

7.0 HERITAGE BUILDINGS

7.1 A Conservation Plan

The conservation of heritage buildings requires a sensitive and informed understanding of the building's design, construction methods, history, and context. A Conservation Plan should be undertaken prior to any intervention in a heritage building, and as a means to prolong the building's life span. A Conservation Plan undertaken by a qualified professional will provide valuable documentation of heritage resources and provide property owners with the necessary tools and knowledge to properly care for their buildings.

When undertaking heritage conservation work, this plan recommends following the Federal Standards and Guidelines for Heritage Conservation. An additional level of guidelines is provided in this section to inform conservation work within the Woodbridge HCD. These include guidelines for:

- Brick or Terra Cotta Masonry
- Stone Masonry
- Foundation
- Traditional Stucco Siding
- Wood Siding
- Roofing
- Gable Ends and Dormer Windows
- Windows and Shutters
- Doors
- Porches
- Projections
- Paint
- Gutters and Rain Water Leaders
- Fences
- Commercial Signages
- Storefronts

Reference should be made to historical photos or other documentary evidence when available in order to gain information on a building's elements, details and materials.

7.1.1 Brick Masonry

Historic Characteristics

Historically, brick was a popular choice for a permanent home, because it is durable, flexible, fireproof and attractive with various colours and shapes to choose from.

Brick is historically structural or loadbearing. Generally a wall consists of two wythes or rows of brick bonded together by 'headers' (bricks placed front to back across the two wythes). In larger or taller buildings there may be 3 or more wythes.

Surface patterns in brick walls are the result of this bonding. Bonding patterns fall into types by common usage (common bond, English bond, Flemish bond and so on). Further decorative work such as diaper work (diamond patterns on a brick wall) or brick shapes add interest to more sophisticated brick buildings.

The use of brick as a veneer started in the mid 20th century. In these buildings no bonding is visible and bricks are laid only in stretcher coursing. However, some historic brick walls appear to be veneer, but in fact have hidden bonding, and are actually traditional loadbearing brick walls, with two or more wythes of thickness.

Brick is damaged by: freezing and thawing when wet (ice action fractures the brick surface); rising damp (water drawn into the brick from damp soil); physical overload (causes crushing or fracturing); building movement (leads to cracking), aging (where mortar has weathered and lost its binders and strength) and improper installation or repair (pointing mortar is too hard).

Brick was very soft in early days of production and became harder and more colourful as industrial processes matured in the later 19th and early 20th Century.

Terra cotta is the name given to fired clay units that are generally very decorative, larger in scale often imitate stone and are generally hollow. They were built into walls as decorative items such as capitals, brackets, cornices and so on.

Brick or terra cotta are attractive and enduring products which are essential character defining elements of a historic masonry building.

Intervention Notes

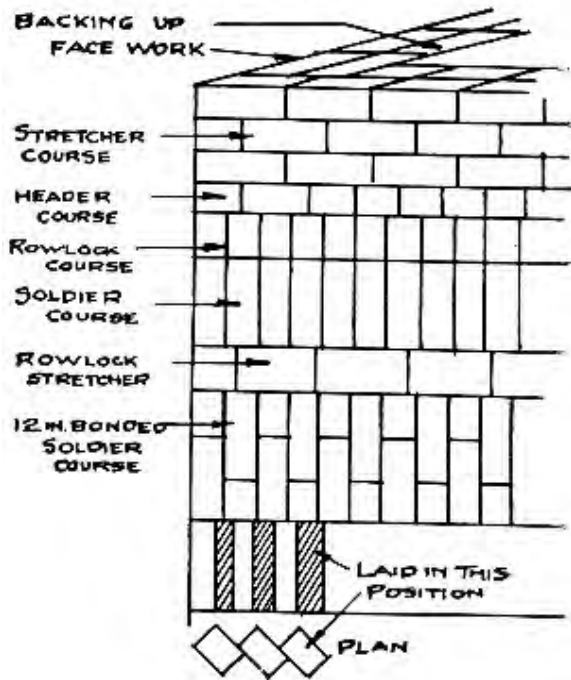
If brick walls are deteriorated they should be repaired and not replaced or covered by other materials. The underlying cause of deterioration should be investigated and corrected as part of the masonry repair / restoration project.

Brick walls require periodic pointing as joints weather. This must be done using correct methods for hardness of joints, shape of joints, tooling and occasionally decorative aspects such as colour, raised ribbon or tuck finishes. Replacement brick or terra cotta units should match the original masonry in size, shape, finish, and colour. This may require research to find correct replacements still being made, using salvaged materials, or even custom manufacture of replica units.

The cleaning of soiled brick and terra cotta masonry is possible and is occasionally desirable to enhance the image of a building, reduce surface damage from chemically active soiling, and to blend in new repair / restoration work. Proper methods should be researched and tested before proceeding. Methods should not damage the brick, be environmentally appropriate, and be gently applied to leave some patina of age. Cleaning should not be impulsively applied and should not try to achieve a new appearance.

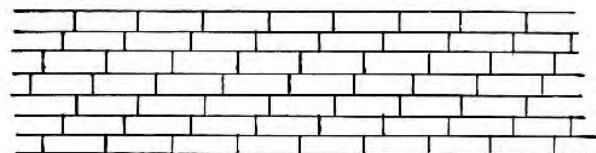
Sandblasting of masonry should never be undertaken as it irreparably destroys the surface of the masonry units.

All masonry work should be undertaken under the supervision of, and by knowledgeable practitioners (architects, contractors, and other specialists).

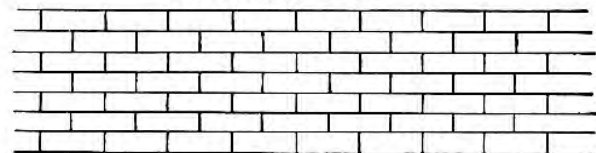


Brick Course

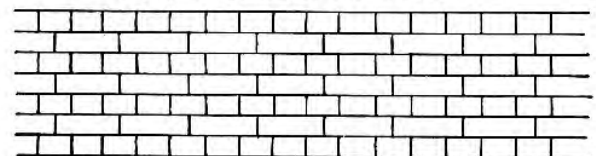
Image Credit: Page 83, The Art of Bricklaying, J. Edgar Ray, Chas. A. Bennett Co., Publishers



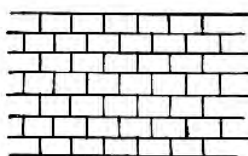
2" RUNNING BOND



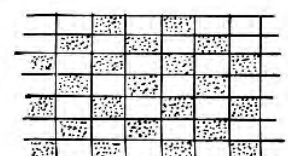
RUNNING STRETCHER BOND



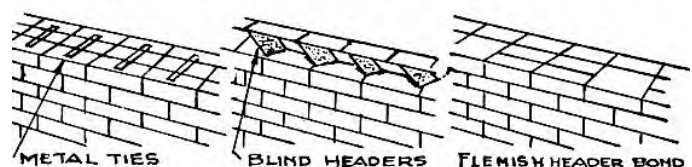
ENGLISH BOND



HEADER BOND



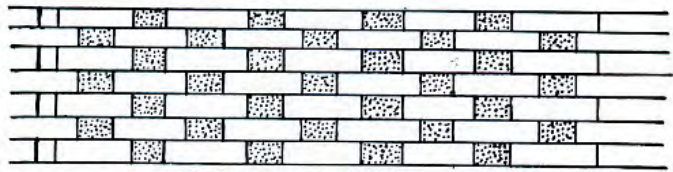
CHECKER BOARD BOND



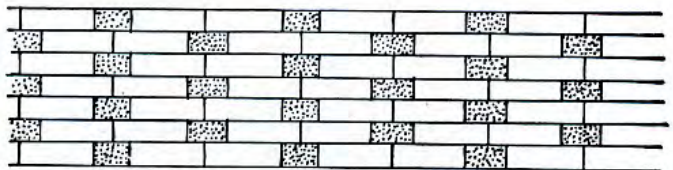
Brick Bond

Image Credit: Page 123, The Art of Bricklaying, J. Edgar Ray, Chas. A. Bennett Co., Publishers

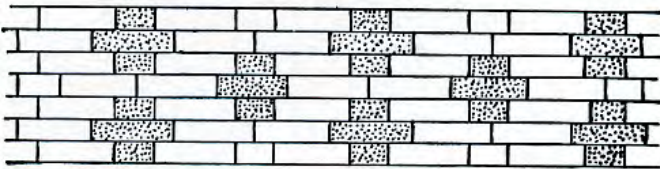
HERITAGE BUILDINGS



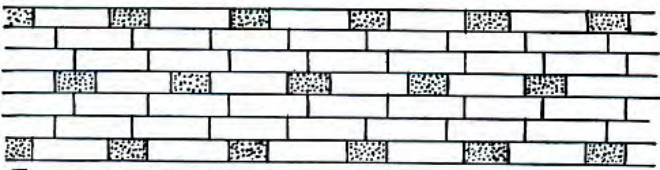
FLEMISH BOND



FLEMISH BOND MODIFIED TWO STRETCHERS BETWEEN HEADERS



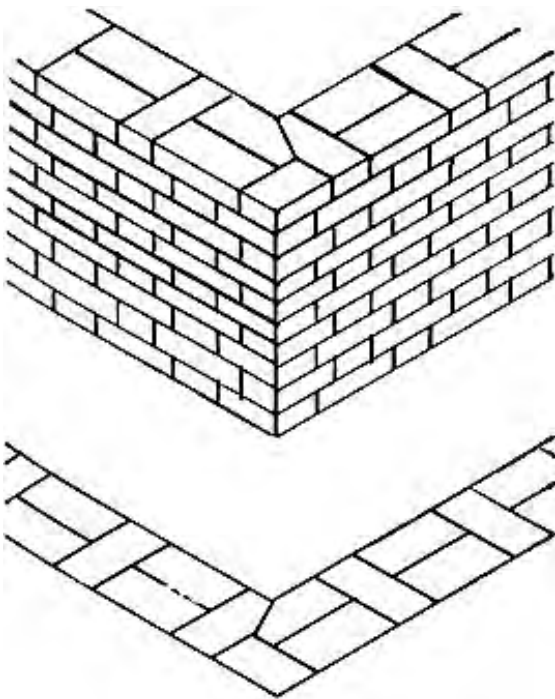
FLEMISH CROSS BOND



FLEMISH COURSE ALTERNATES WITH 2 COURSES OF STRETCHERS

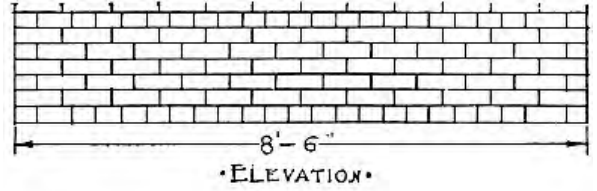
Flemish Bond

Image Credit: Page 124, The Art of Bricklaying, J. Edgar Ray, Chas. A. Bennett Co., Publishers

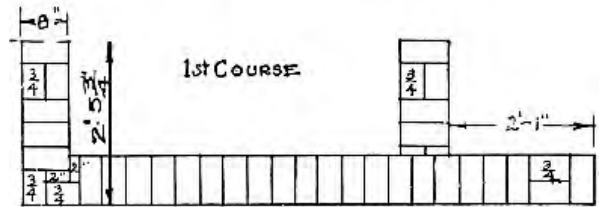


Flemish Bond

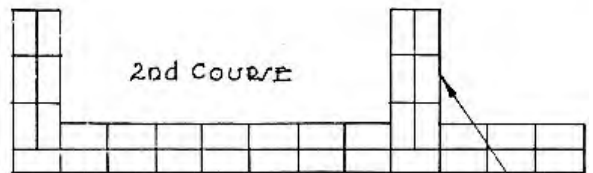
Image Credit: Page 99, The Art of Bricklaying, J. Edgar Ray, Chas. A. Bennett Co., Publishers



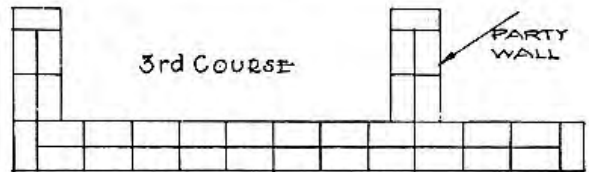
8'-6" ELEVATION



1st COURSE



2nd COURSE

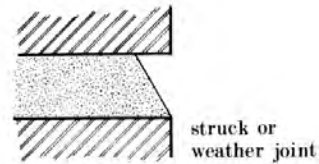


3rd COURSE

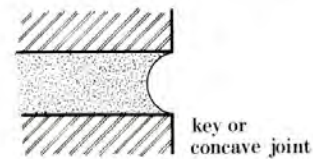
PARTY WALL

8" Wall American Bond

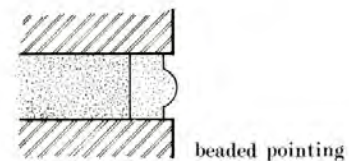
Image Credit: Page 114, The Art of Bricklaying, J. Edgar Ray, Chas. A. Bennett Co., Publishers



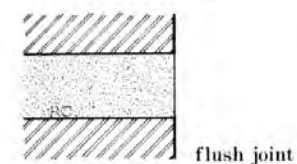
struck or weather joint



key or concave joint



beaded pointing



flush joint

The Most Common Brick Joints and Pointing Used in Turn-of-century Building

Image Credit: Page 8, Guidelines for Restoring Brick Masonry, British Columbia Heritage Trust, Technical Paper Series

7.1.2 Stone Masonry

Historic Characteristics

Historically, stone masonry was used in several forms. Most commonly, random stone rubble walls form the foundations of historic buildings. In early buildings these can be very thick (16"-24") and became thinner in the 20th century. Stone foundations were replaced by other materials such as concrete block, brick, or plain concrete as the 20th century progressed. Stones in foundations are generally granite or hard limestone.

Building stone selection varies widely in type depending upon use and availability, and was a science unto itself as well as an artistic character defining element of the building. It ranges in appearance and hardness from granites, through the more generally used limestones, to relatively soft and often colourful sandstones. Unusual applications include pebbles, rounded river rock, split face stone, or flint nodules set in mortar like a stucco layer. (See Stucco Siding.)

Similar to brick, stone wall appearance is a combination of stone treatment such as coursed rubble, course or fine ashlar, decorative or multicoloured carved stone, and the necessary bonding of wythes for structural stability.

Stone is damaged by: freezing and thawing when wet (ice action fractures the brick surface); rising damp (water drawn into the brick from damp soil); physical overload (causes crushing or fracturing); building movement (leads to cracking), aging (where mortar has weathered and lost its binders and strength) and improper installation or repair (pointing mortar is too hard).

Stone in buildings is an essential character defining element of a historic masonry building.

Intervention Notes

If stone walls are deteriorated they should be repaired and not replaced or covered by other materials. The underlying cause of deterioration should be investigated and corrected as part of the masonry repair / restoration project.

Stone walls require periodic pointing as joints weather. This must be done using correct methods for hardness of joints, shape of joints, tooling and occasionally decorative aspects such as colour, raised ribbon or tuck finishes.

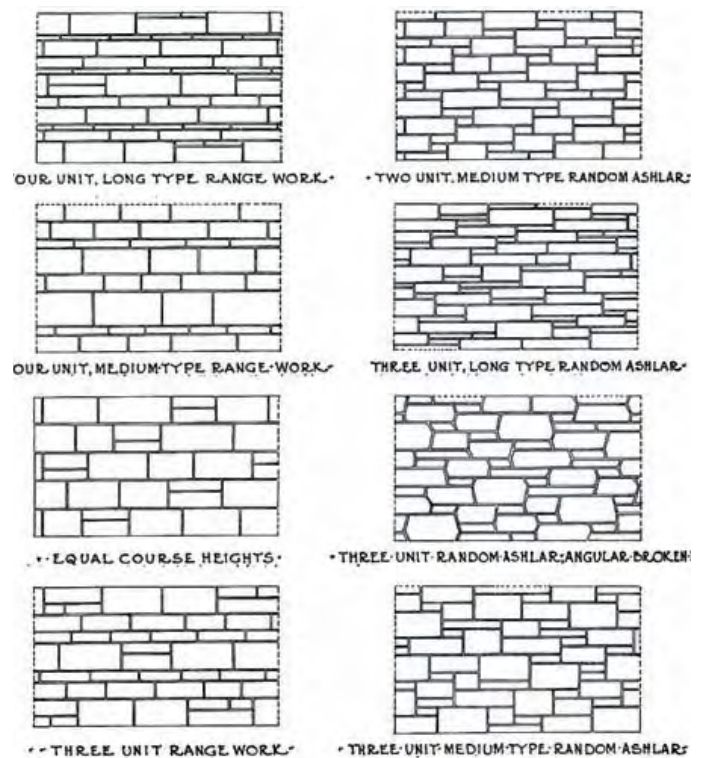
Replacement stone units should match the original in type of stone, size, shape, finish, and colour. This may require research

to find correct replacements, custom cutting and carving, or the use of salvaged materials.

The cleaning of soiled stone masonry is possible and is occasionally desirable to enhance the image of a building, reduce surface damage from chemically active soiling and to blend in new repair / restoration work. Proper methods vary with the kind of stone and should be researched and tested before proceeding. Methods should not damage the stone, be environmentally appropriate, and be gently applied to leave some patina of age. Cleaning should not be impulsively applied and should not try to achieve a new appearance.

Sandblasting of softer stone masonry should never be undertaken as it irreparably destroys the surface of the masonry units. Hard stone such as granites may possibly tolerate this method where surface finish and material allow.

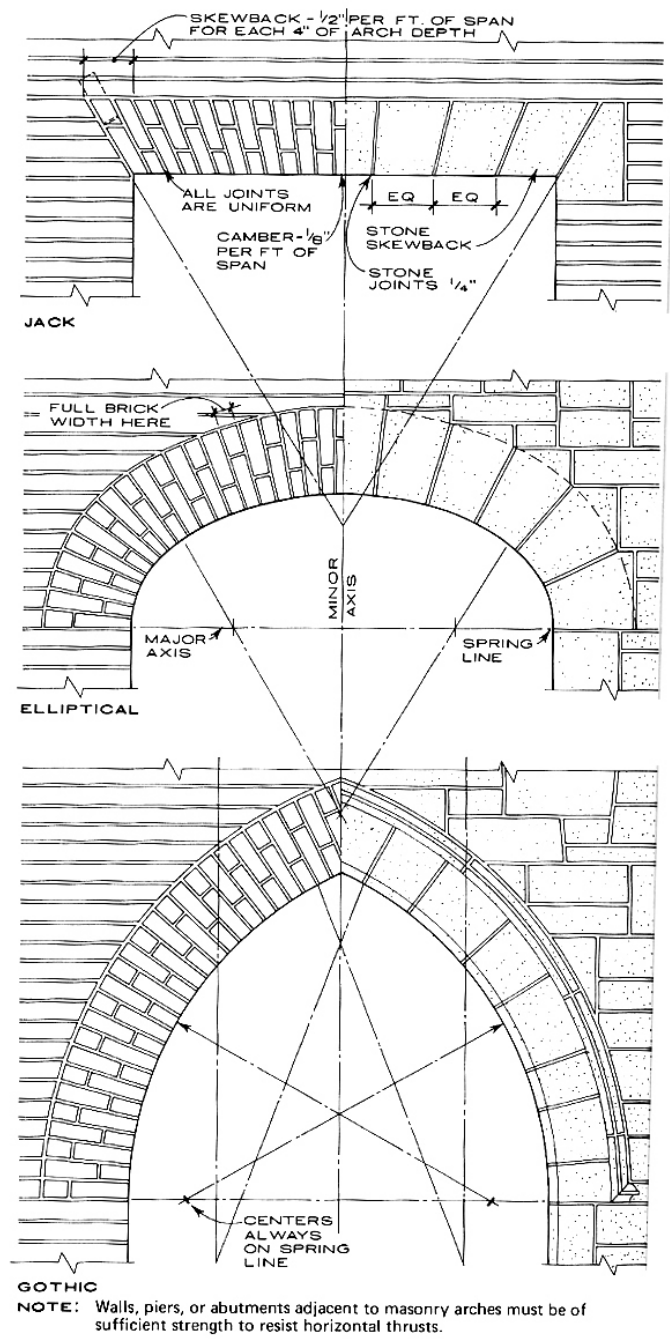
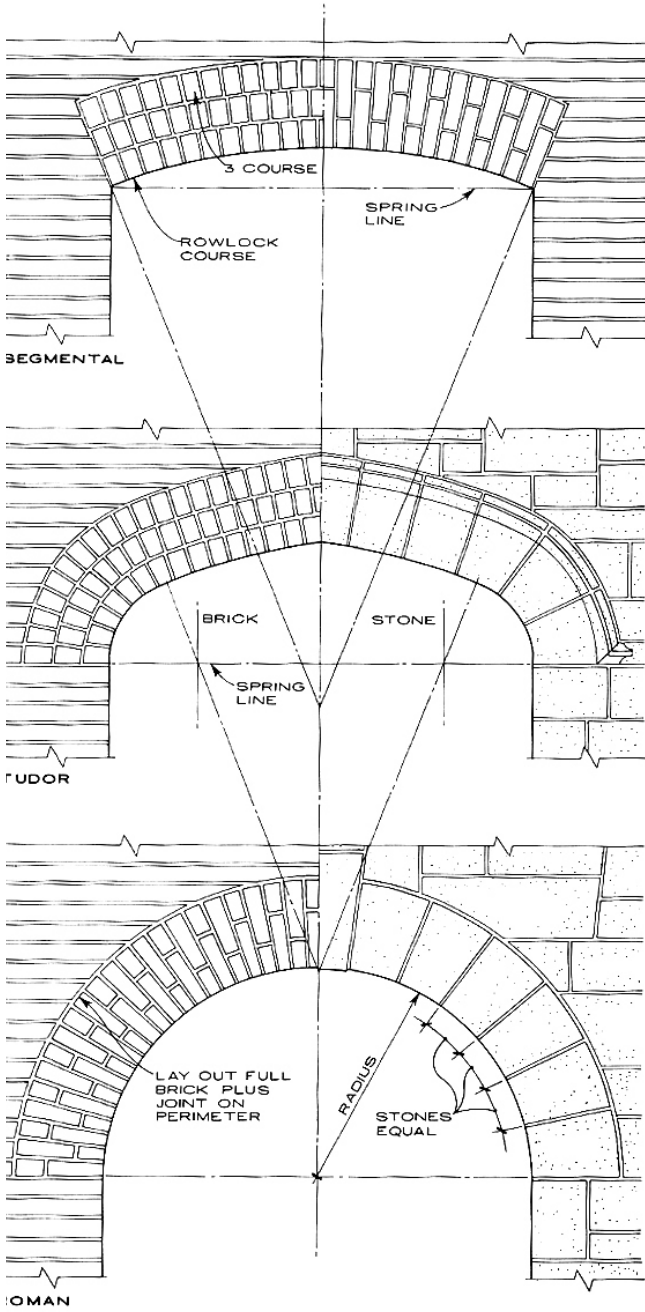
All masonry work should be undertaken under the supervision of and by knowledgeable practitioners (architects, contractors and specialists).



Stone Work

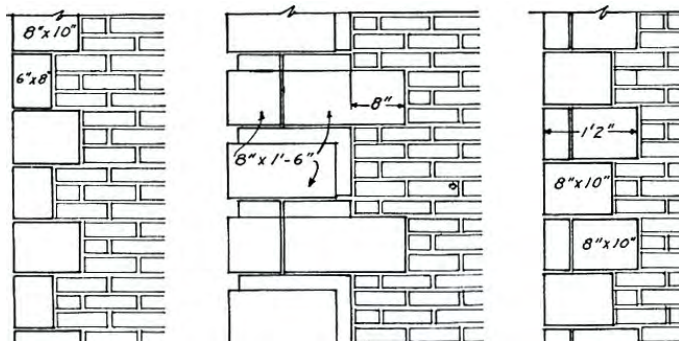
Image Credit: Page 93, Architectural Details, Classic Pages from Architectural Graphic Standards 1940-1980, Ramsey/Sleeper, The American Institute of Architects

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Masonry Arches

Image Credit: Page 206, Architectural Graphic Standards, Eighth Edition, Ramsey/Sleeper, The American Institute of Architects



Types of Cut Stone Quoins for Use with Brick

Image Credit: Page 90, Architectural Details, Classic Pages from Architectural Graphic Standards 1940-1980, Ramsey/Sleeper, The American Institute of Architects

7.1.3 Foundations

Historic Characteristic

See stone masonry section 7.1.2.

Foundation walls are similar to stone walls but are subject to more demanding conditions. They are subject to freezing and thawing, are often wet, must hold out ground water from rain above or soils beside, and hold up the building at the same time. In older walls waterproofing or damproofing may not exist and years of dampness may have washed out binders from the mortars rendering the foundation water permeable, or even structurally unstable.

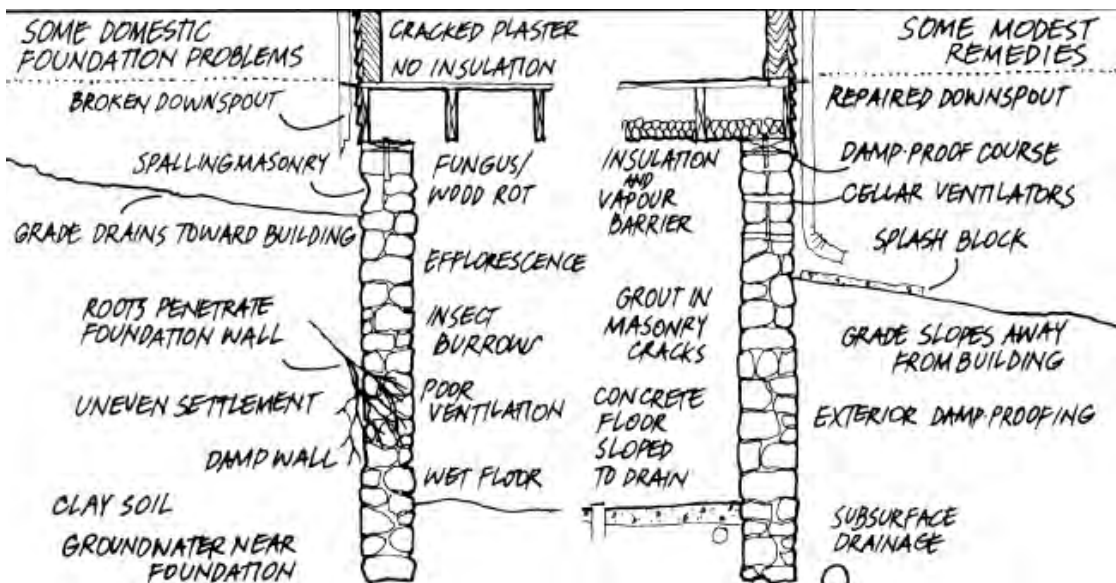
Foundation walls are often visible at grade and where visible are a character defining element.

Intervention Notes

Despite quick fix remedies promoted in the marketplace, to best repair/restore a foundation very often requires the following:

- excavating around the building perimeter,
- pointing the foundation inside and outside,
- low pressure grouting of the wall cavity, if necessary
- parging the exterior below grade and applying a good dampproofing or waterproofing.

Further, when this work is done it is a good idea to install weeping pipe, thus promoting a healthy foundation wall for years to come. This work also reduces rising damp, preserves original materials, and contributes to the preservation of the whole building.



Some Domestic Foundation Problems

Image Credit: Page 115, Well Preserved, The Ontario Heritage Foundation's Manual of Principles and Practice for Architectural Conservation, Mark Fram

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7.1.4 Traditional Stucco Siding

Historic Characteristic

Historic stucco siding is a legitimate finish used for centuries. Installed by good craftsmen, stucco can imitate stone much as other forms of plaster work can. It can also be plain or coloured, smooth or have aggregate embedded in its surface (such as pebble-dash). In some periods, stucco work is an important element of the style as in arts and crafts buildings.

Stucco is historically applied like plaster in 3 layers bonded to the wall with lath. Lath in early buildings consists of wood strips and in newer buildings, galvanized metal. Occasionally stucco was bonded directly to brick or stone masonry by raking out joints and roughening the masonry surface.

Stucco mix is generally lime, portland cement, or a combination, with the addition of sand "mortar".

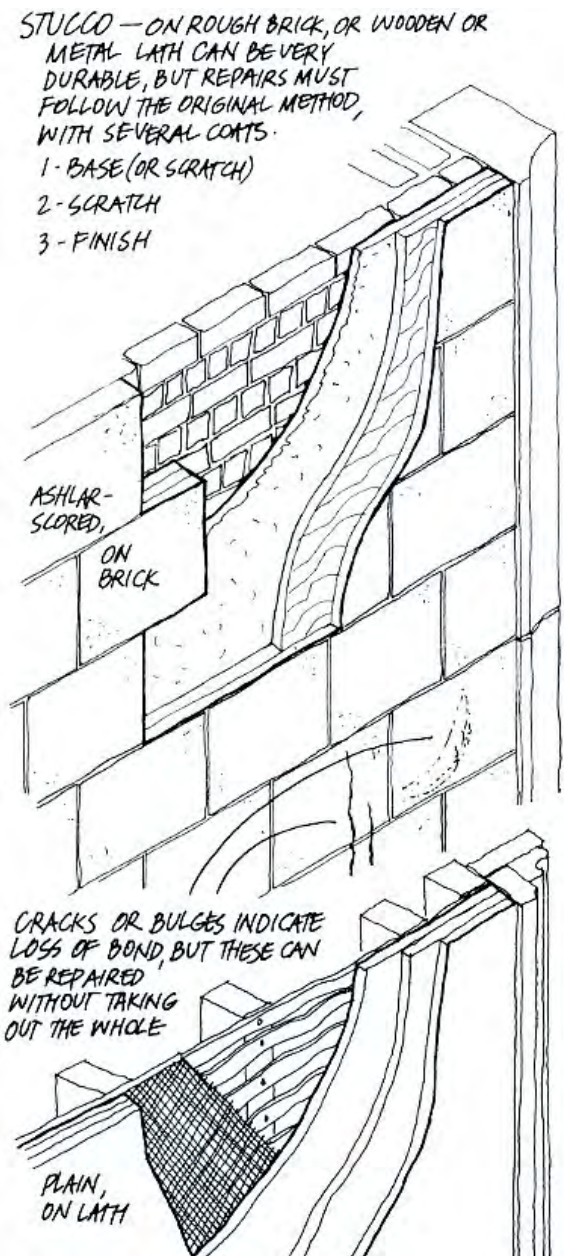
There are still skilled tradesmen that work in traditional stucco materials although they are becoming more difficult to locate.

Intervention Notes

Traditional stucco work should be respected as a legitimate historic material. Modern so-called "stucco" should be avoided except in rare circumstances where its use is compatible with the historic material thickness and appearance.

Modern stucco is generally composed of a thin layering of acrylic polymers and plastic mesh glued to polystyrene insulation. It is a coating system that borrows the traditional name. When inappropriately used it diminishes the historic appearance of the building, and at worse it adds thickness, obscures historic materials, and cannot achieve a historic texture or bind an aggregate as pebble-dash to the surface.

Where stucco is a character defining element of the style, traditional stucco work should be used.



Stucco has been a much-used exterior surface in every era of Ontario architecture

Image Credit: Page 145, Well Preserved, The Ontario Heritage Foundation's Manual of Principles and Practice for Architectural Conservation, Mark Fram

7.1.5 Wood Siding

Historic Characteristic

Ontario is a region traditionally rich in wood resources. As such, buildings of all periods and most styles have included a version based on wood siding. The use of wood in these buildings is an important character defining element.

Wood siding is primarily of two types, horizontal clapboarding or its variations and vertical board and batten siding. In some periods wood shingles were used as siding, often in panels such as gable ends or dormers (Queen Anne Revival or Arts and Crafts).

Wood siding is generally paint finished, however for shingle siding, stain and or oil were occasionally used.

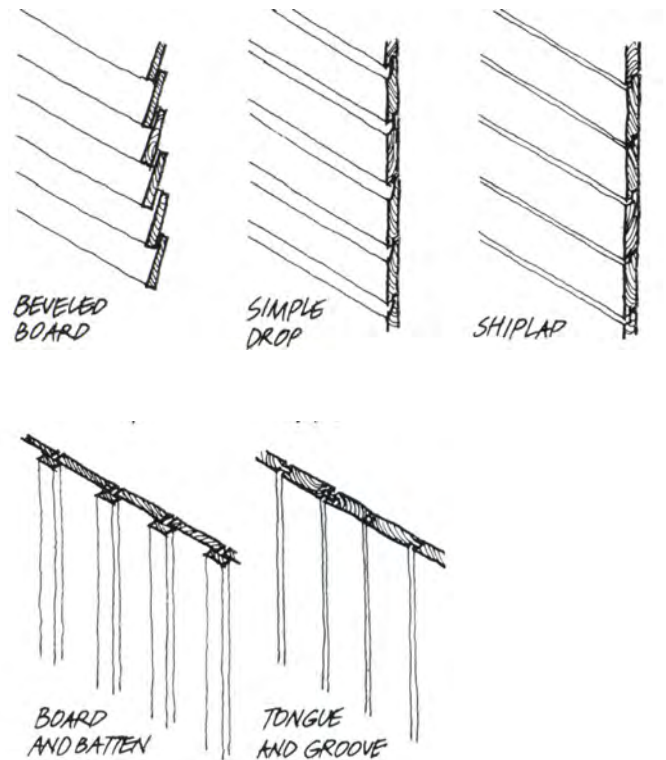
Wood siding deteriorates by rotting from poor or failed detailing allowing water to penetrate the system; animal attacks (squirrels, bats, raccoons), physical damage, weathering and erosion. Well maintained wood siding can last a very long time, sometimes in excess of 100 years.

Intervention Notes

Where wood siding is in restorable or reusable condition it should be repaired and maintained. New pieces can be made to match existing profiles, and many historic profiles such as channel siding and wood shingles still exist. Maintaining roofing details, flashings, and sealants, protective coatings, and paint, is essential to long term survival.

Where it is necessary to replace fully deteriorated siding, new siding of matching material and profiles should be installed.

Imitation materials are often promoted for traditional material replacement. These include aluminium and vinyl siding and various cement board products. These should be avoided. When applied over historic wood materials they can disguise various forms of ongoing deterioration, on occasion promote deterioration by trapping moisture. They always diminish the historic appearance of the building.



Some Types of Wood Siding

Image Credit: Page 137, Well Preserved, The Ontario Heritage Foundation's Manual of Principles and Practice for Architectural Conservation, Mark Fram

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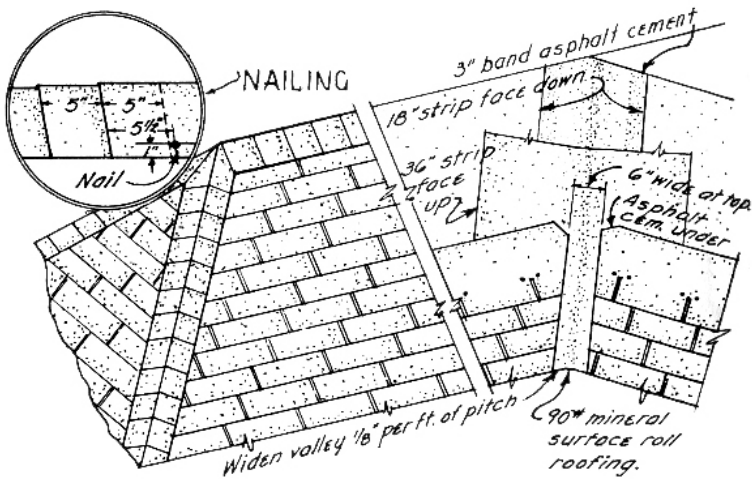
7.1.6 Roofing

Historic Characteristic

Today asphalt shingles dominate our provincial roovescape. They are effective at keeping out water during their working life and are cheap to install. They came into fashion as a permanent roofing material in the 1930's, and by the 1950's had replaced most traditional roofing.

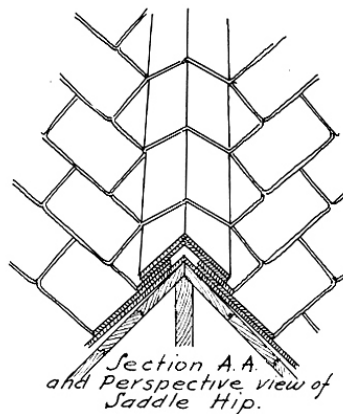
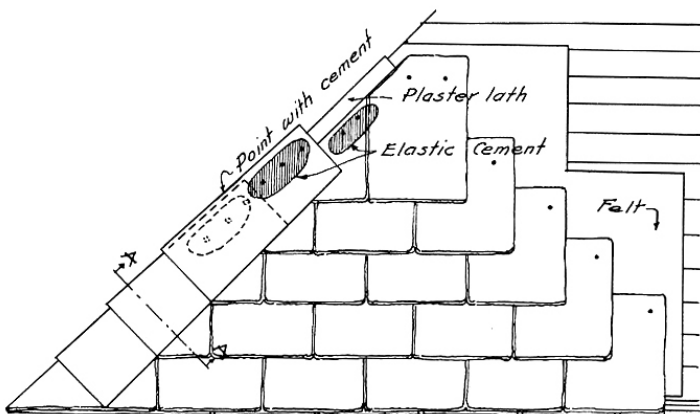
Historically wood shingles were the dominant roofing material followed by slate, clay tile, board and batten, metal shingles or sheets (copper, or tinned iron sheet). Thatch was rarely used.

Wood shingles and slates were often cut to patterns and wood shingles were occasionally stained. Polychromatic slates were often used for decorative effect.



Shingle Roofing

Image Credit: Page 182, Architectural Details, Classic Pages from Architectural Graphic Standards 1940-1980, Ramsey/Sleeper, The American Institute of Architects



Slate Roofing, Image Credit: Page 66, Architectural Graphic Standards, 1932, Ramsey/ Sleeper

Wood shingles were generally eastern white cedar, pine, or as it became available, western red cedar.

Shingles were made in two "forms". Standard thin roofing shingles were mostly used for houses and better buildings; and shakes, thicker cruder split cedar, for sheds and barns. It is a misconception that shakes were generally used earlier, although this may be true of the "first house" - rude cabins erected for immediate shelter - until such time as the permanent "second" house could be constructed.

Wood shingles deteriorate by erosion from weathering, splitting from drying out or physical damage, and animal or fungal attack.

Slate roof is long lasting, up to 100 years and occasionally more, if cared for. Slates deteriorate through erosion from weathering, freezing and thawing as the absorption rate increases with age, and physical damage and failing fasteners (improper nails rust away).

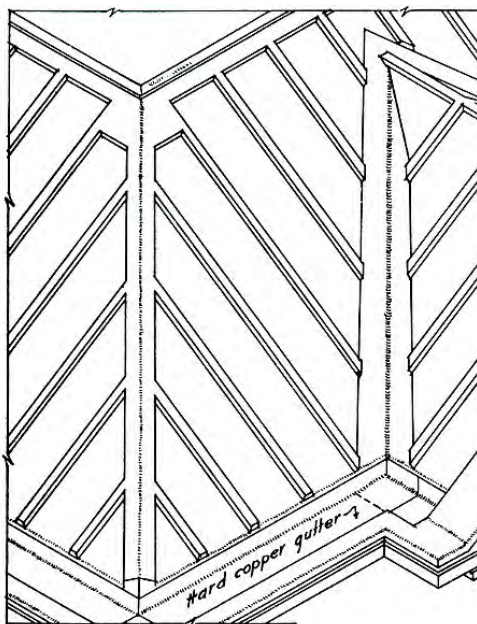
Clay tile roofing is very similar in performance and deterioration effects to slate roofing.

Copper roofing is very stable and long lasting, if properly installed with correct fasteners and flashings it can last in excess of 100 years. Copper deteriorates from slow weathering, cracking from expansion and contraction if not properly installed, failing fasteners, physical damage, and electrolysis if installed in combination with other metals, or acidic materials that eat away at the metal.

Intervention Notes

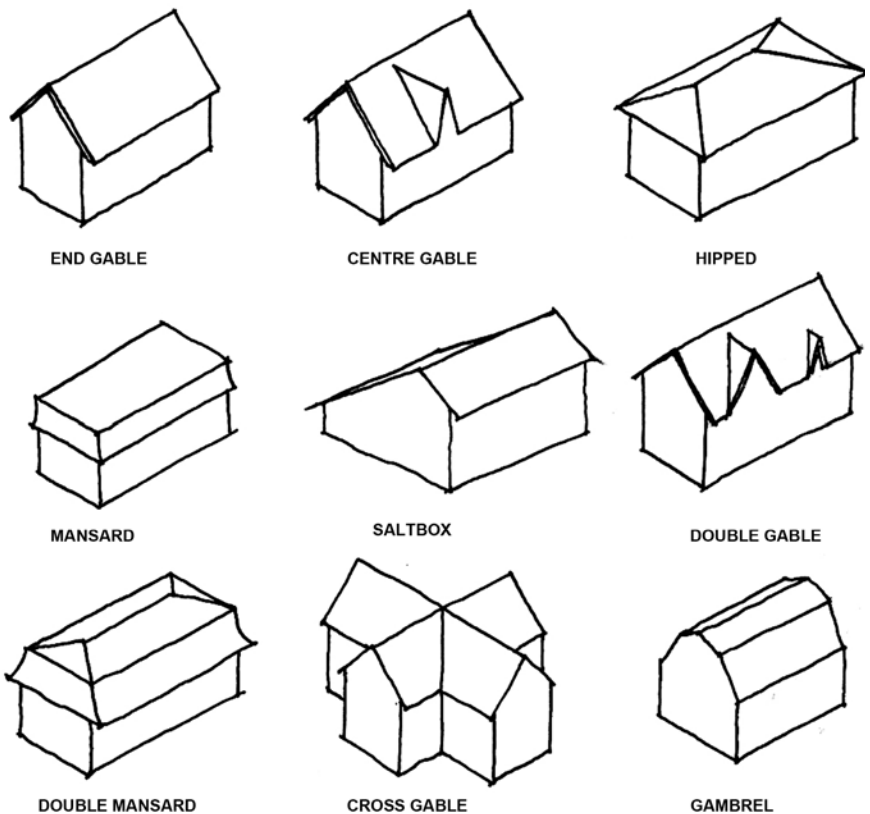
For significant buildings where the roofing is an integral part of the original design or style, roofing should be repaired. When replacement is required, replace in kind with the same material, colour, texture and detailing.

For period housing or lesser buildings, traditional roofing where it exists should be repaired, or traditional materials be reinstalled when roofing requires replacement. If this is not possible, then a good imitation material may be permitted in consideration of the relatively short lifespan of roofing materials. Imitation materials include: specialty asphalt shingles with a weathered wood appearance; fire cement board roofing products that imitate wood, clay tile, or slate; or prefinished metals. The type of re-roofing applied should mirror the original roofing and be consistent with the style of the building. Grandiose roofing on modest buildings should be avoided and visa versa.



Coper Roofing

Image Credit: Page 72, Architectural Graphic Standards, 1932, Ramsey/ Sleeper



Roof Type Image Credit: Sketch by GBCA

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7.1.7 Gable Ends and Dormer Windows

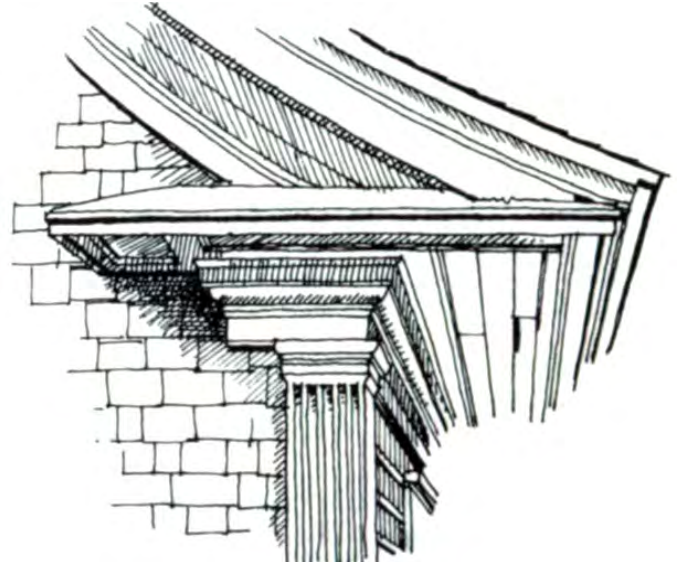
Historic Characteristics

Many styles utilize gable ends and dormer windows at the roof as a significant part of the design. Gables and dormers may be as simple as the triangulated area at the ends of a simple Georgian pitched roof or an explosion of decorative detailing in a complex late Victorian Queen Anne building. Gables and dormers take many forms and are historically often decorated with trim that can be simple, or a froth of complex gothic detailing with waves, sticks, spooling and balls, panels and bulls eyes, sunbursts and so on.

The form, pitch, and decorative trim of a gable or dormer is an essential part of a period style. The attributes of the trim are historically carefully considered following proportional rule books or stylistic pattern theories of the time. Whether a simple ogee curve or a complex build up of moldings and bracketry, the design of the gable ends or dormers in a roof must be respected, or the understanding of the building and its design can be lost.

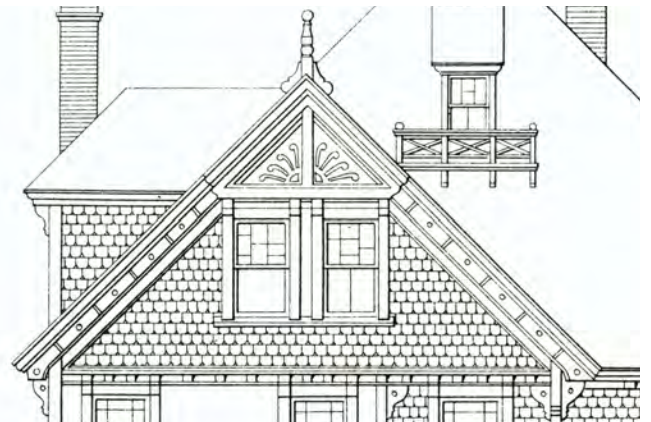
Trims are generally of wood, however in finer buildings these can also be found to be stone, profiled brick, or terra cotta.

Gable and dormer detailing, especially complex detailing is always at risk. It can be subject to physical damage through routine maintenance (ladders, re-roofing etc.), neglect of a complex painting regime, animals (nesting, etc), and rotting from continued weather exposure. Often repairs are complex, and so a slow loss of detail by non replacement is sometimes the result. Gable and dormer features are an essential character defining element of a historic building.



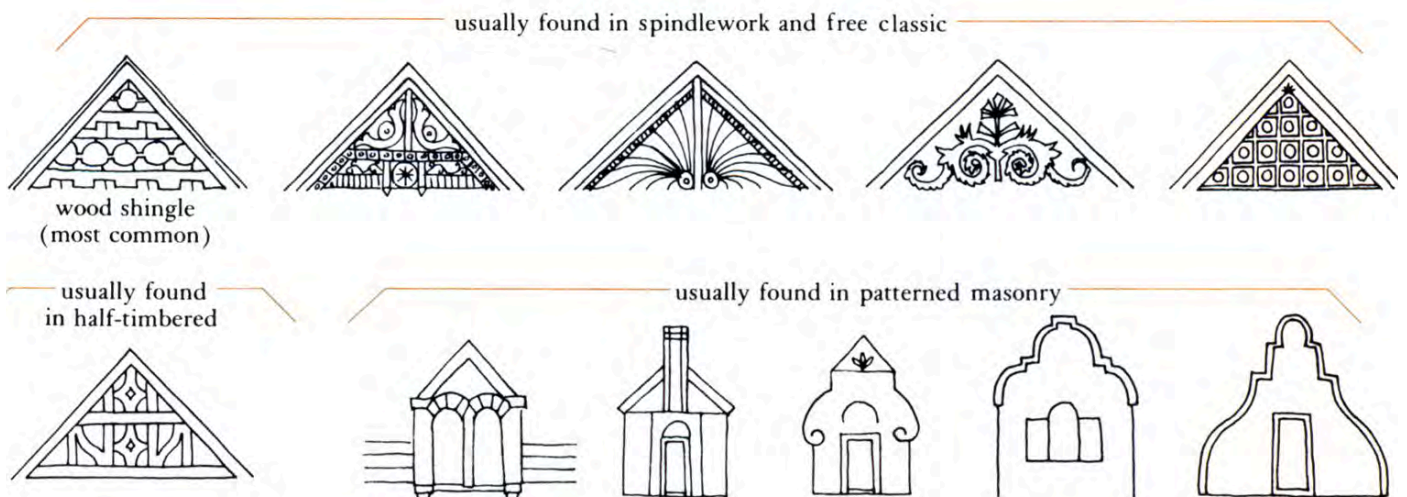
Returned Eaves and Classic Moldings on Classic Houses

Image Credit: Page 5, The Buildings of Canada, A Guide to Pre-20th-century Styles in Houses, Churches and Other Structures, Environment Canada



Queen Anne Revival Gable End

Image Credit: Page 42, Victorian Architecture, Two Pattern Books by A.J.Bicknell & W.T.Comstock, 1978



Typical Queen Anne Revival Gable Detailing

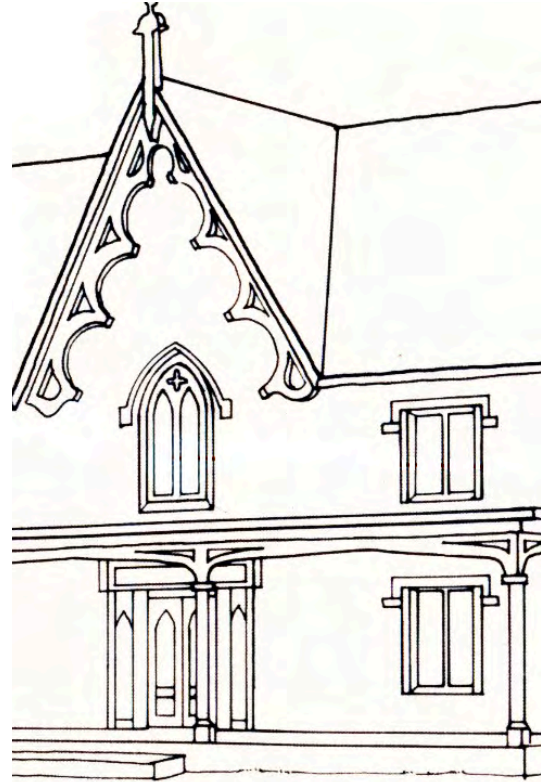
Image Credit: Page 267, A Field Guide to American Houses, Virginia & Lee McAlLester, 1984

Intervention Notes

Careful continuous stewardship of the building prevents the owner from facing dramatic cyclical capital projects, where the cost of replacing decorative features is sometimes considered to be onerous.

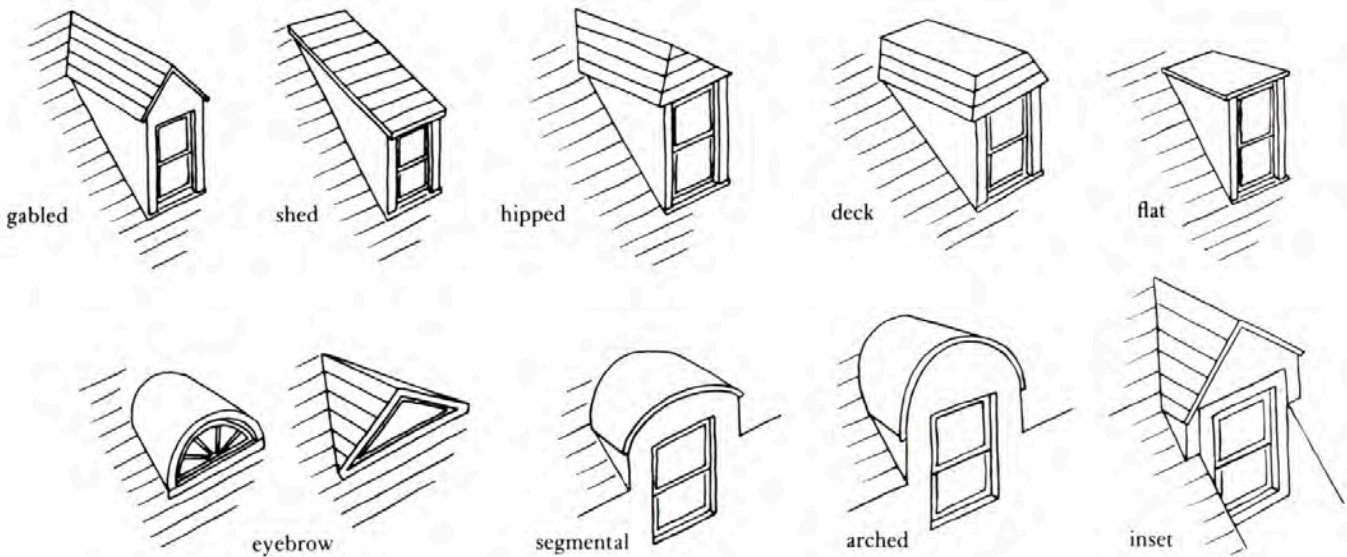
Gables and dormers should be conserved as an essential design element of the original style. They should not be obscured by new work or added or removed in the principal facades. The maintenance of the original building profile should be a high priority. New dormers may be added to rear or side elevations not readily observable from the public realm, where consistent with the style of the building.

Repairs to decorative features should be undertaken with the same materials, profiles, turning, textures, and as much as possible, details. Replacement features where repair is not possible should replicate the original in kind. Replacement of decorative features with modern "off the shelf" substitutes should be avoided. Removal of decorative features in the primary facades should not be permitted.

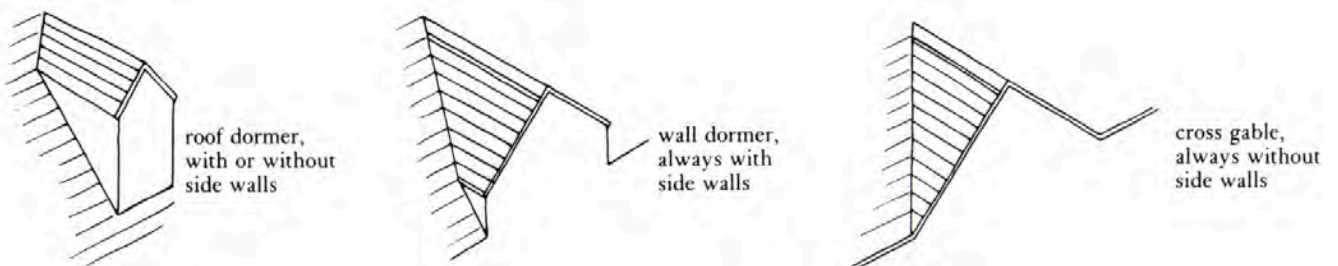


Typical Gothic Revival Gable Detailing

Image Credit: Page 199, A Field Guide to American Houses, Virginia & Lee McAlLester, 1984



DORMERS & GABLES DISTINGUISHED



Dormer Types

Image Credit: Page 44, A Field Guide to American Houses, Virginia & Lee McAlLester, 1984

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7.1.8 Windows and Shutters

Historic Characteristics

Windows and their associated shutters were originally installed, are a character defining element of almost every style.

Window design, size and proportion have a long history of being subject to the rules of proportion. These rules were once universally understood in building design, either through applying mathematical ratios, or indirectly through pattern books and building traditions. Windows are the 'eyes' of a building and an element to which we instinctually respond.

Each style has a window design fundamental to that style. In most historic buildings in Ontario, windows are a variation of double hung or vertical sliders. However, in the Arts and Crafts period and in some Gothic Revival styles, casement windows were employed. In Art Moderne buildings windows are often horizontal pivot or awning types, but casement windows are also found. Double hung windows, and vertical slider windows are generally counterbalanced by a weight system with cotton cord and a pulley at the head of the window.

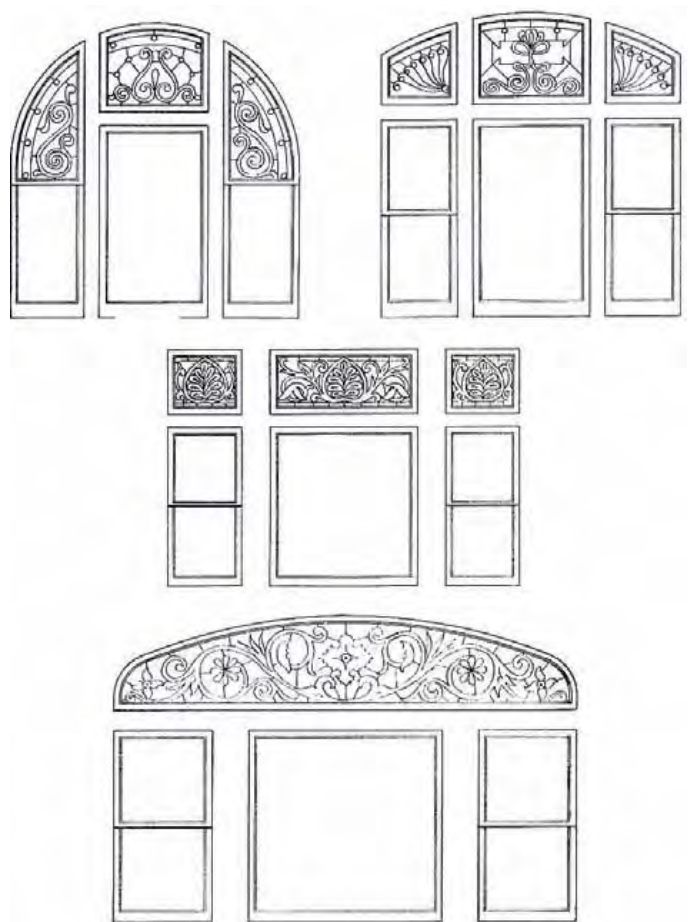
Typically windows were manufactured out of wood. However, in the Art Modern style, windows were occasionally steel or bronze. Window hardware was brass, however steel, iron, and bronze are also found differentiated in time, style and place.

Up until modern times windows were singly glazed and added window thermal performance was achieved by the installation of storm windows. Often the decorative aspect of a storm window mirrored the base window itself.

Until the second half of the twentieth century, glass was almost universally sealed in the frame by the use of linseed oil based putty. After this time, other sealants have replaced this traditional material.

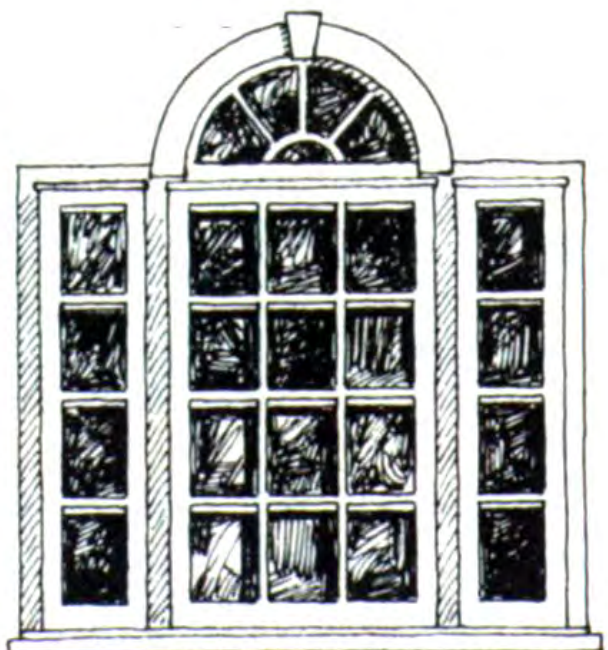
The number of glass panes, and proportion of the panes used are basic elements of the period in which they were installed. Glass was typically installed in a grid of lites (6 over 6, etc.), with the long axis vertical. As glass technology improved, the size of sheets increased, and as glass surfaces became smoother, flatter and more transparent, the size of lites also increased. Once the ability to make large panes became technically possible, sentimentality and revival styles returned to the use of small panes singly or in combination with larger panes as part of the style. There was found to be a comfort that came from the detail of small panes and the screen effect of divided lites (mullions and muntins) that we still emulate today.

Shutters were a common component of window compositions and served the practical function of shading the enclosed rooms



Victorian Triple Front Windows

Image Credit: Page 37, The Victorian Design Book, A Complete Guide to Victorian House Trim, Lee Valley Tools Ltd.



Palladian Window

Image Credit: Page 4, The Buildings of Canada, A Guide to Pre-20th-century Styles in Houses, Churches and Other Structures, Environment Canada

from the sun, and prevented fading of non colour fast fabric. They also occasionally served a security function and protected the precious glass from damage in storms.

Shutters are almost universally constructed of wood, with fixed louvre, moving louvre or panel variations.

As with other wood elements, damage to windows comes from weathering of elements, rotting from water penetration, lack of maintenance, physical damage and alteration.

Also, good windows can lose functionality from being over or improperly painted.

Intervention Notes

Historic windows in reasonable shape should be preserved and restored as any other decorative element of a historic building.

Good maintenance practice will preserve historic windows for the life of the building. Maintenance items include: periodic replacement of putty; application of sealants against weather

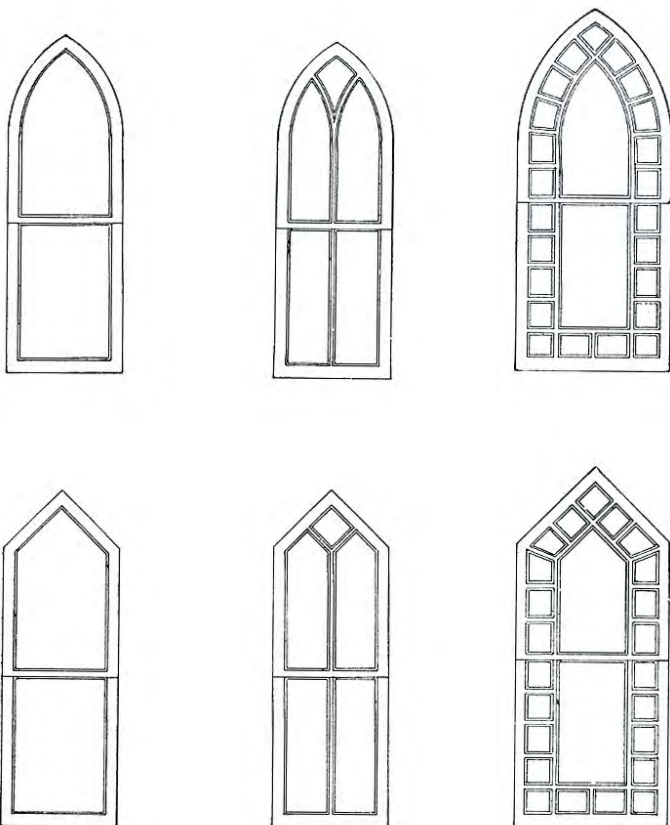
intrusion; repair of damaged glass in kind; periodic repainting, maintenance of weather seals; and replacement of lifting cords.

Installation of appropriate wood storm windows can often achieve a similar thermal performance to modern double glazing. It is not necessary to replace a window simply to achieve better thermal performance.

Where sealed double glazing is desired, if the window glass reglets allow, it may be possible to install it in existing frames.

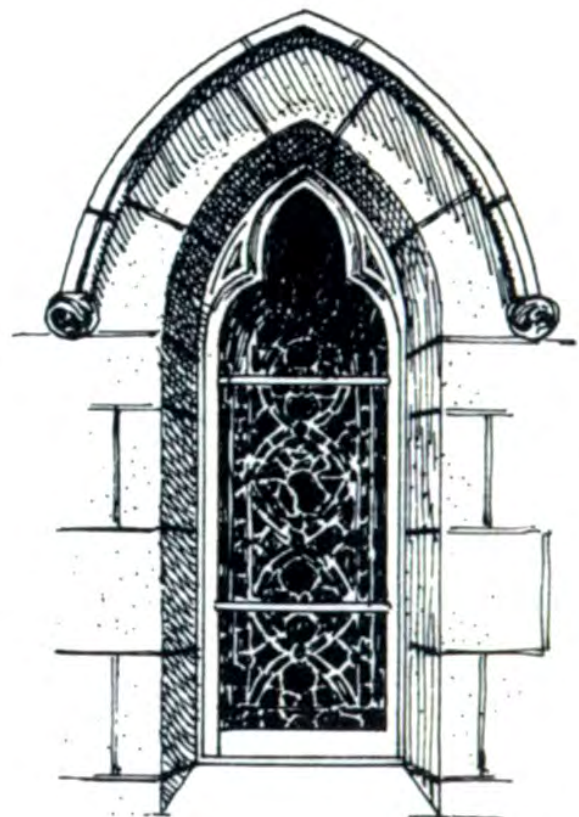
Where windows are damaged beyond reuse or repair, replica windows should be installed. These windows should be a careful copy of the original window in kind. Custom window makers are familiar with this work. Particular attention should be paid to window frame, mullion and muntin sizes and profiles. It is common to find replacement windows with framing members which are too thick, negatively affecting the appearance of the building.

Where replacement sash in existing frames are considered, these may be acceptable with appropriate attention paid to sizes, thickness and profiles.



Gothic and Peak Head Windows

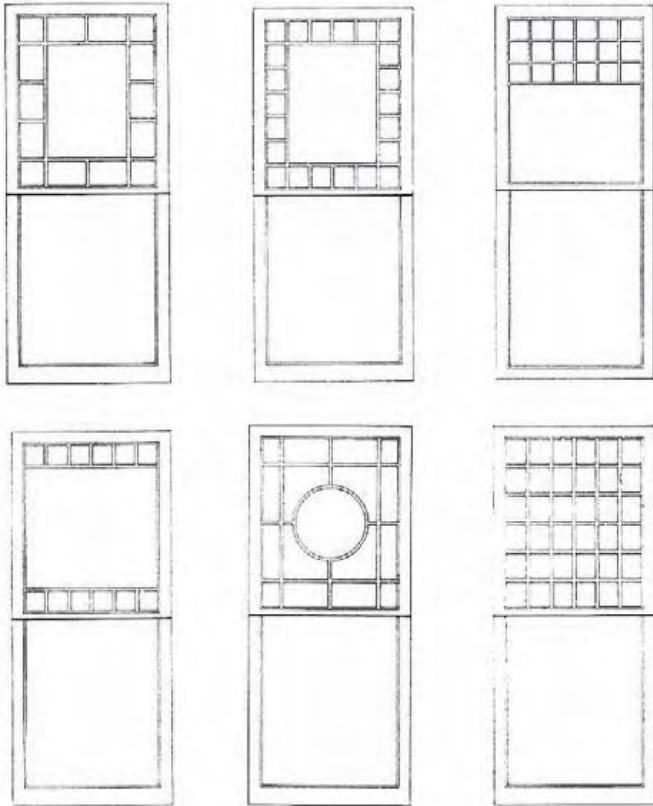
Image Credit: Page 41, The, Victorian Design Book, A Complete Guide to Victorian House Trim, Lee Valley Tools Ltd.



Gothic Revival Window

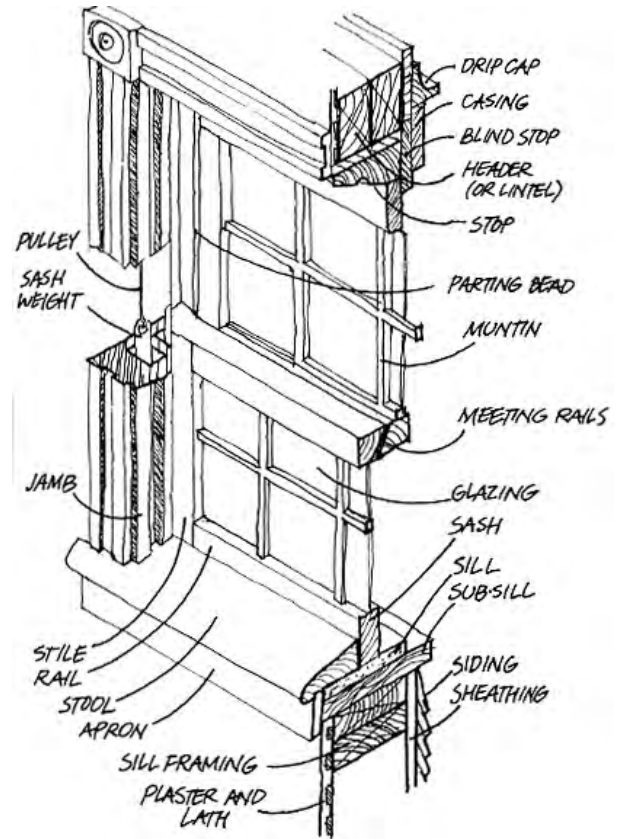
Image Credit: Page 3, The Buildings of Canada, A Guide to Pre-20th-century Styles in Houses, Churches and Other Structures, Environment Canada

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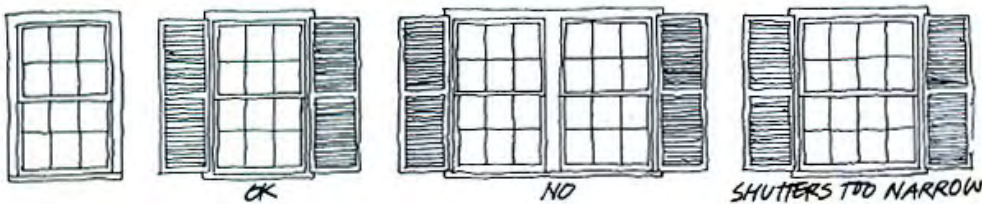
Queen Anne Windows

Image Credit: Page 38, The Victorian Design Book, A Complete Guide to Victorian House Trim, Lee Valley Tools Ltd.



Some Elements of A Double-hung Wood Window

Image Credit: Page 150, Well Preserved, The Ontario Heritage Foundation's Manual of Principles and Practice for Architectural Conservation, Mark Fram



Shutters Must Befit Windows

Image Credit: Page 150, Well Preserved, The Ontario Heritage Foundation's Manual of Principles and Practice for Architectural Conservation, Mark Fram

7.1.9 Doors

Historic Characteristics

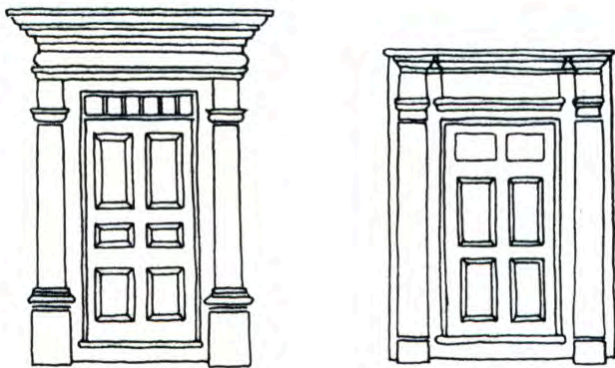
Doors play a significant roll in the period design of any style. Door design historically was a composition of stiles (vertical elements), rails (horizontal elements), and panels (infill elements).

Doors often had no glass in earlier times, but evolved to include small panes in later periods.

The arrangement of stiles, rails, and panels also varies in time, and with different styles from 6 panel rectangular "cross and bible" doors in the Georgian period, to pointed arch panel doors in some Gothic styles. By the turn of the twentieth century glue and laminate technology had evolved to permit large slab doors with decorative wood veneers, often oak, and sometimes embellished with fake or real wood pegs, iron studs, or decorative carving.

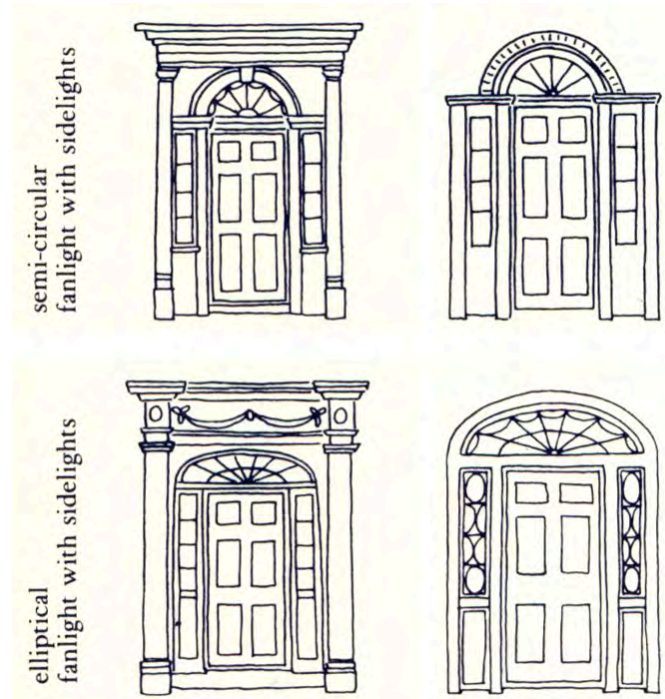
Most buildings have a system of doors with a significant doorway at the front or principal entrance, and simpler functional doors of similar technology at lesser secondary doorways.

Principal doorways in early styles, and a few later styles include sidelights and transoms. The design of these doorways was occasionally quite decorative with great care taken in the design of mullion, muntins, frame, and panel details.



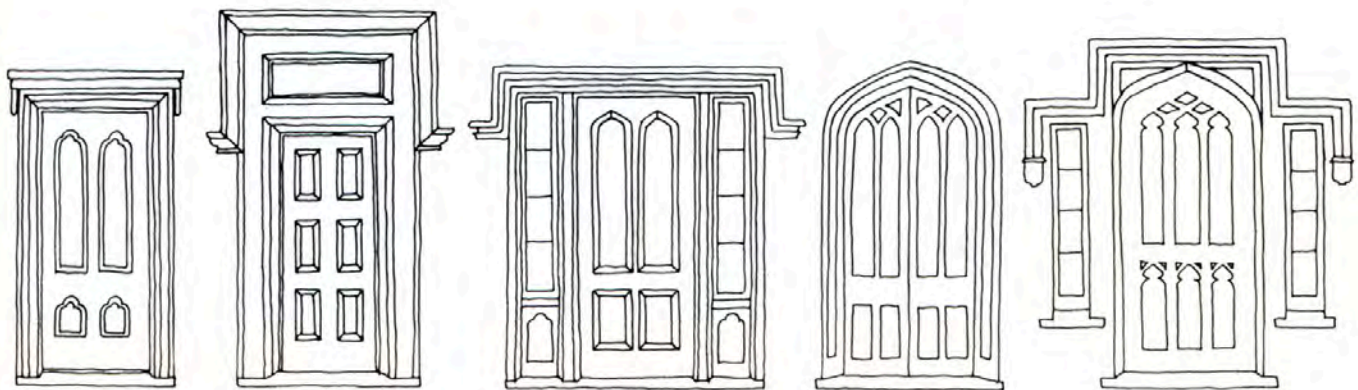
Typical Georgian Doorway

Image Credit: Page 49, A Field Guide to American Houses, Virginia & Lee McALEster, 1984



Typical Neoclassical Doorway

Image Credit: Page 155, A Field Guide to American Houses, Virginia & Lee McALEster, 1984



Typical Gothic Revival Doorway

Image Credit: Page 201, A Field Guide to American Houses, Virginia & Lee McALEster, 1984

HERITAGE BUILDINGS

Intervention Notes

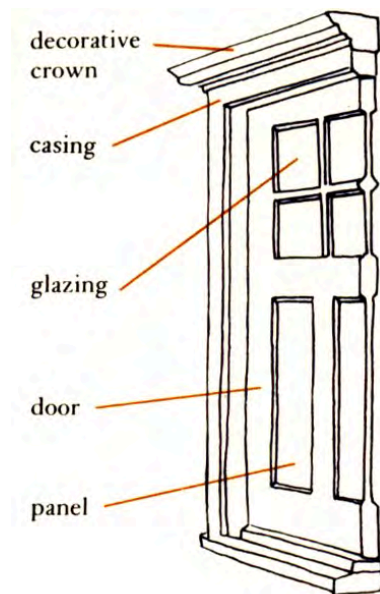
Historic doors and doorways in reasonable shape should be preserved and restored as any other important decorative element of a historic building.

Good maintenance practice will preserve historic doors and doorways for the life of the building. Such maintenance includes: periodic replacement of putty at glass elements; application of sealants against weather intrusion; repair of physical damage in kind; periodic repainting; maintenance of weatherseals hinges, locks, and other hardware as required.

Installation of appropriate wood storm doors can often achieve a similar thermal performance to modern insulated doors. It is not necessary to replace doors simply to achieve better thermal performance. Storm doors are generally not encouraged at front doors, unless they are original to the design, as they are detrimental to the appearance of the building.

Where doors are damaged beyond reuse or repair, replica doors should be installed. These should be a careful copy of the original door or doorway in kind. Custom door and window makers are familiar with this work. Particular attention should be paid to door frame, sidelite, and transom mullion and muntin sizes and profiles. It is common to find replacement doors with framing members which are not correctly sized, too thin or too heavy negatively affecting the appearance of the building.

Replacement doors "off the shelf" and/or in aluminium, vinyl, or clad wood should be avoided. Many of these are poor replicas of period styles.



Doorway Components

Image Credit: Page 49, A Field Guide to American Houses, Virginia & Lee McAlester, 1984

7.1.10 Porches

Historic Characteristics

It is not uncommon to find a historic building which looks very plain and as if something were missing. Very often this is a porch. For many historic styles a porch was the principal decorative element at the front of the house. In some styles such as Regency, the porch often extended around all four sides of the building. Where a porch was a part of the design composition, the sheltered brickwork and windows are often simple and plain, acting as a foil or backdrop to the complexity of porch decoration.

Porches varied in size, layout and design. At the small end of the spectrum they may only cover the front door, whereas at the large end of the spectrum they may be a neoclassical construction 2 or 3 storeys high with decorative columns, complex moldings, and a

full architrave. More commonly, on domestic architecture they are 1 storey in height, occasionally with a second storey roof balcony, located across a significant portion of the front of the building, or tucked into a corner of an "L" shaped plan. Usually constructed of wood they often include single or multiple columns; cornices, brackets or trellage. They are usually above grade at the level of the ground floor and served by front steps. In early houses there is rarely a railing at the ground floor level whether 1 ft or 3 ft above finished grade. In later houses and some styles a railing is included in the decorative woodwork.

Porches are subject to deterioration from rotting, physical damage and/or removal to allow more light into the building, or in a modernization attempt. Historically many porches were built over an earth crawl space that traps moisture, promoting the rotting of the floor structure, further, if not maintained water penetration at flashings and decorative detailing will allow water to enter the roof structure leading to decay.

Porches are an important design feature of styles in which they are included and a character defining element.



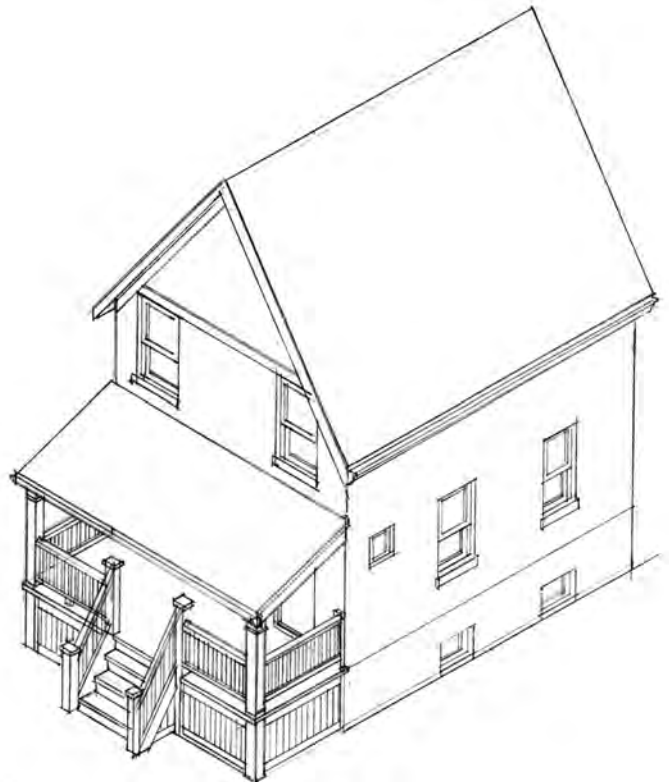
Gothic Revival Porch

Image Credit: Page 196, A Field Guide to American Houses, Virginia & Lee McALEster, 1984



Queen Anne Revival Porch

Image Credit: Page 292, A Field Guide to American Houses, Virginia & Lee McALEster, 1984



Sketch diagram of a Simple Porch Design that is typical to the Woodbridge Area

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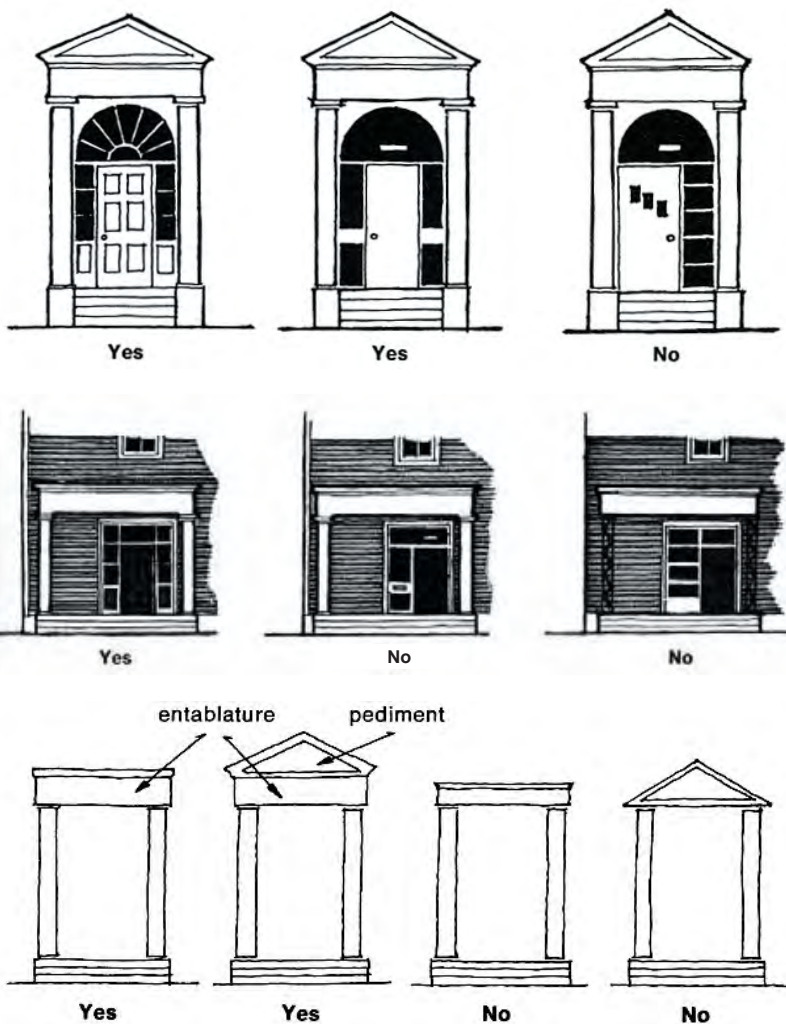
Intervention Notes

Where original porches have survived they should be repaired and restored using original materials and detailing.

Where porches are deteriorated to the degree that restoration is no longer possible they should be reconstructed to match the original design in style, materials and size.

Where porches are missing it is encouraged that they be reconstructed as replicas of the original porch, in accordance with documentary evidence. This work, as for all reconstruction of missing elements, should be based upon historic research to confirm the details of the original design. Often a profile of the trim and confirmation of the size is available as a “witness” or shadow outline on the face of the building. This tracery comes from varying wear, or over paint onto adjacent materials.

Where porches never existed, but are contemplated as an addition, this should be discouraged if it is inappropriate to the style or masks the correct historic appearance of the building. Added porches should be limited to new additions and/or locations which are not a part of the principal facade.



Different Treatments of Entrances

Image Credit: Page 98, 99 & 103, *New Life for Old Houses*, George Stephen, 1972, The Preservation Press

7.1.11 Projections

Historic Characteristics

Projections refers to a wide variety of building elements that project above the principal roof line. These elements may include chimneys, finials, spires, belvederes, cresting or ridge decorations, gargoyles, lightning rods and so on. They are found singly or in combination on historic buildings and are a character defining element of almost every style.

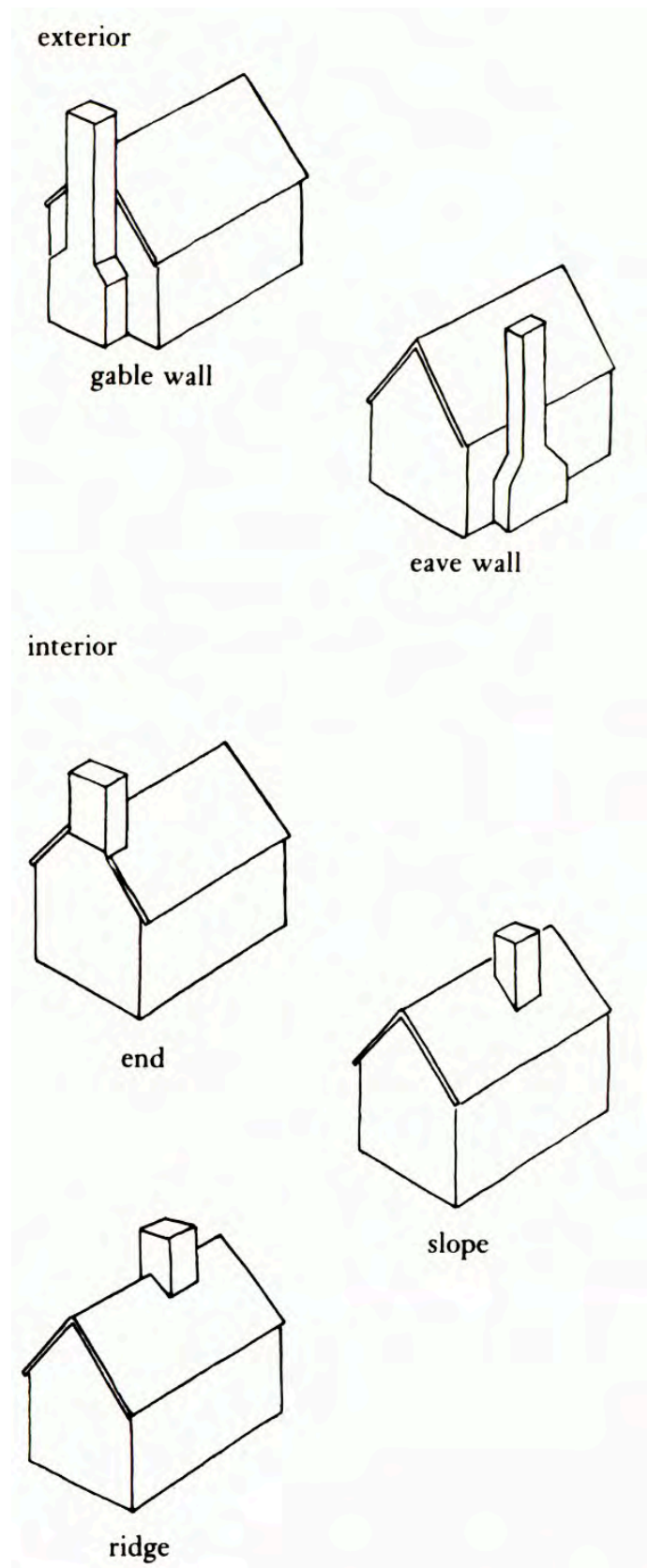
It is a rare historic building that does not have at least a chimney. These sometimes functional (eg. chimneys and belvederes), and often simply decorative items, add considerably to the complete design of a particular style. Over the years and style dependent, one or more of these may be emphasized on a building.

Simple Georgian buildings often placed some emphasis on robust well proportioned beautifully detailed chimneys. These working projections often included multiple flues which added to their substance. In the exuberant eclectic late Victorian period and particularly as an aspect of the Queen Anne and Italianate styles a building might include all types of projections, each a riot of decorative detailing; chimneys, finials, cresting, gargoyles, belvederes, and more! Very often it is the projections that are the first decorative losses of an historic structure.

Intervention Notes

Where historic projections still remain these should be maintained as important elements of the building - brick should be pointed, wood repaired and painted, iron cleaned and painted and so on. If missing, or severely deteriorated, these elements should be reproduced in accordance with documentary evidence.

New projections of a generic "period" design for which there is no evidence should generally be avoided. Exceptions may include basic elemental projections which were almost a certainty and are essential to an understanding of the style, such as chimneys.



Placement of Chimneys

Image Credit: Page 51, A Field Guide to American Houses, Virginia & Lee McAlLester, 1984

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7.1.12 Paint

Historic Characteristic

With few exceptions most wooden elements were historically painted. Exceptions may include working sheds and barns (although many of these were painted), wood roofing and some wood flooring.

Paint technology varied widely in composition over the years and is a subject of special study. Historic paints included: lime based washes (whitewash), milk paint, albumen (egg white) paints, distempers, stains, linseed oil compositions and white lead and linseed oil formulas, shellacs and lacquers. Historically, white lead and linseed oil formulas, represented the largest group of paints, particularly for exterior work. They were applied consistently to building exteriors and interiors from c.1850 to c.1975. They had good covering and adhesion properties and an antiseptic effect through the "poison" aspects of the white lead content. However, white lead in paint is not environmentally appropriate and has been banned since the late 1970's.

Modern paints, do not contain lead and are (for now) available in oil and water based formulas.

Paint colour is often a significant feature of heritage style and varied from the soft grey and off white schemes of the early 19th century in keeping with the colour theories of Andrew Jackson Downey (1815-1852) as elaborated in his book "Cottage Residences" published in 1842, to complex polychromatic schemes common in the the second half of the 19th century.

Intervention Notes

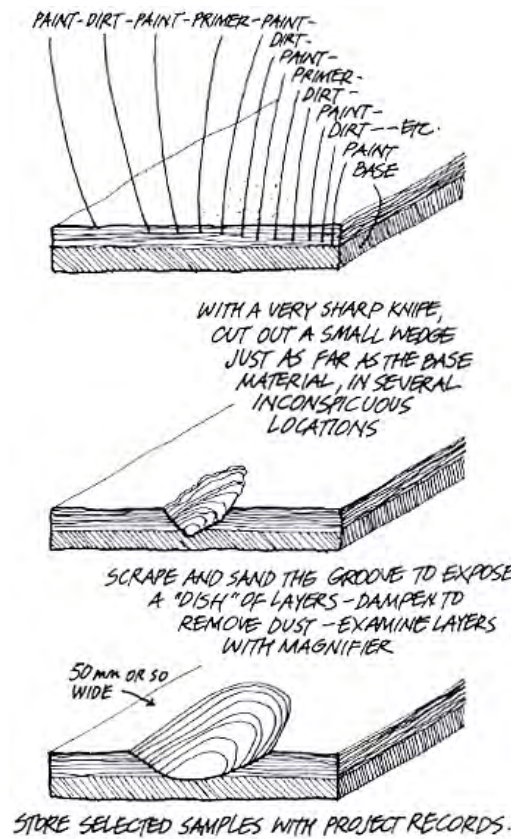
The application of colour to buildings is often seen as a minor aspect of a building project, however the power of appropriate colour to enhance the appearance of a building should not be underestimated.

Caution and appropriate safety techniques must be employed for health safety reasons while working on historic buildings where lead based paints are being scraped, sanded or stripped. Disposal must meet government regulations for the disposal of hazardous waste.

Building owners should be encouraged to use paints that are compatible with the historic paint on the building. Testing should be done to ensure compatibility to help reduce alligator effects and non-adhesion.

Proposals for work on buildings in the heritage district should be encouraged to include a colour section based on on-site colour sampling.

The use of correct period colour schemes should be encouraged based on on site findings and appropriate heritage colouration for the period. The long term application of heritage colours in the heritage district will in time add up to a strong period presentation and better understanding of the styles in the district.



Good conservation practice requires careful analysis of what exists.

Image Credit: Page 165, Well Preserved, The Ontario Heritage Foundation's Manual of Principles and Practice for Architectural Conservation, Mark Fram

7.1.13 Gutters and Rain Water Leaders

Historic Characteristic

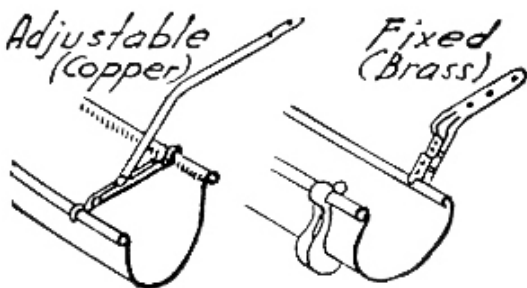
These roof accessories are often considered a minor component of a building's appearance and yet they are often a significant element in a facade composition. When well handled they are virtually invisible, but when handled poorly are an unwelcome intrusion in a building composition.

Gutters have been constructed in a variety of materials. The earliest were carved or built up wooden troughs, sometimes in rounded or box like shapes but more often with a moulded profile that formed part of the trim system of the building. Occasionally in higher class work the gutters were so well conceived as to be invisible, tucked behind fascias or built into roof perimeters in various ways. Where available and again in higher class work, guttering would be lined with or made from metals such as lead, copper, or tinned copper or iron.

Commonly gutters evolved into an accessory made from metal and after its development in the late 19th century galvanized steel. Shapes in metal gutters were most commonly available in half-round and ogee profiles. Metal gutters were secured to the roof fascia with brackets of a variety of styles, lifting from below or hanging from above or with furrels and spikes. Occasionally the brackets were very decorative and part of the style.

The function of a gutter is critical to the health of a building wall. It intercepts water that would otherwise be concentrated by the roof and discharged onto the wall below. Gutters prevent staining, mortar loss, rot in wood elements, freezing and thawing damage, and other deteriorating effects.

Rainwater leaders (RWLs) are the vertical pipes that take water to the ground. These for the most part have always been metal (lead, copper, iron or galvanized steel). This piping is often connected directly to the guttering but in some styles, a decorative hopper is included as a filter and overflow device at the top of the pipe just below the roof.



Stock Strap Hangers Copper & Brass

Image Credit: Page 215, Architectural Details, Classic Pages from Architectural Graphic Standards 1940-1980, Ramsey/Sleeper, The American Institute of Architects

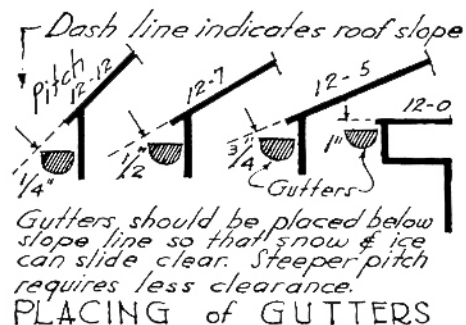
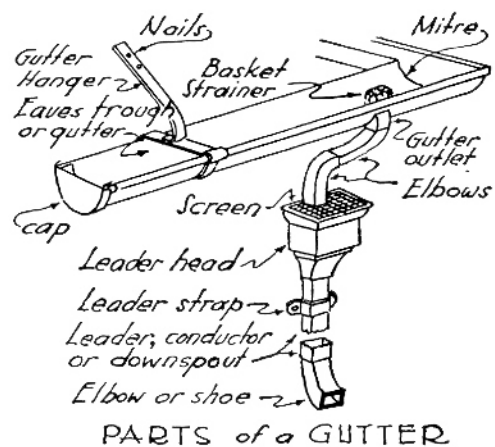
Intervention Notes

Gutters and RWLs require cyclical replacement similar to roofing. This should be done promptly, to avoid staining or water damage to the adjacent walls.

In between requirements for replacement, gutters should be repaired and where sections leak or have become separated they should be reconnected.

Where historic gutters require replacement or are missing, new gutters and RWLs should be manufactured and installed to match as closely as possible the originals in profile, size, and location. This is of particular interest where they have a significant design quality which might include decorative hoppers, or gutters built into the fascia.

It should further be noted that damage to historic foundations and water in basements can often be attributed to the erosion of soil at grade that comes from years of RWLs discharging adjacent to the wall of a building. RWL extensions should be added to carry the water away from the building, or the RWLs should be connected to a storm drain system. A more environmentally appropriate solution would be to connect the RWLs to a weep pipe that leaches rainwater into the surrounding ground.



Gutters

Image Credit: Page 215, Architectural Details, Classic Pages from Architectural Graphic Standards 1940-1980, Ramsey/Sleeper, The American Institute of Architects

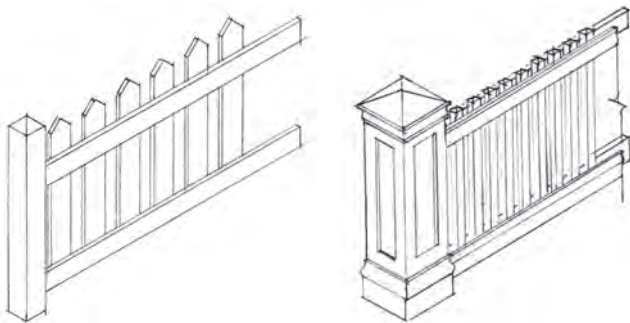
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7.1.14 Fences

Historic Characteristic

Fences and other boundary markers have fallen out of fashion in recent years. A quick study of historic photography reveals that many streets were once “decorated” with beautiful lines of garden fences or walls. These landscape features when reapplied are a significant indicator of a heritage district and serve to create a better understanding of the historic street setting.

Historic fences were installed in wood, most commonly in the form of the classic “picket” fence. They were often quite substantial with decorative built up wood piers at corners and gates, with and heavy posts in between. Pickets were often 2”x2” but were also found in 1”x3” to 2”x4” sizes.



Classic “Picket” Fences - Simple and Decorative

Other fences were installed in iron, and sadly many iron fences disappeared as metal “donations” to the war effort in both the First and Second World Wars. Iron fences often had stone bases

and occasionally stone piers framing the end corners, panel section and gates.

Stone or brick walling was also used to border historic properties. Their robust nature reinforced the significance of the property and added to its decorative qualities, often including the same design and stylistic detailing of the main building they enclosed.

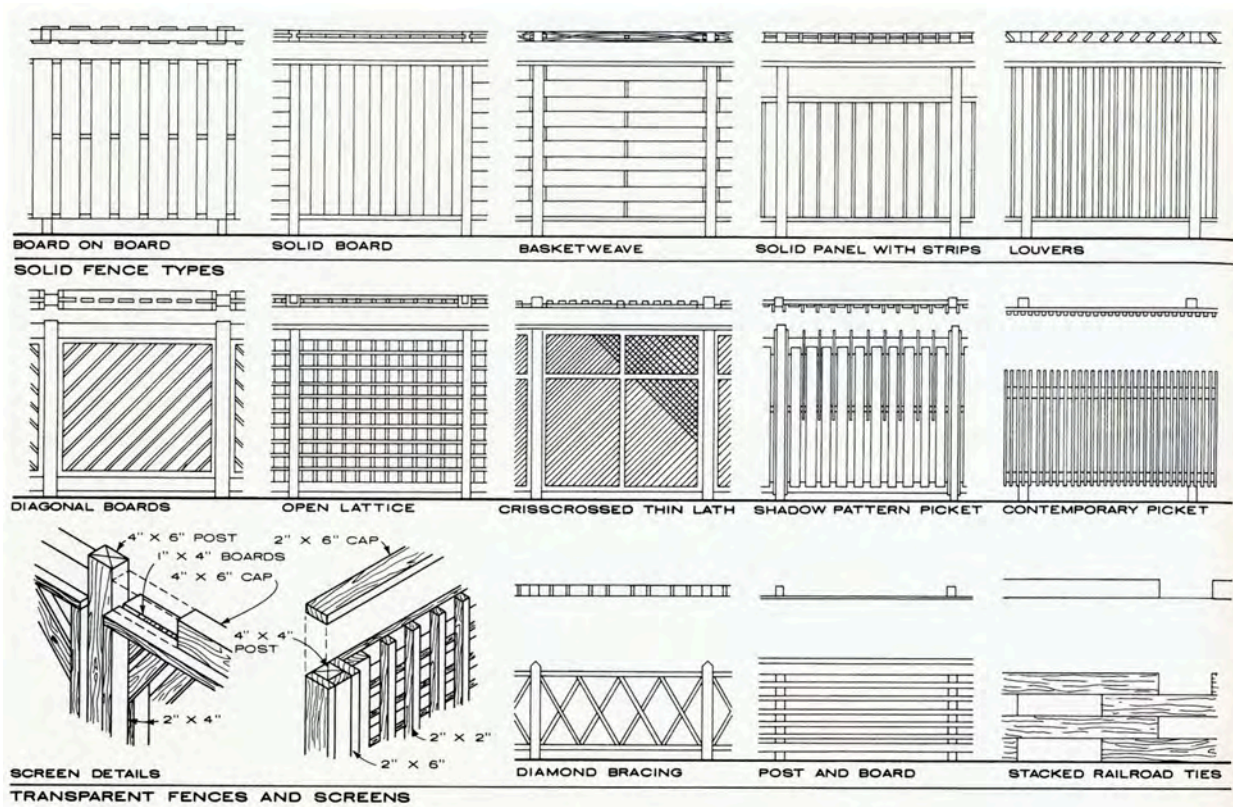
Occasionally walling and fencing also served to divide properties one from the other or to section off a “kitchen” garden from the balance of the site.

Fences deteriorate in all the usual ways that main building materials do and often more rapidly, as they are seen as of secondary importance, are more exposed to the elements on all sides, sit right in the ground, are exposed to animal or insect attack and physical damage. Where historic fences remain they are a character defining element of an historic property.

Intervention Notes

In the rare circumstances where historic fences remain, their repair and maintenance should be encouraged.

Where historic fences can be shown to have existed through documentary research, owners should be encouraged to replicate it. Where historic detailing cannot be determined, an acceptable historic approach to the fence design suitable for the style of the building can be used.



Wood Fences

Image Credit: Page 78, Architectural Details, Classic Pages from Architectural Graphic Standards 1940-1980, Ramsey/Sleeper, The American Institute of Architects

7.1.15 Commercial Signage and Lighting

Historic Characteristics

In today's world of media overload, large loud signage is seen as a necessary aspect of announcing and locating any commercial site. This spiraling up of need to be brash in the face of an ever bolder and brighter environment eventually leads to signage overload.

Historically signage was smaller, simpler and in many respects more tastefully conceived. Commercial building frontages usually included a cornice or architrave intended to accept a sign flat to the surface of the building and in some instances a small, bracketed sign sitting perpendicular to the building face. Well designed, perpendicular signs are both historically correct and charming.

In a district where signage can be scaled back to historic proportions there is an interesting effect. The reduction in visual noise means less individual impact is required to be seen in the commercial environment. A smaller more tasteful sign does the same work as a large bright sign in a noisy environment. Further, the surprising change of nature in the signage regime stands out from other commercial areas in its quietness. In other words visual quiet becomes a new kind of pronouncement.

Intervention Notes (see Diagram A)

Signage

Signs in the heritage district should replicate or emulate the signage regime of an earlier time. Back lit box signs with large faces, acrylic surfaces and bright colours should be avoided whether wall, bracket or pole mounted. Signage should use the **architecture of the building as a guide** and fit on to cornice bands, boom fronts, wall surfaces or awnings as illustrated.

The scale of signs should be small in proportion to the building front and not obscure building windows or architectural features. They should **fit between columns** and respect the rhythms of architectural bays (for example; windows, pilasters, columns). Boom fronts are an exception as the boom front historically was designed to house a larger sign. As well, both lighting and perpendicular signs should be of a small proportion of the building frontage.

Signage colours should reflect period colour choices. Lettering can be decorative and include logos or decorative embellishments to suite the business identity.

Lighting

Signage can be illuminated with lights on brackets, under soffits, or from light standards. Light fixtures should be appropriately scaled, and of a small proportion relative to the storefront or sign. Lights may share the same bracket or column that supports the sign. The use of restored historic light fixtures are encouraged. In some instances, the signage on buildings are simply lit by the ambient light from the street lights.



Original Commercial Storefront

Image Credit: Page 9, Technical Paper Series 4, Guidelines for Storefronts of Heritage Buildings, British Columbia Heritage Trust



Poor Revovation of Commercial Storefront

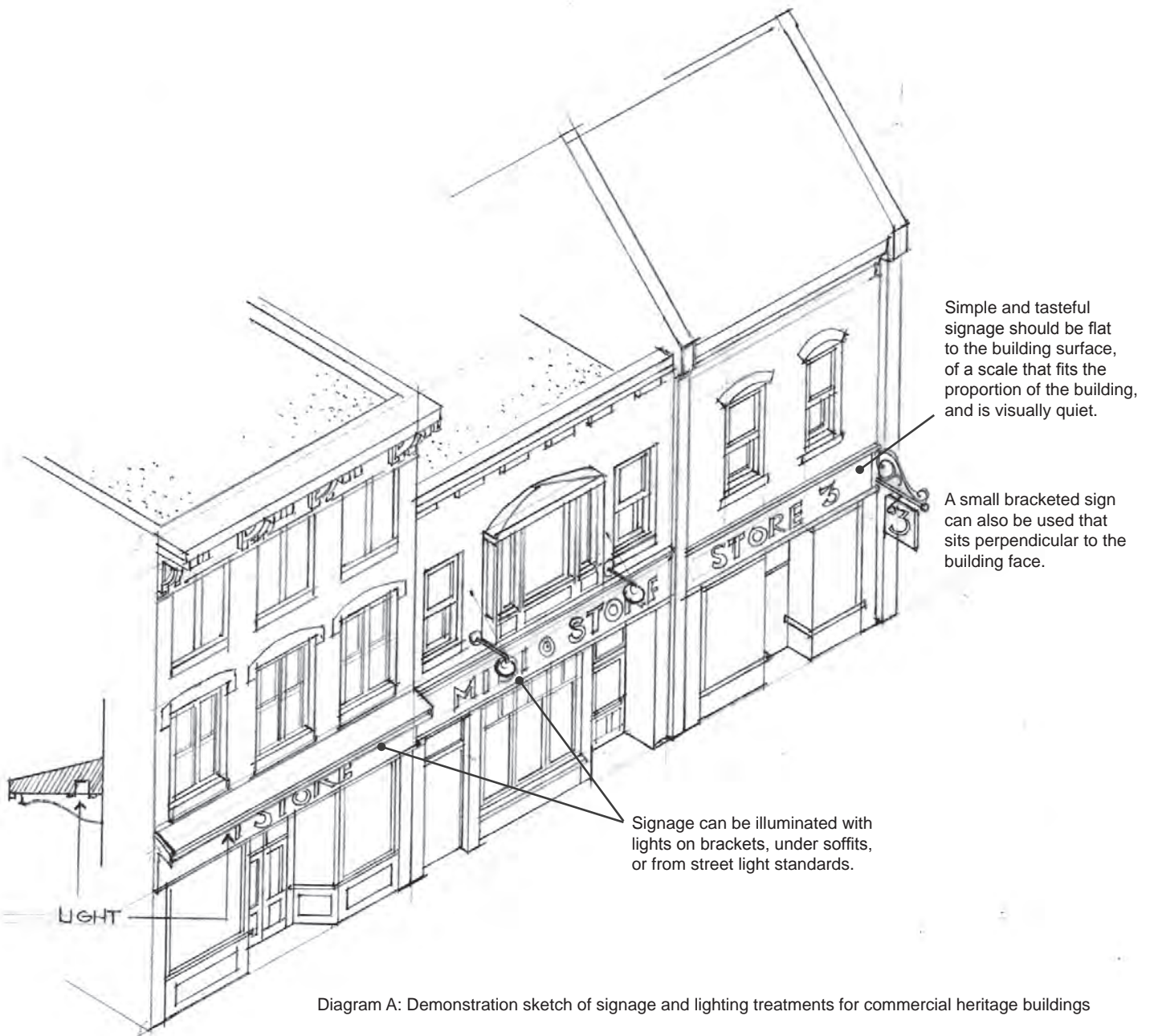
Image Credit: Page 10, Technical Paper Series 4, Guidelines for Storefronts of Heritage Buildings, British Columbia Heritage Trust



Sympathetic Revovation of Commercial Storefront

Image Credit: Page 11, Technical Paper Series 4, Guidelines for Storefronts of Heritage Buildings, British Columbia Heritage Trust

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7.1.16 Storefront

Historic Characteristics

Historically, in the period of commercial development in Canada, storefronts had characteristics similar to today. They were designed to include large display windows, prominent entrances and elements for the placement of signage.

Unlike today historic storefronts often included large awnings or step up porches with fixed roofs. This intermediate zone allowed for exterior display of merchandise, protection from inclement weather, shade from hot sun, and when a bench was added, a socialization space. In towns and cities where stores existed in long blocks, these features often formed continuous covered walkways.

Windows in storefronts were as large as possible and as technology changed, advanced from multi-lited combinations, to a simplified arrangement of a few mullions with large panes of glass, to single large glass surfaces.

Generally storefronts until more modern times were installed in high quality hardwood frames with decorative moldings, sills, and cornices. Wood was replaced by steel frames sometimes with brass or bronze trim at about the turn of the century. Most frames were replaced by aluminium by the late 1950s.

Display windows generally included an elevated surface on which to construct merchandise displays. These surfaces created a cavity below which often, with the addition of a low window under the display window, admitted light to the basement. At other times, this lower wall area was faced in materials associated with the decorative intent of the storefront. These materials might include ribbed or "v" match vertical siding, decorative wood panelling, stone, tile or terra cotta walling, vitrolite glass in a range of colours or decorative metal siding in various forms.

As a prominent feature of a commercial building, storefronts were, periodically changed. Therefore the design of a storefront included in an historic building may not be the original even if it has a period feeling. Research, particularly historic photographs, are invaluable to understanding the design intent of the original storefront set into the larger building facade.



Appropriate Classic Revival Store Front

Image Credit: Page 8, The Buildings of Canada, A Guide to Pre-20th-century Styles in Houses, Churches and Other Structures, Environment Canada



Appropriate Italianate Store Front

Image Credit: Page 8, The Buildings of Canada, A Guide to Pre-20th-century Styles in Houses, Churches and Other Structures, Environment Canada



Appropriate Boomtown Store Front

Image Credit: Page 9, The Buildings of Canada, A Guide to Pre-20th-century Styles in Houses, Churches and Other Structures, Environment Canada

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Intervention Notes

Where a storefront which forms a part of an historic building is subject to repair or renovation, preference should be given to a restoration of the original storefront if enough accurate documentation exists. Where this is not possible, preference should be given to a storefront that is keeping with the general design characteristics of the building period. The storefront is an important large-scale element of a historic building elevation and care must be taken to include a storefront design that is appropriate to the design of the building.

Where contemporary requirements for level entrances for accessibility, door widths, or other issues impact storefront considerations, these should be solved in a manner that requires the least modification to an original restoration storefront or replica storefront approach.

Where a new commercial building is being inserted into the district, it may be of a contemporary design, but in materials and of proportions with lines and levels that connect it from a design perspective to the street wall formed by other nearby buildings. This approach to design should also include the storefront so that the total composition is in harmony with its surroundings, enhances the streetscape, and does not dominate its location.



Awnings should always be located below the storefront cornice and between the storefront piers or pilasters.

Image Credit: Page 45, Planning and Design for Commercial Facade Improvement, Ontario Ministry of Municipal Affairs, Community Planning Wing



The entire street facade presents an image that acts as a sign.

Image Credit: Page 88, Planning and Design for Commercial Facade Improvement, Ontario Ministry of Municipal Affairs, Community Planning Wing

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