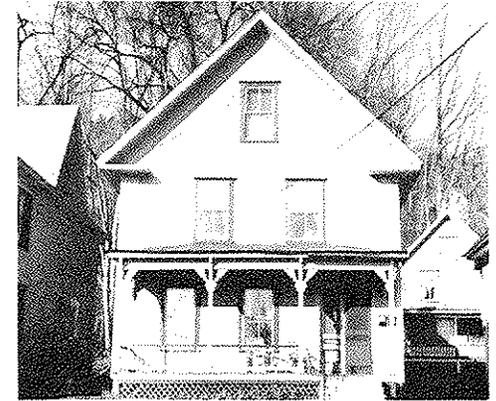
asionally supporting stone pilasters on either side. The entrance may also include either a transom light or side lights or just side lights. Occasionally, the glass has been replaced with plain panels.

WINDOWS are usually plain and without architectural detail. On wood frame buildings, the lintel board above the window may be cut in the shape of a shallow pitch pediment. On a brick building, there are almost always straight stone lintels above the windows and occasionally stone sills.

Classical DETAILS and moldings are usually of bolder relief than on Federal style buildings but may be similar in basic configuration.

CORNICES usually include all three bands of the classical entablature, the cornice, the frieze, and the architrave, but may be limited to only two and occasionally to just the cornice band.

For a specific description of the Greek Revival style commercial storefront, refer to the section on Commercial Storefronts.



Residential
23 Court Street

Commercial
81 Main Street



ITALIANATE REVIVAL STYLE

The single most important architectural feature is the BRACKET. The bracket in a variety of shapes and sizes and commonly in the form of a modillion, is used to support almost everything on the exterior of the building, especially window and door lintels, window sills, and cornices on roofs, porches and commercial storefronts.

Many of the common characteristics of the Greek Revival style continued to be used but always in combination with brackets. These include:

1. The temple form, a porch being substituted for the temple portico.
2. The use of pilasters on the corners of a building to visually support an entablature directly below the eaves.
3. On wood frame buildings, framing the entrance with pilasters and an entablature.

The raised porch with columns and either a full or partial entablature supporting a shallow pitched roof is a common feature on domestic buildings. Other common features include:

1. A main facade, or front elevation, which is three bays across instead of five.
2. Projecting bay windows, either rectangular or trapezoid in plan.
3. Cupolas.

COLUMNS are usually mounted on a pedestal and are almost always separated from the entablature by an impost block. The impost block may be flanked on either side beneath the entablature by brackets or may be curved to form a flat-topped arch between blocks. Columns and pilasters are usually square in

plan with either chamfered edges or panels and usually do not represent any specific Order.

ENTRANCES are usually plain but may include a transom or side lights. Entrances commonly are either flat or segmented arched and may match the shape of the window opening. Entrances, especially on domestic buildings, are usually elaborated by either an entrance porch or a projecting canopy supported by large-scale brackets.

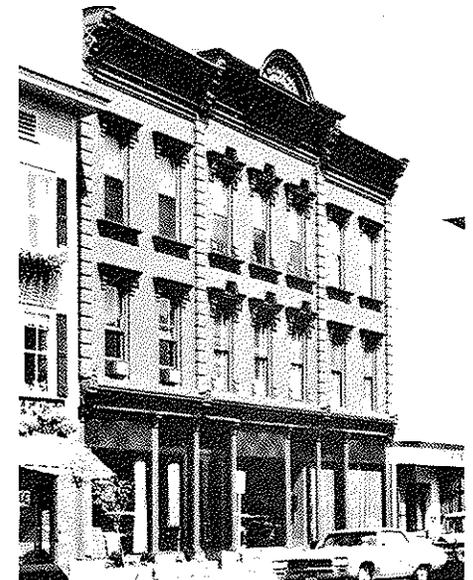
On wood frame buildings, WINDOWS are almost always flat arched. On brick buildings, windows may be flat, segmented or round arched with the top of the upper sash of the window being either straight or curved to match the arch of the window and fill the window opening completely with glass. Individual windows are commonly paired in the form of a double, or siamese, window. Window lintels are usually in the form of projecting hood moldings, either with or without supporting brackets. Windows may also be crowned with either straight or pedimented entablatures, usually supported by brackets. On brick buildings, the window and door lintels may be of brick, stone, cast iron or stamped tin.

On pitched roofs, the CORNICE either may or may not return horizontally around the corner of the building, and occasionally continues across the gable to form a pediment. Cornices are almost always bold in profile and may project as much as three feet beyond the wall surface. Cornices usually include all three bands of the classical entablature, the cornice, the frieze and the architrave. On brick commercial buildings, the cornices are commonly of stamped tin.



Residential
25 E. State Street

Commercial
17 State Street



WINDOWS

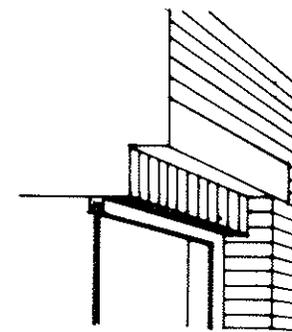
Windows give character to a building in much the same way as the eyes do to a human face and are, therefore, an important element to be reckoned with when trying to determine what a building is going to look like from the outside. If original windows cannot be saved or repaired and it is necessary to replace them, the new windows should be the same size and type as the originals and should fill the whole opening. Window openings should not be enlarged, reduced, blocked-up, closed-off, or otherwise altered in form. New sash for existing windows should be cut to fit the original openings, whether flat or arched. Picture, strip, sliding, jalousie and most casement windows are not appropriate to any nineteenth century architectural style and should not be used except where they are out of the view of the public. More often than not, a window needs nothing more than a repaired or replaced lower sash and/or sill — a job which is a fraction of the cost of replacing the entire window.

Standard sized windows from a catalog generally can be ordered which will fit most flat-arched window openings. Odd sized openings or openings with round, pointed or segmented arches are more of a problem and usually require ordering made-to-measure windows in order to fill the window opening completely. Shallow elliptical and segmented arched window openings can also be fitted with rectangular casings if the arch does not exceed six inches in height. In this case, the area between the arch should be fitted with a plain, smooth recessed panel and painted to match the color of the trim. This alternative should not be done to pointed, round or deep elliptical arched win-

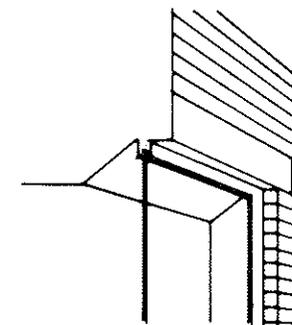
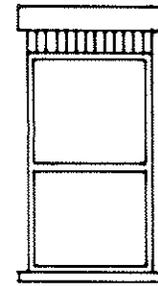
dow openings because the rectangular sash would be out of scale with the opening. In either case, the difference in cost between standard and made-to-measure windows is negligible, and should be investigated. The original window trim should be saved for re-use or should be matched exactly. Replacement windows and casings which usually come with trim should be purchased without.

The practice of blocking-up, or blocking-down existing window openings, especially in brick buildings, to fit a smaller standard window should be avoided as it does more than anything else to change the basic appearance of the building; seldom for the better.

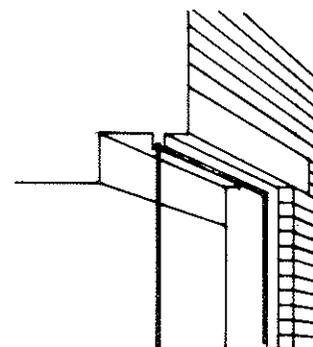
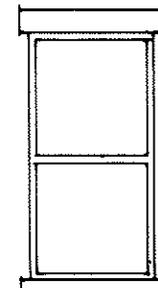
For this reason, every effort should be made to keep new ceilings above the level of the heads of existing windows. Windows are often blocked-down to conceal the edges of lowered ceilings (see attached drawing). If it is considered absolutely necessary to lower a ceiling beyond the window head, some way should be found of retaining the full height of the windows. Sloping the ceiling at the window is the better method because it allows more light to enter the room and looks better from the inside. It is also acceptable if the small vertical face which conceals the lowered edge of the new ceiling is kept as far back as possible from the glass.



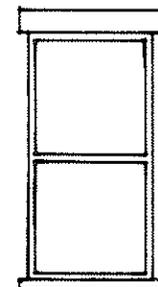
Not Recommended



Recommended



Recommended



Lowered Ceiling Condition

There are so many types of windows available on the market that, if windows have to be replaced, the owner will probably find himself genuinely confused as to what to select. Windows with bright metal sash and/or casings should never be used. Generally, the double-hung sash window should be the first choice when selecting new or replacement windows, not only because it was the most common window type throughout most of the nineteenth century, but also because it usually does the best job of keeping out the weather. Technological limitations in the manufacture of glass until the middle of the nineteenth century made it necessary to subdivide each sash into panes by vertical and horizontal muntins. As glass technology progressed and glass sizes increased, fewer muntins were necessary. The diagrams illustrate the appropriate sash divisions for approximate date spans and related architectural styles. For better visibility and ease of maintenance, however, the one-over-one type, which is really a twentieth century window type, could be substituted for the two-over-two type when the building is simply being rehabilitated rather than restored.

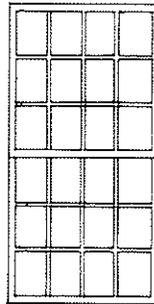
It should be pointed out however that, although appropriate in houses built prior to 1850 six-over-six and other small paned window types should not be used when remodeling or restoring buildings of the latter half of the nineteenth century. This is a common way of dressing-up buildings to look older than they actually are. It should not be done if the integrity of the building is to be respected.

Windows with clip-on muntins which are removable for easy cleaning should also not be used. The muntins are underscaled and be-

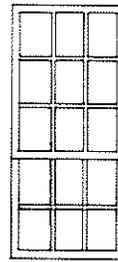
cause they are attached to the inside of the windows, they usually do not appear authentic from the outside of the building.

Common Window Types

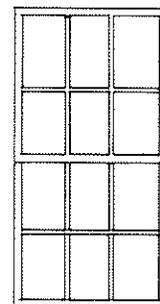
Federal
1780 - 1830



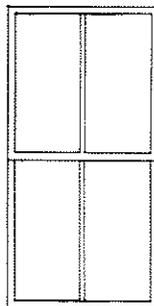
Early Federal
Pre 1890



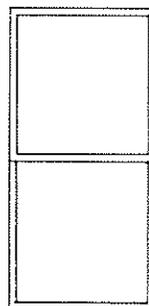
Greek Revival
1825 - 1850



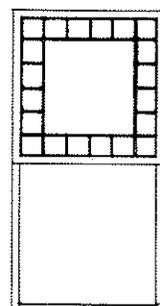
Greek Revival
And Italianate
1850 - 1880



1880 - 1910



Queen Anne
1875 - 1900



STORM WINDOWS

The use of storm windows has long been popular as a means of reducing winter heating bills and, therefore, many property owners have discovered that storm windows, especially aluminum, are a sound investment. The permanent fixed aluminum type has become the most popular because it does not have to be put up in the fall and taken down in the spring, and because it doubles as an insect screen in the summer.

Storm windows, however, often produce undesirable effects because the shiny outline of bright aluminum frames is visually jarring, the loss of the original glazing pattern of the window detracts from the building's character, and the loss of the visual depth of the window reveal results in a monotonous appearance. Storm windows, therefore, should match the inner window exactly in size, and should be painted to match the exterior color of either the window sash or window trim.

Most brands of aluminum windows are presently available with a baked enamel finish in several basic colors and a color can usually be chosen which will either match or be compatible with the trim color of the building. White is usually the safest color as it goes with almost any trim color. Shiny aluminum windows that have already been installed can be painted by first thoroughly cleaning all the surfaces to be painted and applying a zinc chromate primer. Whenever possible, wood storm windows are recommended over aluminum as esthetically more in keeping with most architectural style.

ENTRANCES

No matter what the architectural style of the building, the entrance — which includes the door, transom or fanlight, side lights, and trim — is generally one of the most important architectural elements in the overall design of the building. The comments and standards set forth in the sections on windows and storm windows are, for the most part, directly applicable to this section. In particular, storm doors should be as simple as possible in design and should allow as much of the door behind to show through as possible. Supposedly “colonial” designs with triangular panels across the bottom half and a scalloped edged window on the top should never be used. Whenever possible, wood storm doors are recommended over aluminum as esthetically more in keeping with most architectural styles.

Original entrances should either be repaired or matched in order to preserve the building’s architectural integrity. Stock replacements ordered from a catalog usually are not compatible with the architectural character of the building, and, when they do claim to represent a particular architectural style such as the “colonial,” they are poor substitutes both in scale and detailing for the original. The difference in cost between a stock replacement and rebuilding the existing entrance is usually negligible and should be investigated. A made-to-measure replacement can be more expensive, but considering the entrance’s architectural importance to the overall design of the building, the extra cost should not be the principal consideration.

Many entrances are commonly replaced be-

cause they are not weathertight, a condition easily corrected either by weatherstripping or by rebuilding or replacing the door and/or sill, both at a fraction of the cost of replacing the entire entrance.

Nineteenth century doors, even in commercial buildings up until the 1870’s were usually symmetrically paneled both vertically and horizontally. Standard sized exterior doors from a catalog generally can be ordered which are the same size as the original. Odd-sized and round, pointed, or segmented arched doors are more of a problem and usually require ordering made-to-measure replacements. In no case should hollow or solid core plywood doors, plain or paneled doors with windows across the top, or doors with staggered or geometrically shaped windows be used as replacements. Doors which are paneled across the bottom half and single or multi-paned across the top are frequently used because of the extra light they let in. In spite of the popular belief that they are historically

accurate, they are not and should only be used as a matched replacement for an original door.

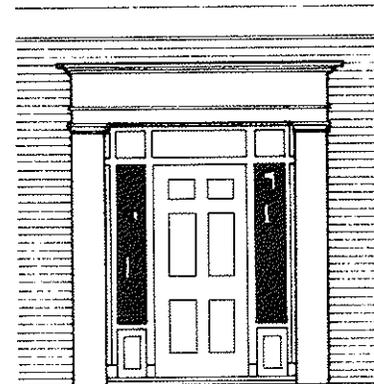
If it is found absolutely necessary to replace the original entrance, every effort should be made to install the new entrance within the existing opening and save the existing trim. The new entrance should be centered within the opening and should be surrounded with either transom and side lights or plain, smooth panels painted a neutral receding color. The door should be simply and symmetrically paneled. If an aluminum framework is used in a building intended for commercial use, it should be anodized either dark bronze or charcoal grey in color. The door should be glass mounted in an aluminum frame.

The accompanying illustrations show an original Greek Revival style entrance completely restored; sympathetically restored but simplified with a compatible catalog door; and modernized with an incompatible catalog door.

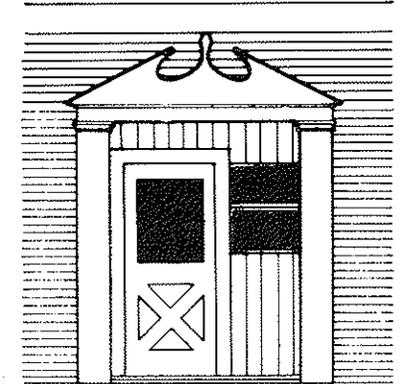
Entrance Restoration



Restored



Simplified



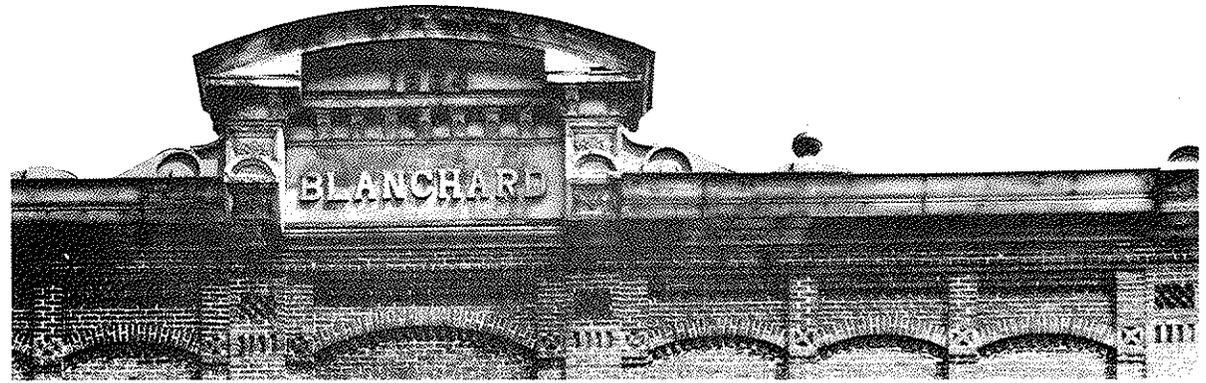
Unsatisfactory Modernization

CORNICES

Ornamental cornices are dominant and significant design components of a variety of architectural styles. Cornices provide strong visual terminations to individual building facades and define the top of the facade and the beginning of the roof. On groups of buildings designed as a commercial block, a relatively continuous cornice, even when interrupted by stylistic changes, emphasizes the horizontal continuity not only of the block but the streetscape as well. On commercial buildings in particular, the cornice is more often than not the most important design element on the facade.

Cornices require regular attention and should be periodically repaired and painted whether of masonry, wood or stamped tin. They are of such design significance and visual importance that every effort possible should be taken to maintain and preserve them. It is important that the top of the cornice, especially where it attaches to the exterior wall on commercial buildings, is properly flashed and weatherproofed to prevent decay and structural weakening from leaking water.

Cornices can be repaired, duplicated or replaced either in the original material or in some other material such as wood or molded fiberglass and painted to match the other exterior trim. Wood is probably the most economical replacement material and certainly the easiest to work with. As long as the basic configuration of the original cornice and the basic size and outline of each cornice component is duplicated exactly, it is not always necessary to reproduce minor decorative carvings which



emphasize individual components but not the overall design of the cornice.

Masonry cornices usually can be successfully repaired by first dismantling the cornice and then completely rebuilding it with the original material, adding additional reinforcement where necessary. Tin cornices, like masonry cornices, if properly maintained are probably the most durable and can be easily repaired with pop rivets and sheet metal and/or with fiberglass. If a tin cornice must be replaced, it usually can be successfully duplicated in wood.

If repair is proven to be completely infeasible, the replacement cornice should either match the original exactly or be skillfully designed to be compatible with the building's architectural style. Cornices or particular cornice details should not be removed when rebuilding a roof. The new roof should be designed to incorporate the original cornice, not to obscure it or require its removal.

Decorative stamped tin and cast iron lintels and storefront cornices are common on Italian-

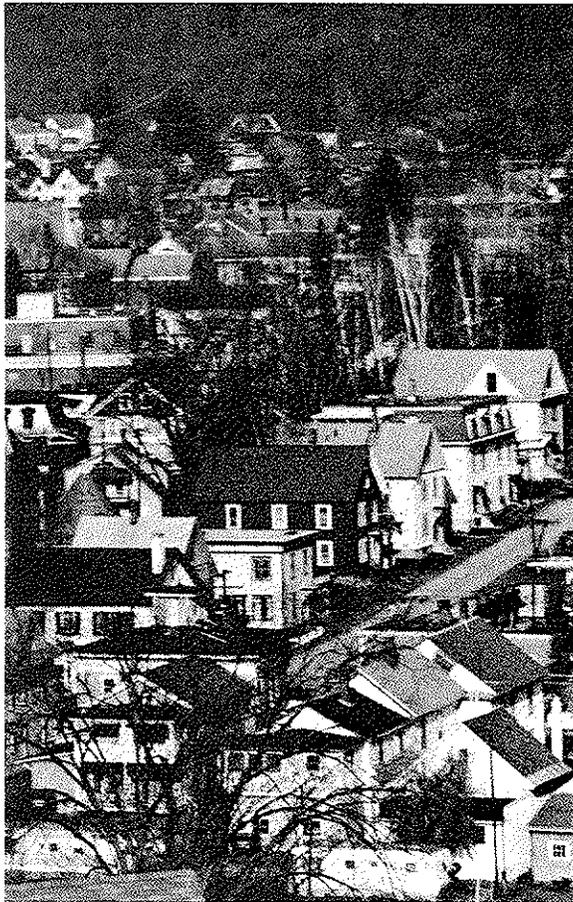
ate, French Second Empire and Queen Anne style buildings and are as important to the architectural character of the building as is the cornice. Maintenance and repair should be carried out on a regular basis.

ROOFS

Roof shapes are as important a component in identifying the architectural style of a building as are the window and door trim and the cornice. Roof shapes vary according to architectural style and building type, but with the exception of the mansard roof which is the hallmark of the French Second Empire style, are not generally peculiar to any one particular style or type. Hip roofs on buildings erected prior to the 1840's are not common in the state because of the harsh winter climate and the problem of flashing the hips. Most of these early hip roofed buildings had their roofs rebuilt in the form of a gable roof to eliminate the problem of water leaking in around the hips. Flashing material was not commonly available before the 1840's and was expensive, being either copper or lead. Advances in technology

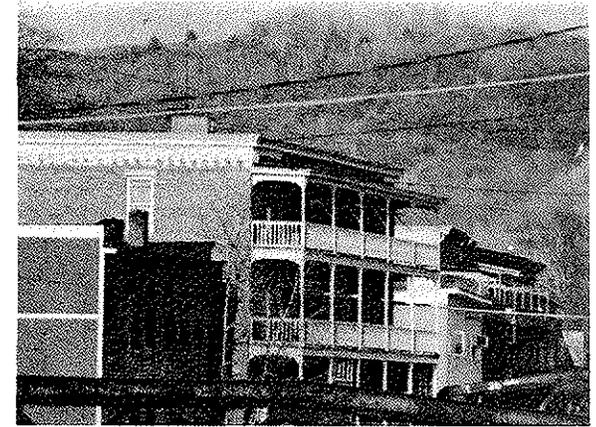
and the development of tin and other types of sheet metal as a flashing and roofing material made it possible to construct almost any shape roof imaginable, as illustrated by the Queen Anne style.

Roof shapes should not be altered for any reason on the principal facade(s) of a building. Altering a roof shape to accommodate additional interior ceiling height should be re-



stricted to the rear of the building where the alteration is out of the view of the public. If such an alteration is undertaken, the roof line of the new roof should be kept well back from the roof line of the original so that the outline and configuration of the original roof will still dominate the building's overall design.

Roof coverings, especially for sloped roofs which are prominently visible, should be considered both from a practical and an esthetic standpoint. The most economical roofing material is, without question, asphalt shingles but the most durable, especially if painted periodically, is sheet metal. Wood shingles are esthetically the best and, if properly maintained, are almost as durable as sheet metal but are extremely expensive. Wood shingles were the standard roofing material prior to the Civil War. Slate, which is characteristic of most French Second Empire and Queen Anne style buildings, is also extremely expensive and from a maintenance standpoint is impractical in regions with a harsh winter climate. Sheet metal roofing is available either as corrugated sheets in a standard width and length or as standing seam, in galvanized steel, aluminum, and anodized aluminum. Anodized aluminum and especially asphalt shingles are also available in a variety of colors. While the choice of roofing material is for the most part personal preference, it is recommended that earth colors, dark reds, dark greens, browns, greys and black are, in general, esthetically the best for roof color. Blues and whites should never be used. If a well-coordinated color scheme is chosen or exists for a building, then the color of the roofing material probably should be coordinated also to be compatible with the scheme for the best overall effect.



A large number of French Second Empire and Queen Anne style buildings have either wood shingle or slate roofs which are laid in decorative patterns or bands. If feasible, on these buildings, especially public buildings, every effort should be made to preserve the original roof covering either by repairing it with slate or shingles cut to match the existing pattern(s) or, in the case of a wood shingle roof, by replacing it with wood shingles laid to match the patterns or bands of the original. The decorative pattern work on these roofs was generally an integral part of the building's overall design and is, therefore, an essential component of the building's architectural style and character.

When replacing the roofing material, trim along roof edges, around dormers, cupolas, wings, and porches should be repaired or replaced to match. In no case, especially with sheet metal roofs should the roofing material extend beyond the edge of the roof boards more than five-eighths of an inch.

COMMERCIAL STOREFRONTS

Original nineteenth century storefronts in almost every architectural style are rare and should be preserved, almost without question. A significant number of nineteenth century commercial buildings were constructed out of masonry for permanence and durability. However, masonry construction imposed limitations on the size of display windows because of the structural requirements necessary to support the masonry wall above the first floor storefront. The increased use of stone for posts and lintels and the development of structural cast and wrought iron eliminated most of the structural problems and opened up the storefront to an almost continuous expanse of muntined glass.

Federal style commercial buildings were usually of standard domestic design used for commercial purposes. Larger window openings were sometimes substituted for the standard sizes, and depending on the size of the opening, the windows were occasionally subdivided by mullions and were glazed with fixed muntined sash. In some brick buildings, the windows were cantilevered out from the face of the buildings on a stone slab in the form of a bay display window. Only a handful of commercial buildings from this period survive, almost all of them constructed out of brick with stone lintels and sills.

Surviving Greek Revival style commercial buildings are also basically domestic in character and mostly constructed out of brick. During this period, stone lintels and posts were commonly used in the place of load bearing brick walls in order to open up the storefront wall as



much as possible for a continuous row of display windows. While stone lintels were already in common use, stone posts were found to be structurally equal to load bearing brick walls but were less bulky in size in proportion to their load bearing capacity.

Italianate, French Second Empire and Queen Anne style commercial buildings continued the use of continuous stone lintels but almost universally substituted cast iron columns for the stone posts. Cast and wrought iron beams were also frequently substituted for the stone lintels which because of structural limitations required the use of more columns. The beams were usually covered with decorative stamped tin entablatures. In an attempt to camouflage the technological and obviously industrial aspects of iron and tin, iron columns were encrusted with decorative architectural components and tin cornices were stamped into a variety of architectural shapes representing a wide variety of past and then contemporary

architectural styles. In almost every instance, the result was an imitation of details previously executed in stone.

The typical storefront included large display windows flanking each side of a deeply recessed entrance and was usually framed by a decorative storefront cornice across the top and masonry piers on either end. The cast iron columns which supported the masonry wall above the storefront either were set out of sight behind the glass or were used as mullions between abutting display windows. Separate storefronts in a continuous commercial block or in abutting commercial buildings were usually isolated from each other by masonry piers. Storefronts in wood frame buildings generally used the same format but usually did not use cast iron columns or cast and wrought iron beams.

The use of large and even single sheets of rolled and cast glass display windows did not occur

until the end of the nineteenth century. Instead, display windows, like standard double-hung sash windows used in almost every type of building, were divided into smaller panes by muntins, the size of the panes increasing throughout the nineteenth century with improvements in glass-making technology.

Restoration of most commercial storefronts is a difficult problem because in almost every instance the original storefront has been replaced with a more modern one. If, however, the original storefront survives, it should be restored.

Restoration does not necessarily imply that muntined display windows like the originals should be put back in the place of existing, modern plate glass display windows. Solid, paneled doors which are historically correct on some storefronts can also be more of a hindrance from a merchandising standpoint than an esthetic asset. People generally are hesitant to enter a commercial establishment with a solid, non-transparent door.

The most important point to remember regarding the restoration or improvement of original storefronts is to respect the existing original openings, whether individual openings for display windows and entrances or the single, large opening defined by supporting end piers and a cornice. The framing of an entire storefront is characteristic of the second half of the nineteenth century. Closing up or blocking down of existing openings to raise the height of window sills, reduce the size of display windows, or conceal lower ceiling heights should be avoided. Such alterations are usually not necessary and always damage the storefront's archi-



tectural integrity and the overall character of the building. If it is found absolutely necessary to lower a ceiling height, the new ceiling should slope back and down from the top of the existing opening to the new height.

In Federal, Greek Revival, and some Italianate and Queen Anne style storefronts with individual display window and entrance openings, it is recommended that display windows be divided by muntins into original window pane sizes or be replaced with a single sheet of plate glass set into a bronze or charcoal grey anodized aluminum frame. Instead of a solid, non-transparent door, entrance doors should match the display windows and be either a half panel, half glass door with two vertical rectangular panels below and nine panes above or a plate glass door mounted in an anodized aluminum frame in a color matching the display window

frames. Display windows and entrance doors in Italianate, French Second Empire and Queen Anne style storefronts, with large display windows flanking a recessed entrance, should be plate glass set in bronze or charcoal grey colored anodized aluminum frames.

The improvement or replacement of a storefront which is not original to a building introduces the possibility of a variety of design solutions. While complete restoration is obviously the most esthetic solution, this is not always economically realistic. In general, the simplest design solutions or those solutions which allow the architectural character of the building to stand out are esthetically the best and usually the safest. Storefront designs should use the standard format of display windows flanking a recessed door and should not attempt to mimic any architectural style,

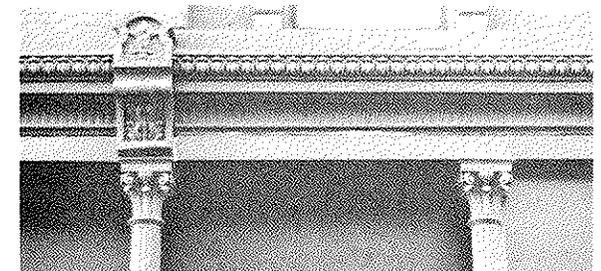


whether American or European. Existing, original architectural details should not be covered over or obscured from view, and nothing should be allowed which projects beyond the original facade line of the building, except possibly a sign.

If the single, large storefront opening defined by supporting end piers and a cornice is intact but intermediate supporting columns are miss-

ing, the new storefront should be completely contained within the perimeter of the opening. If only the sign entablature, the storefront cornice, or a decorative architectural band survive, the new storefront should be limited to the space immediately below. If even these have been removed, a new sign band should be built as a dividing line between the new storefront below and the old building above.

Separation of the new storefront from the old building is extremely important, especially regarding the use of modern building materials in contrast with the old. The storefront itself should be either a simple bronze or charcoal grey anodized aluminum frame or a wood frame with plate glass display windows and entrance door. The storefront should fill the entire opening and non-glazed areas should be finished with plain, smooth panels set into the metal or wood frame and be the same color as the frame. Wall areas surrounding the storefront should be covered either with prefinished, modular panels or with wood or brick depending on whether the building is constructed out of wood or brick. The texture and painted color of a new wood storefront on a wood building can usually be matched with the rest of the building quite easily, and it is not really necessary to visually separate the new storefront. On a brick building, a new brick storefront will, almost without question, stand out like a sore thumb simply because it is impossible to match old and modern brick and it is therefore absolutely necessary to separate the new brick work from the original. New brick work should, however, closely match the bonding pattern of the original as well as the size, texture and color of the bricks themselves.



DORMERS

While dormers are common design elements to the French Second Empire, Victorian, Gothic, and Queen Anne styles, they are not original to the Federal, Greek Revival, and Italianate styles. Every effort should be made to place new dormers on the rear of buildings where they are out of view of the public. If, for whatever reasons, new dormers must be placed on the front of a Federal, Greek Revival or Italianate style building, or on the sides of the building if it has a front gable facade, the dormers should only be put on in pairs to preserve the architectural symmetry of these styles and should only be of a type known as a gable dormer. When new dormers are added to buildings in the French Second Empire, Victorian Gothic or Queen Anne styles, the new dormers should match existing dormers in design or should be of a compatible design which will not detract from the architectural character of the building.

If possible, the new gable dormers should be symmetrically positioned over or between existing lower story windows and should be in scale with existing window sizes. The type of sash used should also match existing sash.

In no instance should shed dormers whether individual or continuous ever be placed where they are in view of the public. In spite of the fact that they give the most interior ceiling height, they are completely out of character with almost any nineteenth century architectural style.



PORCHES

Porches, while rare on Federal style buildings, are common to a variety of nineteenth century building types and architectural styles, either as integral components of the original design or as later additions and are an important element to be reckoned with. Porches generally are of two distinct types: entrance porches which often are an integral part of the building's original design; and verandas which are either an integral part of "temple front" Greek Revival and Italianate and Queen Anne style houses or are later additions, usually in a different style. Porches which are an integral part of the original design should be repaired and, if possible, restored to their original appearance. Removing an original porch or replacing posts or columns and railings with architecturally incompatible substitutes such as ornamental wrought iron can destroy one of the important elements of a building's architectural style and, consequently, can damage a building's integrity. Porches which are not original to a building can either be removed or repaired, depending on whether or not the porches asset as a climatic amenity outweighs a property owner's desire to restore a building to

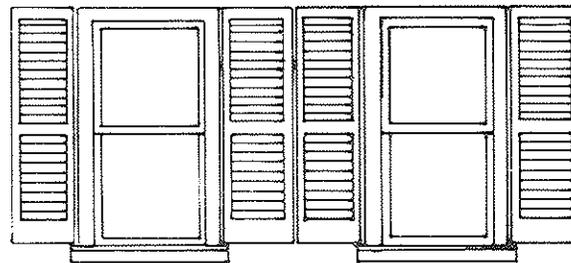
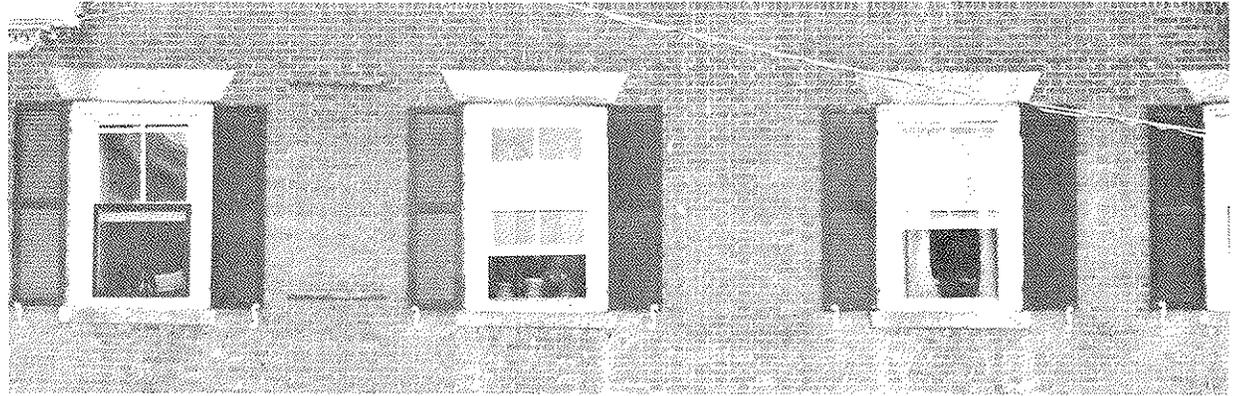
its original appearance. If a porch has to be rebuilt or if a property owner wants to add a new porch to an existing building, it should be designed in keeping with the scale and architectural character of the building. The most common structural problems are rotten footings, floors and post or column bases. Footings and floors are usually easily replaced or repaired but posts and columns, especially those with ornamental detailing may be more of a problem to repair or match and may require special milling or the expert hand of a carpenter who is sympathetic to preservation needs.



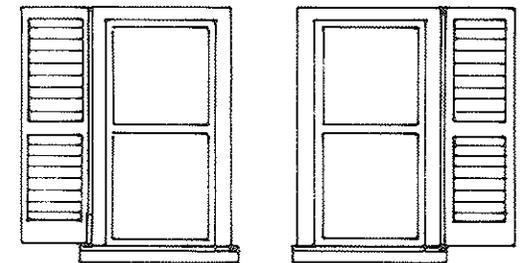
SHUTTERS

Exterior wood shutters were common to most architectural styles throughout most of the nineteenth century except on commercial and high style buildings erected after the Civil War. Shutters enhance the character of even the plainest buildings, and it is strongly recommended that property owners replace those that are missing. The most important thing to remember is that whether the shutters actually hinge or not, they should look as if they could work. The shutters should neither be too long nor too short for the window opening and should be wide enough to cover the entire window if closed. There should be enough wall space between windows for the shutters to lie flat, and shutters should not be used on a window which they obviously cannot cover as indicated in the diagram. Hanging a pair of shutters on the outside of a close set pair of windows should be avoided. The fact that there is not enough space in between for the other two shutters suggests that the windows were never meant to be hung with shutters.

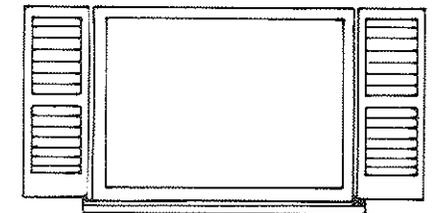
Shutters that look obviously fake will do nothing to improve the building appearance and will only detract from it. While shutters made of wood are historically the most accurate, shutters are presently also available in aluminum with a baked enamel finish and in both solid color vinyl and plastic. Each of these look remarkably like wood, but usually are not available in the correct sizes.



Recommended



Not Recommended

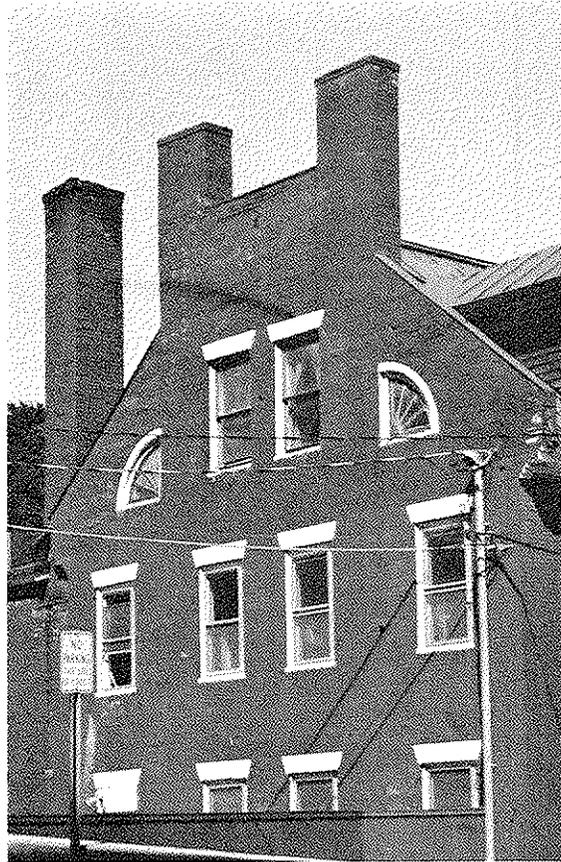


Not Recommended

CHIMNEYS

Chimneys are an important design element to every nineteenth century architectural style and should be maintained with periodic repairs, even if they are no longer used. The most common mistake made in rebuilding a chimney is not building it high enough and not making it the right shape. Chimneys located on the inside of a building were usually square in shape while those located on an exterior wall were rectangular. Chimneys located on an outside wall were never, except in some Queen Anne style buildings, built so as to project but were built flush with the exterior wall surface. Federal style chimneys were usually tapered at the top, banded, or straight; Greek Revival chimneys were almost always straight; and Italianate, French Second Empire, and Queen Anne style chimneys were plain or fluted with corbelled caps or decorative brick work.

In order to save interior space and construction costs, new chimneys are usually located on the outside of a building where often they damage the building's architectural character. Every effort should be made to locate new chimneys, especially stove chimneys, on the interior of the building or on the exterior where they are out of the view of the public. If this is not possible, new exterior fireplace chimneys should only be built on a gable elevation, even if the elevation is the front facade of the building, and should be symmetrically located between existing window openings. Windows should never be eliminated or covered over to accommodate a chimney. The chimney should be stepped on both sides above the fireplace opening if it is centered on the peak of the gable and on only one side, usually the side furthest from the center line of



the gable, if it is offset to one side of the peak. The size of the chimney should be scaled to the size of the building. On masonry buildings, the chimney should be constructed out of a matching material while on wood frame buildings, brick is recommended. Concrete block and stucco are esthetically unsatisfactory and should never be used.

COLOR

One of the most important decisions a property owner will have to make is the choice of exterior colors. This is of particular importance with regard to wood frame buildings where the combination of wall and trim colors usually decides the building's basic character. On a masonry building, although the basic wall color has already been established, the choice of color for windows, doors and trim can still have a decisive influence on the character of the exterior. Choosing colors is a very personal decision but the choice of color has its effect on the general character of the streetscape. A color scheme should be neighborly as well as esthetically effective on the individual building so that both the building and the environment of the street-scapes benefit. Buildings isolated in the countryside are not generally effected by this problem.

Nineteenth century architects, and in general the average citizen, were very conscious of using appropriate exterior colors and color schemes. The most famous treatises on the use of exterior color were written by Andrew Jackson Downing before the Civil War but were widely parodied by other architectural designers before and after. Published in architectural pattern books which were widely circulated among carpenters and other people in the building and related trades, the information was commonly available to almost everyone. The rules that Downing and his contemporaries set down are applicable, in general, to almost all nineteenth century architecture but especially to the Federal, Greek Revival, and Italianate styles. The best source for information on victorian colors and color schemes is **Exterior Decora-**

tion, a republication of the Devoe Paint Company's 1885 display catalog of ready mixed paints, published by the American Life Foundation and Study Institute of Watkins Glen, New York. Downing's basic premise was to "avoid all those colors which nature avoids" and to use only the colors of the "soil, rocks, wood, and the barks of trees." The color white was to be avoided because it was "too glaring and conspicuous" and was not in harmony with the other colors of nature. Contrary to popular myth, white was not the universal color of the Greek Revival period by choice but because of economics. White lead paint was the cheapest paint available throughout most of the nineteenth century. Downing and others also emphasized that painting a building only one color was insufficient and that two, three and even four colors were necessary and recommended. Whether the color of the building should be light or dark was determined by whether the building was openly exposed to view, and therefore should be painted a dark color, or was concealed from view by either other buildings or foliage, and should be painted a light color. The architectural detailing should be painted a contrasting darker or lighter color, either a different shade of the same color or a different but compatible color, depending, respectively, on whether the building is painted a light or dark color. The third contrasting color was for the shutters and a fourth color was recommended for the window sash. While Downing's objections to white may have been well founded by nineteenth century standards, white has come to be a very traditional color for residential wood buildings throughout most of New England and is recommended as a safe color if no other color can be decided on. Downing's recommendation to use only earth colors and



earth tints and to paint the body of the building and the architectural detailing contrasting but compatible colors is a reasonable course to follow. However, because it is usually difficult to visualize from a paint sample in a catalog exactly what a specific color scheme is going to look like, a section of the building should be painted as a test to determine whether or not the color scheme chosen will be esthetically in

keeping with the character of the building. Bright colors are not appropriate to nineteenth century buildings. The one exception is yellow which when trimmed with white is a classic Greek Revival style color scheme.

Specific color recommendations are:

1. Shutters should always be painted a dark color, preferably dark green.
2. In general, the color of the window sash either should match the color of the trim or should be painted matte black or dark green. Window sash can also be painted white on white buildings with white trim. Window sash, doors, and surrounding frames on Federal and Greek Revival style brick buildings should be painted white.
3. Acceptable color choices for window sash on masonry buildings in the Italianate, French Second Empire, and Queen Anne styles are dark brown, dark grey, and matte black. Frames around windows and doors, cornices, lintels, sills, and storefront entablatures constructed out of either stamped tin or wood, and original cast iron or wood storefronts should be similar in color to either the surrounding masonry or the darker sash, or should be painted a contrasting but compatible color. Doors should be painted matte black, dark reds, browns, greens, or ochre.
4. In general, on a wood frame building, any part of the building which is not covered with an original siding material such as clapboards, wood shingles, or boards and battens should be considered trim and should be painted as such.

STREETSCAPE STANDARDS

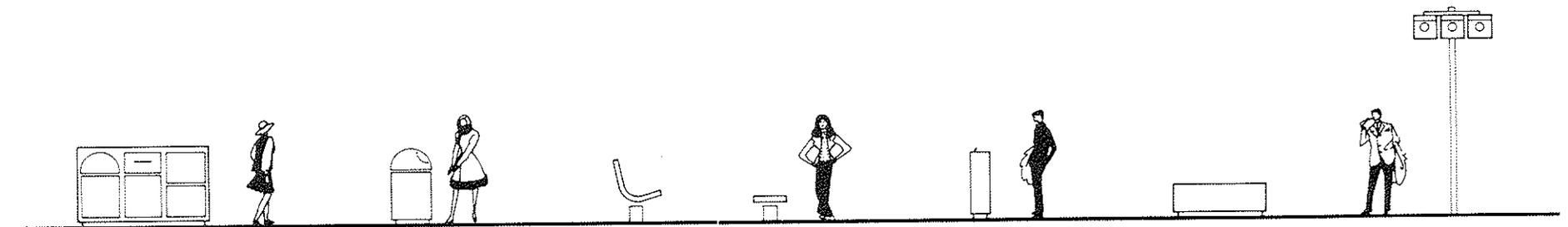
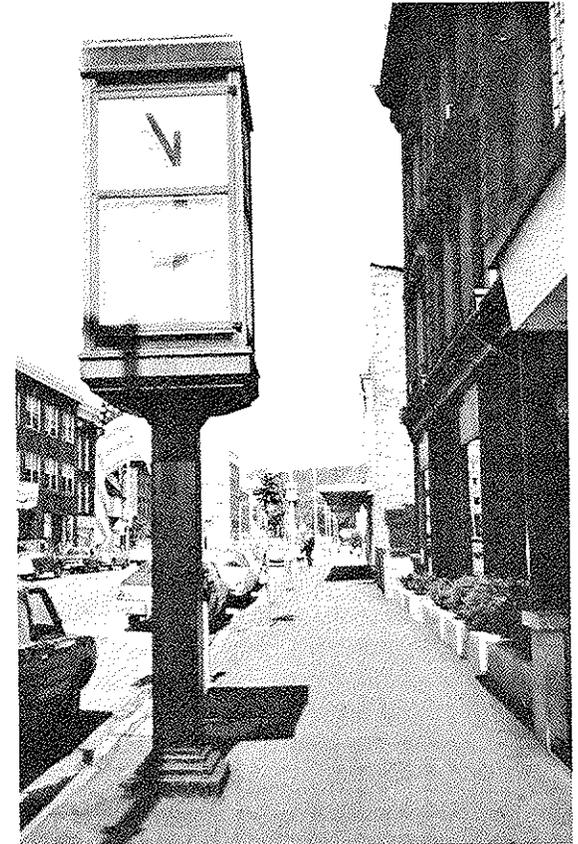
STREET FURNITURE

Street furniture is a vital part of a total streetscape environment and should enhance the street. It has been said that the design of objects in the street is as important to the quality of a City's aesthetic as are the buildings themselves. The design of a street furniture system must coordinate the style, scale, shape, color and materials of all elements in order to give a consistent level of quality and order to the street. Elements considered to be street furniture include benches, trash receptacles, planter boxes, fire hydrants, parking meters, telephone booths, traffic signals, traffic signs, parking signs, mail boxes, newspaper racks, barber poles, clocks, street lighting, planting and more.

The following principles are suggested as a basis for the design and selection of street furniture items:

1. Individual street furniture items must be designed to blend with one another, and must be designed to human scale.

- 2. Warm materials such as wood or native materials such as granite should be used. Materials should be durable and easily maintained.
- 3. Colors used in street furniture probably should be neutral so they blend rather than conflict with the surrounding area.
- 4. Street furniture should never interfere with proper pedestrian circulation, nor should it interfere with snow removal.
- 5. Various items of street furniture should be combined wherever possible. For example, a bus shelter could contain a newspaper rack, trash receptacle, telephone, and a bench.
- 6. Pedestrian paving in Montpelier tends to be continuous asphalt with no relief. Paving patterns in materials other than asphalt are to be encouraged.



Combined Elements

Waste Receptacle

Benches

Drinking Fountain

Pedestrian Scaled
Light Fixture

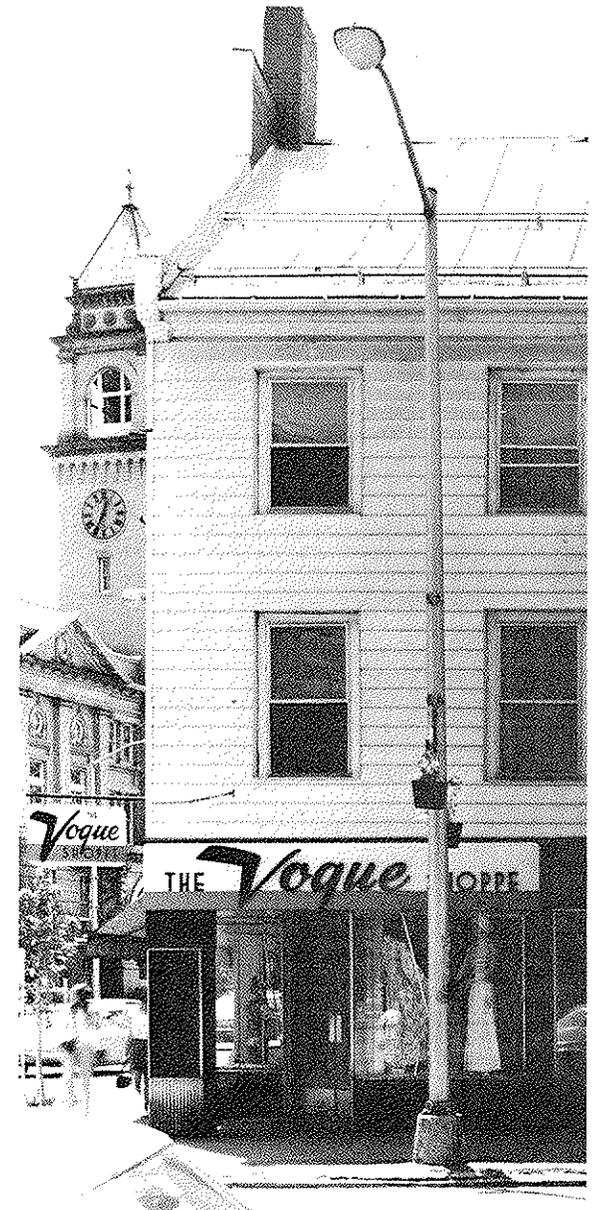
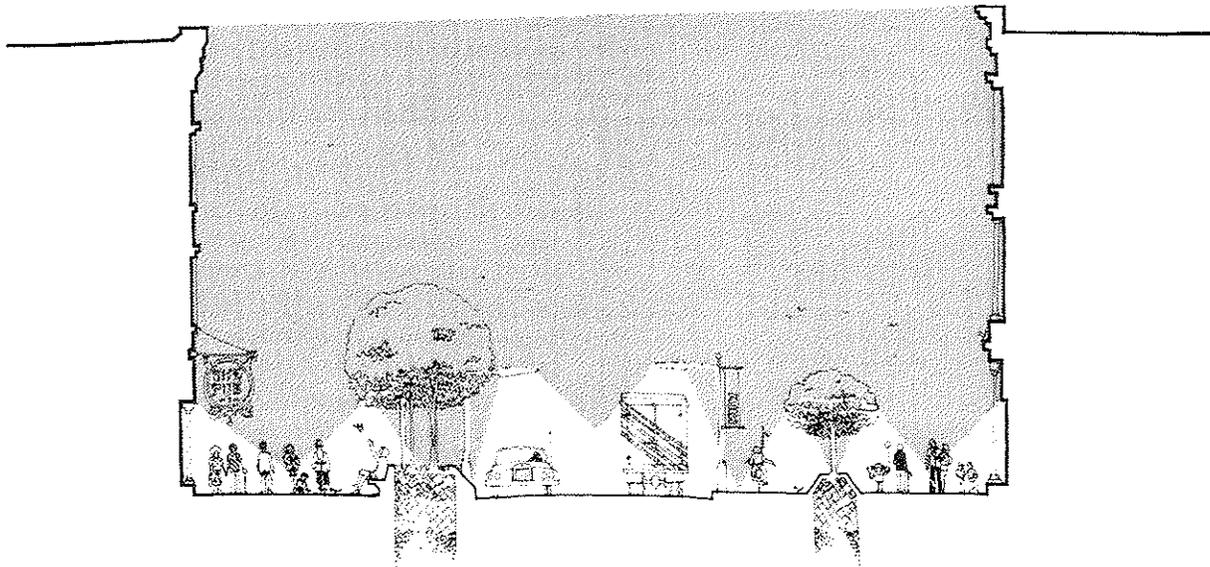
LIGHTING

City streets are given unity at night by their street lighting. Lighting of a non-varying nature contributes to monotony and needs relief. Different kinds of lighting are called for in response to functional changes in the City. The lighting of a residential neighborhood, for example, should be different in nature from a shopping street. Lighting intensity also can be varied in an area in response to need. A shopping block requires more lighting at intersections than in the middle of a block.

In considering street lighting, the scale of fixtures, the color and intensity of the light, and the function of areas to be lighted must be

considered. Light levels at intersections should be three times higher than along a block. The light fixtures in downtown Montpelier are mercury vapor fixtures on high aluminum poles, are out of scale with the buildings, and provide much more light than is necessary. It is proposed that these be replaced with pedestrian-scaled incandescent lights, spaced such that 3 foot candles are produced at mid-block and 10 foot candles at intersections.

It is also proposed that because of the high architectural quality of the buildings in the Central Business District, that building facades be illuminated at night from the tops of buildings across the way. This light will also aid in indirectly lighting the street.



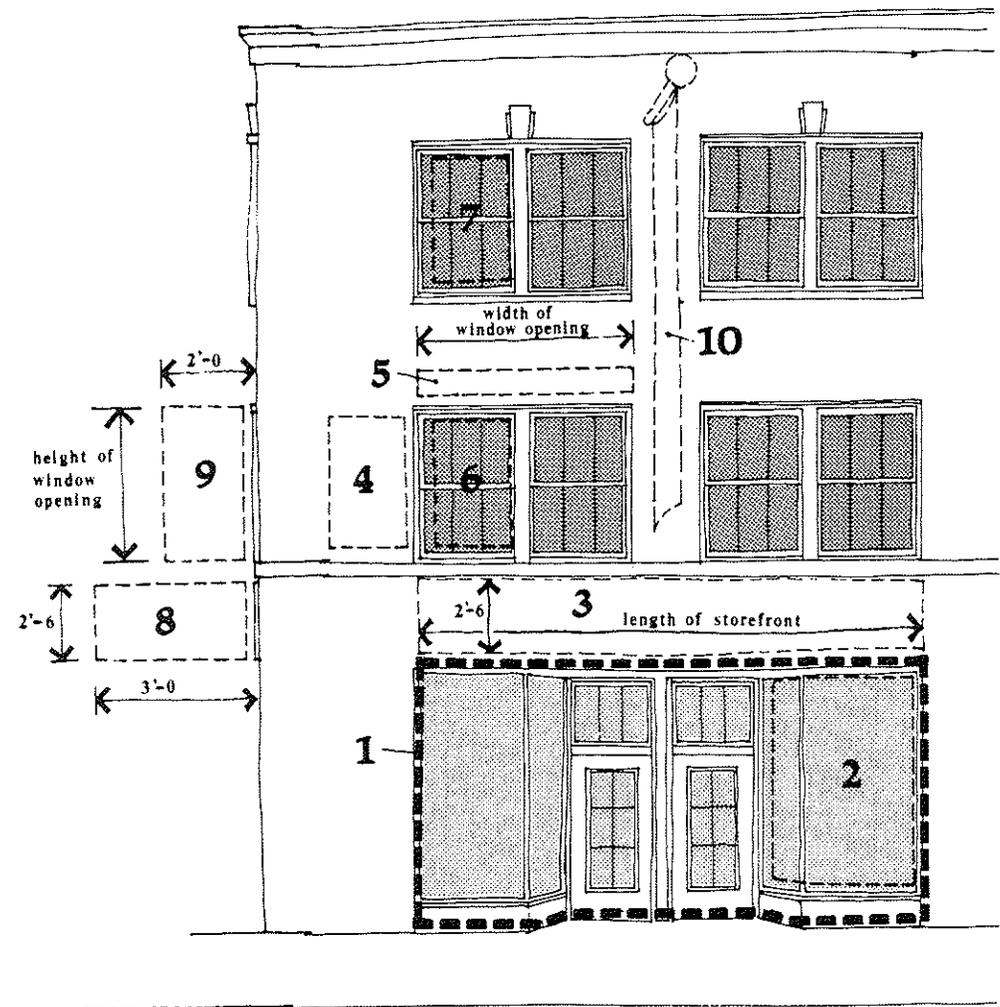
SIGNS

The earliest signs to appear on buildings used for commercial and professional purposes were decorative and information elements that named a building or described functions and activities carried on within. Modern signs, if thoughtfully designed, can continue this tradition and provide dignified and attractive contemporary ornamentation.

As a general rule, signs should be limited in size depending on their location on the facade of the commercial building and should not be allowed to conceal architectural details. The accompanying illustration identifies suggested sign locations and sizes.

Street level signs identifying commercial establishments should be placed within an information band (No. 3) immediately above the storefront (No. 1) or should be applied directly on the display window (No. 2). The information band should be no longer than the overall length of the storefront and should either be confined to the width of an existing band defined by the architecture of the building or should be no more than two feet, six inches in height. If two establishments share a common storefront, as is shown in the illustration (No. 1) then both should use the same signing format.

Second, third and fourth floor businesses should be identified primarily by a street level information directory. However, second floor businesses should be permitted to display signs which are placed either directly beside or immediately above a related window (No.'s 4 and 5) or are applied directly on the window glass (No. 6). A sign placed beside the window should

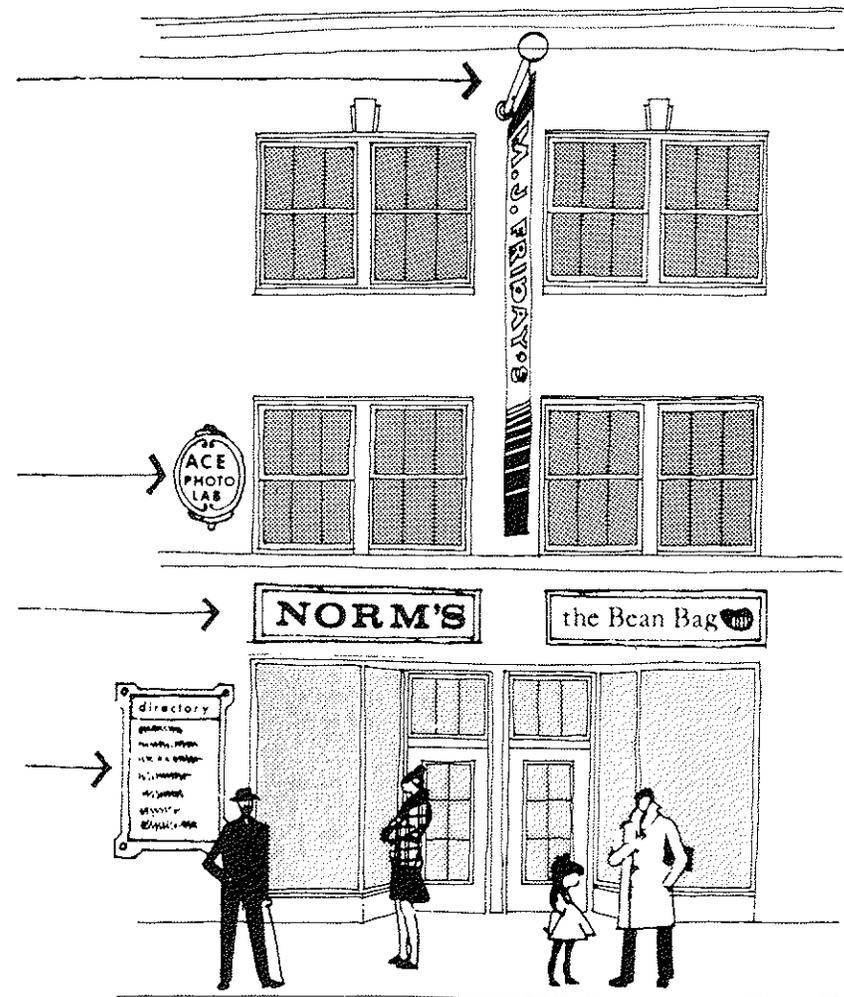


be no higher than the height of the window opening while a sign placed immediately above should be no longer than the overall width of the window. No signs should be permitted on the facade of the building above the second floor level except those which are applied on the window glass (No. 7).

Projecting signs should only be permitted for street level and second floor business identification. Those located on the street level (No. 8) should be placed within the information band; should not project further than three feet beyond the facade of the building; and should be no more than the height of the information band. Those identifying second floor businesses (No. 9) should be placed directly beside a related window; should not be higher than the height of the window opening; and should not project further than two feet beyond the facade of the building. Additional signs should also be permitted around the skirts of storefront awnings only if the signs are a permanent part of the awning.

A continuous information band of uniform height in which all signs are placed should be established for a row of individual buildings of different architectural styles which are similar in scale and maintain a continuous facade line. The same would be true for a row of architecturally similar buildings designed as a block.

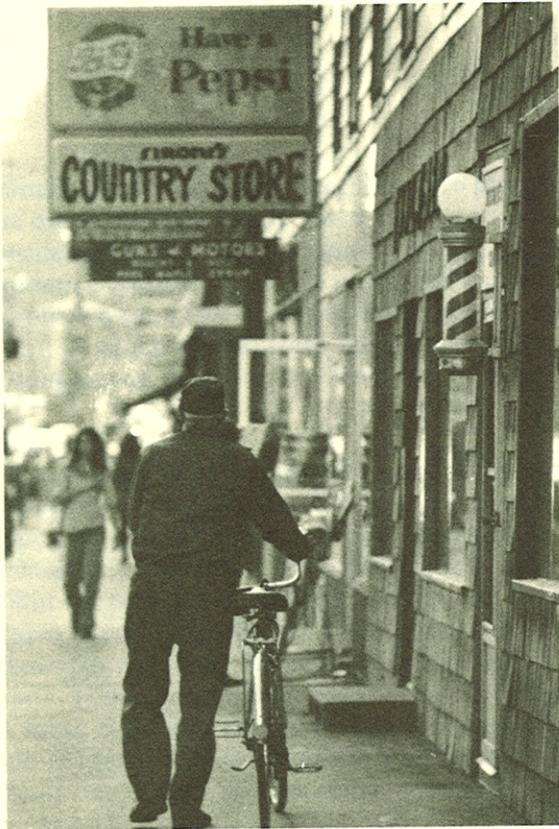
Temporary banner



Commercial sign applied to building within allowable zone

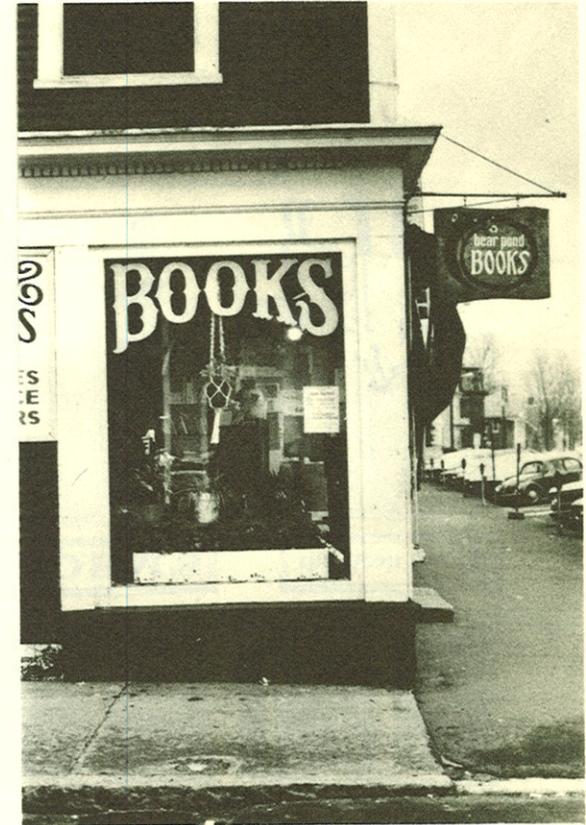
Commercial signage applied to building within allowable information band

Building directory



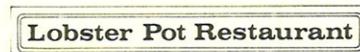
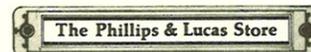
The material, particular configuration, and lettering of individual signs should be compatible with the architectural character of the building. Signs should be formal in design and characterized by dignified type face, restrained ornament, compatible colors and simplicity of shape. Symbols representing the service offered or the general type of merchandise sold, such as a barber pole for a barber shop, a mortar and pestle for a drug store and a pair of glasses for an optometrist, should be encouraged. It is suggested that the number of colors be limited to three in order to avoid visual confusion. Some suggestions for generally acceptable sign shapes and type faces are shown in the accompanying illustration.

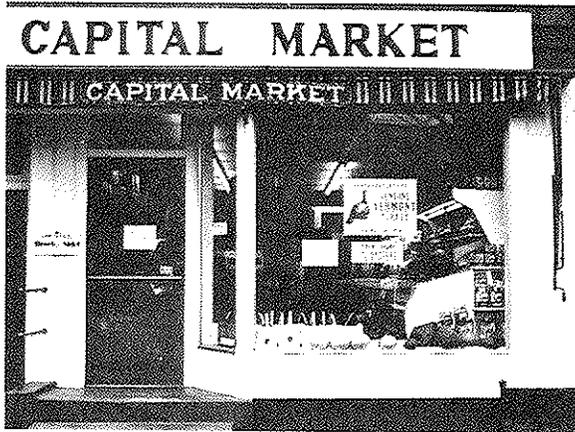
Signs are best lit by exterior sources. Flashing and neon signs should not be permitted on the exterior of a building. It is proposed that product or brand name advertising be limited to only that absolutely necessary to identify the prime business activity of an establishment. The content of exterior signs should be restricted to the name, function or activity of a commercial or professional place of business.



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Window boxes attached to building within allowable zone

Commercial signage applied to building within allowable information band

Collapsible awning attached below sign within storefront zone

