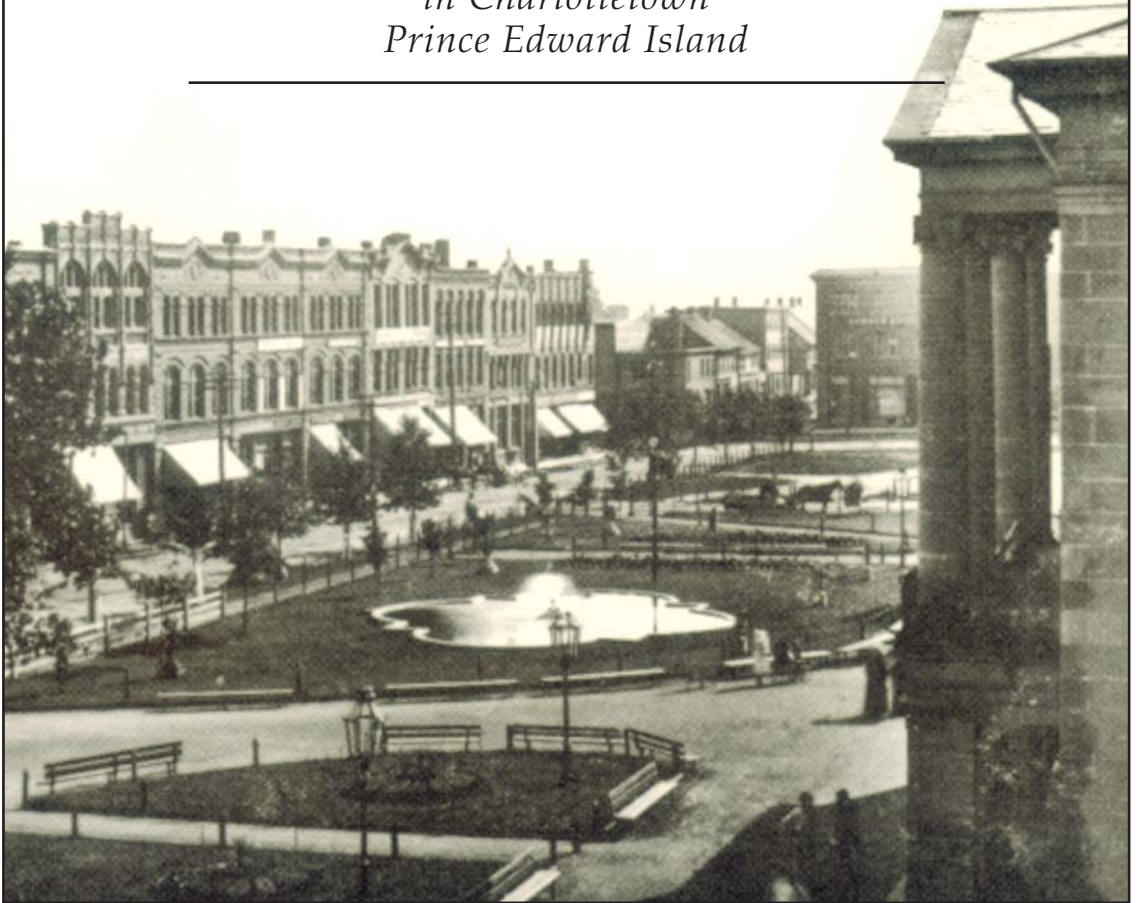




City of Charlottetown

DESIGN GUIDELINES
for the
PRESERVATION of
HISTORIC RESOURCES
in Charlottetown
Prince Edward Island



Compiled and written by:

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Restoration Technologist

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For:

The City of Charlottetown

Planning Department

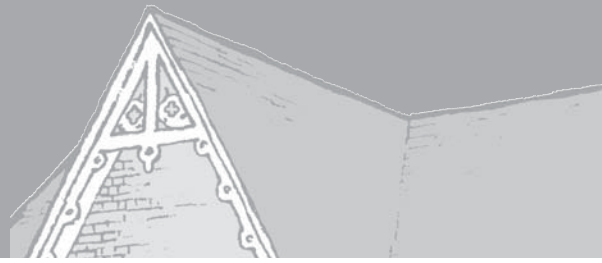
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Acknowledgement:

Thanks are due to Alison Ward for editing this document.

COVER PHOTOGRAPH:

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One of Charlottetown's greatest resources is its collection of 19th century buildings. They contribute to the ambience that Charlottetownians and visitors alike enjoy especially in the older part of town.

These architectural guidelines will be most useful to the property owners as they strive to maintain or repair their building. The understanding of their buildings place in Canadian Architectural history will be a source of pride to them and all who view the results.

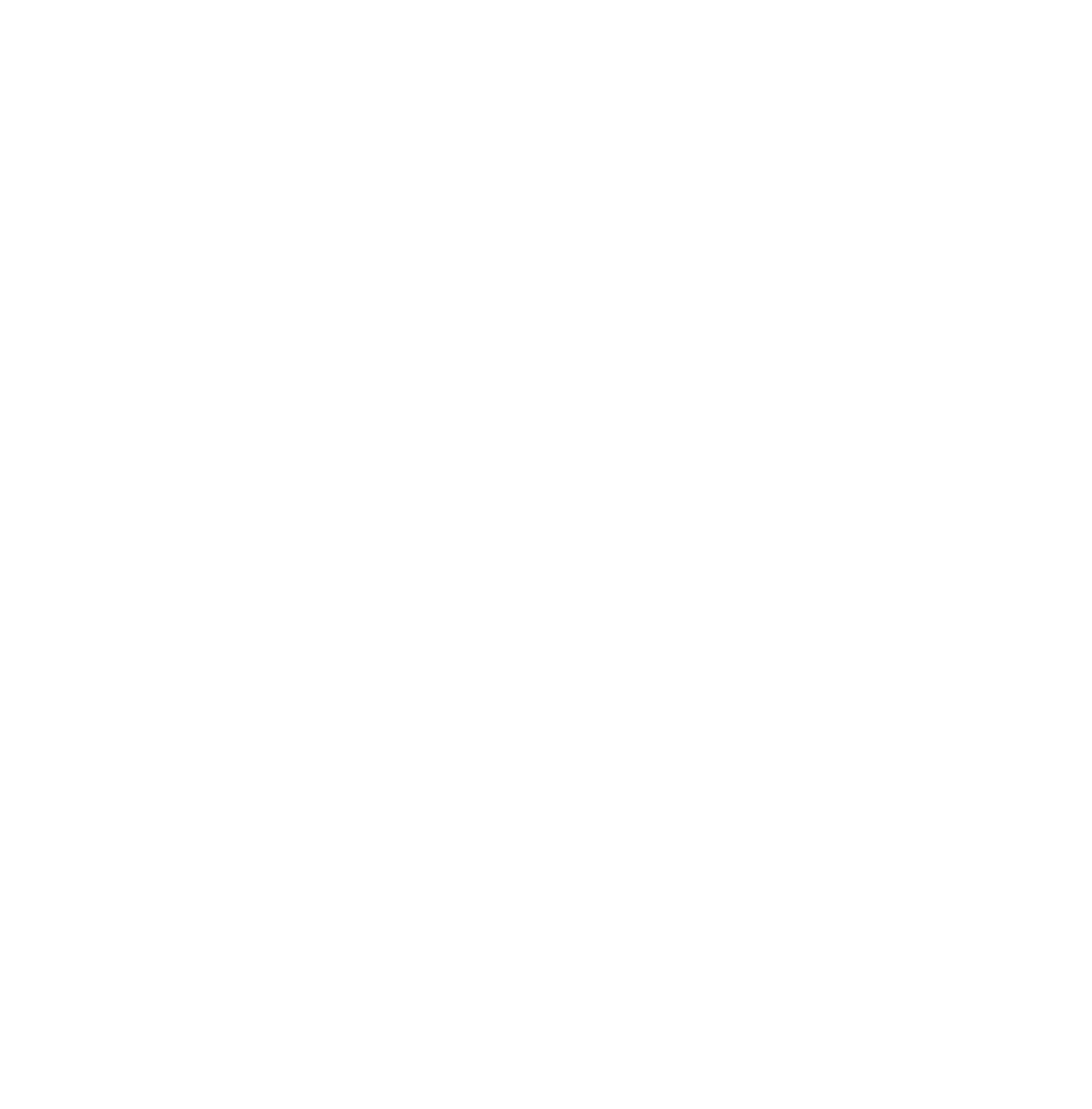
I compliment the efforts of the former Heritage Board Chairman, Clifford Lee, the Planning Department and in particular Tom Ward for this useful publication.

It will certainly make the task of the Heritage Review Board easier.

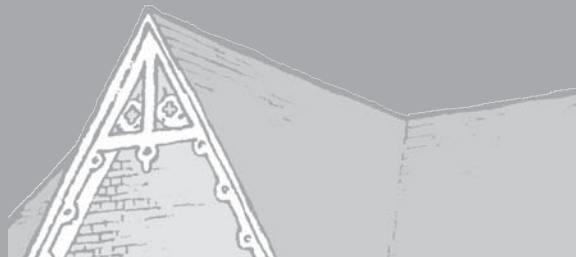
I encourage its use.

Catherine Hennessey
Chairman, Heritage Review Board

January, 1993

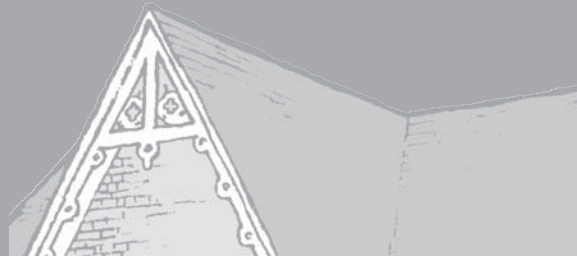


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Introduction



Charlottetown's Built Heritage

The idea that Charlottetown's heritage buildings are precious and of irreplaceable value to the economic and social well-being of our community is more widely accepted now than it was a decade ago. In fact, a clearer community-wide vision of the importance of our built legacy is emerging. We are realizing that our heritage resources are an integral part of the design diversity that makes for a high quality urban environment. The original plan for Charlottetown, as laid out by Charles Morris in 1768, with its street grid, squares, and parks, still exists and is enhanced by the wide range of historic buildings and monuments that echo the confidence and aspirations of our predecessors.

Charlottetown's assets as a provincial capital, as the birthplace of Confederation, and simply as an historic city are significant to the growth of a cultural tourism industry that will undoubtedly become a major contributor to the economic health of the community. Our preserved and functioning heritage resources demonstrate that our history is a vital and relevant part of our daily lives.



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Why Guidelines?

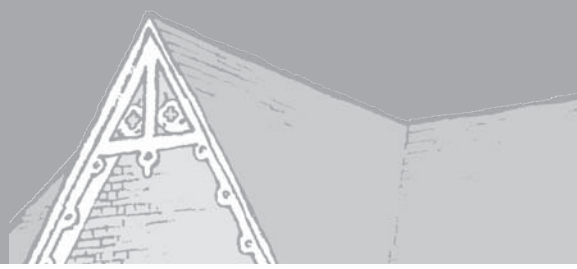
Progress, as it relates to the change or destruction of Heritage Resources, has been relatively slow in Charlottetown. Fire, it seems, has been the worst enemy, though on the whole, little disruption has occurred that would make way for newer, less worthy buildings. The only real and constant threat has been neglect and the passage of time.

With a heightened sense of value imparted on our heritage buildings, it is important now to ensure that the inevitable changes that occur for reasons of modern efficiency, comfort levels, regular maintenance, or in the spirit of "heritage preservation" do not cause irreversible harm nor obscure the characteristics that make them valued in the first place.

For the past ten years, the design review process of the Heritage Review Board has proved effective in protecting heritage buildings. In some cases, unfortunately, the decision-making rationale has not been clear, resulting in a perception by some that the Board is unreasonable and is policing heritage matters. The process has been somewhat problematic because of the lack of consistent standards and accepted criteria. This led the Heritage Review Board to research and approve a Heritage



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Charter which included sixteen standards for heritage preservation in Charlottetown. It is hoped that by articulating these basic principles, Charlottetown's citizens, designers, and builders, together with City Council and the Heritage Review Board, will be able to proceed with shared understanding and expectations.

These Design Guidelines not only attempt to explain the following standards in practical terms but also try to link the principles with the accepted construction techniques required by heritage buildings. The Charlottetown *Standards for Heritage Preservation* are based upon accepted international preservation charters and especially the U.S. Secretary of the Interior's manual: *Standards for Rehabilitation*.

Standards for Heritage Preservation in Charlottetown

1. Compatible Use

Every reasonable effort shall be made to encourage a compatible use of the historic structure which requires minimal alteration to the exterior and does not adversely affect the character.

2. Original Character

The original, distinctive qualities and character of an Historic Resource shall be preserved. The removal or alteration of any historical materials or distinctive features shall be avoided.

3. Style and Craftsmanship

Distinctive stylistic features or examples of skilled craftsmanship shall be treated with sensitivity.

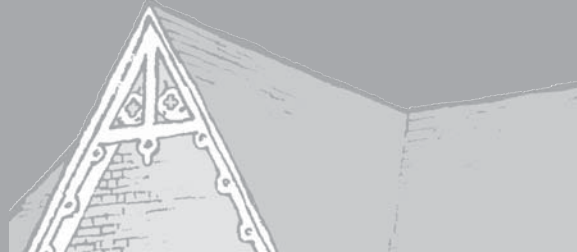
4. Historic Period

All Historic Resources shall be recognized as products as their own time. Alterations that have no historical basis and which seek to create an earlier appearance shall be discouraged.

5. Changes

Changes to an Historic Resource which may have taken place over the course of time are evidence of its development and history. These changes may have acquired significance in their own right. The valid contributions of all periods to an Historic Resource must be respected.

When an Historic Resource includes the superimposed work of different periods, the exposure of the underlying state is only justified when what is removed is of little interest and when the material which is revealed is of historical value. Evaluation of the importance of the elements is the decision of the Heritage Review Board.



6. Methods and Materials

Wherever possible, deteriorated architectural features shall be repaired not replaced. In the event that replacement is necessary, the new material shall match the original in composition, design, colour, texture and other visual qualities.

Repair or replacement of missing architectural features shall be based upon accurate duplication of features, substantiated by historic, physical or pictorial evidence, rather than on conjectural design or the availability of different architectural elements from other buildings or structures.

7. Environmental Control

Systems of insulation, environmental control, and other services shall be upgraded in ways which respect the existing and traditional equilibria and do not set in motion processes of deterioration.

8. Surface Cleaning

In all cases, surface cleaning shall be undertaken with the gentlest means available. Many cleaning methods damage historic buildings and should not be undertaken without thorough testing prior to use. Sandblasting is NOT recommended on brick, stone or wood. In all instances, it should be ascertained before undertaking the work that a building exterior is truly in need of cleaning.

9. Archaeological Resources

Every reasonable effort shall be made to protect and preserve archaeological resources affected by, or adjacent to, any Historic Resource under construction.

10. Contemporary Design

Contemporary design for alterations and additions to existing properties shall be encouraged when they will not destroy significant historical, architectural, nor cultural material, and when such design is compatible with the size, scale, colour, material and character of the property, neighbourhood or environment.

Additions, in particular, should echo contemporary ideas while respecting and enhancing the spirit of the original.

11. Reversibility of Work

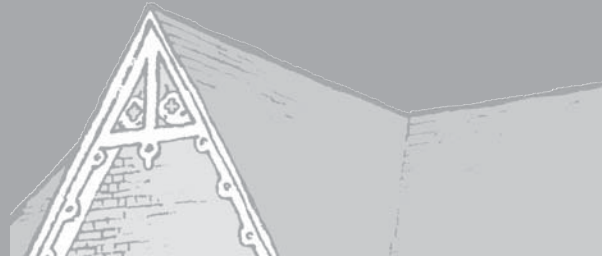
Wherever possible, new additions or alterations to Historic Resources shall be done in such a manner that if they were to be removed in the future, the essential form and integrity of the Resource would be unimpaired.

12. Relocation

Dismantling and relocation of an existing Historic Resource shall be employed only as a last resort, and only when protection cannot be achieved by any other means.

13. Reconstruction

Reconstruction shall be limited to specific depleted details and shall be based upon sound documentary evidence. Reconstruction of the entire Historic Resource shall be discouraged.



14. Recording

Prior to undertaking any alterations, particularly in cases where alterations may threaten the Historic Resource, a record of the threatened element shall be compiled. Measured drawings and photographs may prove invaluable if major features are damaged or lost during construction.

15. Changing Construction Detailing

In some historic structures, poor construction methods have resulted in rapid deterioration of certain elements. In these instances, accurate reconstruction of the original detail will inevitably contribute to the failure of the element again. Reconstruction, therefore, may be undertaken in such a fashion as to duplicate the original as closely as possible while using sound construction practices.

16. Building Codes

At no time should the life and safety of occupants be deemed of less importance than the preservation of the original fabric of the Resource. The required life and safety standards are those specified in the current National Building Code. Notwithstanding these Code requirements, however, where the essential character of the Resource is threatened by changes for Code reasons, every effort shall be made to find an equivalent safety standard by alternative means so as to minimize the impact on the historic fabric.

What is an Historic Resource in Charlottetown?

Heritage Review Board Mission Statement:

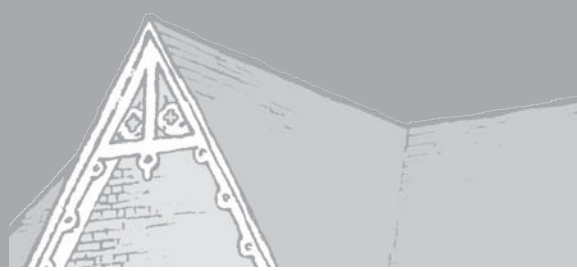
“The City of Charlottetown is committed to the preservation and continued use of the Historic Resources that contribute to the physical, social, educational and economic development of the municipality. The components of our heritage that help define our community’s unique character include sites, monuments, structures and buildings, streetscapes, squares, and environments of historic, architectural, social and cultural significance.”

This Mission Statement, in combination with the Heritage Preservation Standards, will help guide the Heritage Review Board and building owners in their decision-making process. The term “Historic Resource” encompasses a wide spectrum of our cultural heritage that makes up the whole of Charlottetown. This document and, for the moment, the Historic Review Board, is concerned with designated buildings as defined by the heritage provisions of the Zoning and Development By-law. Undoubtedly, as awareness is heightened, other components such as graveyards, squares and buildings not yet protected by the By-law will also be regarded as irreplaceable. The basic principles outlined in these Design Guidelines may be followed for the rehabilitation of any Resource.

Purpose

These Design Guidelines were developed as a reference tool for decision making. They are intended for use by those involved in effecting changes to our Historic Resources and as an educational tool to help increase public awareness of design options and specialized preservation techniques.

This guide is not a prescriptive set of rules and its purpose is not to tie the hands of designers. In fact, a successful preservation project requires the creativity of professionals. Research is critical to any project, as this document cannot anticipate every situation nor identify completely the features that make a particular building important. Advice from qualified professionals or further research will ensure a quality result.



Where to Find Help

1. P.E.I. Museum and Heritage Foundation
2 Kent Street
Charlottetown, P.E.I.
Tel: 892-9127

2. P.E.I. Archives
Coles Building
Charlottetown, P.E.I.
Tel: 368-4390

3. Architects Association of Prince Edward Island
Charlottetown, P.E.I.
Tel: 566-3699

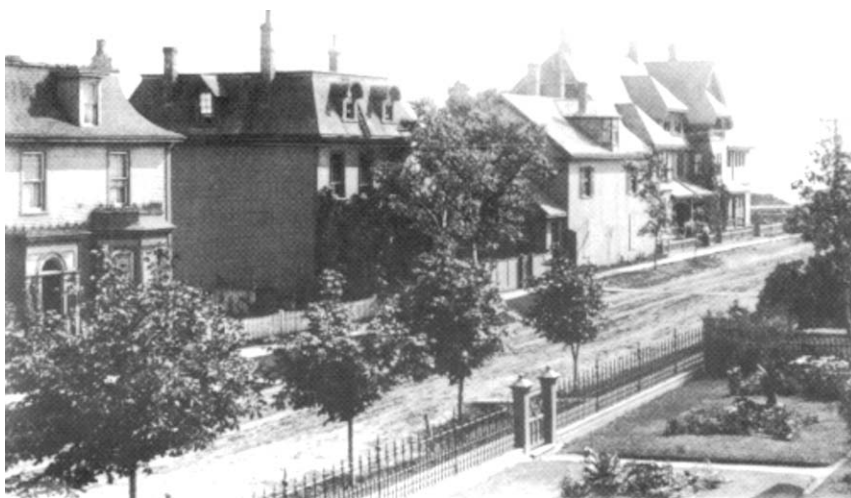
Building Styles

Charlottetown is very fortunate to possess an extensive, functioning building stock ranging from the early, modest vernacular homes lining Kent Street to the grand houses such as Fairholm, Birchwood and Government House. Most of our heritage buildings can be categorized by their appearance even though their individual characteristics are a response to the needs and financial resources of the original owners and to the talents of the builders or architects. It is useful, then, to those who are in a position to renovate or maintain a heritage building, to understand the components that make up a particular style.

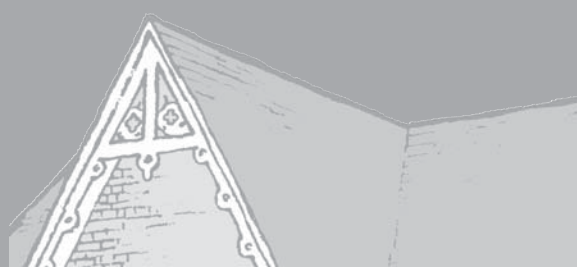
It is important to note that the following is not meant to be a definitive breakdown since many buildings which could be grouped into a particular style category may display only a few of its recognizable components. In addition, because there are not always clear boundaries between styles and because any building may be a combination of many styles, the label may often fall short of the mark.

The purpose of this section is simply to examine the elements that are important to the character of a particular building and to appreciate the style trend that the builder was trying to follow. This section

will help to further
explain Heritage
Preservation Standards
1 through 5.



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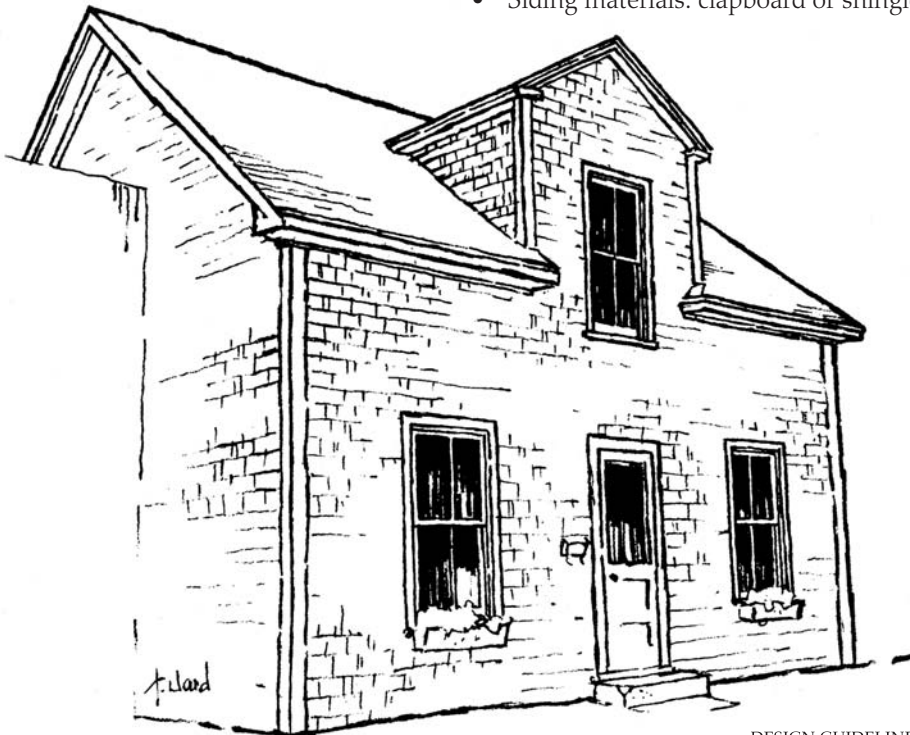
Maritime Vernacular Cottage

(1830's to 1860's)

The Vernacular Cottage is a distinctive Maritime style and was a common residential form in the mid-1800's in Charlottetown. Many examples still exist but have been changed with the addition of later trim features reflecting different style periods.

Distinctive Features – Georgian:

- Rectangular Plan.
- Symmetrical – three to five bays.
- Central doorway.
- 1-1/2 storeys.
- Large central dormer, usually breaking the front eave line.
- If smaller dormers exist they are likely later additions.
- Gable roof – little eave overhang.
- Double-hung windows – originals would have small panes.
- Four or six panel door with transom and sometimes sidelights.
- Siding materials: clapboard or shingles.



Georgian and Neo-classical/Adamesque

(pre-1810's to 1830's)

These well-proportioned, balanced houses followed a British tradition started in the 18th and early 19th Centuries. Earlier Georgian examples are simple in detailing. The terms Neo-classical and Adamesque refer to a further refinement of the Georgian ideals with the addition of classic Greek and Roman details as studied and interpreted by Britain's Robert Adam.

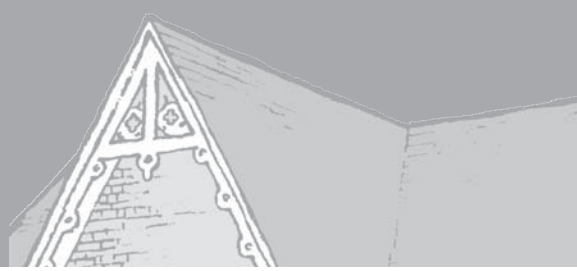
Distinctive Features – Georgian:

- Rectangular Plan.
- Symmetrical – three to five bays – central doorway.
- 1-1/2, 2 or 2-1/2 storeys.
- Four or six panel door with transom.
- Gable or hip roof.
- Simple cornice with returns at gable ends.
- Double-hung windows – originals would have small panes.
- Simple cornerboards and trim.
- Clapboard, shingle or brick.

Distinctive Features – Neo-classical/Adamesque:

- Less heavy, thinner, sharper mouldings.
- Applied pilasters or arches.
- Semi-elliptical fanlight and sidelights.
- Corners emphasized with pilasters.





Classical Revival/Greek Revival

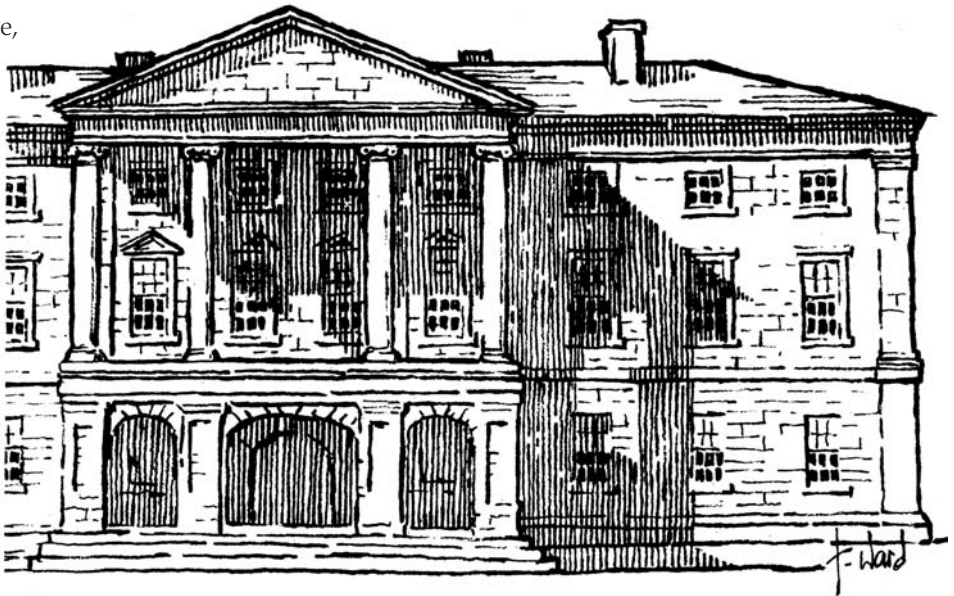
(1830's to 1860's)

A more direct use of Classical elements emerged with further study of Greek original forms. Pattern books (eg. Asher Benjamine) made the architectural vocabulary available to all builders.

A rather formal approach to the Classical Revival style was used for public buildings, reminiscent of the temples of Greece and Rome. For modest buildings a temple effect was obtained by an open portico with a heavy entablature, supported by columns and pilasters.

Distinctive Features:

- Symmetrical – similar to earlier styles.
- Gable end often facing street forming a temple front effect with gable as pediment with pronounced returns, supported by strong corner boards representing columns.
- Trim simplified but heavier – doors and windows may have small columns and entablatures.
- Doors on gable-end houses offset from centre.
- Paneled doors with transoms and sidelights.
- Beneath cornice, plain wide entablatures.
- Double-hung windows.
- Clapboard or shingles.



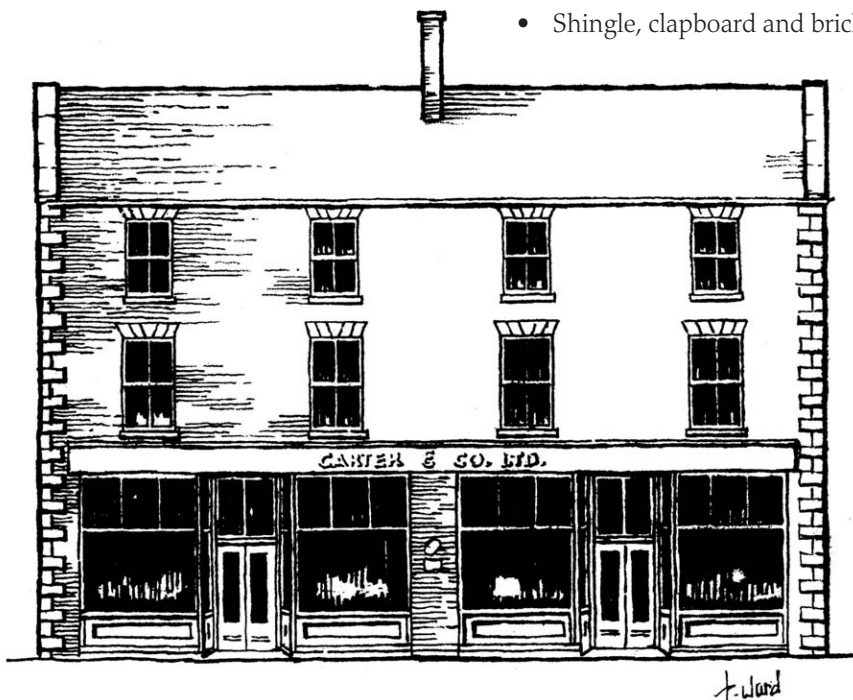
Early Commercial

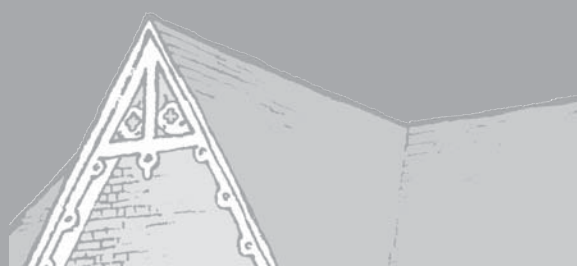
(pre-1860's)

Buildings built exclusively for commercial activity before the Victorian era were still rather simple and used the balanced design elements valued for residential architecture at this time. Prior to this, businesses were located in buildings that looked much like houses.

Distinctive Features – Georgian:

- Ground floor exclusively for storefronts with larger multi-paned windows.
- Double-hung windows on upper levels – originals would have small panes.
- Balanced facade.
- Large, simple double doors with transoms.
- Recessed entry.
- Mouldings simple - some storefronts displayed Classical elements including pilasters and entablatures.
- Signage on horizontal panel above entry and between rows of windows on upper facades.
- Shingle, clapboard and brick.





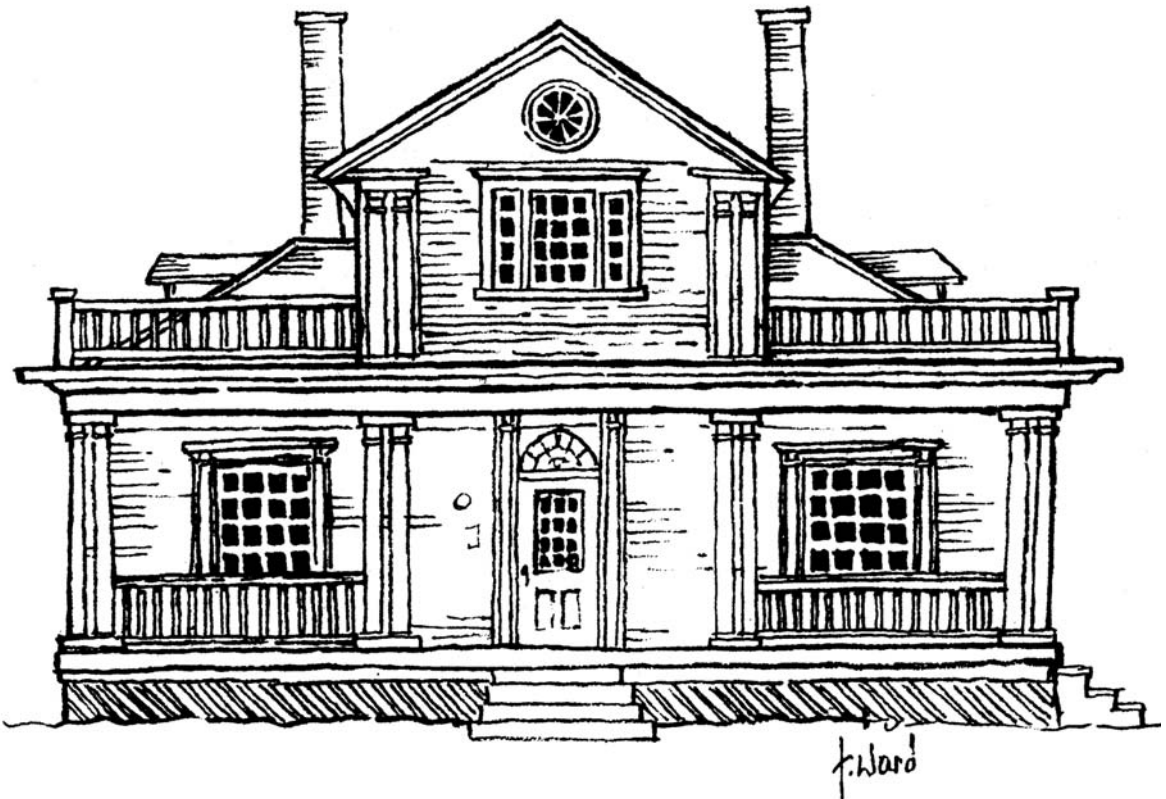
Regency/Picturesque

(1820's to 1840's)

This form was influenced by the public's increasing taste for the picturesque and architectural forms from other British colonies.

Distinctive Features:

- Symmetrical.
- 1 to 1-1/2 storeys.
- Hipped to gabled roofs – broad eaves.
- Verandahs made their first appearance adapted from bungalows found in India.
- Details still Classically based.
- Large windows (sometimes French Doors).



Gothic Revival

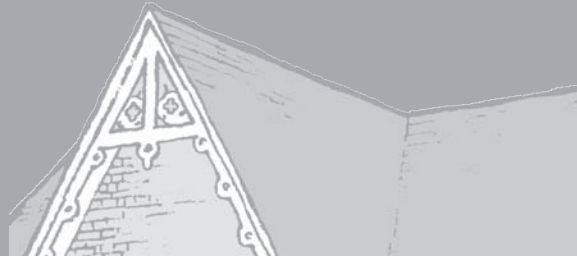
(1840's to 1870's)

The house style most identified with Prince Edward Island is the rectangular house with a gable roof and a large front centre gable. Although mainly found in rural settings, a few exist in Charlottetown. They were influenced by a Gothic Revival movement made popular by pattern books such as those by U.S. architect A.J. Downing. This style was also used extensively for churches.

Distinctive Features – Georgian:

- Generally symmetrical.
- Emphasis on vertical proportions, steeply-pitched roofs and vertical lines.
- Windows may have pointed arch and tracery.
- Decorative bargeboard (Gingerbread).
- Projecting bays common.
- Shingle or clapboard.





Italianate – Residential

(1840's to 1870's)

From the English picturesque tradition, this is a response to the widely used formal, classical styles. The Italianate style was modeled after the asymmetrical villas of the Italian countryside, the large palaces of Rome and Florence, and the arcaded Renaissance palaces of Venice.

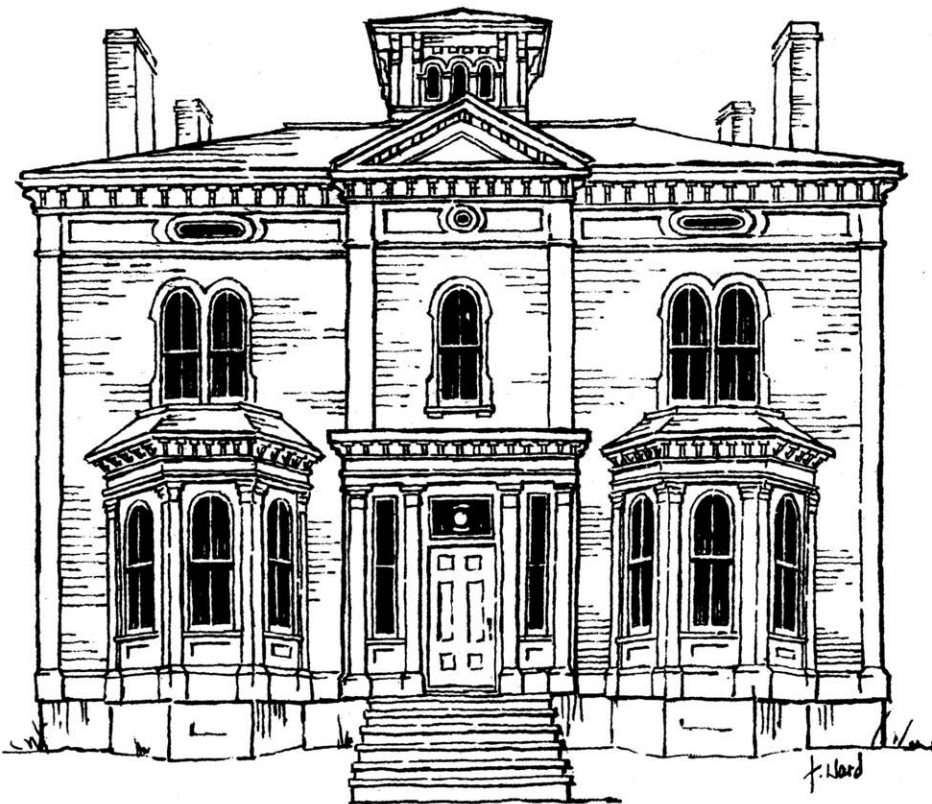
a) Distinctive Features – Italian Villa:

- Square tower with low pitch roof placed off-centre.
- Low hipped or gable roof.
- Asymmetrical plan and massing.
- Wide eave overhang with large, sometimes paired brackets.
- Balconies, bay windows, porches.
- Tall, round-headed windows, often paired and with elaborate wood mouldings.
- Tall, round-headed doors, often paired and decorated with heavy mouldings.



b) Distinctive Features – Italian Palace Style:

- Square, heavy appearance.
- Low, hip roofs with wide projecting eaves.
- Elaborate eave brackets.
- Cupola.
- Bay windows and porches.
- Tall prominent doors with heavy mouldings.
- Round-headed windows – paired.





Italianate – Commercial

(1840's to 1880's)

This first distinctive commercial storefront style was very popular in Charlottetown as it was in most of North America. It was built primarily in brick and stone and replaced earlier, more modest commercial buildings made of wood. It was modeled after the arcaded facades of the Italian Renaissance style found in northern Italy, particularly in the palaces of Venice.

Distinctive Features:

- Multiple storeys of wood, brick and/or stone, with a vertical emphasis.
- Tall round-headed windows on upper facades with pronounced hood mouldings giving an arcaded effect.
- Use of decorative cast iron for structural support and ornament.
- Articulated cornice – in Charlottetown, corbelled brick cornices.
- Storefronts with large plate glass windows, transoms and recessed doorways.
- Signage in band above storefront.



Second Empire/Mansard Style

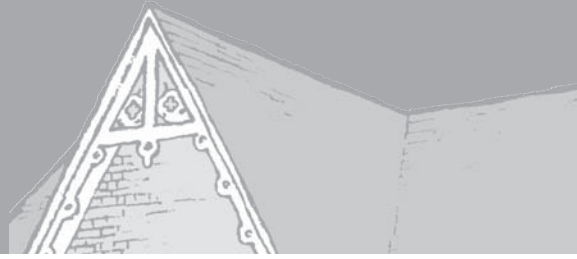
(1860's to 1880's)

The Second Empire Style originated in France but reached Canada through Britain and the United States. The Second Empire was that of Napoleon III (1852 to 1870), and the Mansard Roof, which identifies the style, was named after the French architect Francois Mansard. In Charlottetown, this style was used extensively, from mansions such as Beaconsfield and Birchwood, to modest one-storey houses such as those found of Fitzroy Street.

Distinctive Features:

- Mansard Roof – double-pitched, steep slopes are straight sided, concave or convex, usually with dormers.
- Mansard-roofed square towers are sometimes used.
- Massing is somewhat symmetrical.
- Emphasis on vertical proportions.
- Heavy bracketing at eaves.
- Tall windows with large panes of glass, two-over-two.
- Window heads round, square or gabled with heavy moulded decorations.
- Doors usually double with upper glass panels and heavy mouldings.
- Iron cresting at roof edges.
- Wood frame – clapboard or shingles.





Queen Anne Revival

(1880's to 1910's)

Queen Anne Revival houses were popular during the peak of the Picturesque movement and are most identified with the late Victorian period. The style is said to have been created by English architect R.N. Shaw. It incorporated only some of the classical motifs popular during Queen Anne's reign (1704 to 1714). In Charlottetown, this style is somewhat subdued compared with examples from other provinces.

Distinctive Features:

- Very large, asymmetrical structures.
- Steep roofs – variety of roof lines.
- Turrets, towers and porches.
- Large chimneys.
- Complex details including: eclectic wall surfaces, decorative shingles and siding.
- Variety of windows – often with coloured glass.
- Bays common.
- Palladian windows.
- Decorative door – heavy mouldings – coloured glass panels.



Richardsonian Romanesque

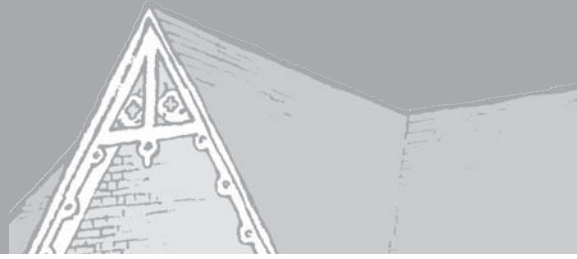
(1880's to 1900's)

H.H. Richardson recorded and adapted the Romanesque architecture of southern France. This style used masonry as a variant of the Queen Anne style as it provided a more massive appearance.

Distinctive Features:

- Dominant round arches with contrasting stone details.
- Heavily rusticated masonry.
- Deeply-set windows emphasizing wall thickness.





Georgian/Colonial Revival

(1890's to 1940's)

A first revival style based upon North American models (themselves revivals of still earlier forms). This was an effort to move to more simplified forms and an attempt to adapt the forms of earlier architectural styles to contemporary needs.

Distinctive Features:

- Rectangular plans.
- Symmetrical facades.
- Shallow, hipped or gabled roofs.
- Restrained classical detailing in palladian windows, columns and cornices.
- Windows often shuttered.



Guidelines

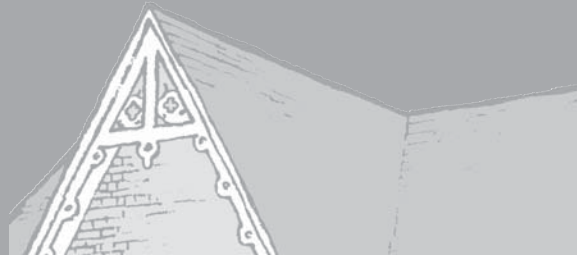
The previous section attempted to identify those valued components critical to particular styles found in Charlottetown. This section will outline common problems and renovation mistakes associated with the components, and will point to possible solutions or accepted renovation techniques. In all cases, Standard #6 – Methods and Materials, is used to guide the decision-making process:

“Wherever possible, deteriorated architectural features shall be repaired not replaced. In the event that replacement is necessary, the new material shall match the original in composition, design, colour, texture, and other visual qualities. Repair or replacement of missing architectural features shall be based upon accurate duplication of features, sustained by historic, physical or pictorial evidence rather than on conjectural design or the availability of different architectural elements from other buildings or structures.”



PHOTO: T. WARD

Assessment



These guidelines attempt to direct, in a general way, approaches to specific design problems encountered with Heritage Resources and will fall within the following general categories:

1. Maintenance or Repair of period building components.
2. Replacement or Reconstruction of period building components.

Before the best design solution can be found, the real problem must be clearly identified. In questions of maintenance, it is important to treat the cause and not the symptom. In addition, the solution must “fit” the problem. Look for and have confidence in the simplest solution.

Example 1:

At the corner of a shingle building, paint has not adhered, it continually bubbles and chips and the shingles are often wet. A persistent problem such as this is not cured simply by repainting or by covering with a synthetic siding material. Rather, the source of the deterioration, (eg. leaking rain gutter) must be found and fixed. The wood must then be allowed to dry out and only then, primed and repainted.

Example 2:

The bottom rail on a window is losing paint and beginning to rot. At close investigation, it is found that over time the wood window sill has jacked and now slopes slightly inward, pooling water at the window’s bottom rail. Of course, repairing the bottom rail without correction of the sill slope would be only a temporary solution.

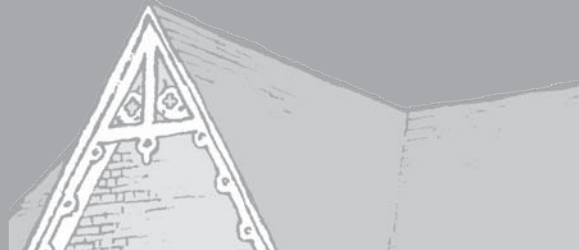
Replacement of the entire window unit is a rather drastic solution and costly compared with effective assessment and specific solutions for the real problem.

Research and Help

In every case, time should be allotted for carefully study and research before a solution or design is proposed. The best design will be one of careful consideration of the information gathered and an evaluation of the consequences of specific action.

Become a building detective. Inspect areas that normally require a high level of maintenance before a costly problem arises. Look at your building with a critical eye and identify the parts that are important to its character; recognize that these are valuable and irreplaceable.

Research is required if parts of your building are missing or have been changed. Visit the P.E.I. Archives and try to unearth your own collection of historic photographs. Study the building for clues such as images of missing components in built-up paint layers. Every building invariably has its own story to tell. In many cases, the advice of a qualified professional can help in this research and with the implementation of yours plans.



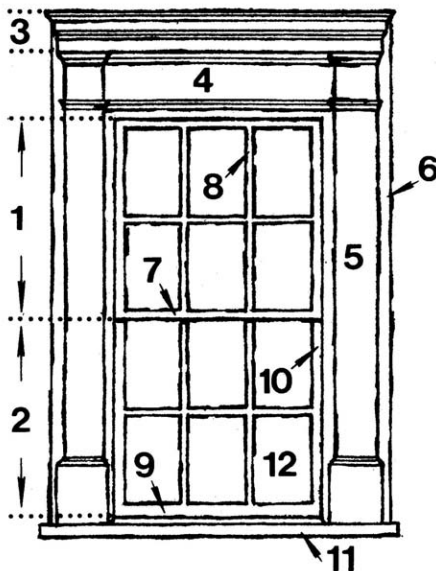
Contractors

Finally, beware of contractors or salesmen pushing a quick-fix solution, particularly if this means covering up a problem. Ensure that your contractor has experience with the renovation of historic buildings and is familiar with the specialized techniques required for these projects. Always ask to see examples of previous work and assess the quality and craftsmanship of the work and whether it respects the special character of the heritage building.

Windows

Windows are one of the most important elements in defining building character and style. They are also one of the most complex components, being comprised of many working parts. Windows require considerable maintenance as they are subject to continual use, however, they were usually built to last and were assembled with the highest level of craftsmanship and with select materials.

In most renovation projects, proposals for window repair and/or replacement are made for reasons of material integrity, appearance, or thermal efficiency. These proposals should always be made with the building's character in mind.

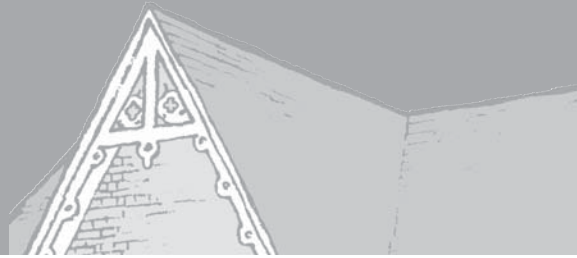


DOUBLE-HUNG WINDOWS

Window Components

1. Upper Sash
2. Lower Sash
3. Cornice
4. Lintel
5. Pilaster
6. Casing
7. Meeting Rails
8. Muntin Bar
9. Rail
10. Stile
11. Sill
12. Pane (Light)

Guidelines



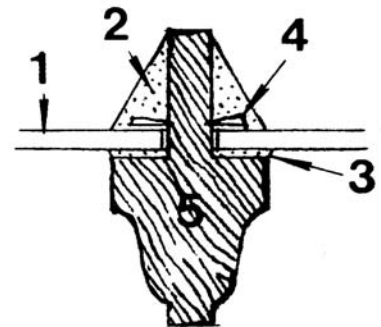
Window Repair

1. Inspect all window components. Compare findings with historic photographs and other existing historic windows. Identify the original form and ensure that all wood is free of rot and that glazing putty is intact and flexible.
2. Repair rather than replace original windows. Retain any early window replacements if they contribute to the character of the building. (Standard #4 – Historic Period and Standard #5 – Changes).

Protect and maintain window components by making putty repairs, connection repairs, limited removal of paint build-up and reapplication of paint.

3. Retain and conserve existing glazing, especially if glass is coloured, is very old, or is curved. Retain and conserve historic window hardware.
4. Repair or add weatherstripping to increase weather-tightness. Ensure that weatherstripping does not restrict the operation of the window. Caulk where required to stop air infiltration at non-moving joints.

GLAZING TECHNIQUE (Guideline #2)



1. Glass
2. Putty
3. Back Putty
4. Glazing Point
5. Muntin

- Clean and prepare wood with linseed oil so that dry wood does not leach putty oil.
- Use linseed oil putty for wood windows by first applying a thin bed of “back putty” on which to lay the glass.
- Install glazier’s points and a crisp bevel of putty as shown.
- Carefully paint over the putty but not the glass.



**DROP CEILING SET-BACK
(Guideline #3)**

**REPLACEMENT WINDOWS
(Guideline #2)**

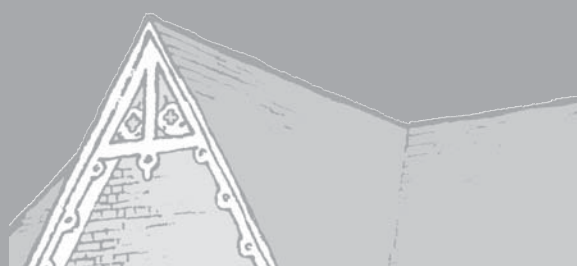


Original

Inappropriate
Replacement

Window Replacement

1. Replace only severely deteriorated original windows. When necessary, replace in kind, duplicating window components and style including arrangement and profile of sash and muntins, frames, sills, heads, window surrounds and decorative trim. "Snap-in" muntins should be avoided as they are not considered satisfactory replacements for "true" muntins.
2. Replace inappropriate modern windows, especially "off-the-shelf" window units which have no regard for the dimensions of the original sash and openings and architectural character. Retain early replacement windows that contribute to and respect the character of the building.
3. Do not alter original window opening dimensions. If interior ceiling levels have been dropped, ensure that the lowered ceiling is set back, allowing full ceiling height adjacent to full-height windows. This is also critical for commercial storefront windows with transom lights. Good examples of drop ceiling set backs to allow for full height windows may be found in City Hall and in the H.L. Sears building at Queen and Richmond Streets.

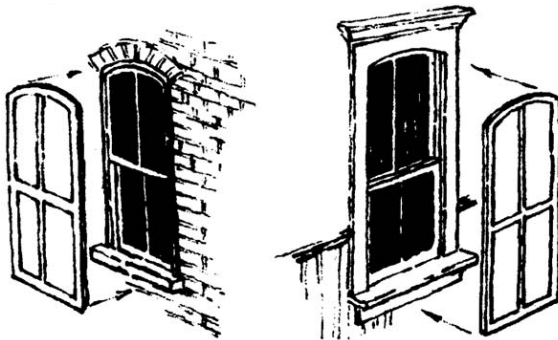


4. Add window hardware, operable shutters, and awnings only if documented evidence of their existence is found.
5. For missing windows, where no documentary evidence exists, windows of a simple design (ie. one-over-one) may be used if they are compatible with the character of the building and properly fill the original window opening.

Storm Windows and Thermal Glazing

1. Original wood storm windows, properly weatherstripped, are the best solution to increase thermal efficiency for historic window openings.
2. Interior storm windows are a next-best solution for thermal efficiency. These units should be removable for cleaning.

STORM WINDOWS

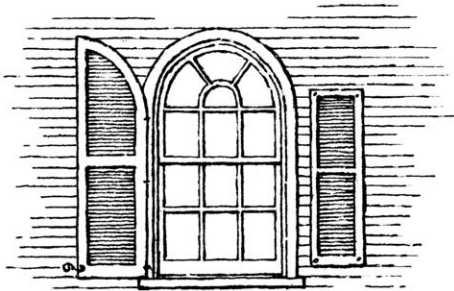


Exterior

Interior

- Ensure that glass separation rails are at matching positions to original window.

Shutters – Guidelines



REPLACEMENT SHUTTERS (Guideline #3)

Shutters, even if fixed open, must appear as though they could close and cover the entire window opening.

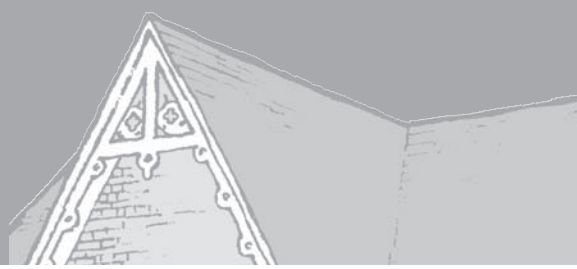
Shutter Repair

1. Inspect all shutter components. Compare findings with historic photographs and other existing historic shutters. Ensure that original wood shutters are free of rot. Metal shutters should be inspected for obvious corrosion.
2. Repair rather than replace original shutters. Protect and maintain wooden shutter components with connection repairs, limited removal of paint build-up and reapplication of paint. Clean metal shutters with the gentlest means possible (ie. wire brushing or low-pressure dry grit blasting to remove corrosion prior to repainting with appropriate coatings).
3. Retain and conserve historic shutter hardware.

Shutter Replacement

1. Replace only severely deteriorated original shutters. When necessary, replace in kind, duplicating all shutter details.
2. Replace missing shutters only if they can be faithfully reproduced from the existing physical evidence or from clear historic photographs.
3. Remove or replace inappropriate shutters, especially modern “off-the-shelf” units which have no regard for the dimensions and shape of the original window opening or for the character of the building. Shutters, even if fixed open, must appear as though they could close and cover the entire window opening.

Doors



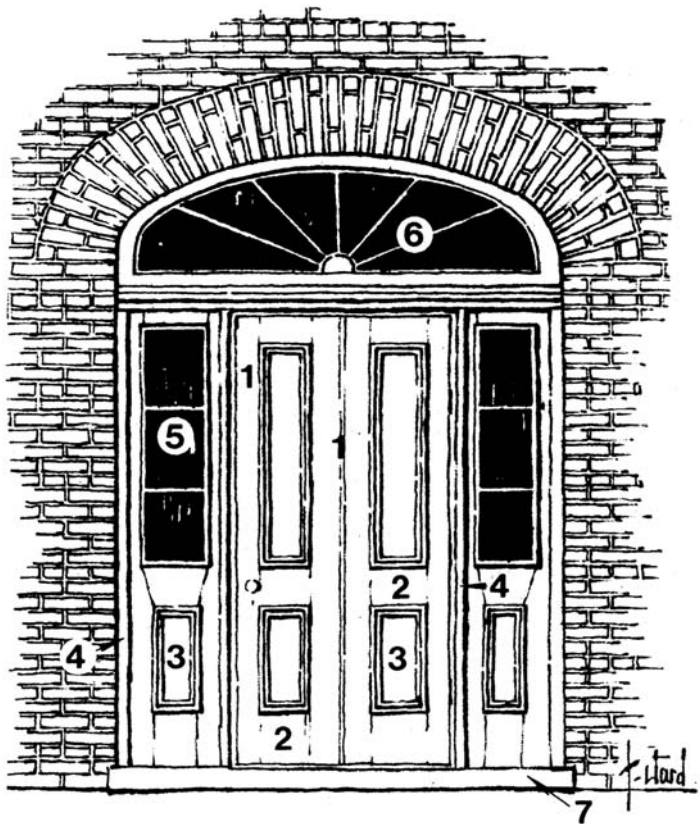
Many wonderful examples of functioning historic wood doors exist in Charlottetown. Doors, like windows, are critical elements in determining the style and character of a building and often demonstrate a high level of craftsmanship.

Note: In Charlottetown, doors generally had flat, not raised panels.

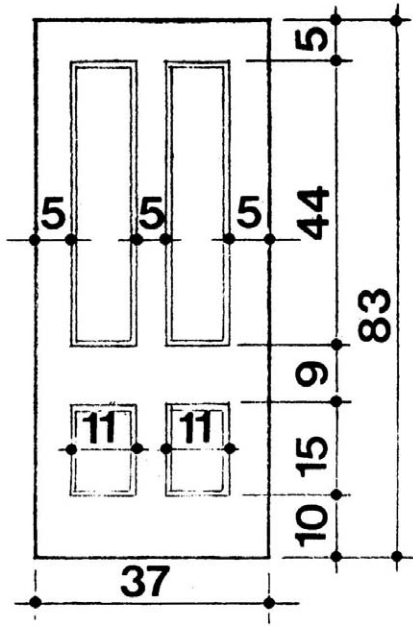
Four-panel doors with flat panels were used extensively, especially for early simple houses.

DOOR COMPONENTS

1. Stile
2. Rail
3. Panel
4. Jamb
5. Side Light
6. Fan Light
7. Sill



Guidelines



Typical proportions of a four-panel door. Measurements in inches.

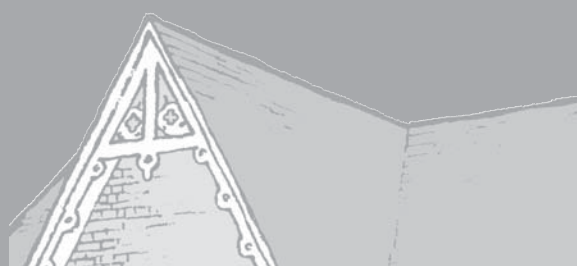
Door Repair

1. Inspect all door components, including transoms and sidelights. Identify areas of wear or deterioration. Determine whether the existing door configuration is original or an appropriate early replacement.
2. Repair rather than replace original doors. If subsequent door replacements exist, retain if they contribute to the character of the building (Standard #4 – Historic Period, and Standard #5 – Changes).
3. Retain and repair existing historic door hardware.
4. Repair and add weatherstripping to increase thermal efficiency. Caulk where required to stop air infiltration at door casings.

Door Replacement

1. Replace only severely deteriorated original or early doors, transoms and sidelites. When necessary, replace missing doors, transoms and sidelites in kind, duplicating all detail.

Embossed, insulated metal doors are not considered satisfactory replacements. Missing doors should be reproduced based upon physical evidence or documentary evidence only.

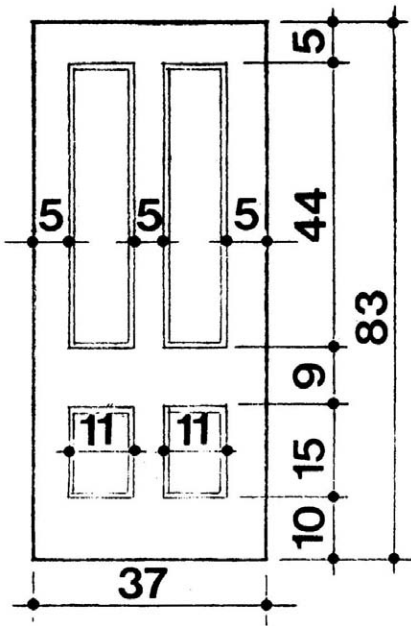


2. Replace inappropriate doors, especially “off-the-shelf” units which have no regard for the original entrance dimensions nor the building’s architectural character.
3. Do not alter the original door opening dimension nor locations.
4. Replace missing hardware with simple modern solutions or with reproduction hardware appropriate to the style and period of the building.

Storm Doors/Screen Doors

1. Make storm or screen doors a discreet addition to the doorway. Highly ornate screen door reproductions should only be installed on appropriate styles.

Exterior Woodwork



Typical proportions of a four-panel door. Measurements in inches.

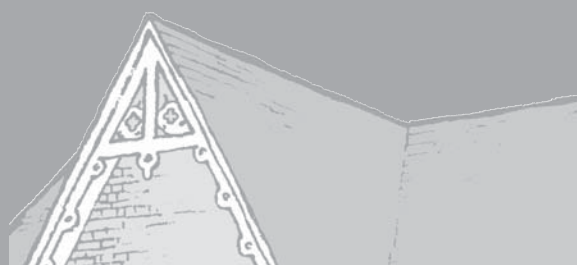
Charlottetown is primarily a city built of wood. From the earliest periods, wood was the choice material for construction, likely because it was readily available and easily worked.

Guidelines

Woodwork Repair

1. Inspect all wooden exterior building components and determine whether they are original or are early compatible components. Compare findings with documentary evidence and historic photographs of original configurations. Identify wooden elements important to the building's style and character.
2. Remove inappropriate modern cladding materials. Despite nail holes and other minor damage, sound siding and shingles likely survive beneath stucco, aluminum, asbestos shingle, or vinyl coverings.
3. Repair rather than replace original wooden components.

Although wood was and is easily worked into a wide variety of functional and decorative components, it is a material particularly vulnerable to moisture degradation. It is important, therefore, to ensure that wood is protected with a sound protective coating (traditionally paint) and that the components

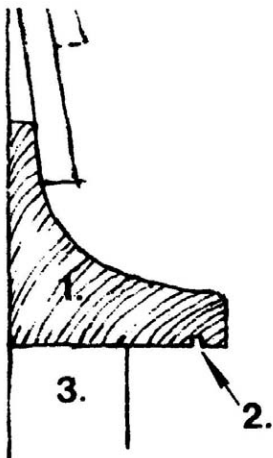


protective coating (traditionally paint) and that the components are assembled in such a way that water is easily shed and does not stand nor pool on horizontal surfaces. Peeling or blistering paint is generally a symptom of moisture problems.

WOOD REPAIR TECHNIQUE

A workable two-part epoxy with sawdust added to make it more carvable is an ideal plastic repair material and will extend the life of decorative wood mouldings.

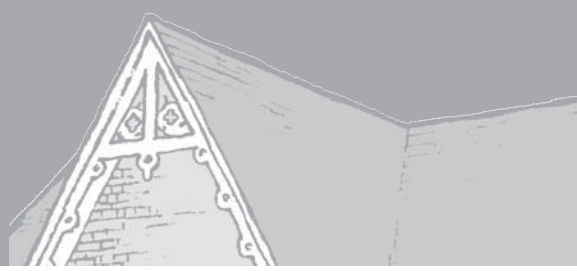
4. Repair any source of moisture penetration before making obvious surface repairs.
5. Use only gentle techniques for cleaning or stripping wood surfaces. Do not sandblast nor waterblast wood coating. Follow traditional techniques for scraping, sanding, filling, priming and painting.
6. Repair wood components by patching, splicing-in, or consolidating deteriorated areas. Save as much of the original material as possible. Use similar materials and dimensions and match wood grain direction when patching.
7. Where wood is particularly vulnerable, (eg. window sills or exposed end grain), chemical preservative should be used to ward off decay. Preservatives should not interfere with paint adhesion.
8. Do not cover wood with vinyl, nor aluminum cladding. In historic buildings decorative details integral to the character and style are always covered or removed for these installations. Moisture is invariably trapped against wood surfaces originally intended to be exposed.



TRADITIONAL WOOD WATER TABLE (Guideline #9)

1. Water table.
2. Saw kerf to cause drip and prevent water running back into joint.
3. Skirting or trim.

9. Ensure that traditional elements such as ledges and wood water tables are used and are working to run water safely away. Do not rely entirely upon caulking to keep water out of joints.
10. Remove vegetation in contact with wood surfaces as it may hold moisture against the components.
11. Apply compatible paint coatings. Follow manufacturer's instructions and prepare surfaces properly.
12. Repaint with colours appropriate to the historic building style and period.
13. Inspect ventilation louvres to ensure that they function as intended. Vents are typically installed in enclosed areas to help dry out wood and reduce fungus growth. (ie. attic spaces, porch structures, gables, built-up porch columns, etc.).



Woodwork Replacement

1. Replace entire siding surfaces only if they are severely deteriorated.
2. Replace entire wood detail only if it can be faithfully reproduced from the existing physical evidence or from clear historic photographs.

DISCOVERING ORIGINAL PAINT COLOUR SCHEMES (Guideline #12)

With a very sharp knife, cut a crater in the paint layers to the base material. Smooth out the crater with sandpaper to expose a precise chronology of paint colours. Examine with a magnifying glass and record the colours found.



Paint Sampling or Cratering

Masonry

Generally, brick and stone was a choice material for monumental civic buildings and churches in Charlottetown. Wooden commercial buildings destroyed by fire were often replaced with masonry structures.

Masonry buildings consist of load bearing units (brick or stone blocks) laid in a bed of mortar. Mortars combine sand, lime and cement in varying proportions and do not “glue” the units together but allow the wall assembly to act as a unit resisting compressive stresses. Modern building construction uses very hard mortar (a large proportion of portland cement) to bind hard bricks with control joints for thermal expansion and contraction. Historic building construction (pre-1920) used soft mortars to bind bricks and stone of relative softness. The soft mortar absorbs stresses and thermal expansion and contraction with no control joints.

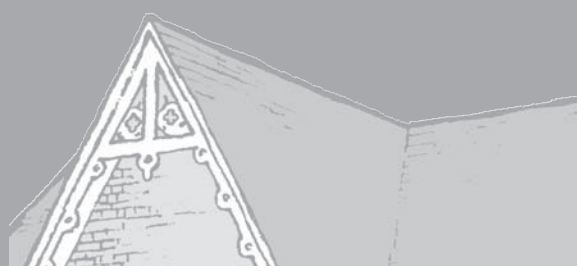
Unlike modern bricks, those used in historic buildings generally possess a hard baked exterior and a very soft interior. Modern hard mortars used to repoint historic brick and stone walls transmit stresses to the units and simply crush the relatively soft stone or old brick.

In masonry, moisture penetration is also a major cause of deterioration due to the severe freeze-thaw cycles in Charlottetown, as well as to the presence of salts in the maritime climate. The

TYPICAL REPOINTING MORTAR FORMULA

Cement (White Portland)	– 1 part
Lime	– 3 parts
Sand	– 10 parts

** the addition of more lime increases the flexibility of the mortar mix.*



preservation of masonry buildings requires that inevitable moisture penetration is able to escape freely. Soft, flexible mortar enables moisture to escape and the wall to expand and contract as a unit.

Guidelines

Masonry Repair

1. Inspect all masonry components and determine if they are original or compatible replacements. Compare findings with historic research and historic photographs. Identify the masonry elements important to the style and character of the building.
2. Protect masonry walls from obvious sources of water penetration (ie. leaking roof gutters, vegetation, poorly set wall capping stones, etc.).
3. If structural cracks are evident (horizontal, vertical, or diagonal cracks), repair the structural problem prior to masonry repair. If metal reinforcement ties are required, use non-ferrous (non-rusting) metal.

Repointing

1. If possible, repoint only in areas where mortar is loose or crumbling. Use a soft lime mortar.
2. Remove deteriorated mortar by carefully hand-raking joints to avoid damaging the masonry units. Electric saws and hammers damage the stone or brick. Many buildings in Charlottetown have very thin mortar joints. Power tools increase the joint width, deteriorate the units and change the overall appearance of the building.
3. Repoint the joints with a soft lime mortar similar in strength, composition, colour and texture to the original. Reproduce the original joint profile.

4. Apply repointing mortars only in temperatures that are above freezing (day and night temperatures) and not in direct hot sunlight.
5. Replace spalled bricks and deteriorated stone in kind, matching the units in colour, texture and dimension.
6. On masonry walls do not use synthetic surface coatings that may trap moisture.
7. Inspect painted masonry to determine if repainting is warranted due to poor quality bricks or to poor patches. Apply compatible paints (vapour permeable) following manufacturer's instructions.

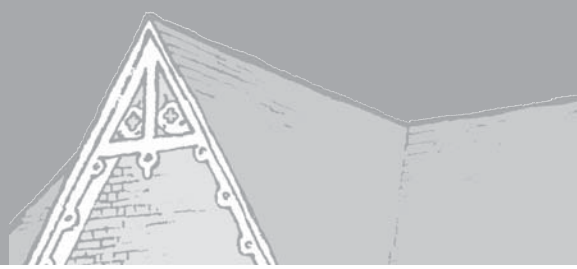
Cleaning

1. Clean masonry only when deemed necessary. Certain cleaning methods (ie. water jets which drive moisture deep into walls) damage historic buildings and should not be undertaken without thorough testing. Sandblasting removes the hard exterior surfaces of stone and brick and is NOT recommended under any circumstance.

In all cases, surface cleaning shall be undertaken with the gentlest means possible. (Standard #8 – Surface Cleaning).

2. The migration of salts in solution and their subsequent crystallization causes major deterioration to masonry surfaces, especially to those already under stress due to improper repointing or cleaning methods. Do not use common salt as a de-icer on exterior walks adjacent to historic masonry buildings.

Use Calcium Chloride (non-corrosive) or clean sand.

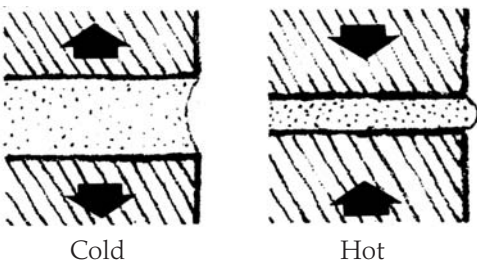


Masonry Replacement

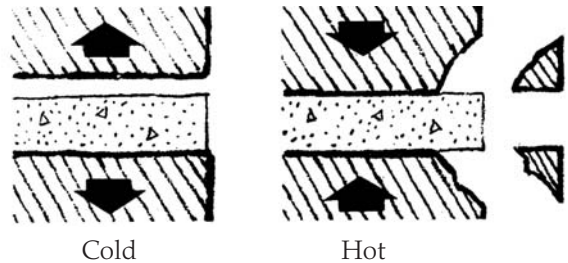
1. Replace masonry units only if they are severely deteriorated. Ensure that the colour and dimensions match as closely as possible.
2. Replace entire masonry details only if they can be faithfully reproduced from the existing physical evidence or from clear historic photographs.

EFFECTS OF TEMPERATURE CHANGE UPON MASONRY

(A) Flexible Lime Mortar



(B) Inflexible Mortar (Portland)



Flexible repointing mortar (A) expands and contracts with temperature changes. Bricks bonded with inflexible mortar (B) spall at the edges in hot weather and separate from the harder mortar when it is cold. The later condition opens cracks permitting the entry of water causing additional deterioration.

Source: R.C. Mack, AIA de Teel Patterson Tiller, J.S. Askins, *“Preservation Briefs: 2 - Repointing Mortar Joints in Historic Brick Building”*, U.S. Department of the Interior, Technical Services Division.

Roofs

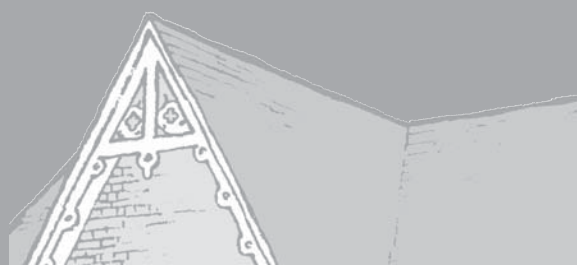
The decorative detail, materials and general shape of a building's roof are important stylistic elements. In addition, roofs, by design, function to protect the entire structure from the degrading factors of weather. Problems found elsewhere in the structure can often be traced to a deteriorated roof system

In Charlottetown, slate roofs were used on very early fire-proof buildings. Later Victorian flat-roofed commercial buildings were covered with continuous membranes of tar or bitumen on a base of felt paper. Modest wood structures generally were covered with wood shingles.

Guidelines

Roof Repair

1. Since roofs are made up of various overlapping materials and because they are the most exposed parts of buildings, they must be inspected regularly to ensure that they are functioning as intended.
2. Inspect roof surfaces to determine original elements and early compatible components. Check findings with historic photographs for missing original elements.
3. Assess the remaining life expectancy of the outside roofing materials and the attic space surfaces. Look for obvious signs of weather penetration.
4. Repair rather than replace original elements. Decorative elements such as dormers, cresting, chimneys, etc. will likely outlive the original roof covering material. Identify and preserve these details.



5. Maintain the roof system on a regular basis. Clean and caulk gutters and downspouts. Ensure that metal flashings are in good condition.
6. Ensure that the attic space is properly ventilated with screened vents.
7. If possible, repair deteriorated sections of roofing materials if the remaining roof is generally in good condition. This is important for irreplaceable textured roofs comprised of slate or wood.

Roof Replacement

1. Replace only severely deteriorated roofs, with historically appropriate materials if possible.

While replacing, ensure that roof structure, sheathing and flashings are in good condition. Take care of any structural problems or wood rot before recovering. Protect the roof with tarpaulins while repairing or replacing roofing materials.

2. Strip existing deteriorated roofing material prior to installation of new materials. The life span of the new materials will be substantially shortened if laid over an existing roof.
3. When replacing roofing materials, ensure that slopes and moundings are preserved. Reinstall cresting and other decorative detail after their restoration.

Storefronts



STOREFRONT COMPONENTS

1. Display Window
2. Transom Window
3. Recessed Entry
4. Cast Iron Support Column
5. Panelled Kick Plate
6. Cornice
7. Signband
8. Brick Pier

The appearance of commercial storefronts have always been linked to the marketing strategy of businesses. As businesses changed, especially in the 1950's when it seemed that everyone was intent on "modernizing", it was often deemed necessary to change the physical appearance of storefronts. In some cases, high quality renovations occurred, reflecting design ideas of the time and contributing to the design integrity of the entire building. In Charlottetown, traditional storefronts designed with the whole facade in mind were often removed, blocked down or simply covered with cheap materials and with no regard for the character of the buildings or the street. In some cases, entire facades were sheathed from top to bottom, essentially forming a background for signs.

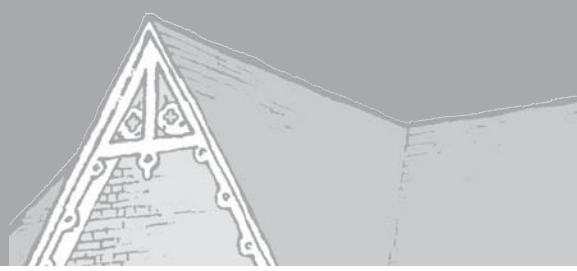
Much of this kind of renovation work occurred in Charlottetown's commercial district. The panelling and detail associated with these newer storefronts deter from the unique character of downtown Charlottetown.

Guidelines

Storefront Repair

1. If an historic storefront exists, it is likely covered with inappropriate cladding such as enamelled metal panels, metal siding or plywood.

Carefully expose and inspect storefront detail and finishes concealed behind later cladding. The traditional features to look for include: cornices, sign bands, doors, awning hardware and cast iron support posts. Compare findings with historic photographs and identify the form as original or an appropriate later addition.



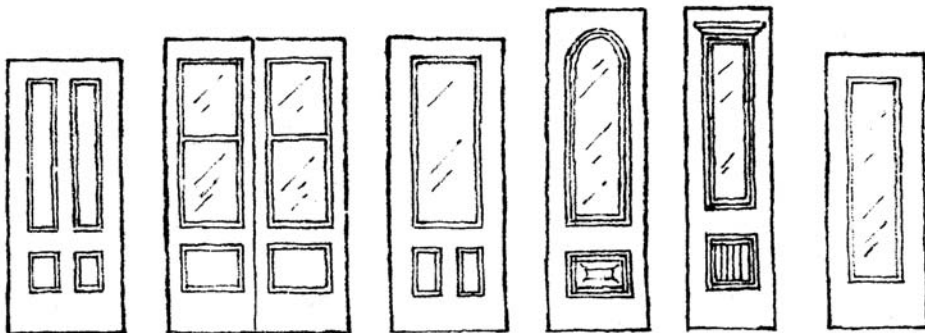
2. Repair rather than replace original detail if structurally sound. If an intermediate storefront exists, retain if it contributes to the character of the building. Ensure that wood is free of rot.

Protect and maintain sound components with limited removal of paint and reapplication of protective coatings.

3. Retain and conserve existing glazing, especially if glass is coloured or is very old.
4. Add weatherstripping, caulking, and insulation discreetly to ensure weathertightness.
5. In the case of existing storefronts, doors have invariably been replaced with modern aluminum doors. In Charlottetown, doors are considered critical elements contributing to the character of the city. Reproduce wood storefront doors and install with simple modern functional hardware or reproduction hardware appropriate to the period of the building.

Aluminum or metal “off-the-shelf” doors are not considered appropriate replacements.

APPROPRIATE STOREFRONT DOORS



Early Commercial (to 1860's)

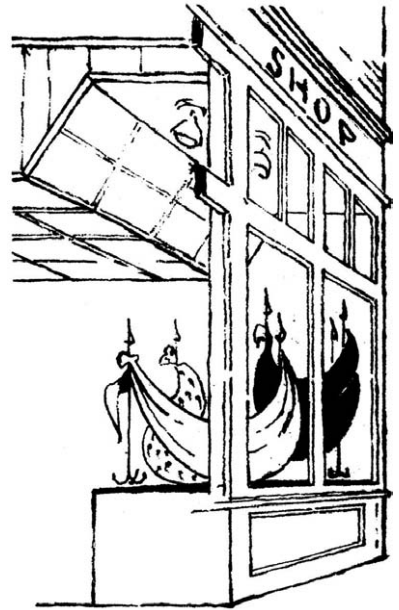
Italianate (to 1880's)

Post-Victorian

Storefront Replacement

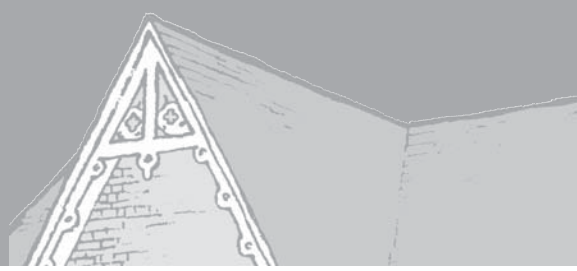
1. Where an existing storefront is deteriorated beyond repair, or if it does not fit the character of the building, replace it by installing a reconstructed historic version based on historic photographs, or with a more fitting modern design respecting traditional storefront arrangements and the character of the building.
2. Ensure that the arrangements of posts and beams are still structurally sound. When replacing storefronts, employ a professional engineer to assess and make recommendations concerning structural stability. Historic commercial facades consist of an open glazed display area and entry, surmounted by one or two storeys of heavier solid construction. Traditionally, the loads of the upper facade were carried by a large wooden beam spanning the storefront opening, transferred to masonry columns at each end and cast iron columns on either side of the recessed entry.

If required, discretely add new structural components to fit within the traditional design.



DROP CEILING SET-BACK (Guideline #4)

Full-height storefront windows keep the integrity of the original design.



3. Every consideration should be given to reproducing those storefront components that were traditionally made of wood and by using chemical preservatives where necessary.

Although aluminium window frames are a legitimate material, they do not lend themselves well to imaginative colour schemes. If aluminum beams are deemed necessary, use only dark refinished sections, in combination with other traditional wood elements.

4. Do not alter original storefront dimensions. If interior ceiling levels have been dropped, ensure that the lowered ceiling is set back allowing full ceiling height adjacent to full-height storefront windows and transoms.

Signs and Awnings

1. Follow traditional signage patterns and forms for historic commercial buildings. Consider that a loud, large back-lit sign is not necessarily an asset to your business or to the community. Signs should not be used as a sole marketing tool.



PUBLIC ARCHIVES OF PRINCE EDWARD ISLAND

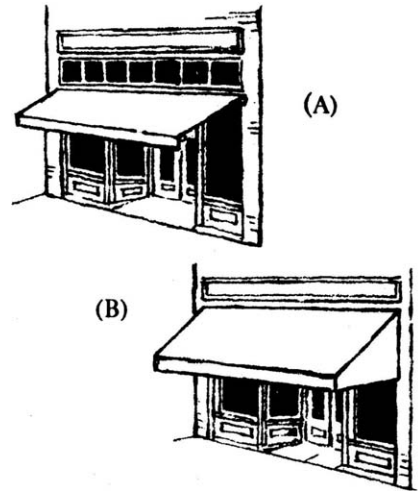
Although Charlottetown went through periods where signs proliferated, even those most elaborate were self-contained and were placed in frames or sign bands just above the storefront between upper floor windows, or were hung perpendicular to the facade. A sense of scale of the entire facade should be maintained. As with other building components, historic photographs should be research for examples and signs incorporated into the whole renovation proposal.

2. During major storefront renovations, remove back-lit sign boxes and consider a sign contributing to the character of the building and the street.
3. Retain and repair existing retractable canvas awnings. Install new traditional canvas awnings where appropriate, with traditional projections ensuring protection of customers from the elements.

Fixed plastic or metal awnings are not considered appropriate alternatives.

Lighting

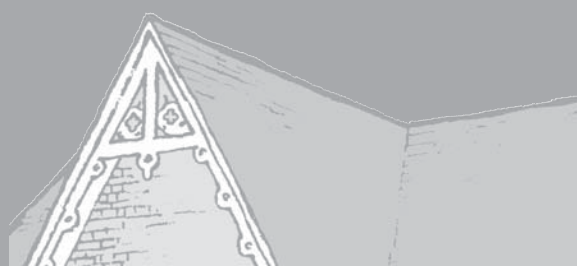
1. Use traditional incandescent lighting methods where possible.



TRADITIONAL AWNINGS

Traditional awnings can be attached above the display windows, just below the transom windows (A) or just below the signboard (B). Awnings should reinforce the frame of the storefront and should not cover the piers. The valance should be about 7 feet above the ground and project between 4 and 7 feet from the building.

Bibliography



- Collier, Richard. *Guidelines for Storefronts of Heritage Buildings – Technical Paper Series 4*. British Columbia: British Columbia Heritage Trust, November 1982.
- Deslauriers, Helene and Herb Stovel. *Appropriate Design on Main Street – A Main Street Canada Technical Manual*. Ottawa, Ontario: The Heritage Canada Foundation, 1989.
- Fram, Mark. *Well Preserved*. Toronto, Ontario: The Ontario Heritage Foundation, 1988.
- “Guideline Guide – How To Produce Useful Design Guidelines”, Main Street Newsletter – The Heritage Canada Foundation, Vol. 4, No. 3, May-June, 1988.
- Hume, Gary L., Kay D. Weeks, et al. *The Secretary of the Interior’s Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings* (revised 1983). Washington, D.C.: U.S. Department of the Interior (N.P.S.), 1983.
- Humphreys, Barbara A., and Merideth Sykes. *The Buildings of Canada*. Ottawa: Parks Canada, 1980.
- Jendl, H. Ward. *Rehabilitating Historic Storefronts – Preservation Briefs #11*. Washington, D.C.: National Trust for Historic Preservation, September, 1982.
- Mack, Robert C., AIA, de Teel Paterson Tiller, James S. Askins. *Repointing Mortar Joints in Historic Brick Buildings – Preservation Briefs #2*. Washington, D.C.: National Trust for Historic Preservation, September, 1980.
- Myers, John H., *The Repair of Historic Wooden Windows – Preservation Briefs #9*. Washington, D.C.: National Trust for Historic Preservation, 1981.
- Rogers, Irene L., *Charlotte Town – A Walking Tour*. P.E.I.: P.E.I. Museum and Heritage Foundation, 1989.
- Rogers, Irene L., *Charlottetown – The Life in Its Buildings*. P.E.I.: P.E.I. Museum and Heritage Foundation, 1983.
- Rogers, Irene L., “Island Homes”, *The Island Magazine*, No. 1, Fall-Winter, 1976, pp. 9 - 13.
- Ryan, Dick, Joseph DeSousa, Ian Lawson, Raymundo Vela. *Awnings and Canopies on Main Street*. Washington, D.C.: National Trust for Historic Preservation, 1987.
- Smith, H.M. Scott. *Historic Houses of Prince Edward Island*. Erin, Ontario: The Boston Mills Press, 1990.
- Wagner, Richard, Suzanne G. Dane, Linda S. Gisson. *Guiding Design on Main Street*. Washington, D.C.: National Trust for Historic Preservation, 1988.
- Weeks, Kay D. and David W. Look, A.I.A. *Exterior Paint Problems on Historic Woodwork – Preservation Briefs #10*. Washington, D.C.: National Trust for Historic Preservation, September, 1982.
- Young, Carolyn, et al. *Heritage Handbook – Fredericton*. New Brunswick: Fredericton Heritage Trust Inc., 1982.



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