

SAINT JOHN HERITAGE CONSERVATION AREAS

# Doors

## INTRODUCTION

Doors are a very important design and functional feature on the facade. The location, size, shape and style of doors establish our impression of a building.

Doors were traditionally constructed of wood. Metals were used for the hardware. Before deciding what to do with the doors, carefully inspect them to determine what work is necessary. Check the operation of the hinges and hardware, and the condition of any glazing. Make sure that the drainage of rainwater is adequate. Look for rot, warping and wear. Inspect the paint. Check for air infiltration on a windy day, and examine the weather stripping for wear and deterioration.

If you find some problems, identify the cause (some problems may be external to the doorway). Solutions may range from repair to total replacement. The character of a doorway is set by the window opening and panels in the door, the transom over the door, the sidelight if any, and the surrounding trim.

If the door is beyond repair, an exact replica is the best choice. If you must use a new standard door, choose one that closely matches the original.

## DOOR STYLES

The style of door should fit the style of building. Recognize the style and preserve it. The shape of the opening, the divisions within it and the surrounding trim each contribute to the stylistic character.

### GEORGIAN pre 1800-1830

Raised panels, centrally placed, often with fanlight transoms. A projecting classical cornice and simple trim.



### GREEK REVIVAL 1830 -1860

Simple panelled design. Centrally placed. Rectangular transom, panelled sidelights, pilastered frame.



### GOTHIC REVIVAL 1850 - 1870

"Pointed" Vertical Appearance, Delicate Muntins, Heavy Moulded Trim



SAINT JOHN





## SAINT JOHN HERITAGE CONSERVATION AREAS **DOORS**

### ITALIANATE 1850 - 1870

Tall raised panel design, often round head, bracketed hood or sill. Often paired.



### MANSARD 1860 - 1880

Panels of various shapes or carved designs. Ornate heavy mouldings and brackets. Often paired.



### ROMANESQUE 1875 - 1895

Often arched, randomly located mostly in masonry or stone buildings. Door panelled, often with glazed upper half.



### QUEEN ANNE 1880 - 1900

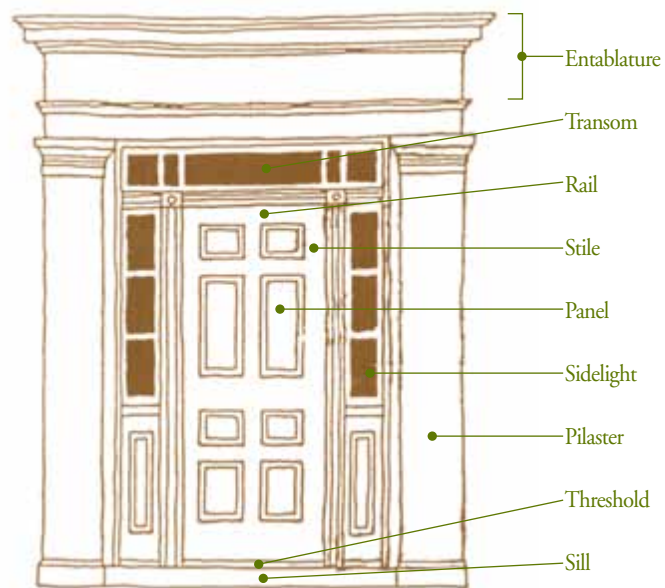
Multi-shaped, irregularly placed inserts, panels or windows. Often multi-paned or leaded sash. Playful character. May be paired.



Preserve the original historic fabric. Repair, rather than replace deteriorated architectural features. When replacement is necessary, match the original. Replacement of missing features should be based upon historical accuracy. Do not remove or alter original material or distinctive architectural features.

Recognize buildings as products of their own time, and avoid alterations without historical basis, or that create an earlier appearance.

### PARTS OF A DOOR



### PRESERVATION

Saint John has a rich variety of nineteenth century buildings that form the character of our city. Individually, many of them are excellent examples of a particular style of architecture.

The heritage value of any building is a product of its history, its architecture, and its contribution to the character of our neighborhoods.

The treatment of particular building elements such as windows, doors, and roofs should be considered in relation to the design of the building as a whole.

### MAINTENANCE

Regular maintenance will ensure that the door functions properly, and will preserve it in good condition. Regular washing and painting will protect the doors from the elements, and provides an opportunity for periodic inspection and repairs. Most repairs to doors, sills, frames and hardware are relatively simple.

*Cleaning glass:* Use detergent. If grime is hard use very fine steel wool.



## SAINT JOHN HERITAGE CONSERVATION AREAS **DOORS**

**Painting:** exterior paint normally lasts five to eight years. Remove loose paint, sand the surface, and wash with a mild detergent and rinse clean to prepare for new paint. Use a primer-sealer and paint following the manufacturer's instructions. Latex paints are generally preferable, except over existing oil-based paint.

**Paint colours:** to discover the previous paint colours scrape a small area, feather sand the edges down to the wood, and examine it with a magnifying glass. Use the original or period colours.

### Glass Repair

Coloured, patterned, or bevelled glass was widely used in Saint John for decorative effect. It was most often installed using lead came, and can be economically repaired locally. Old glass is valuable and is part of the character of a heritage building. Preserve it.

Cracked decorative or historic glass can be repaired in place. Clean the edges with acetone, and apply a clear fluid glue to the crack.

### Door Repairs

Take the door out of the frame by removing the pins in the hinges. If the door is out of square, possibly the joints between stiles and rails have loosened up. Square up the door, drill through the two members, insert a hardwood dowel, and glue it in place.

If the bottom rail is partially rotted, remove rotted material, plane the surface smooth and screw on new wood.

### Threshold Repairs

Gouge out all the rotted wood, and treat the area with a preservative. Then fill the cavity with epoxy filler. Large areas of rot are best removed, the remaining good wood treated with preservative and fitted with a new piece glued in place. New epoxy consolidants permit repair without removal of the rotted material.

### Surface repairs

Small cracks should be cleaned out, primed with linseed oil and then puttied. For minor damage use plastic wood. For larger areas use epoxy resin techniques. Drill 1/4" holes at an angle into the rotted area and inject the resin with a plastic squeeze bottle. Then using a paste of resin and sawdust, fill and shape as with plastic wood or putty.

### Replacement Doors

Consider a replacement door only if your existing door is drastically deteriorated or is already an unsuitable replacement.

Replacement of an entire door and frame will require attention to the surrounding trim and surfaces both inside and outside. Replacement is costly and is seldom warranted.

Duplicate the original in style, type and material. Custom wood doors can be produced by a local millwork shop to provide a near-perfect match for the original.

If an exact duplicate is too costly, try and find a salvaged door of the same historical style, or buy a new paneled door that has a pattern similar to the original.

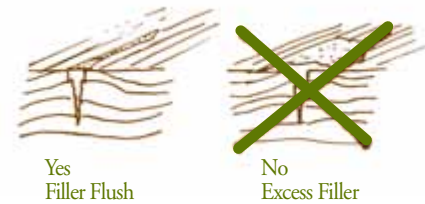
### Storm Doors

Storm doors, usually removeable, were used to improve the thermal performance of a door. In the warmer months screen doors would take their place.

Storm doors and screens were more common on the secondary doors rather than the front door.

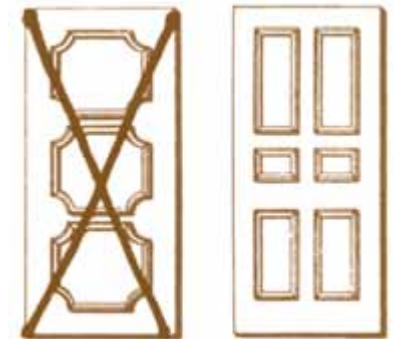
Replace the traditional removable wood storm doors and screens with a duplicate of the original or the period door. Metal storm doors are inappropriate on the main doors. Choose a simple design with the largest possible glass area. Paint the door to match the existing.

Retain interior vestibules where they exist or consider the installation of a new one as an energy conservation measure.



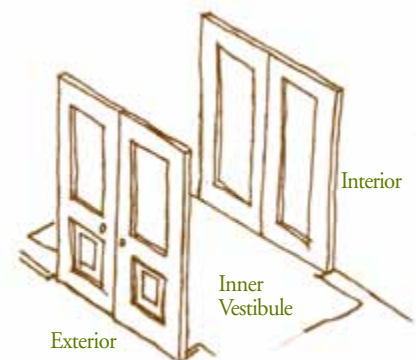
Yes  
Filler Flush

No  
Excess Filler



No  
Style is not  
historic

Yes  
Traditional  
style door







## SAINT JOHN HERITAGE CONSERVATION AREAS **DOORS**

### Hardware

The original hardware is part of the architectural history of the building. Preserve original handles, hinges and locks.

### Locks

The original locks and latchsets are probably fairly simple in construction, and therefore easy to maintain. Periodic cleaning of their inner works and lubrication with powdered graphite or a lubricant spray (never oil) will help them to work better and last longer. Shirn or reset the strike plate if the latchbolt isn't catching.

Our expectations of locks have risen substantially and may exceed the abilities of the originals. The installation of a cylindrical deadbolt is visually a minimal change and should be sufficient to meet your needs.

### Hinges

Many Saint John doors hang on beautifully cast hinges that are very decorative. The most likely problem will be that the screws have loosened, causing the door to sag or bind. Remove the screws fill the holes with scraps of wood and glue. Replace the screws when the glue has hardened. While you're at it, tap out the hinge pins, wipe them with oil, and put them back.



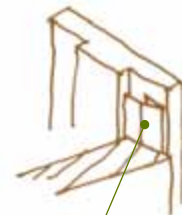
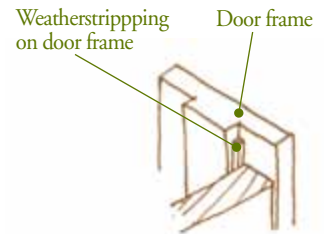
### Other Hardware

The knobs, latches, knockers, numbers and mail slots should require little but the occasional tightening of a screw, and the care and cleaning appropriate to the material. Preserve these often beautiful original details. Replacements or additions should complement the existing in finish and design.

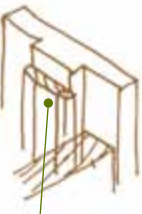
### Weatherstripping

Air infiltration is the largest source of heat loss, and can be reduced by the installation of a variety of weatherstripping products. Foam strips with a self-adhesive backing are applied directly to moving or fitting parts and are only effective in compression. Foam strips glued to a wood nailing strip are slightly more durable, and can be removed in the spring. Compressible vinyl or metal strips are effective and durable, and are available with self-adhesive backing.

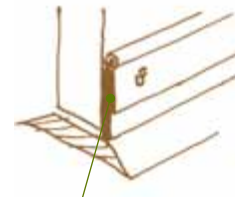
The threshold door bottom requires a different approach. Fit the door with a sweep or shoe, or install a new threshold with a vinyl insert.



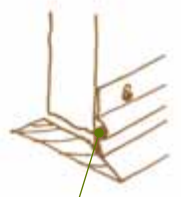
Weatherstripping on door frame



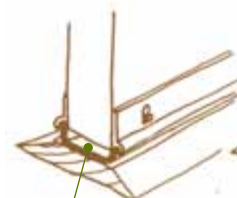
Weatherstripping on door stop



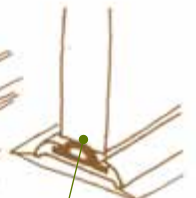
Door sweep



Door sweep



Door shoe



Door threshold



## SAINT JOHN HERITAGE CONSERVATION AREAS **DOORS**

### TYPICAL DOOR DETAILS - QUESTIONNAIRE

This questionnaire has been developed to assist you in the repair and reconstruction of a heritage door for your property. It provides you with the typical measurements and construction information.

When working on your heritage door it is important to keep the original size and portions to maintain the style and character.

This information will assist you in gathering the necessary data to undertake repairs, reconstruction or to build a new door suitable to your heritage building.

- Entablature
- Bracket
- Bracket Incisions
- Transom Sash
- Frame
- Top Rail +/- 7
- Astragal Mounting 1
- Moulding 1 Ω
- Panel or Glass
- Latch Stile +/- 6
- Hinge Stile +/- 6
- Lock Rail +/- 6-8
- Panel +/- 20
- Bottom Rail +/- 6-8
- Threshold

The following check list provides practical tips to help you repair or replace doors on your heritage building.

Answering each of the questions will help you make decisions on the details needed to carry out the right work for your door.

What is the architectural style of the door? If you do not know, refer to the Door Style section.

- Georgian    Greek Revival    Gothic Revival    Italianate    Mansard  
 Romaneque    Queen Anne    Other

Lots of doors can be repaired. Does this door need to be

Repaired?  YES    NO

Rebuilt?  YES    NO

Replaced?  YES    NO

A mixture of talc and fiberglass resin can be used to replace rotted wood; especially at the replaced end of stiles and the bottom rails.

If the door has to be replaced, have you considered a salvaged/used door? If replacing the door will it have a similar true panel door?

- YES    NO



## SAINT JOHN HERITAGE CONSERVATION AREAS **DOORS**

Does the glass need repair or replacement?

YES  NO

Does the door need repainting?

YES  NO

*(If so, refer to the Practical Preservation Guidelines on Paint & Colour and apply for a Certificate of Appropriateness before painting).*

Can you re-use the existing hardware?

Hinges YES NO

Escutcheon plate (latch plate) YES NO

Handle/knob YES NO

Flush bolts YES NO

Do you plan to install new weather stripping?

YES  NO

Does the door threshold require repair?

YES  NO

If you plan to use a new door are the moulding added to the surface or recessed?

YES  NO

If you are having your door rebuilt, measure for the following and have these parts accurately copied:

Door Part	Measurement
Top rail	length ____ x ____ height
Lock rail	length ____ x ____ height
Bottom rail	length ____ x ____ height
Hinge stile	length ____ x ____ height
Latch stile	length ____ x ____ height
Astragal	length ____ x ____ height
Windows	length ____ x ____ height
Panels	length ____ x ____ height
Moulding	length ____ x ____ height

Are you proposing to use modern materials? Vinyl, metal and fiberglass are not encouraged.

YES  NO

### FOR MORE INFORMATION

The Practical Conservation Guidelines, application forms for Grants and Certificates of Appropriateness and other useful information for fixing up your older building is available from:

Heritage Services | Growth and Community Development Services  
15 Market Square,  
Saint John, New Brunswick | E2L 4L1  
Phone: (506) 658 2838

Email: [heritage@saintjohn.ca](mailto:heritage@saintjohn.ca)

Online: [www.saintjohn.ca/heritage](http://www.saintjohn.ca/heritage)

**Property Owners!** Contact Heritage Staff before you begin to make any plan purchase supplies or hire contractors. Advice on ways to save you time, money and energy will be offered free of charge.

### References

The Old House Journal. Edited by Clem Labine, Published Monthly London,

Mark, And Bambaru, Dinu. Traditional Windows; Montreal: Heritage Montreal 1985

Magee, Phoebeanne, and Smith, M. Aileen, Herfe4Gehandbook: St. Andrews: St. Andrews Civic Trust, 1980

Stephen, George Remodeling Old Houses without Destroying their Character, New York: Alfred A. Knopf, Inc., 1974

Vila, Bob. This Old House – Boston: Little Brown And Company, 1980