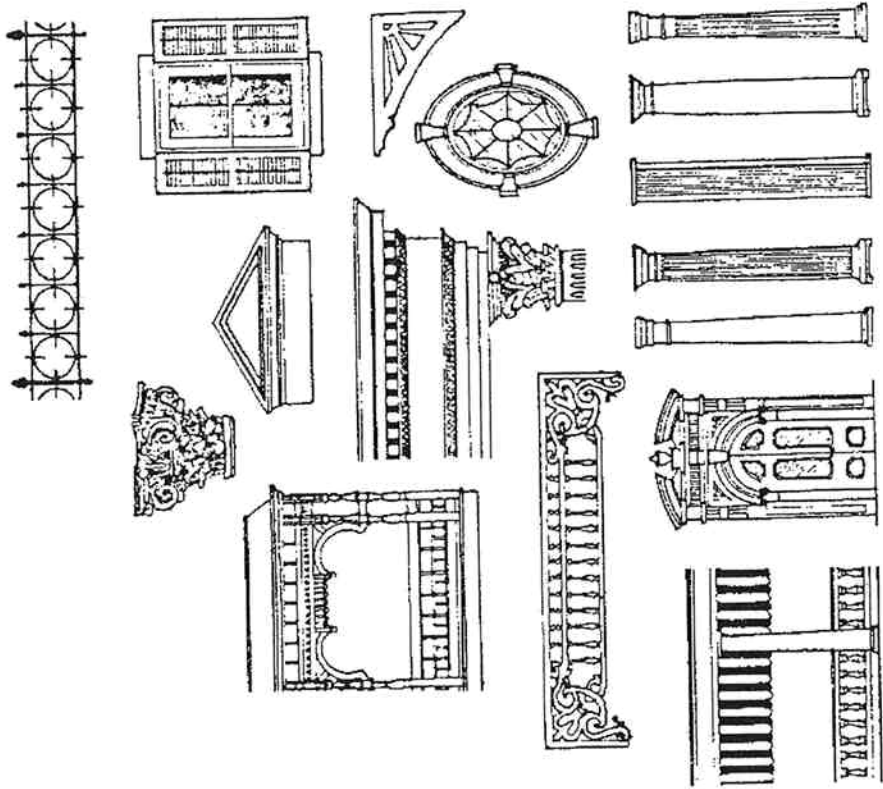
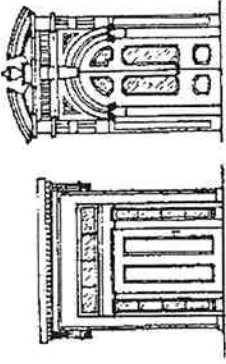


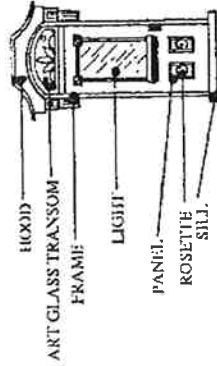
STYLE ELEMENTS



DOORS



Historically, the front door of a structure was a prominent element of the facade. Doors crafted from fine woods resplendent with decorative glass and elegant hardware expressed an owner's taste, character, and wealth. Doors were constructed of a solid wood frame inset with panels of glass or wood that were held in place by moldings. This configuration created a handsome three dimensional design. Front doors were often part of a carefully coordinated entrance incorporating decorative cornices, pilasters, sidelights, stairs, railings, balusters, and in the case of commercial buildings, lighting, signage, and shop windows. Rear and side doors were usually less elaborate in design and detail reflecting their service and delivery functions, but were sympathetic in style.



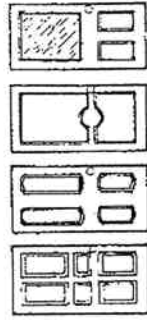
Original doors and entrances, because of their high visibility and prominence, are important components of a structure; every effort should be made to retain, restore, and protect them. Desirable features include original or period hardware, unpainted stone sills and lintels, hood molds, transoms, and wood or metal architraves.

Late nineteenth century doors were often embellished with etched, leaded,

stained or beveled glass panels. If the glass is chipped, cracked or missing, it can be repaired or replaced with new glass. Fancy glass of similar style can often be purchased from antique or glass dealers.

An exterior wood door is continually exposed to the deteriorating effects of sun, wind, moisture, and customer usage. It requires a protective coating of either paint or exterior use varnish. A door in good condition is easy to maintain, requiring a light application of new coats of varnish or paint. An extensively damaged finish requires complete sanding or paint removal prior to refinishing.

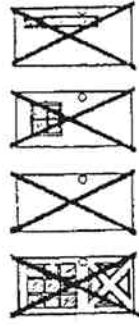
Storm doors should also be considered for their decorative abilities as well as their energy conservation and protective properties. See also *Weatherproofing* and *Home Security*.



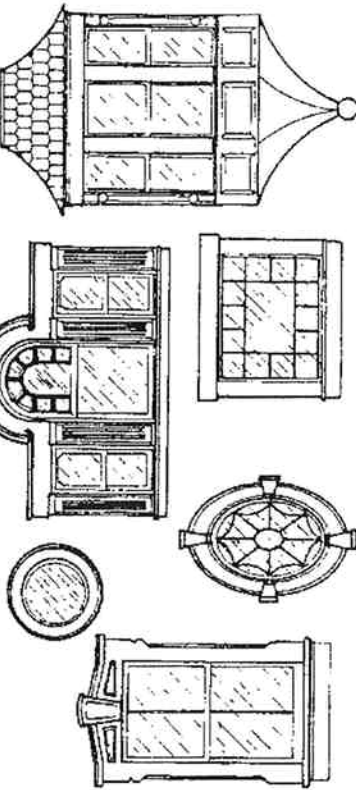
Multi-panelled doors of wood or steel with or without glass are readily available as are fancy glass originals and reproductions. Brass, porcelain, and wood hardware add to the character of the door.

PROHIBITIONS

The replacement door must fit the existing opening, with the opening being neither decreased nor enlarged in size. Flush steel or flush wood doors and interior doors used on the exterior are prohibited.



WINDOWS

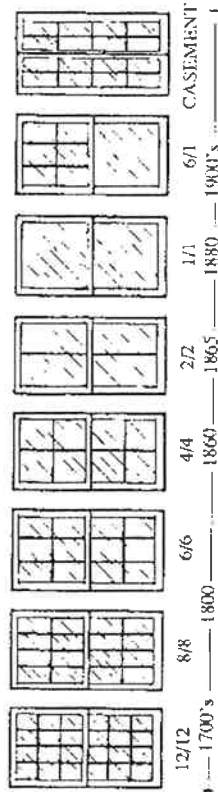


Windows make an important contribution to the character of a building and the block. Size, shape, type, ornamentation, and orientation reflect building style, and rhythm created by the placement of windows symmetrically or asymmetrically enhances the style.

Historically, windows served as a functional means of providing light and air circulation within a building. A storefront window also functioned as a display area for the store's wares. The development of the glass making process provided for larger panes (or lights) with a variety of hues and textures. During the Victorian era, glass making graduated to a fine art. Fancy bevelled, leaded, etched, curved, and art buildings.

Except for the plate glass of the

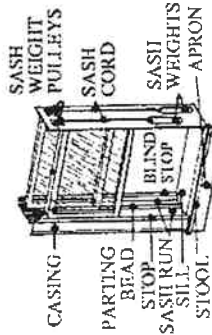
COMMON SASH ARRANGEMENTS



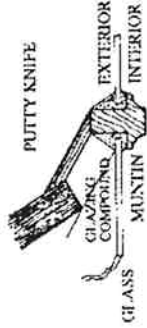
storefront, double hung sash is the most common window type. This window has two vertically movable sections (sash) set in one frame and can feature one or several panes per sash.

A common window is an open ended box set through a wall. The bottom of the box, or sill, is of heavier stock and slopes away from the wall to shed water. The three remaining sides constitute the jamb with the two vertical sections further classified as stiles. The sash is the wooden frame which holds the glass. A double hung window has two sash frames which travel in the stiles. These sash frames are hung on pulleys by weighted cords.

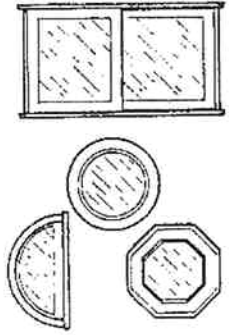
After several coats of paint have been applied to a window over the years, the space between sash and frame can become clogged and impede movement.



A flat tool will break the paint seal. Missing, broken, or frayed sash cords can be replaced by removing interior window casing, thereby getting access to the weight pocket. Cotton rope with a nylon center and labeled as sash cord is an appropriate new cord material. Flat steel chain can also be used.

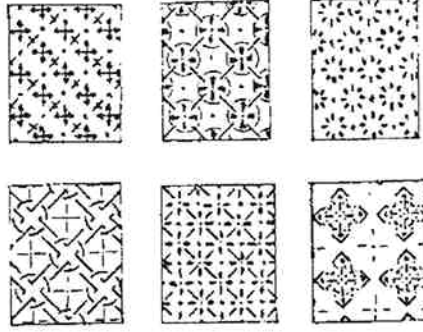


If the putty seal securing glass within a sash has cracked or the glass requires replacement, the existing sealing material must be removed. Before replacing the glass, owners should consult local housing/building code officials to ensure the use of proper glass. Glazing compound can be applied to the newly set glass within its frame, and the compound can be smoothed with a putty knife. Painting will further seal the window pane edges.



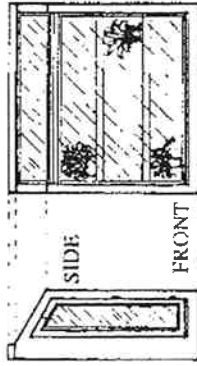
Window fabrication must be of wood—although the exterior face can feature a vinyl cladding. Vinyl or aluminum replacement windows are prohibited. Any desired size or shape can be reproduced, and glass types such as etched or bevelled are readily available.

ETCHED GLASS PATTERNS



Skylights are windows set through a roof. They originated in the late nineteenth century on a small scale. Recently, skylights have become extremely popular. They come in a wide variety of dimensions, are framed with wood or aluminum, and feature bubbled or flat glass. The low profile style of skylights are preferred to the bubble style because of their minimal visibility. If aluminum frames are desired, they must be bronze in color. Skylights are appropriate where they do not have prominent street visibility.

GREEN HOUSE WINDOW FOR SIDE AND REAR FACADES ONLY



A relatively recent product is the thermal pane window. This utilizes from two to four panes of glass placed in the same frame with seals between the glass pieces. To provide the appearance of multiple panes per sash with the use of these windows, snap in interior muntins are available. Respect should be given to the style of the structure when pane configuration is considered. If repair of a thermal pane window is required, factory exchange of the damaged sash is necessary.

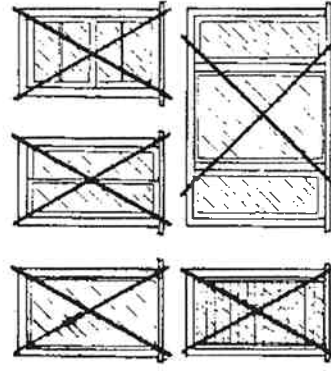
PROHIBITIONS

A replacement window must be of the same material, size, proportion, style, and configuration as an original window. Vinyl or aluminum replacement windows are prohibited. When replacing windows, caution must be taken to insure that the frame and sash combination does not reduce dramatically the glass area of the window. This will change the fenestration of the building. Window openings cannot be reduced to accommodate new windows. The pane configuration must match the original configuration of the windows being replaced so as not to alter the character of the building. Raw aluminum, other metal finishes, and tinted or mirrored glazing are not permitted. Aluminum storm windows

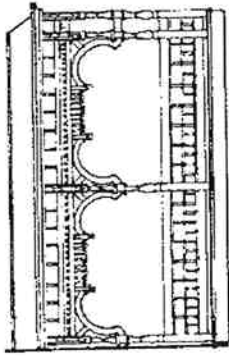
are permitted only if painted or vinyl-clad.

FOR MORE INFORMATION

- "Fixing Double Hung Windows," James McConkey, *The Old House Journal* Vol. VII, No. 12, December 1979.
- "Restoring Rotted Widow Sills," *The Old House Journal* Vol. II, No. 8, August 1974.
- "Defeating Decay," Clem Labine, *The Old House Journal* Vol. IX, No. 5, May 1981.
- "Make Your Own Ornamental Wood Screens," Susan Clark, *The Old House Journal* Vol. IX, No. 7, July 1981.
- "Window Glass," H. Weber Wilson, *The Old House Journal* Vol. VI, No. 4, April 1978.
- "Your Residential Stained Glass," H. Weber Wilson, *Architectural Ecology*, Chambersburg, Pa.
- Special Window Issue, *The Old House Journal* Vol. X, No. 4, April 1982.



PORCHES

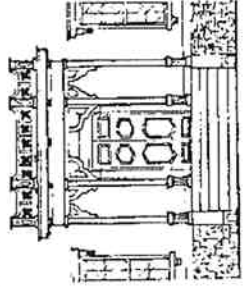


Porticoes originated from the classic Greek portico which defined the entrance to a structure with an elaborate framing element. Incorporating columns, pediment, and often a grand stair, the portico was designed as an impressive introduction to the interior living space.

The mid-nineteenth century experienced a romanticism in building design. Nature and geography influenced the size and shape of a building, thus achieving a composite whole, and a verandah became an integral element in this design.

The porch and verandah satisfied human needs on three levels. Emotionally, the porch served as a transition between the natural and man-made environments. Creativity was expressed through architectural embellishments such as columns, brackets, scrollwork, and spindles. The verandah provided an opportunity for enhancement of a structure's basic theme.

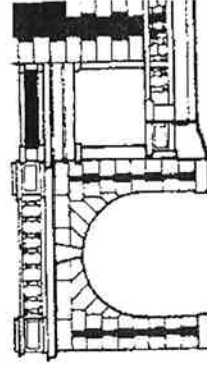
PORTICO



Functionally, a properly designed and oriented porch dramatically reduced heat gain in the summer months. In winter, low angled sun rays entered house windows to warm the room. The verandah often linked major entrances with minor ones, shielding these entrances from weather. A broad verandah provided a living area that was cooled by breezes. The Victorian verandah featured wicker and folding canvas furniture, plants, straw mats, and canvas awnings or blinds. The porch swing was also a common feature.

Socially, the front porch offered a place for the residents of a house to recognize or ignore passersby. Casual acquaintances and neighbors could be entertained here without the personal commitment of the formal parlor. Thus, the porch served as a connection to the neighborhood.

PORTE-COCHERE



Porches are focal points of a facade and deserve proper rehabilitation. If rebuilding is required, duplication or reuse of existing decorative details is important. Recycling trim insures retention of original character.

Floor boards on wood porches receive substantial wear and tear. These interlocking boards can be turned over if the top side is worn. Rotted boards can be replaced with new boards treated with a wood preservative. Porch floors

were originally painted grey, beige, brown, or dark green; this continues to be the standard.

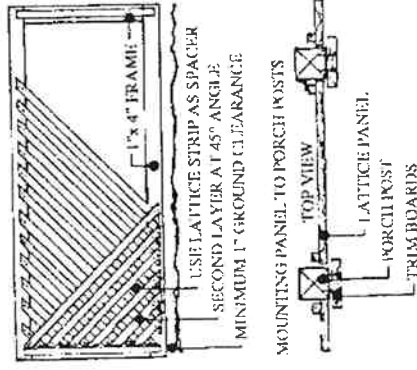
For structures built during the early years of the twentieth century, poured concrete was used as a porch floor material. Concrete is fairly impervious but is susceptible to settling cracks. New concrete can be poured after the damaged material is chipped out. The porch can be colored the original gray or painted gray, beige, brown, or dark green.

Columns are necessary structural and decorative elements; therefore, their preservation is extremely important. Deterioration of columns will cause collapse of the porch roof. Rotted wood columns can be reproduced, or sections can be duplicated and grafted to the original.

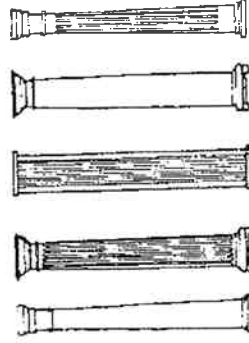
Railings and balusters function as protective supports for persons utilizing the porch and must be able to bear a person sitting on or leaning against them. They also enhance the design style of the porch. Repair of a railing is similar to that of a column - duplication of parts or reproduction of the whole.

The late nineteenth and early twentieth centuries witnessed the use of heavily decorative cast iron work on porches as supports and railings. Pieces can be rewelded or duplicated and then primed and painted. Also introduced during this period was the use of stone column bases. This was common particularly if the house had a raised foundation. Due to the size and weight of the materials, repairs such as resetting stone require professionals.

LATTICE PANEL CONSTRUCTION



A wood preservative and primer should be applied to all surfaces before assembly. A minimum of one inch ground clearance needs to be allowed to reduce chances of rot and insect infestation.

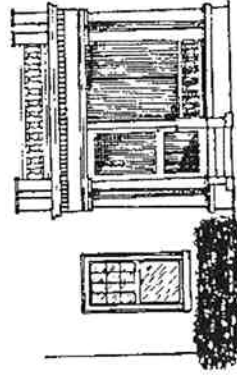


Many products are available which duplicate original floor boards, balusters, columns, and railings enabling retention of original materials and character. Wood columns in a variety of styles, heights, and diameters can be ordered from lumber companies. Steel columns are available, and decorative column caps and cornice work are reproducible.

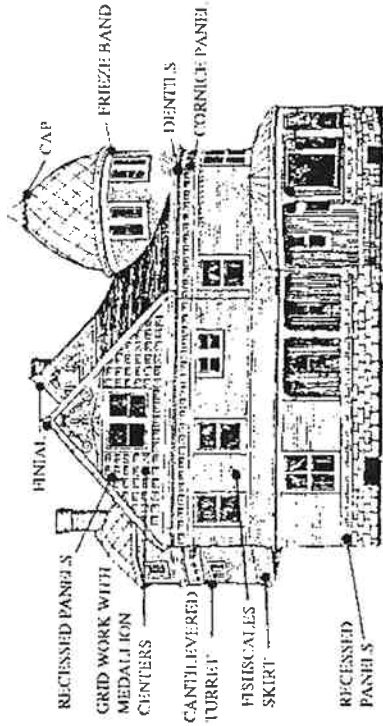
PROHIBITIONS

Porches and steps which are appropriate to the building and its development should be maintained. Distinguishing architectural features of wood, iron, cast iron, and stone should be restored or duplicated and not removed. A new porch should be of similar architectural style, character, and material as the principal structure on which it is to be located. No aluminum or vinyl porch enclosures are permitted. Rear porches may be screened or glass enclosed; however, the proportions of the porch must be maintained. Porch roofing material should match the color and texture of the main roofing material. Lightweight aluminum designed as "ornamental iron" metal supports and rails are inappropriate and shall not be used. Unnatural floor coverings, such as indoor-outdoor carpeting, and pre-cast concrete steps are not permitted.

APPROPRIATE PORCH SCREENING

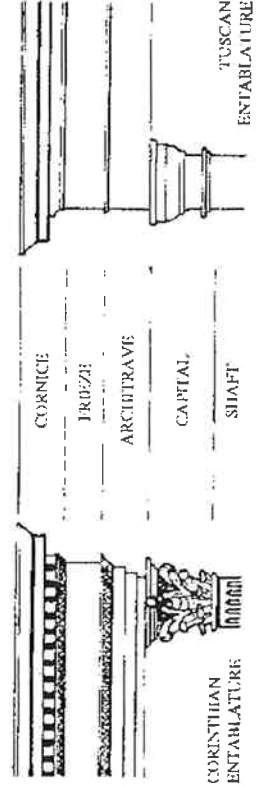


ORNAMENTATION



Ornamentation, combining a variety of materials, patterns, and techniques, is the most interesting and unique architectural element a building can add personality.

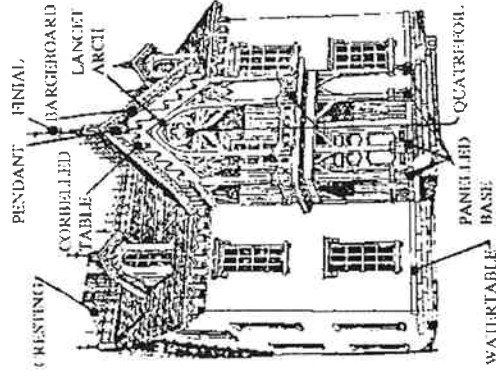
Early ornamentation reflected the skill and imagination of the carpenter. Wood was sawed, chiseled, turned, or sculpted into an endless variety of designs and uses. Bargeboards, brackets, balusters, sunburst, capitals, dentils, cornices, pendants, finials, posts, pilasters, and columns served decorative and sometimes functional purposes. Wood shingles, prevalent as a siding element in the late nineteenth century, incorporated a decorative flair with the introduction of such patterns as



was available in flat, sheet, and solid cast forms. The former could be bent, shaped, and stamped into a variety of fins, cornices, arches, and pediments. Iron could be cast into solid engravings or delicate filigree cresting.

Plaster was used ornamentally during the late nineteenth century. Molds guaranteed the exactness of hardened plaster forms, achieving duplicity found with iron in a light-weight material impervious to rust.

Ornamentation took a variety of forms fabricated from numerous materials: wood, stone, brick, metal, and plaster, all of which provide visual interest and enhance a building's style. These elements make an important contribution to a building's historical significance.

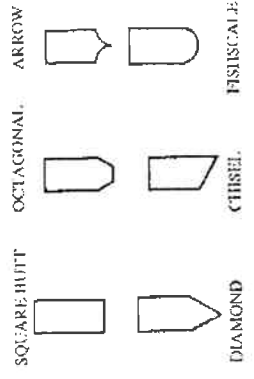


Wood and plaster pieces are easy to reproduce. Sections can be reattached, sealed, and painted. Cracks in wood can be filled with a flexible caulking which will expand and contract with the weather variations as does the wood.

Metal trim damage is often limited to rust which can be sanded and painted with a metal primer and a rust inhibiting paint. Dentils in sheet metal can be pulled or popped out; holes can be patched with fiberglass or metal.

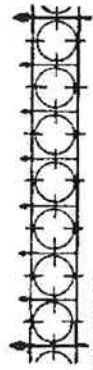
The easiest means of repairing damaged brick detailing is to chip out mortar around the damaged brick, remove the brick, reverse it, and return it to the original location. Should the damage be too excessive, a brick of similar color, texture, and size should be used. If another area of the building, such as a chimney, requires rebuilding, bricks may become available which could be used for detail.

Stone is the least frequently damaged ornamentation material and the most difficult to repair. Due to its weight and the skill needed to duplicate a design, a professional stone mason usually is required. If the detail piece is a plain lintel or similar common unadorned piece of stonework, materials are readily available, and repair is manageable.



Ornamentation elements can be reproduced. Availability, execution, and installation varies with type of material and complexity of the design. Wood, as the most commonly used trim material, is easiest to reproduce and install.

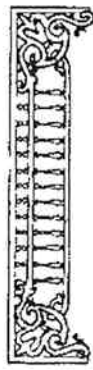
REPRODUCTIONS AVAILABLE



CRESTING



CROWN AND DENTIL MOLDING

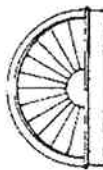


FRIEZE

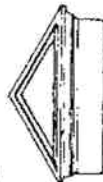


BRACKETS

CAPITALS



SUNBURST WINDOW HOOD

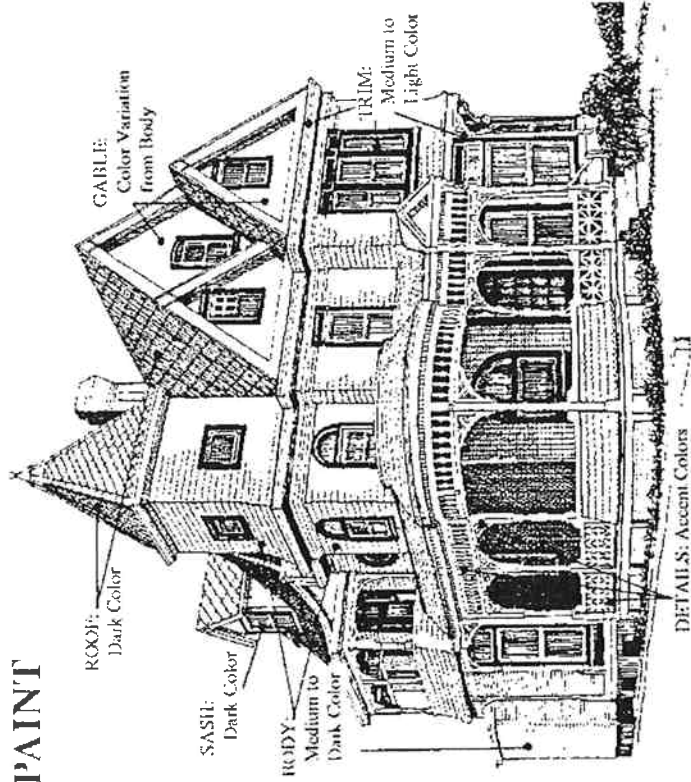


PEDIMENTED WINDOW HOOD

PROHIBITIONS

Original ornamentation should not be removed, altered, or destroyed. However, detailing of a similar style and type—sharing the same time period as the structure or original decoration—can be used to replace original ornamentation. Vinyl and aluminum details are prohibited.

PAIN



ROOF:
Dark Color

GABLE:
Color Variation
from Body

TRIM:
Medium to
Light Color

SASH:
Dark Color

BODY:
Medium to
Dark Color

DETAIL: Accent Colors

Color, through the use of paint, is one of the most important style elements of a building. This medium affords an opportunity for creative expression and accentuation of decorative details and is the one vehicle that both establishes and reflects the personality of building and owner. Visually, fresh paint will make the greatest impact in a rehabilitation project.

Furthermore, paint is a necessary protective element—a renewable skin. This coating is applied over wood, masonry, and metal facade elements, including walls, windows, doors, and trim. Paint seals and protects these components from weather damage.

Color selection influences the character of a neighborhood just as it affects the appearance of a particular building.

Blending colors with nearby buildings is as significant as choosing compatible colors for an individual building. Color intensity should enhance features and reinforce the structural and stylistic elements of a building.

Early building styles in America emulated noble Greek and Roman prototypes in Europe; however, construction was executed in local materials. Frame was the common medium which could be painted a stone color (white, beige, or gray), and texture could be achieved by adding sand to the paint mix.

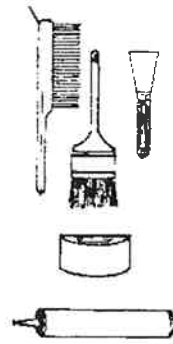
The mid nineteenth century witnessed the development of two contrasting color themes. Gothic buildings employed picturesque details with nature as a backdrop. Earthy tones of

grays, yellows, and tans created harmony between architecture and landscape.

During the same era, building details became more creative, and popularity of these details increased. Darker colors were used throughout a building, but detail emphasis was achieved through the use of vivid contrasts by not limiting the painting of trim elements to darker shades of the primary colors; new colors were introduced to the palette.

The late years of the nineteenth century witnessed a less vibrant use of contrasting colors and a darkening of the overall scheme. Trim details were at the height of popularity, but due to their intricacy had no need to rely on color for accentuation.

A reinstitution of classical architecture occurred at the turn of the twentieth century. Simple, pastel color schemes returned to fashion, presenting a solid forthright impression.



The protective coating that paint provides depends upon proper application and maintenance. A deteriorated paint surface can be both unsightly and physically damaging. Neglected maintenance of a painted surface is the most obvious rehabilitation problem and one requiring care and attention to correct.

Most paint problems are the result of

one or more of the following factors: poor surface preparation, moisture contact, and inferior quality materials. Proper surface preparation is usually the key to insure paint durability. Paint will adhere only to a dull, dry, clean, firm, sealed, and primed surface.

All loose paint on the original surface should be scraped. A sanding block or orbital sander will provide an even level surface on which new paint can adhere. Washing the surface with tri sodium-phosphate (TSP) or other cleaner will remove all chalk, powder, and mildew which adversely affect paint adhesion. To further protect subsurface material and prolong paint life, all cracks should be filled with a caulking; loose sections should be resected.

Thorough surface preparations should be followed with a coat of a high-quality oil based primer/sealer. This coating will restore oil to weathered materials, seal porous surfaces, and provide a uniform film conducive to finish coat adhesion. The primer/sealer should dry completely prior to painting.

Often the paint surface is merely dirty and requires a simple washing with a mild detergent and water solution. This will prolong the life and appearance of the paint without adding excessive coatings.

No paint should be applied to damp material. Durability is shortened considerably when materials to be painted are not dry. The primer/sealer coat should be allowed to dry thoroughly. Water on a existing painted surface or absorbed into a wood subsurface should evaporate completely prior to painting. Generally, a surface should only be repainted when trouble

is apparent. These are alligatoring, chalking, excessive chalking, blistering and peeling, or exposed material. Often, only a small area or section will require surface repair, preparation, and new coating.

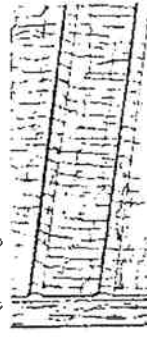
The following sections outline specific problem areas for wood, masonry, and metal painted surfaces. It is important to understand and correct the cause of a problem in order for any new coating to perform properly. *Wood, Masonry, and Metal* sections identify specific causes and cures for common problems affecting paint durability on each material.

WOOD

Wood, an organic (once living) material, is the most susceptible building product to decay when exposed to the elements. Therefore, wood should be covered with some sort of protective coating. Maintenance of this coating can be complicated by factors inherent in the paint, material, or building.

The failure of paint on wood is almost always a problem of adhesion, generally attributable to poor surface preparation or moisture contact.

Alligatoring



Alligatoring or scale-pattern cracks in the paint film are often caused by the inability of the top coat to bond smoothly to a glossy coat beneath. The problem is compounded further when

many coats of paint have been applied to wood. Excessive coatings inhibit paint elasticity. Thus, failure results as wood continues to expand and contract due to temperature and humidity changes.

An effective solution to this problem is removal of all old paint in affected areas by scraping and sanding or by use of a paint stripping compound. This treatment should be followed by primer and finishing coats.

Checking



Checking of paint —characterized by a pattern of short, narrow breaks in the top layer of the coating—is also caused by a loss in film elasticity. These breaks generally follow the grain line of the wood subsurface.

In this case, loose paint should be removed with a scraper and wire brush. Exterior spackle can be used to fill depressions between paint which is firm and cannot be removed by scraping and sanding. Then the entire surface should be washed with TSP or another cleanser, primed, and painted.

Excessive Chalking

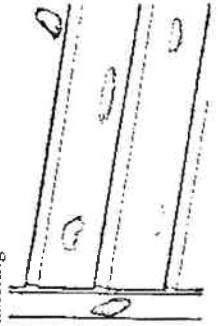


It is normal for all painted surfaces to chalk to some degree. Normal chalking is the result of sun and moisture slowly "weathering" the film surface. However, excessive formation of fine powder on the surface of a paint film is not normal. Excessive chalking is caused by failure to adequately prime and seal a porous surface, spreading surface coats too thin, or overthinning of paint. Often, paint is stored on a cold concrete floor in a basement or garage. A common mistake is to thin this "thick" cold paint. Instead, the paint container should be warmed in water, placed in the sun, or on a heating register until the coating reaches a normal stirring consistency.

To solve the problem of excessive chalking, the chalk residue must be removed. The process includes washing the area with a stiff brush and a TSP solution to loosen deteriorating material and rinsing with spray from a garden hose to remove film. Once the surface is dry, a coat of primer will uniformly seal the surface and provide a good medium to which finishing coats can bond.

If chalk has stained adjacent brick or stone, the stains can be scrubbed with a stiff brush and detergent solution. If the brick is a slightly lighter color after it dries, it can be masked by rubbing a piece of brick over the area.

Blistering



Blisters can be caused by heat, moisture, or both. If a top coat is applied in direct sunlight, heat blisters can result. The film dries too quickly, and trapped solvents later vaporize, causing pressure against the top coat. This problem is especially common when dark, heat absorbing colors are used. Furthermore, moisture trapped in or behind paint film will vaporize or "percolate" when exposed to the sun. The resulting pressures also will cause blistering.

Blisters should be removed by scraping and sanding. If the blister was caused by moisture, the source must be removed. Blistering is usually the beginning stage of peeling; correction of moisture problems is covered in the next section.

Peeling



Peeling is the common paint problem which results when wet wood swells under paint, causing the paint film to loosen, crack, and chip away. Uncaulked joints allow moisture to seep into adjoining wood surfaces. Caulking in a deteriorated condition will have the same effect. Other ways water can reach painted wood include clogged, overflowing gutters; damp basements; boards located too near bare ground; and painting over wood damp with rain or mildew.

Often, the most common failure of paint due to moisture is the result of water vapor becoming trapped within exterior walls. Condensation from washing,

cooking, and bathing passes from interior rooms into the exterior wall cavity. Without adequate ventilation, the moisture will condense on the back of exterior wall material, dampening the wood.

Moisture is frequently responsible for paint failure. Every step possible should be taken to eliminate moisture contact on wood. Joint areas—such as window sash and frame—should be carefully inspected. Loose or cracked caulking should be replaced with a high quality flexible product; a compound that will expand and contract as wood swells and shrinks is necessary.

Exhaust vents should be installed and used to relieve moisture in kitchen, bathroom, and laundry areas. Dishwashers and dryers should have individual vents. Exterior walls around such high moisture rooms or adjacent to drains, pipes, radiators, or heating ducts may require a small three-quarter inch (3/4") diameter vent plug installed two inches (2") above floor level. This will allow moisture laden air to escape. These plugs must be painted the color of surrounding material.

A vapor barrier can be established to eliminate moisture from travelling into the exterior wall cavity from an interior wall surface. This can be accomplished by installing insulation with a foil vapor barrier in the wall cavity or by use of a fiberglass and resin interior wall covering system.

If moisture is rising from the ground through a masonry foundation, a specially designed water proofing is required. Wood should not touch the ground anywhere on a building. Wall siding should begin at least six inches above the ground.

Other moisture problems have been

connected, wood should be allowed to dry thoroughly after scraping and sanding. A "moisture meter", available at some local paint dealers, can be helpful in determining when wood has thoroughly dried. Once dry, the entire area should be sealed with a primer and finished with two finishing coats. More than adequate drying time should be allowed during periods of high temperature or humidity.

Mildew



Mildew or molds are fungi which thrive in nearly all environments. Mildew "feeds" on matter such as wood, paper, leather, and paint. Moisture content in the air is related directly to the growth capability of mildew. A surface with mildew growth must be treated effectively or mildew will reappear on paint which is applied over the fungi. Oil based paints can be particularly conducive to fungi growth.

Mildew can be killed and removed by scrubbing a surface with a commercial mildew wash or a solution of one part household bleach to three parts water. This should be followed by a detergent wash and fresh water rinse. If paint below the fungi is not damaged, repainting is unnecessary. If repainting is required, a mildewicide agent should be added to primer and paint to lessen chances of new mildew growth in the future.

MASONRY

Painted masonry was limited to elements above foundation level. Most

commonly, this was brick. Structures built before 1850 were simple and constructed of soft brick. Clay was kiln fired, baking the exterior surface only. The interior remained dried clay. Soft brick of this type was always painted to protect the fragile brick skin from damage which could expose the raw interior material.

More substantial houses used better quality brick which was softly baked. It did not require painting, but many buildings of this type continued to be painted, emphasizing varied color combinations popular during the mid-nineteenth century.

Completely baked brick was available beginning in the late-nineteenth century. Much of this brick was unpainted since its natural surface was impervious to deterioration.

Peeling



Efflorescence is the most common cause of peeling on surfaces of mortar, brick, and poured or block concrete. Soluble salts are contained in these materials. When these salts are dissolved in water, they are carried to the material surface and remain after water has evaporated. These crystallized salts push the paint away from material surface which results in peeling. This phenomenon can be observed as white staining on unpainted brick surfaces.

Paint peeling can also be caused by water entering behind paint through cracks along sharp edges or deteriorated sections of brick.

Efflorescence must be removed before

repainting. All flaking and chalking paint must be removed from the damaged area by bristle brushing or low pressure steam cleaning. A four percent (4%) solution of hydrofluoric acid or undiluted vinegar may be necessary to remove salt deposits.

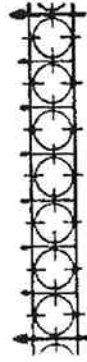
Next, the surface should be rinsed with clear water to remove any deposits of dirt, powdered masonry, or chemical residue. Once the surface has dried, all cracks should be filled with masonry patching compound, latex concrete surface is very porous, an alkali-resistant primer or block filler should be applied before finishing coats. An exterior latex masonry paint should be used as it contains no oil base ingredients to react chemically with mortar elements.

METAL



Galvanized

Metal surface paint peeling is almost exclusively the result of improper surface preparation. Clean metal is the first and most important step in painting galvanized surfaces. All loose, flaking paint must be removed to expose bare metal. Then a conditioner or rust-proof galvanized metal primer should be used. Once the surface has been properly treated and primed, exterior enamels may be applied as finishing coats.



Iron Work

Fences, cresting, railings, and lawn furniture made of cast or wrought iron are all susceptible to paint failure due to subsurface rust. Cleaning is essential in securing a long lasting coating on iron work. All loose rust, scale, and dirt can be wire brushed from the surface. Commercially available compounds will aid in rust removal and neutralization. Strongly adhering paint should be lightly sanded to insure new finish adhesion. Once the metal is completely free from rust, powder, and dirt, the area should be primed immediately with a rust inhibiting primer. Finish coats can then be applied.

A variety of paint products and additives are available to treat individual problems such as those previously described. Paint dealers or manufacturers can be extremely helpful in these situations.

Some general rules do apply specifically to old materials. An oil additive used directly or mixed in oil based paint or primer is an excellent lubricant for dried wood. Flexible caulk can be used to seal joints or fill cracks. The caulk should expand and contract with the material it is serving. Oil based primers are best for old, weathered surfaces and can be used with either latex or alkyd paints.

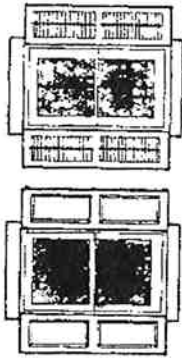
PROHIBITIONS

Colors and shades which have no historical precedent for the style of the structure to be painted is prohibited as is self cleaning paint which chalks when wet. Separate body and trim colors shall be used whenever appropriate and possible. Painting previously unpainted brick surfaces is prohibited.

FOR MORE INFORMATION

- Century of Color: Exterior Decoration for American Buildings, 1820-1920, Roger Moss, (Watkins Glen, New York: American Life Foundation), 1981.
- "Practical Painting Pointers," X.I.M. Products, Inc., 1972.
- Paint Problem Solver, National Decorative Products Association, St. Louis, MO, 1980.
- Porter Paints: Products, Specifications, and Applications. Catalog No. 56, Porter Paint Co.
- "How To Select and Use Latex Caulks," Rohm and Haas, Philadelphia, 1975.
- "Mildew: Technical Division Scientific Circular #802," National Paint and Coating Association, Inc., Washington, D.C.
- "Removing Exterior Paint," John F. Zinkle, The Old-House Journal Vol. VII, No. 6, June 1979.
- "It's Not As Easy As It Looks," Patricia Poore, The Old-House Journal Vol. XI, No. 4, April 1981.
- "Don't Blame The Paint," Clem Labine, The Old-House Journal Vol. IX, No. 4, April 1981.
- "Historic Paint Research: Determining The Original Colors," Matthew J. Mosca, The Old House Journal Vol. IX, No. 4, April 1981.
- "Stripping Exterior Paint," Ronald A Labine Sr., and Ronald A. Labine Jr., The Old House Journal Vol. IX, No. 4, April 1981.

SHUTTERS



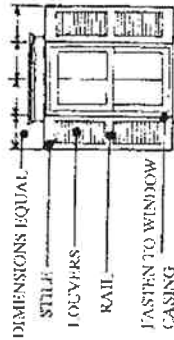
Exterior wood shutters served decorative and functional purposes on many styles of buildings constructed during the nineteenth century. Functionally, closed shutters with operable louvers permitted air flow and soft light to enter while shielding the house from intense sunlight and heat or rain. During winter months, closed shutters reduced heat loss and curbed drafts.

Visually, shutters were important style elements on many buildings built between 1830 and 1890, particularly on those of the Federal style. Locally, shutter usage varied among neighborhood. Shutters provide a balancing effect between window openings and wall spaces; they minimize a large wall expanse and provide a more vertical appearance.

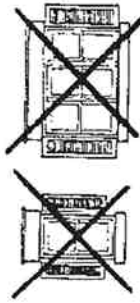
To determine if a building had shutters originally, the window casings can be checked for remaining hinge pins or notches in the wood where mountings could have been located.

A building possessing original, operable shutters is a rarity, and retention and rehabilitation of this element is important to preserve the character of the building. Some common problems with original shutters include missing or deteriorated parts and loose or non-functioning louvers and hinges. Frequently, shutter problems can be solved by stripping old paint from the piece. Shutters can be dismantled for repair or replacement of broken louvers, yoke pins, and/or rotted louver pegs.

Loose hinges cause shutters to sag and not close properly. Replacement with larger screws should eliminate this problem.



If the condition of original shutters is beyond repair, consider salvaging identically sized shutters from demolished structures or obtaining reproduction wood shutters with or without operable louvers.



PROHIBITIONS

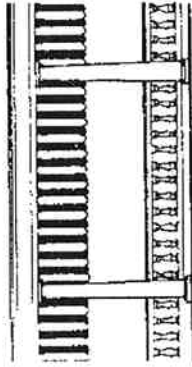
Vinyl or aluminum shutters are prohibited. Shutters must be of a size appropriate to cover the area of window sash they adjoin and must appear as though they could close. Shutters are to be either hung on hinges mounted to window casings or secured to wall with a one-inch spacer between the exterior wall and shutter.

FOR MORE INFORMATION

"Tips on Stripping Shutters," R. A. Labine, *The Old House Journal* Vol. II, No. 9, September 1974.

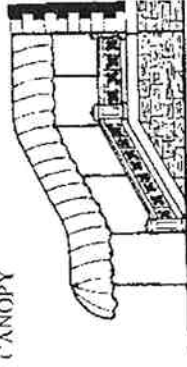
"Restoring Shutters to Working Order," *The Old House Journal* Vol. I, No. 2, November 1973.

AWNINGS

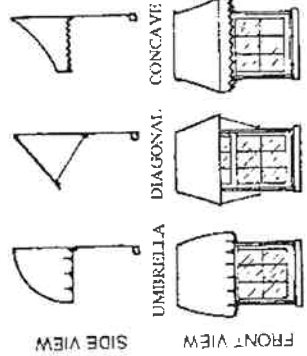


Canvas awnings for windows, doors, porches, and decks provide decorative protection from the elements. They offer a soft, flexible, textured component to a structure and are easily removable. Historically, awnings were used during summer months to reduce heat and fading damage to drapes, rugs, and furniture.

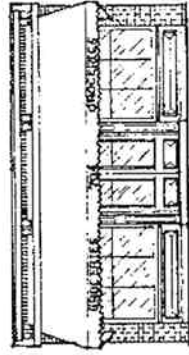
CANOPY



Awnings were available in a variety of shapes and colors. Over doorways, awnings frequently served as canopies, covering both the entry and steps. Window or door awnings could be umbrella-shaped, diagonal, or the more popular concave awning. Scalloped or straight edges with or without piping were common.



Storefront awnings extended out from the building to cover a portion of the sidewalk. Both commercial and residential awnings could be retracted; that is, rolled or folded back toward the building. Diagonal roll commercial awnings were used to enhance and protect open air uses such as fruit markets or similar vending.



An awning is supported by steel posts which provide strength and shape. These posts are mounted to and project outward from a building and may also include a ground projecting support.

Canvas used in awnings is a durable and long lasting material when properly maintained. It is recommended that awnings be stored indoors during winter months. Occasionally, sections of the material can separate, thus requiring simple stitching. The material should be rubbed annually with a rejuvenating and sealing liquid designed to water proof canvas and keep it from becoming brittle.

Support framing, if damaged, requires replacement rather than repair. Individual sections are readily available from manufacturers.

Many companies custom manufacture an awning to a customer's specifications. Simple stripe patterns or solid colors are the most appropriate.

PROHIBITIONS

Soft, pliable canvas awnings cannot be duplicated with rigid metals such as aluminum and steel; therefore, only cloth awnings are permitted, and colors shall correspond with those appropriate to the building on which the awning is attached. However, contemporary design is permitted when in keeping with the architectural design standards.

Steel supports which are visible, i.e. ground projecting members, must be painted a dark color corresponding to that of the awning or the building on which the awning is located.