



February 2023

CITY OF FALL RIVER  
Historic District Commission

# Design Guidelines



# Table of Contents

- 01 Design Guidelines Introduction
  - 02 Guidelines for Exterior Maintenance
  - 03 Guidelines for Roofing
  - 04 Guidelines for Exterior Woodwork
  - 05 Guidelines for Masonry and Stucco
  - 06 Guidelines for Windows and Doors
  - 07 Guidelines for Site Elements
  - 08 Guidelines for Additions and New Construction
  - 09 Guidelines for Commercial Properties
- 



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## Design Guidelines



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# CITY OF FALL RIVER

## Historic District Commission

### Design Guidelines Introduction



#### BENEFITS OF LOCAL DESIGNATION

The designation of local historic districts and landmarks has been found to:

- Increase neighborhood stability and property values
- Preserve the physical history of the area
- Promote an appreciation of the physical environment
- Foster community pride and self-image by creating a unique sense of place and local identity
- Increase the awareness and appreciation of local history
- Increase tourism
- Attract potential customers to businesses
- Create local construction jobs employing skilled tradesmen
- Promote sustainable economic development

These *Guidelines* were developed in conjunction with the City of Fall River's Historic District Commission (HDC) and the Planning Department. Please review this information during the early stages of planning a project. Familiarity with this material can assist in moving a project quickly through the approval process, saving applicants both time and money.

Additional *Guidelines* addressing other historic building topics are available at One Government Center, Room 534 and on the Commission's website at [www.fallriverma.org/historic-district-commission](http://www.fallriverma.org/historic-district-commission). For more information, to clarify whether a proposed project requires HDC review, or to obtain permit applications, please call the Planning Department at [frhdc@fallriverma.org](mailto:frhdc@fallriverma.org) or (508) 324-2530 or arrange to meet with staff.

#### Why is Historic Preservation Important?

The City of Fall River recognizes that the character and quality of life enjoyed by its citizens depend in great measure upon the City's rich architectural heritage and the importance of the natural and designed landscapes in our community. This historical, cultural, archaeological, social and economic heritage is entrusted to each generation, enriched and passed on to future generations. The Fall River Historic District Commission (HDC) is charged with safeguarding this heritage as represented by the City's historical and architectural value.

#### FALL RIVER'S HISTORIC PROPERTIES

Fall River regulates properties proposed full or partial demolitions of buildings or structures listed on the City's Register of Significant Structures. In addition, the City currently regulates one locally designated Historic District:

- Highlands Local Historic District, Established 2014

In addition, the City of Fall River has approximately 100 individually designated National Register properties and currently five National Register Historic Districts:

- Corky Row Historic District
- Downtown Fall River Historic District
- Highlands Historic District
- Lower Highlands Historic District
- Quequechan Valley Mills Historic District

Financial incentives are available for designated historic properties in addition to recognition and protection. (Refer to *Preservation Assistance Programs*, page 01-3.)



The locally designated Fall River Historic District represents a portion of a larger National Register Historic District. The locally designated Historic District is largely comprised of wood framed residential buildings with gabled or hipped roofs.

## HISTORIC DESIGNATION AND LISTING

### Local Designation

Local designation of a historic property or district provides a tool for local communities to determine what is architecturally and historically important to their community and a mechanism for the regulation of proposed changes to those properties.

### The National Register of Historic Places

The National Register of Historic Places is the United States Government's official list of districts, sites, buildings, structures, and objects identified as worthy of preservation. The National Register is administered by the National Park Service, a division of the Department of the Interior.

Listing in the National Register does not eliminate or restrict property rights of individual owners. Projects involving federal or state permits, licenses, or funding are reviewed for their potential effects on significant historic properties, including those listed in the National Register. Having a property listed on the National Register could make its owners eligible for federal and state tax credits for expenses incurred rehabilitating an income-producing property. National Register information is available from the Massachusetts Historical Commission. (Refer to *Preservation Organizations*, page 01-15.)

## DEFINITIONS

**Historic Resource:** An individual building, structure, site, object, or district that has been determined to have historical significance or associations and whose distinctive character conveys a unique architectural and cultural heritage.

**Historic District:** A defined area that contains concentrations of historic resources. A district can include as few as one historic resource or hundreds of resources.

## HISTORIC DISTRICT COMMISSION

Established in 2014, the Fall River Historic District Commission (HDC) has oversight of the City's preservation activities and regulatory review within the bounds of the Fall River Historic Districts and at individually properties listed on the Register of Significant Structures.

The purpose of the HDC as provided for under Massachusetts General Laws Chapter 40C, is to aid in the preservation and protection of the distinctive characteristics and architecture of buildings and places significant in the history of the Fall River, the maintenance and improvement of their settings and the encouragement of new building designs compatible with the existing architecture. The HDC is responsible for the regulation of alterations, new construction and demolition within locally designated Historic Districts.

The HDC is comprised of seven members, four appointed by the Mayor and three by City Council, and up to four alternates. In appointing the members, every effort is made to include a member of each the Fall River Preservation Society and the American Institute of Architects as well as a relator and property owner within each of the locally designated Historic Districts.

Although the HDC's primary responsibility is to review applications for Certificates of Appropriateness (COAs), the HDC also provides recommendations to City Council regarding historic preservation activities in the City including the documentation of historically designated properties.

## HDC Certificate of Appropriateness Review Actions

The HDC utilizes the *Fall River Design Guidelines* in its review. (Refer to *Fall River Design Guidelines*, page 01-11.) The HDC can take one of four actions following the review of a COA application:

### Approval as Submitted

The Certificate of Appropriateness will be issued

### Approval with Conditions

A Certificate of Appropriateness will be issued pending review for compliance of required conditions - this may include modifications to a site or landscape to mitigate the impact of the proposed project

### Continued

The applicant provides additional information or clarification as requested by the HDC

### Denial

It is determined that the project does not meet the requirements for the granting of a COA (The applicant can work with Planning Department staff to bring the project into compliance with the ordinance using the *Guidelines* and resubmit to the HDC for re-review or appeal to the Superior Court)





*Many of the City's larger rehabilitation projects have benefitted from preservation assistance funding. The funding can be instrumental in a project's financing, allowing the continued use of significant historic buildings.*

## **PRESERVATION ASSISTANCE PROGRAMS**

There are federal, state and local incentive programs available for historic properties. The submission and review requirements are rigorous and it is highly recommended that applicants contact the applicable agency at the early planning stages of a potential project. The HDC can provide letters of support for financial assistance programs that benefit the preservation of the City's historic resources following a review of an application proposal.

### **Federal Historic Tax Credit Program**

The Federal Historic Preservation Tax Incentive Program rewards private investment in rehabilitating historic income-producing properties such as offices, rental housing, and retail stores. The Program, established by the Tax Reform Act of 1986, is jointly administered by the U.S. Department of the Treasury and the U.S. Department of the Interior's National Park Service. Owner-occupied single-family residences are not eligible for the program. If eligible, up to 20 cents on every dollar spent on qualified rehabilitation work (including most architectural and engineering fees) would be available as a credit against federal income taxes. The 20% tax credit is available to buildings that are listed in the National Register of Historic Places, either individually or as a contributing building in a National Register Historic District, or as a contributing building within a local historic district that has been certified by the Department of the Interior. To be eligible for the 20% tax credit, project work must be certified as meeting *The Secretary of the Interior's Standards for Rehabilitation*. (Refer to *Preservation Resources*, page 01-15.)

### **Massachusetts Preservation Projects Fund**

The Massachusetts Preservation Projects Fund (MPPF) is a state-funded 50% reimbursable matching grant program established in 1984 to support the preservation of properties, landscapes and sites (cultural resources) listed in the State Register of Historic Places. These important resources represent a significant portion of the Commonwealth's heritage. Applicants must be a municipality or nonprofit organization. Eligible activities for grant funding include pre-development, development and acquisition projects. The program is administered by the Massachusetts Historical Commission.

### **Massachusetts Historic Rehabilitation Tax Credit Program**

The Massachusetts Historic Rehabilitation Tax Credit allows the certified rehabilitation of an income-producing property to receive up to 20% of the certified rehabilitation cost in state tax credits. This credit program illustrates the economic and community benefits of preservation. It can be coupled with the Federal Rehabilitation Tax Credit to make a preservation project financially feasible. The credits can be sold to third-party investors for funds which are often put back into the project. To be eligible, projects must be listed in or certified as eligible for listing in the National Register. The program is administered through the Massachusetts Historical Commission and the work must be certified as meeting *The Secretary of the Interior's Standards for Rehabilitation*.

### **Preservation Restriction Program**

Many owners of historic buildings and structures throughout Massachusetts have protected their properties in perpetuity by donating preservation restrictions to qualified non-profit preservation organizations. Qualified properties must be listed or eligible for listing in the National Register of Historic Places (individually or as a contributing resource within a district). Preservation restrictions must follow Massachusetts guidelines and have required approvals. All Internal Revenue Service requirements must be met to qualify for tax benefits.

### **Community Preservation Committee**

The Community Preservation Act (CPA) was created by a Massachusetts law (MGL Chapter 44B) to help cities and towns preserve the character of their community. Fall River's Community Preservation Committee reviews applications submitted by City bodies and citizens at large for funding projects involving the acquisition of open space, recreation, preservation of historic resources, and the support of low and moderate income housing, and makes recommendations regarding the use of the City's Community Preservation Fund for those purposes. That fund is composed of a 1.5% surtax on City real estate taxes and state matching grants based on the surtax revenues for the fiscal year ending the prior June 30th, and interest on the accumulated funds. (Contact information: 508.294.5344; [cpc@fallriverma.org](mailto:cpc@fallriverma.org).)



*There are a variety of architectural styles represented in Fall River, such as this Gothic Revival residence.*

## PRESERVATION REVIEW PROCESS

To maintain the character of properties within the Historic District, all proposed exterior changes at a designated property require review and the issuance of a Certificate of Appropriateness (COA) from the HDC prior to commencing work. A COA is required for all exterior work at a locally designated property, except the planting or removal of trees, shrubs, and plants unless they are specifically required as part of a condition of approval of an application. Although the completion of an application is required for all exterior projects at all properties, minor applications can be approved administratively without requiring attendance at a meeting. Minor applications include regular maintenance activities and the in-kind replacement of many materials.

The type of work requiring a COA includes:

- **Exterior Alteration** - Installation, modification and/or removal of materials or features from sites, buildings, or structures including sign modification or installation
- **New Construction** - New or an extension of an existing building, structure, or site feature
- **Demolition** - Complete or partial removal of a building, structure, or site feature
- **Relocation** - Moving of a building, structure, or site feature

The process of applying for a COA requires a completed application and sufficient information to review the proposed work including a scaled site plan, drawings, sketches, photographs, and product brochures or samples for those building features that will be modified. The applicant is encouraged to consult with the Planning Department staff to ensure that all required information is included in the application to minimize delays associated with reviews. For a complex project, applicants are encouraged to meet with the HDC for a conceptual review, prior to spending time and money preparing supporting materials for an application.

Within fifteen days of receipt of a complete application, the application will be distributed to the HDC for a determination as to whether the application is of no interest, requiring no further HDC review, or if it is deemed of interest, the application is placed on the agenda for a public meeting. COA applications are reviewed by the HDC at their meetings. During their review, the HDC references the criteria set forth in the Historic Preservation sections of the Fall River Zoning Ordinance. Review by the HDC ensures that any proposed changes will be compatible with the character and design of the individual property and the surrounding Historic District.

The applicant, or a project representative, should attend the HDC meeting for COA review to answer any questions the HDC may have regarding the application, or the application could be tabled pending clarification and/or the submission of additional information as requested by the HDC. As part of the review process, the applicant may be requested to provide additional information to clarify the proposed alterations or to provide necessary supporting information to allow the HDC to better understand the outcome of the proposed project.



*Although the style of these residences vary, they share common elements like form, scale, setbacks, and materials.*

## CONCEPTUAL HDC REVIEW

The HDC encourages property owners with questions or complex applications, such as the construction of an addition or new building, to seek a preliminary conceptual review from the HDC. Although not a binding decision, conceptual reviews provide the opportunity to receive HDC feedback prior to expending significant time and money preparing a complete application and associated design documents.

## APPROVALS REQUIRED FOR WORK

HDC review and approval is triggered by the submission of an application for a Certificate of Appropriateness (COA) for any proposed alteration to the exterior of a property, excluding the addition or removal of trees, shrubs, and plants. This includes the replacement of signs, awnings, windows, doors, and roofs.

HDC approval is necessary but may not be sufficient for the granting of a building permit. Each property is subject to review for compliance with applicable zoning, building, and safety ordinances and codes. The property owner is responsible for obtaining all necessary approvals prior to commencing work.





*The 1750 Lafayette Durfee House is the home of Col Joseph Durfee who led the Fall River militia during the War for Independence and was frequently visited by the Marquis de Lafayette. The house is listed on the Fall River Register of Significant Structures and open for public tours.*

## FALL RIVER REGISTER OF SIGNIFICANT STRUCTURES

In 1977, the City of Fall River established the Historical Commission with the responsibility of community-wide preservation planning. Among its many responsibilities, in 1983, the Historical Commission was charged with the identification of significant historic buildings and structures within the City. Their efforts resulted in the development of the Fall River Register of Historic Structures.

To be eligible for listing on the Fall River Register of Historic Structures, a property must be either listed on the National Register of Historic Properties or, in the judgement of the Historical Commission, eligible for listing on the National Register of Historic Properties. To date, over 1,900 structures, sites and objects have been listed on the Fall River Register of Historic Structures.

In 1988 the City established a Demolition Delay ordinance to reduce the loss of historic resources listed on the Fall River Register of Historic Structures. As established, the Demolition Delay ordinance provided the Historical Commission the opportunity to review and if appropriate delay the partial or full demolition for up to six months to allow alternatives to demolition to be explored with the property owner.

The HDC assumed the responsibility for the review of all proposed partial or full demolition projects at historically significant properties within the City.

## HDC DEMOLITION REVIEW

For properties within a locally designated Historic Districts, property owners seeking to demolish all or part of a building or structure must submit a Certificate of Appropriateness application to the HDC. Although the HDC utilizes similar criteria as in its review of properties designated on the Register of Significant Structures, they also consider the historic context and may require drawings of the proposed new building and/or a site plan of the resulting landscape improvements as a condition of approval of the demolition application.

The HDC can deny a demolition permit for a property within a locally designated Historic District. However, in its review of properties located outside of local Historic Districts, for those properties listed on the Fall River Register of Significant Structures, the HDC can delay the partial or full demolition for up to six months to allow alternatives to demolition to be explored.

### WHEN HDC APPROVAL IS NOT REQUIRED

The HDC will issue a Certificate of Non-Applicability for the following types of work that do not required HDC review:

- Interior alterations
- Regular exterior maintenance
- Landscape plantings including trees and shrubs
- Temporary buildings, structures, or signs
- Terraces, walkways, driveways, sidewalks, and similar at-grade structures
- Storm and screen windows and doors
- Window air conditioner units
- Paint color
- Roof color
- Some signage - contact the Planning Department for specific information
- Timely reconstruction of a building, structure or exterior architectural feature destroyed by a fire or natural disaster

The HDC will issue a Certificate of Non-Applicability for the following types of work that do not required HDC review. Please contact the Planning Department at (508) 324-2430 for additional clarification regarding required reviews.

### WORKING WITHOUT A COA

The Planning Department will inspect all work for compliance with an approved Certificate of Appropriateness (COA). If any changes are proposed after the issuance of a COA, please contact the Planning Department at (508) 324-2430 for additional required reviews.

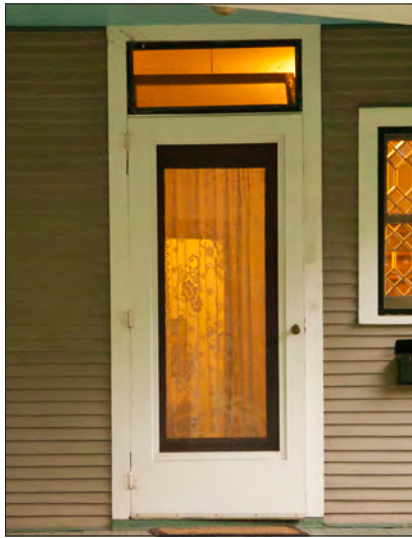
Work completed without an approved COA is subject to possible fines, removal, and restoration of the site, building, or structure to its appearance prior to the violation.

## SUSTAINABILITY

In the most general sense, “sustainability” is the concept of meeting current needs in a way that can be continued in the long-term, without jeopardizing the ability of future generations to also meet their needs. The goals and ideals of sustainable planning and design can be thought of in three major categories:

- **Environmental:** Protecting the natural environment and using resources and energy in a sustainable way
- **Social:** Promoting social equality while enriching and protecting important elements of our culture
- **Economic:** Providing equal economic opportunity and considering the full life-cycle impacts of current decisions

Sustainable recommendations include aspects of environmental, social and economic goals, and addresses a philosophical as well as physical approach to our surroundings.



*Historic buildings were often constructed with sustainable features. The operable door transom provides ventilation in warm weather.*

### Sustainable Benefits of Preservation

Historic buildings are intrinsically “green,” as reusing an existing building has substantially lower environmental impact than building a new one by avoiding demolition and keeping demolished building materials out of landfills.

Sustainable benefits of preservation include:

- Preservation and rehabilitation minimize the wasteful loss of materials while maintaining a distinctive sense of place
- The historic building or structure already exists, and the energy required to fabricate the lumber, bricks, windows, and doors was expended long ago
- New construction often includes demolition of an existing building (construction waste comprises 25% to 30% of landfills), and the fabrication of new construction materials creates additional waste; while preservation of an existing building conserves landfill space
- The most appropriate materials for the majority of preservation projects are often historic materials, rather than non-biodegradable manufactured products, such as vinyl and plastics

## Planning a Sustainable Project

When undertaking measures to increase the energy efficiency of a historic building, or when considering the energy efficiency of planned repairs, careful planning and forethought can prevent unforeseen issues and unintended negative consequences. Planning Department staff are available to discuss a proposed project, and can provide guidance regarding sustainability issues. Hiring an architect or preservation professional is highly recommended for complex or substantial projects involving multiple building systems or elements. When evaluating a sustainability project at a historic building or site, two important factors should be considered early in the process:

- Its historic fabric and character
- Its inherently sustainable features

When property owners are contemplating how sustainability principles can be incorporated in their historic property, it is recommended that interventions be planned on a whole-building/site basis, even if they will be implemented in phases over time.

- Upgrades and sustainable features should always be planned with first priority given to the least-impact options and small improvements, such as maintenance and operations improvements, weatherization and insulation, which are generally reversible and can have a big impact at a relatively low cost
- Larger and non-reversible sustainability upgrades to historic buildings and sites should be considered in relation to their impact on the historic fabric and character

## Maintenance and Operations

The principles and approach described in this section can assist in the sustainable design of alterations and repairs. However, the long-term maintenance and operation of a historic building or property can also have a significant impact on the environment.

*Although maintenance and operations are not subject to HDC review, the HDC encourages:*

- Recycling unused and demolished building materials, as well as everyday products such as paper, plastic, and glass
- Using the gentlest effective cleaning methods available for both household use and for exterior building maintenance, rather than harsh chemical cleaners
- Using natural, low-impact materials such as sand for de-icing walkways, paths and driveways, rather than salt or harsh chemical de-icing agents
- Using energy efficient appliances, equipment, and lighting
- The use of low-VOC materials, household cleaners, carpeting, adhesives, and paint
- Proper lead-safe paint removal and chemical disposal
- Maintaining historic design features - such as glazed exterior door transoms - that provide natural light and air circulation

## Heating, Ventilation and Air Conditioning (HVAC)

Installation or improvement of a building's HVAC systems can provide significant upgrades in energy efficiency, but they must be carefully designed and planned. An improperly designed HVAC system installed in a historic building can damage significant historic fabric, cause moisture-infiltration issues and be uneconomical. (Refer to *Building Insulation*, page 02-12.)

*The HDC encourages:*

- Maintaining existing HVAC systems to ensure proper operation and efficient operation
- Incorporating incremental measures such as programmable thermostats, ceiling fans and properly located vents into existing HVAC systems
- Using a “zoned” HVAC system to reduce energy costs
- Taking into account whole-building performance when designing a replacement or upgrade to an HVAC system
- Upgrading obsolete HVAC equipment with more efficient systems, in a way that is sensitive to the historic building
- Considering HVAC systems specifically designed for existing buildings, such as high-velocity systems with small ducts, to minimize the impact on historic fabric
- Locating HVAC equipment to the rear of a property to minimize impacts on the historic character of the building and/or streetscape and screen it from public view

## Alternative Energy Sources

In exploring alternative energy technologies in historic buildings, including solar power and geothermal heating/cooling, it is important to consider how proper installation and selection of systems can improve energy-efficiency without adversely affecting a building's historic character.

*The HDC encourages:*

- Minimizing impacts on the historic fabric and appearance of a building when installing modern equipment such as solar panels (Refer to *Roof Mounted Equipment*, page 03-9.)
- Investigating whether a geothermal system can improve the energy-efficiency of a building's HVAC system while not disturbing archeological remains or tree roots

*The HDC discourages:*

- Installing modern equipment in a manner that is not reversible or adversely affects the historic building

### DEFINITIONS:

**Geothermal Heating/Cooling:** General term for HVAC systems that use the thermal energy generated and stored in the Earth to heat/cool a building

**VOC:** Volatile Organic Compounds, which are generally harmful to human health when introduced into the air

**Bioswale:** A landscape element designed to remove particles from storm water and slow or divert storm water runoff



*Rain gardens with native plants promote groundwater absorption and can be attractive addition to a site.*

## Site Features

In addition to upgrades to the historic building itself, proper design of the site can contribute to a property owner's energy-efficiency and water conservation goals.

*The HDC encourages:*

- Considering the historic character and landscape of a site before installing any new site features
- Utilizing existing site features - such as shade trees, cisterns and topography - to maximize energy efficiency and conserve water
- When compatible with a historic property, installing sustainable features such as bioswales, rain barrels, and cisterns
- Minimizing new site features with adverse impacts, such as impervious paving

*The HDC discourages:*

- Introducing non-native plant species to a site, resulting in increased water-use or requiring pesticides
- Installing new trees or plantings where they may damage the historic building

Refer to *Guidelines for Site Elements* for additional information.

## ENERGY AUDIT

Property owners should consider an overall approach to energy efficiency before undertaking any work. An energy audit can identify the efficiency of existing assemblies and potential upgrades as a first key step in this process. With an overall plan in place, specific smaller projects can be undertaken in an efficient way, without jeopardizing the desired final outcome or historic integrity of the building or site.

Property owners should consult their local utility company regarding energy audits and energy efficiency incentives; many have services and tips for homeowners.





Rain barrels can capture storm water from roofs for use in gardens.

## Roof Sustainability Options

Property owners are more frequently looking towards their roofs when considering sustainable improvements to their buildings. Roof sustainability options can generally fall into the following categories:

### Reducing Solar Heat Gain

Because a roof surface is typically exposed to the sun for large portions of the day, the temperature of the roof surface, and often the attic below, can easily exceed 120 degrees Fahrenheit. Although the added warmth may be appreciated in the winter, it can result in higher cooling needs in the summer.

Possible ways to reduce solar heat gain include planting deciduous trees to block the summer sun's rays, installing an attic fan or vent, or installing attic insulation to limit effect of heat gain in habitable portions of building. (Refer to *Building Insulation*, page 01-12.) Another potential option is to install lighter colored, more reflective roofing if historically appropriate or the roof surface is not visible from the public way.

### Capturing Solar Energy

Solar collectors provide a renewable energy source. The City of Fall River encourages solar collectors for space heating, hot water and electricity. However, property owners are encouraged to locate solar collectors where they are hidden or minimally visible from public view. The proximity and seasonal shading characteristics of adjacent and neighboring trees and structures should also be considered to ensure sufficient year-round solar exposure to justify the expense of installation.

### Improving Natural Lighting

Skylights, although found in commercial or industrial buildings historically, were rarely found in residences. The installation of new skylights should minimize alteration of the roof structure with the long dimension oriented down

the roof slope. Skylights should be hidden or minimally visible from the public view, and should not disturb historic roof materials such as slate or terra cotta.

### Managing Storm Water Run-Off

Much of the rain that falls on a roof surface is typically diverted to a gutter, then a downspout, and from there, discharged at the perimeter of a building or into a storm sewer. By either reducing the amount of water that reaches the gutter or collecting the water as it is discharged from the downspout, the soil around a building does not become saturated, and the sewer system is less likely to become overwhelmed in a significant storm.

One of the means of controlling the quantity of water diverted to a gutter system is to install a green roof in a manner that the planted material is not visible from the public way. An option for flat and sloped roofs is to install rain barrels at the bottoms of downspouts. Rain barrels collect storm water discharged from downspouts. They typically include a spigot near the bottom for a hose hook-up, allowing the collected storm water to be used for future watering of gardens and lawns.

### Roof Sustainability Recommendations

Installation of cool (i.e., reflective) roofing and green roofs are becoming increasingly common as an energy-efficiency measure. However, for historic buildings, the selection of a new roof system must take into account the historic character of the building.

*The HDC encourage:*

- Installing historically appropriate roofing, including material and color, at all visible roof surfaces
- Placement of all roof mounted equipment (including mechanical equipment, vents, television dishes, solar collectors, and skylights) in a manner that is as visually unobtrusive as possible (refer to *Roof Mounted Equipment*, page 03-9)
- Installing skylights and solar collectors so that they are parallel to and do not extend more than 8 inches above the roof surface
- Using cool-roof and green-roof technologies, when appropriate, in areas that are not visible from the public right-of-way and do not adversely impact the appearance, structure, or moisture-performance of a historic structure
- Installing dark colored rain barrels and shielding them from public view with evergreen shrubs

Refer to *Guidelines for Roofing* for additional information.

## WINDOW AND DOOR WEATHERIZATION

One of the most effective and least intrusive ways to increase the energy efficiency of a historic building is to limit air infiltration and movement ("drafts") through the exterior building envelope. Due to the operational nature, windows and doors and the joints around them can often represent vulnerable locations for air infiltration. (Refer to *Weather Stripping and Caulk and Screen/Storm Windows and Doors*, page 06-10.)



## LOCAL ORGANIZATIONS BENEFITING HISTORIC AND NATURAL RESOURCES

### Historical Commission

Since its inception in 1977, the mission of the Fall River Historical Commission (FRHC) is to identify, document, and protect Fall River's historic resources, to increase public awareness of Fall River's heritage and the value of historic preservation, and to do so with not only the guidance and council of the Massachusetts Historical Commission but also by interacting with other city boards and committees. The Historical Commission is responsible for community-wide preservation planning and maintenance of the Fall River Register of Historic Places outside of locally designated Historic Districts.

508.324.2530 frhc@fallriverma.org

### Fall River Historical Society

Founded in 1921, Fall River Historical Society (FRHS), the oldest cultural institution in Fall River, Massachusetts, is an important resource for scholars, researchers, other museums and historical societies, and the local community. Dedicated to preserving the history of Fall River and sharing it with the public, they maintain significant collections of costumes and accessories, decorative arts, furniture, ephemera, photographs, paintings, drawings, sculpture, and manuscripts. They also have distinguished maritime and Fall River textile industry collections.

(508) 679-1071 www.lizzieborden.org

### The Preservation Society of Fall River

The Preservation Society of Fall River is a non-profit organization whose mission is to encourage and foster the preservation of historically and architecturally significant properties, and to assist the City in the establishment of a 40C local Historic District.

### Conservation Commission

The Fall River Conservation Commission is responsible for the administration and enforcement of the Massachusetts Wetlands Protection Act (M.G.L. Chapter 131, §40) and its regulations (310 CMR 10.00) within the boundaries of the City of Fall River.

508-324-2340 conservation@fallriverma.org

### Park Board

Fall River's Park Board is responsible for the maintenance, control, and regulation of the use of recreational facilities, parks, playgrounds, cemeteries, and trees.

508.324.2550 www.fallriverma.org

### Fall River Street Tree Planting Program

The Fall River Street Tree Planting Program strives to encourage the planting of street trees and educate the public about improving the natural environment.

508-123-4567 www.FRSTPP.org

## SAFETY PRECAUTIONS

Repair and maintenance of a building can potentially be dangerous work. It is recommended that all manufacturers' recommendations be followed and appropriate safety precautions with ladders, tools, materials, and processes be taken. Property owners should consult a professional for work that is unfamiliar or potentially unsafe.

Work on older buildings can uncover hazardous materials such as asbestos, lead, radon, and mold. Property owners should familiarize themselves with these materials and their building's conditions prior to beginning work. Property owners who are unfamiliar with how to properly handle or work around potentially hazardous materials are strongly encouraged to consult with a trained or certified contractor.

Information about common hazardous materials can be found on national and state organization's web sites, including:

### Arsenic

Center for Disease Control and Prevention  
[www.cdc.gov/biomonitoring/Arsenic\\_FactSheet.html](http://www.cdc.gov/biomonitoring/Arsenic_FactSheet.html)

### Asbestos

US Environmental Protection Agency Hotline  
(800) 368-5888 [www.epa.gov/asbestos](http://www.epa.gov/asbestos)

### Lead

National Lead Information Clearinghouse  
(800) 424-LEAD [www.epa.gov/lead](http://www.epa.gov/lead)

### Mold

Indoor Air Quality Information Clearinghouse:  
(800) 483-4318 [www.epa.gov/iaq/molds/index](http://www.epa.gov/iaq/molds/index)

### Radon

The National Safety Council's Radon Hotline  
(800) SOS-RADON [www.epa.gov/radon](http://www.epa.gov/radon)

## REGULATORY REQUIREMENTS

The Building Inspectors are mandated by local ordinances and state law to fulfill very specific rules and regulations. All construction projects in Fall River must comply with the Fall River Zoning Ordinances, as well as the Massachusetts State Building Code; handicapped access regulations and certain sections of Massachusetts General Law. The intent of the regulations is to protect the public health, safety, and welfare of citizens against the hazards of inadequate, defective or unsafe conditions. The Code addresses the interior and exterior conditions of buildings and structures, building systems and the surrounding property.

For specific information regarding the applicable ordinances and code sections for a project, please contact the Planning Department at (508) 324-2430 or the Building Department at (508) 324-2500. Applicants are also welcome to meet with a Building Inspector who can assist with permit applications and regulatory questions.

## DESIGN OF ALTERATIONS

In balancing the desire for a change to a historic property with regard to the historic integrity, the HDC encourages property owners to retain as much historic building fabric as possible. As such, the following guide can be used, listed in preferential order:

1. Maintenance
2. Repair and In-Kind Replacement
3. Alterations and Renovations
4. Adaptive Reuse
5. Additions and New Constructions

If demolition is considered, property owners should refer to the *HDC Demolition Review* (page 01-5). Demolition of designated historic buildings is rarely necessitated.



*Sufficient information is available for this fire-damaged residence to accurately repair it and replace damaged elements in-kind.*

## GUIDELINES FOR HDC DECISIONS FOR ALTERATIONS TO EXISTING BUILDINGS

When reviewing a proposed project for the exterior alteration of a historic building, the HDC's review is generally guided by principles contained in *The Secretary of the Interior's Standards for the Treatment of Historic Properties*, and more specifically, *The Standards for Rehabilitation*. *The Standards for Rehabilitation* provide property owners and tenants common-sense guidelines to allow sensitive contemporary uses for their sites while retaining their architectural and cultural heritage. In reviewing projects, the HDC encourages sensitive rehabilitation involving the least amount of intervention or change as identified in the following guidelines:

- **Identify, retain, and preserve** the overall form, materials, and details that are important in defining the architectural and historical character of the building and site.
- **Protect and maintain** historic materials and features. This involves protection from other work that may occur in proximity to the historic materials, and also protection through regular maintenance. A regular program of protection and maintenance usually involves the least degree of intervention and can prevent or postpone extensive and costly work.

- **Repair** rather than replace deteriorated historic materials and features. Repairs maintain the building in its current condition while making it weather-resistant and structurally sound. Repairs should involve the least intervention possible, concentrating specifically on areas of deterioration. When repair is not possible, the HDC encourages replacement in-kind, reproducing by new construction the original feature exactly, including the original material, finish, detailing, and texture.
- **Replace** missing or deteriorated historic materials and features in-kind when the extent of deterioration precludes repair. Similar to repair, the preferred approach is to replace the entire feature in-kind to match the original material, finish, detailing, and texture. Since this is not always technically or financially feasible, substitute materials are sometimes acceptable when they convey the appearance and finish of the original feature.
- **Reconstruct** missing historical features if adequate historical, pictorial and physical documentation exists so that the feature may be accurately reproduced. The addition of features from other historic buildings or addition of historical elements, for which there is no documentation, is not appropriate.
- **Alterations and additions** are sometimes needed to ensure the continued use of a building. An alteration involves returning a building to a useful condition while saving those parts that represent its historical, architectural, or cultural significance. It is important that alterations do not radically alter, obscure or destroy character-defining spaces, materials, features, or finishes. An addition is new construction at the exterior of an existing building and should be carefully considered. New additions should be differentiated but also compatible with the historic building in terms of size, mass, form, fenestration, material, detailing, and style and should be constructed at a less visible side or rear elevation, so that the character-defining features are not radically obscured, damaged, or destroyed.

### COST VS. VALUE-ADDED

While some of the recommendations in these *Guidelines* do not represent the least expensive options, the HDC strongly believes that selecting an option of better quality will be less costly in the long-term.

An immediate benefit is that using traditional materials and construction methods tends to be more historically appropriate and sustainable. (Refer to *Sustainability*, page 01-6.) Another benefit is that traditional materials generally have a longer life-cycle because they are appropriate for the local climate, requiring less frequent replacement. Additionally, traditional materials tend to reduce associated landfill waste and replacement costs, as well as potentially increasing a property's value associated with authentic, higher quality construction.





*Deteriorated roofing can make a building highly vulnerable to water damage of the structure and interior finishes.*



*Exterior woodwork should be regularly repainted to reduce the potential for rot.*

## FALL RIVER DESIGN GUIDELINES

This project included preparing the following *Guidelines*:

- 01 *Design Guidelines Introduction*
- 02 *Guidelines for Exterior Maintenance*
- 03 *Guidelines for Roofing*
- 04 *Guidelines for Exterior Woodwork*
- 05 *Guidelines for Masonry and Stucco*
- 06 *Guidelines for Windows and Doors*
- 07 *Guidelines for Site Elements*
- 08 - *Guidelines for Additions and New Construction*
- 09 - *Guidelines for Commercial Properties*

Further information is available at the Planning Department and on the HDC web site at [www.fallriverma.org/historic-district-commission](http://www.fallriverma.org/historic-district-commission). These *Guidelines* serve to cover the topics most typically addressed by the HDC. Any work under the jurisdiction of the HDC that is not specifically covered in these *Guidelines* is subject to HDC review and approval.

## PROPERTY MAINTENANCE

Properties should be maintained in a manner that allows them to be safe and contribute to the City culturally and economically. The City of Fall River and the HDC encourage the regular maintenance of any building or structure to prevent a hazardous or unsafe condition from occurring.

Potential examples of hazardous or unsafe conditions include cases in which:

- All or part of the building may fall and injure people or property
- Structural elements are deteriorated such that they can no longer safely carry imposed loads
- A defect or condition makes the building susceptible to water damage, including unmaintained paint on exterior wood surfaces and openings in roofs or walls

## MAINTENANCE IS PRESERVATION

Regular maintenance helps to preserve buildings and property, protect real estate values and investments, and keeps Fall River an attractive place to live, work, and visit. Lack of regular upkeep can result in accelerated deterioration of building elements and features. In the case of historic buildings, these features often represent character defining elements that are difficult and costly to replace. Long-term lack of maintenance can impact a building's structure, resulting in expensive repairs.

It is prudent to inspect buildings, structures, and landscape elements regularly to identify potential problems. If problems are detected early, minor maintenance may not only improve a property's overall appearance and value, but also can prevent or postpone extensive and costly future repairs. Regular maintenance can include a variety of tasks, such as cleaning gutters and downspouts and painting of exterior woodwork. It is important to keep in mind that, if completed in a timely fashion, regular maintenance can prolong the life of a historic building or structure, while enhancing its long term value, authenticity, and cultural value. It should also be noted that HDC review is not required for routine maintenance activities. (Refer to *Guidelines for Exterior Maintenance* for additional information.)



*In addition at buildings, site elements, such as walls, also require regular maintenance.*



*This former store now serves as a medical office.*

## ALTERATIONS AND RENOVATIONS

Alterations and renovations are sometimes needed to ensure the continued use of a building, but have the potential to alter the character of historic properties. When planning alterations or renovations, careful attention should be given to the original building and its relationship to the alteration or renovation.

When considering changes to historic properties, applicants should strive to:

- Identify, retain, and preserve the character-defining features of the historic building
- Minimize alteration to the original design, materials, and features
- Use design elements, materials, and techniques that are compatible to the historic building and setting
- Maintain the appropriate historic contextual setting

## REPAIR VS. REPLACEMENT

When it is no longer feasible to maintain a historic feature due to its condition, repairs or replacement in-kind may be necessary. Repairs maintain the building in its current condition while making it weather-resistant and structurally sound, concentrating specifically on areas of deterioration. When repair is not possible, the HDC encourages replacement in-kind. Similar to a regular maintenance program, these activities can prevent or postpone extensive and costly future repairs.

In order of preference, the HDC encourages the following approach:

1. Non-intrusive repairs, focused at deteriorated areas, stabilizing and protecting the building's important materials and features
2. When repair is not possible, replacement in-kind to the greatest extent possible, reproducing by new construction the original feature exactly, matching the original material, size, scale, finish, profile, detailing, and texture
3. When replacement in-kind is not possible, the use of compatible materials and techniques that convey an appearance similar to the original historic features, and the use of materials similar in design, color, texture, finish, and visual quality to the historic elements

## ADAPTIVE REUSE

Similar to alterations and renovations, adaptive reuse projects might be necessary to use a building for a different purpose from which it is currently or was originally designed, if permitted under the Fall River Zoning Ordinance. Similar to alterations or renovations, great care should be given to the original building and its relationship to the alteration or renovation. In addition, careful attention should be taken with required alterations, such as the modification or addition of window and door openings to accommodate the new use.

*Examples of Adaptive Reuse:*

- Conversion of a house to multi-family residential or offices
- Conversion of industrial/commercial buildings into housing
- Conversion of institutional buildings into commercial space

*Benefits of Adaptive Reuse:*

- Retention of historic character and high quality historic materials and craftsmanship
- Promotes stability of ownership and occupancy of historic resources
- Potential cost savings versus new construction
- Maintains and utilizes the established neighborhood and existing infrastructure



*This former church now serves as a medical office building. By renovating and adaptively reusing the existing building, a significant local structure was saved from demolition and the current office has a unique and easily identifiable location.*





The addition to this former mill building maintains the industrial character while providing an inviting entrance to the market.

## ADDITIONS

Additions to a building within a Historic District can dramatically alter the appearance of the individual property, the streetscape and the surrounding landscapes.

Exact reproduction of historic buildings is discouraged, while design compatible to the context of the historic resources and their surroundings is encouraged. Because of the sensitivity of the area, the property owner should take great care when proposing an addition to a designated property.

When considering an addition to a historic building or structure, applicants should:

- Preserve the cohesive ambiance of historic resources with compatible, sympathetic, and traditional construction
- Use compatible siting, proportion, scale, form, materials, fenestration, roof configuration, details, and finishes to the existing building
- Construct additions at secondary elevations wherever possible, subordinate to the historic building, and compatible with the design of the property and neighborhood
- Construct additions so that the historic building fabric is not radically changed, obscured, damaged, or destroyed
- Reference the *Guidelines for Additions and New Construction*

## RESEARCHING HISTORIC PROPERTIES

Property owners seeking information regarding the history of their property can consult with the Fall River Historical Society as well as reference historic property designation information, City atlases, City directories, and potentially historic photographs. (Refer to *Preservation Organizations*, page 01-15.)



The Fall River Historical Society building listed on both the National Fall River Registers of Historic Places. The Historical Society maintains a significant collection of artifacts and serves as an important resource for scholars.

## NEW CONSTRUCTION

More dramatically than additions, new construction within a Historic District can significantly alter the appearance of the individual property, the streetscape and the surrounding landscapes. All new construction should be compatible within the property's surrounding context. As a result, those areas that are highly cohesive, with strong historical integrity, will likely be more limited than those areas with a variety of building types, scales, materials, and designs, such as those found in Fall River's Historic District.

When considering a new construction or development project, exact reproduction of historic buildings is discouraged, while design compatible to the context of the historic resources and their surroundings is encouraged. Because of the sensitivity of the area, the property owner should take great care when proposing new construction or a new development within a locally designated Historic District.

When considering new construction within a locally designated historic district or historic context, applicants should:

- Preserve the cohesive ambiance of historic resources with compatible, sympathetic, and contemporary construction
- Use compatible siting, proportion, scale, form, materials, fenestration, roof configuration, details, and finishes
- Reference the *Guidelines for Additions and New Construction*

## FREQUENTLY ASKED QUESTIONS

**Q: Where should I begin the process?**

**A:** It is often helpful to begin by understanding what makes your property historically or architecturally significant (see below) as well as by understanding whether a proposed project is likely to be approved. Contact the Fall River Planning Department at (508) 324-2430 to be placed on a HDC agenda for a review of your property's significance or for a conceptual review of a proposed project. Obtain the *Guidelines* section applicable to your proposed project and consider whether the proposed changes are appropriate for the property.

**Q: How can I find out about the history of my neighborhood or property?**

**A:** The Fall River Historical Society is the best resource for local history, (refer to page 01-15), including historic photographs, National Register Nominations, and survey forms on historic buildings. Links to information on local history are also available on the City of Fall River's website. Additional information regarding historic properties is available from the Massachusetts Historical Commission, and on its website. There are also numerous reference organizations and resources, a few of which are listed on page 01-15.

**Q: How do I make it more likely that my project is approved?**

**A:** It is helpful to have an understanding of what makes your property architecturally or culturally significant when considering a project. This will allow you to make informed decisions about the proposed project with an understanding of some of the issues considered by the HDC. Each section of the *Guidelines* outlines what is and is not likely to be approved by the HDC. If considering a complex application, particularly one that includes an addition or new construction, it is often helpful to consult informally with the HDC in a conceptual review prior to submission of a Certificate of Appropriateness (COA) application. (Refer to *Conceptual HDC Review*, 01-4.) The conceptual review process can provide feedback to guide an application towards a design that may be approved by the HDC prior to expending a lot of time and money in the development of detailed plans or Construction Documents.

**Q: Do I need to hire an outside professional?**

**A:** Careful review of the applicable *Guidelines* and the application requirements for an approval prior to hiring a design professional or contractor can assist in the early planning stages of your project. If not required by Code to receive a building permit, you are welcome to submit applications for work without the assistance of a design professional. However, for complex proposals or those that require the submission of scaled drawings, consultation with a professional may be required and may expedite the review process. If you are retaining the services of a professional, it is helpful to work with architects, contractors, and others familiar with the requirements of working with the HDC. Before submitting your application, confirm that it is complete with the Planning Department.

**Q: I am planning a complex project. When is the best time to talk to the HDC?**

**A:** If your project is complex or requires review from multiple land use Commissions and Boards, the best time to talk to the HDC is as early in the project as possible, before you invest significant time and money into the design process. This initial informal informational review can help move a project more quickly through the review process. Please contact the Fall River Planning Department at (508) 324-2430 for an appointment.

**Q: Is there a way to expedite the review process?**

**A:** It is important to complete the application thoroughly and submit all required materials to the HDC for review. It is recommended that you contact the Fall River Planning Department directly to understand what submission materials are required for your project; whether Commission review is required or a conceptual review is recommended; and the specific submission requirements, deadlines and meeting dates. Contact the Fall River Planning Department to determine what other reviews are required; if multiple reviews are necessary, they can often be pursued simultaneously.

**Q: Does my project require HDC review?**

**A:** Proposed exterior changes to any building, site, or structure within the boundaries of a locally designated Fall River Historic District are required to receive an approval. Refer to applicable *Guidelines* sections for clarifications regarding types of work that is subject to review. Most applications for maintenance, in-kind repair, and where HDC approval is not required can be approved administratively and do not require attendance at an HDC meeting. (Refer to *When HDC Approval is Not Required*, page 01-5.)

**Q: How do I apply for HDC review?**

**A:** The specific submission requirements for HDC review will vary based upon whether the submission is for a conceptual review or a Certificate of Appropriateness. In most instances, the submission materials are typically similar to those required for a building permit review. For specific information regarding the submission requirements for your proposed project please refer to the applications available on the City of Fall River website at [www.fallriverma.org/historic-district-commission](http://www.fallriverma.org/historic-district-commission) or contact the Fall River Planning Department at (508) 324-2430 .

**Q: Can I begin construction immediately after I get the HDC approval?**

**A:** The HDC review is not necessarily sufficient for the granting of a building permit. Each project is also subject to review by all departments having jurisdiction over compliance with zoning, building and safety codes. HDC review is just one step in obtaining a building permit. You must complete all necessary reviews and obtain all necessary permits applicable to your project prior to proceeding with any work. However, you cannot receive a building permit without obtaining an approval from the HDC if your building is within a designated Historic District.

## PRESERVATION RESOURCES

### Reference

- Belle, John, John Ray Hoke, Jr., Stephen A. Kliment (eds.). *Traditional Building Details for Building Restoration, Renovation, and Rehabilitation*. New York: John Wiley and Sons, Inc., 1998.
- Bucher, Ward (ed.). *Dictionary of Building Preservation*. New York: John Wiley and Sons, 1996.
- Cusato, Marianne, et. al. *Get Your House Right; Architectural Elements to Use and Avoid*. New York: Sterling, 2007.
- Harris, Cyril (ed.). *A Dictionary of Architecture and Construction*. New York: McGraw Hill, 2006.
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- Mouzon, Stephen A. *Traditional Construction Patterns*. New York: McGraw-Hill, 2004.
- Poppeliers, John C. and S. Allen Chambers, Jr. *What Style is it? A Guide to American Architecture, Revised Edition*. New York: John Wiley and Sons, 2003.

### Building and Landscape Preservation

- Bernhard, Sandy and Tom Ela. *The House Journal: A Resource to Evaluate and Document the History, Alterations, and Records of Your House and Property*. Washington, DC: The Preservation Press, 1993.
- Favretti, Rudy and Joy Favretti. *For Every House A Garden: A Guide for Reproducing Period Gardens*. Chester, CT: The Pequot Press, 1977.
- Moss, Roger W. ed. *Paint in America: The Colors of Historic Buildings*. New York: John Wiley and Sons, 1995.
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- Weaver, Martin E. *Conserving Buildings: A Manual of Techniques and Materials, Revised Edition*. New York: John Wiley and Sons, 1997.

### City of Fall River History

- Fenner, Henry. *History of Fall River, Massachusetts*. Monroe Press, 1911.
- Lima, Alfred J. *A River and its City: The influence of the Quequechan River on the development of Fall River, Massachusetts*. PearTree Press, 2013.
- Moniz, William A. *Granite, Grit, and Grace: An Exploration of the Fascinating Side Streets of Fall River's History*. Fall River Historical Society, 2017.

## PRESERVATION ORGANIZATIONS

### Local Organizations

- City of Fall River Planning Department  
Historic District Commission (HDC); Historic Commission  
One Government Center, Room 534; (508) 324-2340  
[www.fallriverma.org/historic-district-commission](http://www.fallriverma.org/historic-district-commission)
- Fall River Historical Society and City Museum  
451 Rock Street, Fall River, MA 02720  
(508) 679-1071; [www.lizzieborden.org](http://www.lizzieborden.org)

### State and Regional Organizations

- Massachusetts Historical Commission*  
220 Morrissey Boulevard; Boston, MA 02125  
(617) 727-8474; [www.sec.state.ma.us/mhc](http://www.sec.state.ma.us/mhc)
- Preservation Massachusetts*  
Old City Hall; 45 School Street; Boston, MA 02108  
(617) 723-3383; [www.preservationmass.org](http://www.preservationmass.org)
- Historic New England  
Otis House; 141 Cambridge Street; Boston, MA 02114  
(617) 227-3956; [www.historicnewengland.org](http://www.historicnewengland.org)



## ACKNOWLEDGEMENTS

We would like to express our appreciation to the representatives of the following groups and individuals who helped make the *Guidelines* possible:

**Mayor:** Paul Coogan

### City Councillors:

Joseph Camara, President  
Michelle Dionne, Vice President  
Andrew Raposo  
Leo Pelletier  
Linda Pereira  
Laura-Jean Washington  
Pamela Laliberte  
Attorney Bradford Kilby  
Shawn Cadime

### Community Preservation Committee:

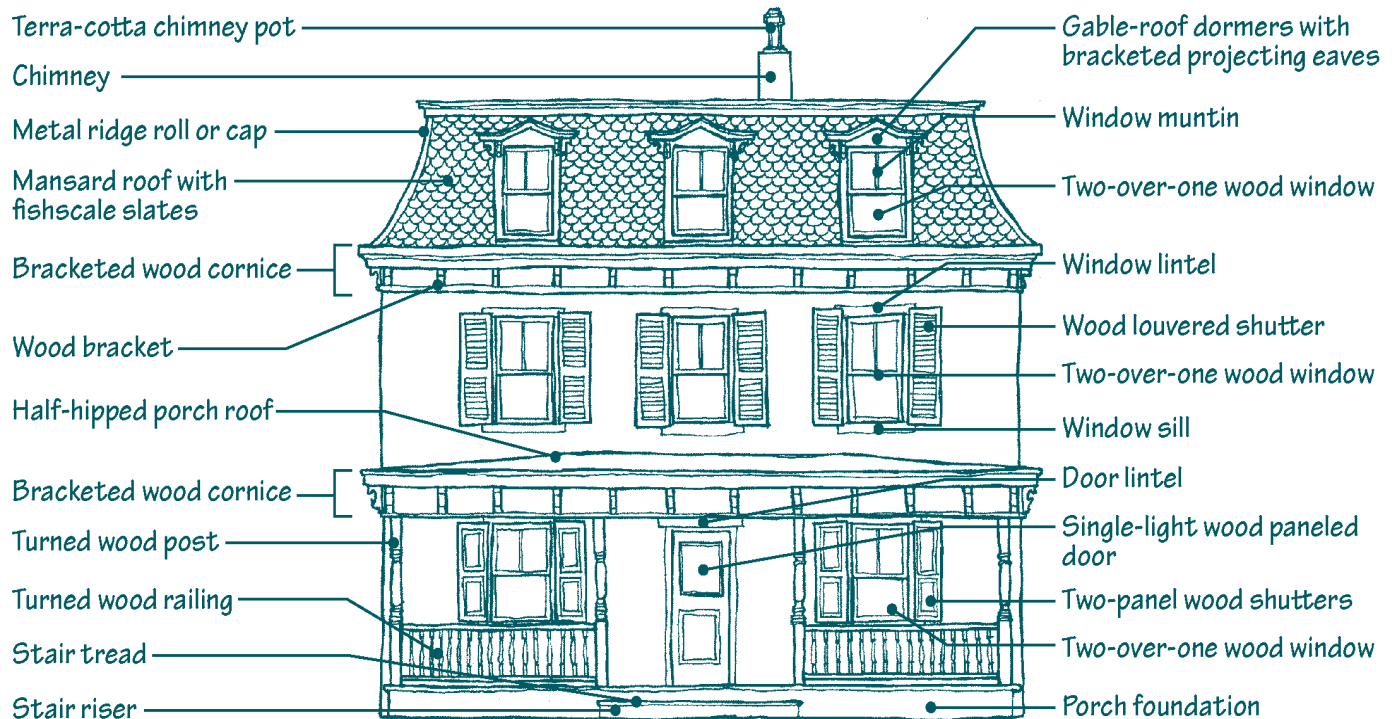
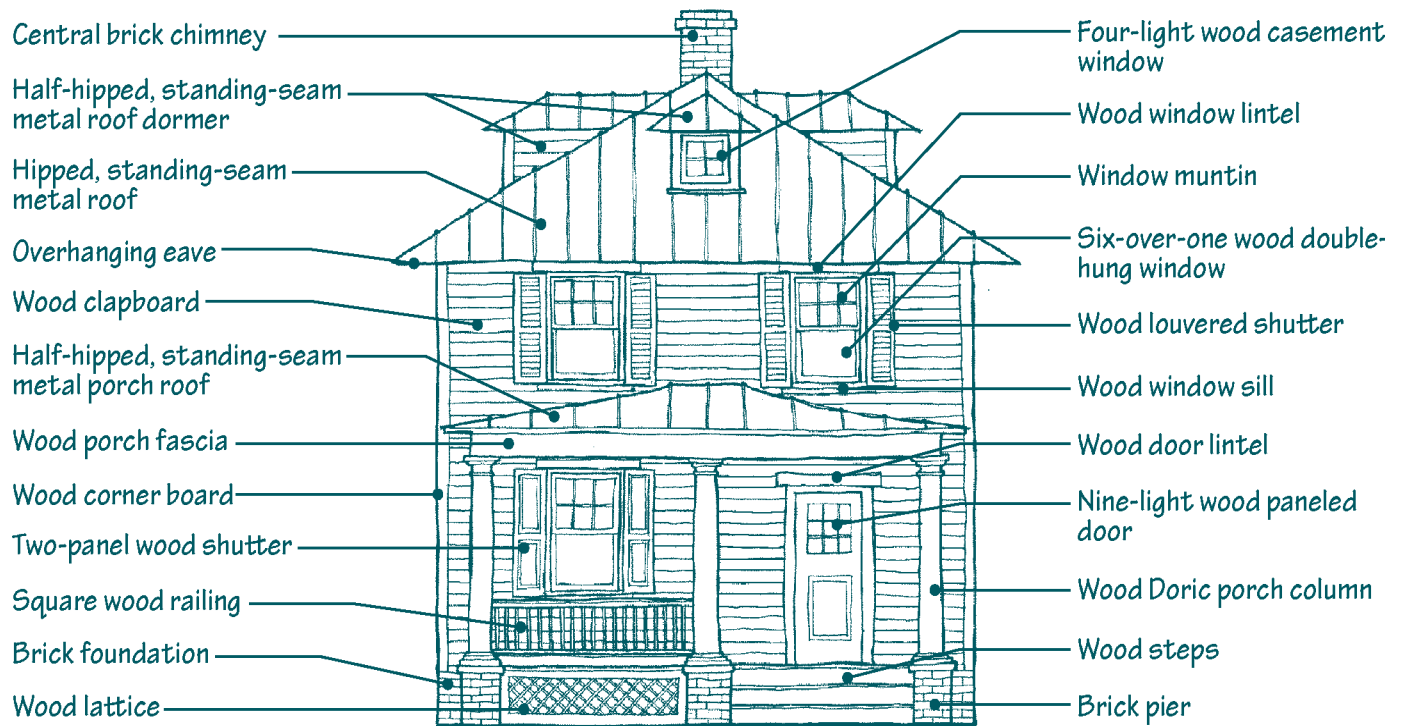
John Brandt, Chairman  
Kristen Cantara-Oliveira, Vice Chair  
Alexander Silva, Clerk  
Caroline Aubin  
Richard Calderon  
Victor Farias  
Jason Burns

Special note of appreciation to the Preservation Society of Fall River's Board of Directors and volunteers whom led the efforts to establish the cities' Local Historic District.



## GLOSSARY OF ARCHITECTURAL TERMS

The following diagrams represent composite buildings, and provide a basic vocabulary of architectural elements and terms. Please refer to the individual *Guidelines* for additional information.



This material is funded by the City of Fall River Historical Commission on behalf of the Historic District Commission Planning Department, City of Fall River, MA [www.fallriverma.org/historic-district-commission](http://www.fallriverma.org/historic-district-commission)



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# CITY OF FALL RIVER

## Historic District Commission

### Guidelines for Exterior Maintenance



*This chimney has open joints where it penetrates the roof, providing a path for storm water entry and potentially causing it to be unstable. Vines growing on masonry can also dislodge mortar.*

These *Guidelines* were developed in conjunction with the City of Fall River's Historic District Commission (HDC) and the Planning Department. Please review this information during the early stages of planning a project. Familiarity with this material can assist in moving a project quickly through the approval process, saving applicants both time and money.

Additional *Guidelines* addressing other historic building topics are available at One Government Center, Room 534 and on the Commission's website at [www.fallriverma.org/historic-district-commission](http://www.fallriverma.org/historic-district-commission). For more information, to clarify whether a proposed project requires HDC review, or to obtain permit applications, please call the Planning Department at [frhdc@fallriverma.org](mailto:frhdc@fallriverma.org) or (508) 324-2530 or arrange to meet with staff.

#### EXTERIOR MAINTENANCE

The historic architecture of Fall River features a well-constructed building stock from the early-19th to the mid-20th centuries. Many of these buildings serve residents and businesses today because they have been maintained by previous and present owners. These buildings can continue to evolve to suit the needs of future residents with continued attention and maintenance.

A building is typically a family's or business owner's largest single investment. One of the best ways to help a property retain its value is to implement a schedule of regular and preventive maintenance. Unlike the buyer of an automobile, a new homeowner is not provided with an operator's manual or warranty book outlining a recommended maintenance schedule. As a result, many homeowners do little or no regular maintenance or repair, leaving them unaware of potential issues until a serious problem develops.

#### BUILDING ENVELOPE DETERIORATION

The exterior envelope of a building is made up of various components that typically include roofing, walls, windows and doors. Each of these building components can be executed in various materials within the same building envelope, such as a combination of shingle roofing at sloped surfaces and rolled roofing at flat surfaces. These components of various materials act together as a system to protect the interior from exterior environmental extremes. Some of the environmental influences affecting the exterior building envelope include:

- Moisture, rain, snow, ice, humidity and groundwater
- Wind
- Sunlight
- Temperature variations
- Atmospheric chemicals and acid rain
- Insects, birds and rodents
- Vegetation, molds, algae and fungi

All building materials, new or old, will deteriorate over time. Each of the environmental influences listed above, individually and in combination, has the potential to react differently with the materials that comprise a building's exterior envelope and cause deterioration. The potential reactions are further complicated by the way the materials are installed and joined together, and their relative locations. However, by implementing a regular maintenance and repair program, the rate of deterioration can be dramatically slowed, allowing the city's historic buildings to last for centuries.

## MAINTENANCE IS GOOD PRESERVATION

Regular maintenance helps preserve buildings, structures and properties; helps protect real estate values and investments; and keeps Fall River an attractive place to live, work and visit. Lack of regular upkeep can damage these values and the building itself, resulting in accelerated deterioration of a building's or property's elements and features. Small openings or unpainted surfaces can allow moisture penetration and eventually rot. In the case of historic buildings, character defining elements can be difficult and costly to replace. In addition, long-term lack of maintenance can impact a building's structure, resulting in expensive repairs. (Refer to *Demolition-by-Neglect*, below.)

It is prudent for property owners to inspect their buildings and properties regularly to identify potential problems. If problems are detected early, smaller investments of money may not only improve a property's overall appearance and value, but can prevent or postpone extensive and costly future repairs. Regular maintenance items include painting and cleaning gutters and downspouts. It is prudent to inspect the roof for any signs of moisture infiltration, open joints, missing components, and cracks or bulges.



*Regular cleaning of gutters and downspouts allows storm water to easily flow from a roof and away from building foundations, reducing moisture-related deterioration at wall surfaces.*

## REPAIR VS. REPLACEMENT

One of the essential missions of the HDC is to protect and preserve historic properties for the benefit of future generations. This includes all exterior historic materials found within the district. **To preserve the authenticity of Fall River, the HDC strongly encourages the retention of historic materials or replacement in-kind whenever work on a property is considered.** Therefore, the HDC recommends repairs that are focused at specific areas of deterioration and that maintain a building's stability and weather resistance, rather than wholesale replacement of a historic building material. It is understood that additional care and attention might be required as part of the effort, but regular maintenance and timely repairs can minimize large repair costs associated with ongoing deterioration.



*Loose elements of the railing should be re-secured.*

## PREVENTIVE MAINTENANCE CHECKLISTS

These *Guidelines for Exterior Maintenance* include preventive maintenance checklists to assist property owners in recording the current condition of their buildings, as well as keeping track of maintenance tasks as they are performed. The checklists refer to typical problems associated with various materials and possible recommended actions. The checklist should be modified to address the specific materials found at each property. If a building has serious problems, a more detailed inspection can be performed by a qualified architect or structural engineer who can prescribe an appropriate treatment approach.

It is recommended that owners conduct a minimum of two annual property reviews, before winter and in the early spring. The fall review will assist in identification of weatherization projects needed before winter and its associated snowfall, as well as identification of projects to be scheduled during the tourism low season and for the following year. The spring review will help identify work that should be completed during the warm weather months. Areas of deterioration or problems should be photographed during each inspection. Dating of photographs can help document an ongoing problem's progression and assist in planning future repairs. For more specific information regarding the various materials identified, please refer to the *Guidelines* sections available at the One Government Center, Room 534 or on its web site at [www.fallriverma.org/historic-district-commission](http://www.fallriverma.org/historic-district-commission).

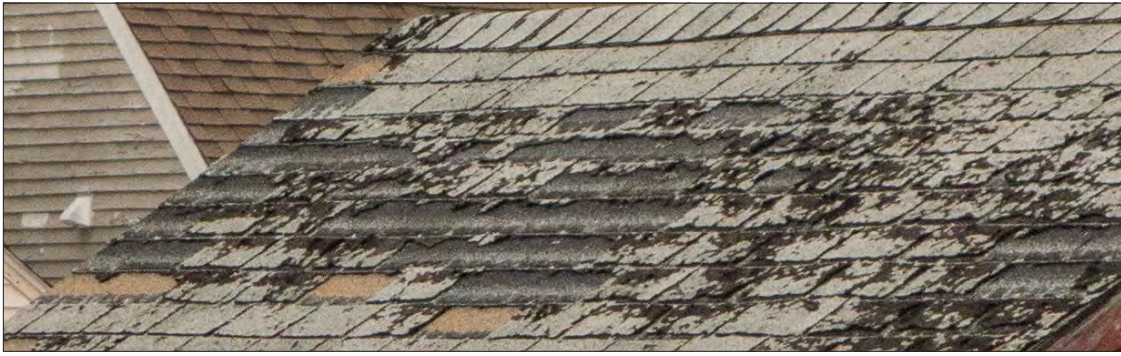
## DEMOLITION-BY-NEGLECT

Demolition-by-neglect refers to the neglect in the maintenance of any building or structure that allows a hazardous or unsafe condition to occur, including where:

- All or part of the building may fall and injure people or property
- Structural elements are deteriorated such that they can no longer safely carry imposed loads
- A defect or condition makes the building susceptible to water damage, including unmaintained paint on exterior wood surfaces and openings in roofs or walls

The HDC strongly discourages demolition-by-neglect, which may require the replacement of deteriorated building elements in-kind.





The shingles at this roof surface have exceeded their useful life. Replacement is encouraged to minimize potential water infiltration into the building.

## ROOFING AND RELATED ELEMENTS CHECKLIST

As a general rule, roofing and its associated components should be reviewed every fall and spring, accompanied by the regular cleaning of leaves and debris from gutters and downspouts. Attention should also be given prior to periods when storms producing severe conditions are more common, such as times of prime winter snow. In addition, it is best to review the gutters, downspouts and attic areas during a rainstorm to determine whether they are functioning properly. Flat roofs or low-sloped roofs are best reviewed immediately following a rainfall to determine whether standing water or pooling is present. Care should be taken when reviewing or maintaining roofs since they are potentially dangerous, particularly when wet.

If there are questions regarding whether the severity of deterioration warrants replacement of an element, consultation with a professional is recommended. It is usually less costly to fix a small problem than to delay action, resulting in more extensive deterioration and repair needs in the future. Refer to the *Guidelines for Roofing* or further information.

MATERIAL / LIFE SPAN	CONDITION OBSERVED	RECOMMENDED ACTION
<b>Roofing – General</b>	<ul style="list-style-type: none"> <li>• Sagging or bowing of roof ridge, surface or rafters</li> </ul>	<ul style="list-style-type: none"> <li>☐ May indicate significant structural problems – Consultation with an architect or structural engineer is recommended, particularly if condition worsens</li> </ul>
<b>Wood Shingles or Shakes</b> 30+ years	<ul style="list-style-type: none"> <li>• Shingles or shakes are not laid on open sheathing or batten strips - verify from attic</li> </ul>	<ul style="list-style-type: none"> <li>☐ Provide proper ventilation in attic</li> </ul>
	<ul style="list-style-type: none"> <li>• Moss, mold, or algae is present on roof surface</li> <li>• Wood is cupped or warped</li> <li>• Individual shingles or shakes are split</li> <li>• Individual shingles or shakes are uniformly thin from erosion</li> <li>• Shingles or shakes are missing</li> </ul>	<ul style="list-style-type: none"> <li>☐ Clean and treat surface to inhibit future growth</li> <li>☐ Trim back overhanging tree limbs to allow direct sunlight onto roof surface</li> <li>☐ Replace deteriorated shingles or shakes in-kind</li> <li>☐ Consider roof replacement if deterioration is substantial or prevalent</li> </ul>
<b>Slate</b> 50+ years	<ul style="list-style-type: none"> <li>• Shingles are not laid on spaced wood boards or batten strips – verify from attic</li> </ul>	<ul style="list-style-type: none"> <li>☐ Provide proper ventilation in attic</li> </ul>
	<ul style="list-style-type: none"> <li>• Slates are broken or missing</li> </ul>	<ul style="list-style-type: none"> <li>☐ Re-attach, re-secure or replace loose or missing slates or tiles in kind</li> </ul>
	<ul style="list-style-type: none"> <li>• Units are delaminating or flaking apart</li> <li>• Slate or tile particles are present in valleys, gutters and downspouts</li> </ul>	<ul style="list-style-type: none"> <li>☐ Replace deteriorated individual slates or tiles in-kind</li> <li>☐ Consider roof replacement when over 20% of slates or tiles are split, cracked, missing, or deteriorated</li> </ul>
<b>Faux Slate – Rubber or Plastic/Polymer Shingles</b> Varies based on manufacturer	<ul style="list-style-type: none"> <li>• Individual shingles are cracked</li> <li>• Individual shingles are curled, warped, or bent</li> </ul>	<ul style="list-style-type: none"> <li>☐ Replace deteriorated shingles with visually similar shingles</li> <li>☐ Consider roof replacement if deterioration is substantial</li> </ul>
	<ul style="list-style-type: none"> <li>• Shingles are faded or discolored</li> </ul>	<ul style="list-style-type: none"> <li>☐ Consider roof replacement if deterioration is substantial</li> </ul>

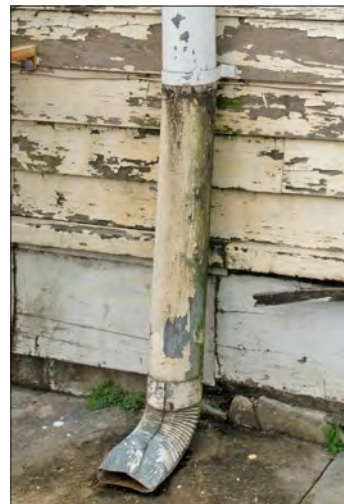


MATERIAL / LIFE SPAN	CONDITION OBSERVED	RECOMMENDED ACTION
<b>Asphalt Shingles</b> 20+ years	<ul style="list-style-type: none"> <li>• Mineral granules are present in gutters and at the base of downspouts</li> <li>• Mineral granules are almost totally worn off shingle surface</li> <li>• Edges of shingles look worn</li> <li>• Shingles are missing</li> <li>• Shingles have lifting or curling edges</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Replace deteriorated or missing individual shingles in-kind</li> <li><input type="checkbox"/> Consider roof replacement when over 20% of units are split, cracked, missing or deteriorated</li> </ul>
	<ul style="list-style-type: none"> <li>• Nails popping up</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Re-fasten or replace affected nails</li> </ul>
	<ul style="list-style-type: none"> <li>• Moss, mold, or algae has formed on roof surface</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Clean and treat surface to inhibit future growth</li> <li><input type="checkbox"/> Trim back overhanging tree limbs to allow sunlight to strike roof surface</li> </ul>
<b>Flat Roofs</b> Varies based on product	<ul style="list-style-type: none"> <li>• Asphalt of roofing felt has bubbled, separated, or cracked</li> <li>• Roof feels loose or spongy underfoot</li> <li>• Water is pooling on roof</li> <li>• Mineral granules or gravel have worn away</li> <li>• Roofing felt looks dry or cracked</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Consider patching seams with compatible materials if area is isolated</li> <li><input type="checkbox"/> Consider roof replacement if deterioration is substantial or leaking is observed – Verify condition of roof substrate including rafters and plywood sheathing</li> </ul>
<b>Metal Roofs</b> 60+ years	<ul style="list-style-type: none"> <li>• Surface has a substantial number of rust or corrosion spots</li> <li>• Surface has signs of previous tar patch jobs</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Tin, terne-coated steel and terne-coated stainless all need repainting every 5-10 years and regular repair, but can last for decades if properly maintained</li> <li><input type="checkbox"/> Consider patching with compatible materials if area of deterioration is isolated</li> <li><input type="checkbox"/> Consider roof replacement if deterioration is substantial or prevalent</li> </ul>
	<ul style="list-style-type: none"> <li>• Metal is punctured</li> <li>• Joints or seams are broken</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Consider patching or re-soldering with compatible materials if area is isolated</li> <li><input type="checkbox"/> Consider roof replacement if deterioration is substantial or prevalent – Verify condition of roof substrate</li> </ul>
	<ul style="list-style-type: none"> <li>• Surface of flat metal roof bulges</li> <li>• Water pools or stands on surface</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Consider roof replacement if deterioration is substantial or prevalent – Verify condition of roof substrate</li> </ul>
<b>Flashing</b> (Formed sheet metal at joint intersections to prevent moisture penetration)	<ul style="list-style-type: none"> <li>• Flashing is loose, corroded, broken, or missing</li> <li>• Flashing has roofing cement or tar</li> <li>• Flashing has openings or gaps</li> <li>• Vertical joints do not have both base and counter flashing</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Consider patching or replacement with compatible materials if area of deterioration is isolated, such as around a chimney</li> <li><input type="checkbox"/> Consider roof replacement if deterioration is substantial</li> </ul>
<b>Roof Projections</b> (Dormer, TV dish, antenna, vent, pipe, skylight, mechanical equipment, lightning rod, cupola, etc.)	<ul style="list-style-type: none"> <li>• Connections around roof projections are not properly flashed and watertight</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Consider patching with compatible materials if area of deterioration is isolated</li> <li><input type="checkbox"/> Removed abandoned rooftop projections that are not historic features to reduce number of roof penetration and attachment locations</li> <li><input type="checkbox"/> Consider flashing replacement if deterioration is substantial</li> </ul>

MATERIAL / LIFE SPAN	CONDITION OBSERVED	RECOMMENDED ACTION
Chimneys	<ul style="list-style-type: none"> <li>Flashing around chimney is not watertight</li> <li>Mortar joints in chimney are open or badly weathered</li> <li>Masonry or stucco coating is cracked or crumbling</li> <li>Chimney is leaning</li> </ul>	<ul style="list-style-type: none"> <li>Consider patching with compatible materials if area of deterioration is isolated</li> <li>Re-point deteriorated or open mortar joints</li> <li>Consider replacement if deterioration is substantial or prevalent – Replacement may necessitate chimney rebuilding from the roof surface up – Replicate all chimney detailing in reconstruction</li> </ul>
	<ul style="list-style-type: none"> <li>Chimney is not properly capped</li> <li>Chimney is not properly lined</li> </ul>	<ul style="list-style-type: none"> <li>Install an appropriate chimney cap for the building style and use dark colors vs. silver</li> <li>Install a chimney liner if wood-burning fireplace is used or if masonry or stucco inside flue is crumbling</li> </ul>
Gutters and Downspouts	<ul style="list-style-type: none"> <li>Gutters or downspouts are clogged</li> </ul>	<ul style="list-style-type: none"> <li>Review roof drainage during a rainstorm – Water should collect in gutters and flow through downspouts without spilling over roof edge</li> <li>Clean out debris at least twice each year, in the spring and fall, or more frequently based on tree proximity and debris accumulation</li> <li>Install screens over length of gutters and/or strainers over downspout locations</li> </ul>
	<ul style="list-style-type: none"> <li>Gutters or downspouts are rusty, loose, askew or tilting</li> <li>Hanging gutter have open or missing seams</li> <li>Sections are missing</li> </ul>	<ul style="list-style-type: none"> <li>Consider repairing or patching with compatible materials if area of deterioration is isolated</li> <li>Consider gutter or downspout replacement if deterioration is substantial or sections are missing</li> </ul>
	<ul style="list-style-type: none"> <li>Metal lining of built-in box gutter has broken seams</li> </ul>	<ul style="list-style-type: none"> <li>Re-solder open joints</li> <li>Consider replacement if deterioration is substantial or prevalent</li> </ul>
	<ul style="list-style-type: none"> <li>Cast iron downspout boots are rusted</li> </ul>	<ul style="list-style-type: none"> <li>Remove rust to bare metal – Apply rust-inhibitive primer and paint</li> </ul>
	<ul style="list-style-type: none"> <li>Water is pooling adjacent to foundation</li> </ul>	<ul style="list-style-type: none"> <li>Re-grade area at foundation to direct water away from building</li> <li>Verify water exiting from downspout is directed away from building foundation - Install splash block or downspout extension at base of downspout to direct water to drain</li> </ul>



Missing or deteriorated roofing may allow storm water and snow melt to enter an attic, potentially rotting wood framing members. It is prudent to review a roof's surface as well as the underside of the roof where possible to quickly detect and repair roof leaks as soon as possible and minimize severe damage.



The crushed downspout allows leaves and debris to form a clog and impede water flow. The paint loss at the wall surface suggests the water is overflowing at the joint above..

## EXTERIOR WOODWORK CHECKLIST

Many of Fall River’s most historic residential buildings are wood framed. Generally, exterior woodwork should be reviewed every fall and spring. The fall review allows a property to be prepared for winter and allows the owner to plan for spring repair and painting. The spring review will alert a property owner to damage that occurred over the winter months and allow for repair during fair weather.

If there are questions regarding whether the severity of deterioration warrants replacement, consultation with a

professional is recommended. If problems with the paint surface, wood siding or shingles is a reoccurring issue, it could be related to the extreme difference in temperature and relative humidity between the inside and outside from air conditioning and or the type and installation method of insulation in older buildings. Painting of exterior wood elements should be completed when the temperature and relative humidity are within the paint manufacturer’s recommended ranges. (Refer to *Building Insulation*, page 02-12; *Exterior Paint*, page 02-14, *Guidelines for Exterior Woodwork* and *Guidelines for Windows and Doors*.)

MATERIAL	CONDITION OBSERVED	RECOMMENDED ACTION
<b>Exterior Walls – General</b>	<ul style="list-style-type: none"> <li>Exterior walls not plumb or vertically straight</li> <li>Bulges visible at exterior walls</li> <li>Door and window frames out-of-square</li> <li>Siding surface is wavy</li> </ul>	<ul style="list-style-type: none"> <li>May indicate differential or uneven foundation settlement or significant structural problems – Consultation with an architect or structural engineer is recommended, particularly if condition worsens</li> </ul>
<b>Wood Siding, Shingles, Decorative Woodwork</b> (Refer to <i>Guidelines for Exterior Woodwork</i> for more information)	<ul style="list-style-type: none"> <li>Loose, cracked, missing or open joints at wood siding, shingles or decorative woodwork</li> </ul>	<ul style="list-style-type: none"> <li>Could lead to water infiltration and rot – Repair or replace in-kind as appropriate</li> <li>Apply caulk to open joints – Verify compatibility with adjacent materials</li> </ul>
	<ul style="list-style-type: none"> <li>Thin or worn shingles</li> </ul>	<ul style="list-style-type: none"> <li>Attempt patching with compatible materials if area of deterioration is isolated</li> <li>Consider replacement in-kind if deterioration is substantial or prevalent</li> </ul>
	<ul style="list-style-type: none"> <li>Open joints around window and door frames</li> <li>Open joints between dissimilar materials (such as wood siding and porch roof)</li> </ul>	<ul style="list-style-type: none"> <li>Re-caulk, apply sealant, repair or replace deteriorated flashing as appropriate – Verify compatibility of caulk or sealant with adjacent materials – Select paintable caulk or sealant if possible</li> </ul>
	<ul style="list-style-type: none"> <li>Mold, algae or mildew on siding or trim, especially on north side or shady areas</li> <li>Vines growing on walls</li> </ul>	<ul style="list-style-type: none"> <li>May indicate moisture problem – Verify if a vapor barrier is present in wall and remove if possible</li> <li>Clean and treat surface to inhibit future growth – Do not use high pressure water since this could result in more significant problems</li> <li>Remove vines and scrub surface with a stiff brush to remove roots on wall surface after they have dried</li> <li>Trim back shrubs and overhanging tree limbs to allow air circulation and sunlight to reach surface</li> </ul>
<ul style="list-style-type: none"> <li>Original siding or trim covered with vinyl or aluminum siding</li> </ul>	<ul style="list-style-type: none"> <li>Vinyl or aluminum siding and capping can trap moisture and hide rot and damage – Vinyl or aluminum siding and capping should be removed and woodwork inspected for damage and repaired or replaced if necessary</li> </ul>	
<b>Fire Escapes and Window Grates</b> (Refer to <i>Guidelines for Exterior Woodwork</i> for more information)	<ul style="list-style-type: none"> <li>Fasteners or rungs are loose, corroded, broken, or missing</li> </ul>	<ul style="list-style-type: none"> <li>May indicate unsafe condition for evacuating occupants - Consultation with an architect or structural engineer is recommended, particularly if condition worsens</li> <li>Remove surface rusting to bare metal - Apply rust inhibitive primer and paint - Match color of adjacent wall surface at fire escapes</li> <li>Consider removal or replacement if deterioration is substantial or prevalent</li> </ul>



MATERIAL	CONDITION OBSERVED	RECOMMENDED ACTION
<p><b>Water and Termite Damage</b> (Refer to <i>Guidelines for Exterior Woodwork</i> for more information)</p>	<ul style="list-style-type: none"> <li>• Dirt veins on exterior walls, particularly near foundation, steps, under galleries, porches, etc.</li> <li>• Wood is soft when stuck with a small blade or ice pick, particularly window sills, galleries, porches, steps, sills, and siding (Refer to <i>Detecting Wood Rot</i>, page 04-4)</li> <li>• Wood is located on masonry foundation or pier or within 6-inches of ground (Refer to <i>Wood Rot</i>, page 04-3)</li> <li>• Vegetation, such as shrubs, are located immediately adjacent to foundation</li> <li>• Vines are climbing on building</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Possible indication of termite damage – Contact extermination company to determine if there is active infestation and extent of damage</li> <li><input type="checkbox"/> Possible indication of wood rot or insect infestation – Eliminate source of moisture to control rot and replace defective elements in-kind; contact an extermination company to address possible infestation</li> <li><input type="checkbox"/> Wood on masonry foundations or piers or close to the ground can be vulnerable to rot and termite infestation – Review appropriate alternatives and conduct regular inspections</li> <li><input type="checkbox"/> Retain a pest management company for regular inspections</li> <li><input type="checkbox"/> Vegetation can trap moisture in woodwork by blocking sunlight and air circulation – Remove or thin vegetation close to a building or conduct regular inspections for rot behind vegetation</li> <li><input type="checkbox"/> Climbing vines can trap moisture and grow behind siding – Remove vines to allow air and light at surface</li> </ul>
<p><b>Windows and Doors</b> (Refer to <i>Guidelines for Windows and Doors</i> for more information)</p>	<ul style="list-style-type: none"> <li>• Windows and doors do not fit or operate properly</li> <li>• Wood rot, particularly at sills and lower rails</li> <li>• Window is not operational</li> <li>• Glass is cracked</li> <li>• Glazing putty is missing, cracked, or deteriorated</li> <li>• Storm/screen windows or doors are missing, deteriorated or non-operational</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Verify whether frame is wracked or out-of-square – Possible indication of differential or uneven foundation settlement or deteriorated wall framing</li> <li><input type="checkbox"/> Verify whether windows are painted shut and hardware (including sash cord or chains) is operational</li> <li><input type="checkbox"/> Repair or selectively replace deteriorated components in-kind</li> <li><input type="checkbox"/> Following repairs, verify deteriorated areas are well painted and joints caulked</li> <li><input type="checkbox"/> Verify whether window has been painted shut</li> <li><input type="checkbox"/> Verify whether sash cords are attached to sash weights</li> <li><input type="checkbox"/> Replace glazing to match existing</li> <li><input type="checkbox"/> Replace glazing putty – Verify compatibility with adjacent materials</li> <li><input type="checkbox"/> Repair or replace deteriorated units as appropriate</li> <li><input type="checkbox"/> Consider installing interior storm windows and doors</li> </ul>
<p><b>Painting</b> (Refer to <i>Exterior Paint</i> page 02-14; and <i>Weather Stripping and Caulk</i>, page 06-10, for more information)</p>	<ul style="list-style-type: none"> <li>• Chalky or dull finish</li> <li>• Paint surface worn</li> <li>• Peeling, curling, crazing and blistering</li> <li>• Caulk or sealant not adhering</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Surface cleaning might be all that is needed</li> <li><input type="checkbox"/> If repainting, additional preparation might be required</li> <li><input type="checkbox"/> Wood generally needs repainting every 5 to 8 years</li> <li><input type="checkbox"/> Possible indication of non-compatible paint for surface – Review type of finish on existing material and confirm type of preparation required for new paint; may include surface scraping and sanding and/or application of primer</li> <li><input type="checkbox"/> Possible indication of a moisture problem – Review drainage, potential leaks, and whether there is a vapor barrier within the wall – Remove vapor barrier if possible</li> <li><input type="checkbox"/> Check for drainage problems if area of failure is near gutter, downspout or intersecting roof, such as a porch</li> <li><input type="checkbox"/> Verify compatibility with caulk or sealant and surface material – Select paintable caulk or sealant if possible</li> </ul>

## EXTERIOR MASONRY AND STUCCO CHECKLIST

Masonry is present in almost all buildings, frequently as a foundation, pier, or chimney, and sometimes as the wall material. Since masonry is often part of the structural system of older buildings, it is critical that it be maintained to prevent serious problems. Masonry and stucco repair and cleaning should be conducted when the temperature is consistently between 40 and 90 degrees Fahrenheit to minimize potential spalling, problems associated with colder temperatures, and shrinkage with warmer temperatures. Painting or coating of masonry and stucco, where appropriate, should be completed when the temperature and relative humidity are within the paint or coating manufacturer’s recommended ranges. For further information, refer to the *Guidelines for Masonry and Stucco*.



*Mortar joint openings in stone foundations can provide a path for water and snow melt to enter a building as well as rodents and pests.*

MATERIAL	CONDITION OBSERVED	RECOMMENDED ACTION
Exterior Walls and Piers – General	<ul style="list-style-type: none"> <li>• Cracks in masonry wall</li> </ul>	<ul style="list-style-type: none"> <li>□ May indicate differential or uneven foundation settlement or significant structural problems – Consultation with an architect or structural engineer is recommended, particularly if condition worsens</li> <li>□ Vertical and/or diagonal cracks or cracks that split individual bricks or stones indicate a potentially more significant problem, such as uneven settlement while Horizontal cracks or hairline cracks limited to mortar joints or individual stones or bricks tend to be less serious</li> <li>□ Monitor and photograph condition biannually after repair to see if cracks return</li> </ul>
	<ul style="list-style-type: none"> <li>• Bows or bulges in wall plane</li> <li>• Leaning walls</li> </ul>	<ul style="list-style-type: none"> <li>□ May indicate differential or uneven foundation settlement or significant structural problems – Consultation with an architect or structural engineer is recommended, particularly if condition worsens</li> </ul>
	<ul style="list-style-type: none"> <li>• Water ponding adjacent to foundation</li> <li>• Vegetation, such as shrubs, located immediately adjacent to foundation</li> <li>• Vines growing on walls</li> <li>• Damp walls</li> <li>• Moss or algae on masonry surface</li> </ul>	<ul style="list-style-type: none"> <li>□ Verify water exiting downspout is directed away from building foundation – Install splash blocks or downspout extensions to direct water away from wall</li> <li>□ Vegetation can trap moisture in masonry by blocking sunlight and air circulation – Remove or thin vegetation close to a building or conduct regular inspections for algae and mold behind vegetation – Remove vines</li> <li>□ Re-grade area adjacent to foundation to direct ground water away from building</li> <li>□ Remove vines and scrub surface with a stiff brush to remove roots on wall surface after they have dried</li> <li>□ Clean moss or algae from wall surface with low pressure water, with the possible use of gentle detergent and brushing</li> </ul>
	<ul style="list-style-type: none"> <li>• Efflorescence, usually a white, powdery surface due to water-soluble salts, leaching out of masonry and depositing on a surface by evaporation</li> </ul>	<ul style="list-style-type: none"> <li>□ Clean efflorescence from wall surface with low pressure water, with the possible use of gentle detergent and a natural bristle brush</li> <li>□ Review area for possible sources of moisture</li> </ul>

MATERIAL	CONDITION OBSERVED	RECOMMENDED ACTION
<b>Mortar</b>	<ul style="list-style-type: none"> <li>• Soft and crumbling</li> <li>• Open joints or broken joint bonds</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Consider patching with compatible mortar if area of deterioration is isolated – It is critical that mortar match original in appearance, profile, hardness and composition to minimize potential reoccurrence</li> <li><input type="checkbox"/> Consider replacement if deterioration is substantial</li> </ul>
<b>Stones and Bricks</b>	<ul style="list-style-type: none"> <li>• Spalling, chipping, flaking, cracking or crumbling of surface</li> <li>• Loose or missing stones or bricks</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Replace incompatible mortar and match original</li> <li><input type="checkbox"/> Consider patching with compatible materials if area of deterioration is isolated</li> <li><input type="checkbox"/> Consider replacement if deterioration is substantial</li> </ul>
	<ul style="list-style-type: none"> <li>• Pitted surface from sandblasting or pressure wash</li> <li>• Pitted surface from stucco removal</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Masonry with a damaged surface is more likely to absorb moisture, leading to accelerated deterioration – Consult a professional</li> <li><input type="checkbox"/> Photograph condition and monitor biannually to see if surface continues to deteriorate</li> <li><input type="checkbox"/> Review adjacent materials and interior finishes for signs of moisture infiltration and rot</li> </ul>
	<ul style="list-style-type: none"> <li>• Missing or dislodged units</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Reset or replace individual units to match adjacent in appearance, size, and hardness</li> </ul>
	<ul style="list-style-type: none"> <li>• Bulging or leaning retaining walls</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> May indicate a significant structural problem - Consultation with an architect or structural engineer is recommended, particularly if condition worsens</li> <li><input type="checkbox"/> Verify drainage through retaining wall is operational</li> </ul>
<b>Stucco</b>	<ul style="list-style-type: none"> <li>• Cracks in surface</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Consider patching with compatible stucco if area of deterioration is isolated</li> <li><input type="checkbox"/> Consider replacement if deterioration is substantial</li> <li><input type="checkbox"/> Substantial cracks might indicate differential or uneven foundation settlement or severe structural problems – Consultation with an architect or structural engineer is recommended, particularly if condition worsens</li> </ul>
	<ul style="list-style-type: none"> <li>• Bulges in wall</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Verify keying of stucco to lath or underlying substrate – If wall area moves when pushed, stucco is not bonded and should be replaced with compatible material to avoid potential surface collapse</li> <li><input type="checkbox"/> Check for moisture trapped behind stucco surface</li> </ul>
<b>Painted Masonry and Stucco</b>	<ul style="list-style-type: none"> <li>• Chalky or dull finish</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Additional preparation might be required prior to repainting – Preparation dependent on surface</li> </ul>
	<ul style="list-style-type: none"> <li>• Peeling, flaking, curling, and blistering</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Possible indication of a moisture problem – Review drainage, potential leaks and for presence of a vapor barrier in the wall – Remove vapor barrier if possible</li> <li><input type="checkbox"/> Check for drainage problem if paint failure near a roof edge, downspout, porch ceiling or foundations are often the result of drainage problems</li> </ul>
	<ul style="list-style-type: none"> <li>• Paint surface worn</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Similar to woodwork, painted masonry tends to need repainting every 5 to 8 years with compatible paint</li> </ul>



## PROPERTY CHECKLIST

Exterior maintenance extends beyond a building’s perimeter to include the surrounding property. Seasonal property maintenance includes cutting grass, raking leaves, and snow removal. Larger maintenance issues include: water management on the site, trimming trees, and regular repairs to fences, walls, walkways and paved surfaces. Specific maintenance might be required for specialized site elements such as water features. Prior to anticipated storms, secure furnishings and features that could become airborne in high winds.

MATERIAL	CONDITION OBSERVED	RECOMMENDED ACTION
<b>Water Management</b>	<ul style="list-style-type: none"> <li>• Rain water or snow melt flows toward building foundation</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Re-grade around foundation to direct water away from building</li> </ul>
	<ul style="list-style-type: none"> <li>• Water ponding adjacent to foundation</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Verify water exiting downspouts is directed away from building foundation – Install splash blocks or downspout extensions to direct water away from wall</li> </ul>
	<ul style="list-style-type: none"> <li>• Vegetation, such as shrubs, located immediately adjacent to foundation or vines are climbing on buildings</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Vegetation can trap moisture in wall surfaces by blocking sunlight and reducing air circulation – Remove or thin vegetation close to building or conduct regular inspections for rot, algae, fungus, and mold behind vegetation – Remove climbing vines</li> </ul>
	<ul style="list-style-type: none"> <li>• Tree limbs extend over roof</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Shade from the sun can lead to the formation of moss, fungus, mold, or algae – Leaves and debris collect in and clog gutters and downspouts and tree limbs can cause severe damage if they fall during a storm – Trim limbs 5-feet away from building – Maintain gutters and downspouts</li> </ul>
<b>Metal and Wood Fences</b>	<ul style="list-style-type: none"> <li>• Metal fences</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Check for rust spots or bare metal – Remove rust, prime and repaint every 5 to 8 years</li> </ul>
	<ul style="list-style-type: none"> <li>• Wood fences</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Check for deterioration, follow recommendations in the <i>Exterior Woodwork Checklist</i>, page 02-6</li> <li><input type="checkbox"/> Anticipate repainting or staining every 5 to 8 years</li> </ul>
<b>Sidewalk, Walkway and Patio Pavers</b>	<ul style="list-style-type: none"> <li>• Brick, stone, or concrete pavers cracked or missing</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Verify the condition of the sub-base and replace deteriorated or missing units in-kind</li> </ul>
	<ul style="list-style-type: none"> <li>• Water ponding on paved surface</li> <li>• Subsidence of paved surface</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Verify the condition of the sub-base and reset individual units to allow appropriate drainage</li> </ul>
	<ul style="list-style-type: none"> <li>• Vegetation growing between individual units</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Some vegetation has a substantial root structure that can dislodge individual paving units – Remove vegetation if appropriate</li> </ul>
<b>Asphalt and Concrete Paving and Driveways</b>	<ul style="list-style-type: none"> <li>• Cracked surface</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Seal cracks to minimize potential water infiltration</li> <li><input type="checkbox"/> Consider sealing or repaving entire surface if cracks are substantial or prevalent</li> </ul>
	<ul style="list-style-type: none"> <li>• Water ponding on paved surface</li> <li>• Subsidence of paved surface</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Verify the condition of the sub-base and patch to allow appropriate drainage</li> </ul>
	<ul style="list-style-type: none"> <li>• Rodent droppings</li> <li>• Holes from burrowing animals</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Possible indication of pest infestation – Contact pest management company to determine if there is active infestation or nesting birds – Review appropriate alternatives and conduct regular inspections</li> </ul>
<b>Snow and Ice</b>	<ul style="list-style-type: none"> <li>• Accumulation on surfaces</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Remove snow and ice from paved surfaces, minimizing use of salt or chemicals adjacent to building foundations</li> <li><input type="checkbox"/> Remove snow piled against wood surfaces including siding, steps, and doors</li> <li><input type="checkbox"/> Remove excess snow from roof surfaces to minimize overburdening of structure</li> </ul>

## INTERIOR CHECKLIST

Exterior maintenance problems can be most evident at the interior of a building. The areas most likely to demonstrate exterior problems tend to be the least-visited parts of a house, such as the attic, basement or crawlspace. It is important to remember that attics, basements, and crawlspaces are spaces with distinct conditions. Attics sit directly under roofs and thus can be highly susceptible to moisture infiltration. Similarly, a basement or a crawlspace is vulnerable to moisture and pest infestation and damage. Because these spaces typically do not have heat, air conditioning, or moisture control at the same levels as the rest of the building, problems can fester and become severe before being noticed. It is important that these areas, though often awkward to access, receive regular attention.



The dark areas at the top of the truss and the white surface residue are both signs of moisture infiltration that should be addressed.

MATERIAL	CONDITION OBSERVED	RECOMMENDED ACTION
<b>Attic Space</b>	<ul style="list-style-type: none"> <li>• Water stains on rafters or roof boards – Probably indicated by either a dark patch on the wood or plaster or a white bloom indicating salt crystallization</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Review during or immediately following a rainstorm to understand whether staining is an active or past problem – Pay particular attention to flashing locations around roof penetrations such as vent pipes, chimneys, and dormer windows, as well as at valleys and eaves, especially prior to storm seasons</li> </ul>
	<ul style="list-style-type: none"> <li>• Mildew on underside of roof structure</li> <li>• Dampness in attic space</li> <li>• Overheated attic</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Verify whether the attic is sufficiently ventilated</li> </ul>
	<ul style="list-style-type: none"> <li>• Broken or missing collar beams</li> <li>• Cracked or sagging rafter</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Potential structural problem – Consultation with an architect or structural engineer is recommended, particularly if condition worsens</li> </ul>
	<ul style="list-style-type: none"> <li>• Inadequate insulation at attic floor or between rafters</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Install appropriate insulation without a vapor barrier – Select insulation that is reversible and will not cause damage if wet (Refer to <i>Building Insulation</i>, page 02-12)</li> </ul>
<b>Basement and Crawlspace</b>	<ul style="list-style-type: none"> <li>• Mortar of walls or piers is soft and crumbling</li> <li>• Damp or moldy smell</li> <li>• Evidence of dampness under first floor framing or around pipes</li> <li>• Evidence of wood rot or insect infestation at wood sills on top of foundation walls or first floor joists</li> <li>• Periodic standing water or flooding</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Review for potential moisture infiltration</li> <li><input type="checkbox"/> Verify water exiting from downspouts is directed away from building foundation – Install splash blocks or downspout extensions at base of downspouts</li> <li><input type="checkbox"/> Re-grade area at foundation to direct rain water or snow melt away from building</li> <li><input type="checkbox"/> Verify that foundation vents are clear of debris</li> <li><input type="checkbox"/> Check underground water supply and drainage systems for cracked or clogged pipes</li> <li><input type="checkbox"/> Re-point areas of deteriorated mortar</li> <li><input type="checkbox"/> Apply stucco to brick piers if appropriate</li> <li><input type="checkbox"/> Retain a pest management company to provide regular inspections and contact immediately for potential infestation</li> </ul>
	<ul style="list-style-type: none"> <li>• Inadequate insulation (Refer to <i>Building Insulation</i>, page 02-12)</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Install insulation under first floor framing</li> <li><input type="checkbox"/> Install appropriate insulation around pipes, heating and air conditioning ducts – Condensation can form on uninsulated equipment and pipes</li> </ul>

## BUILDING INSULATION

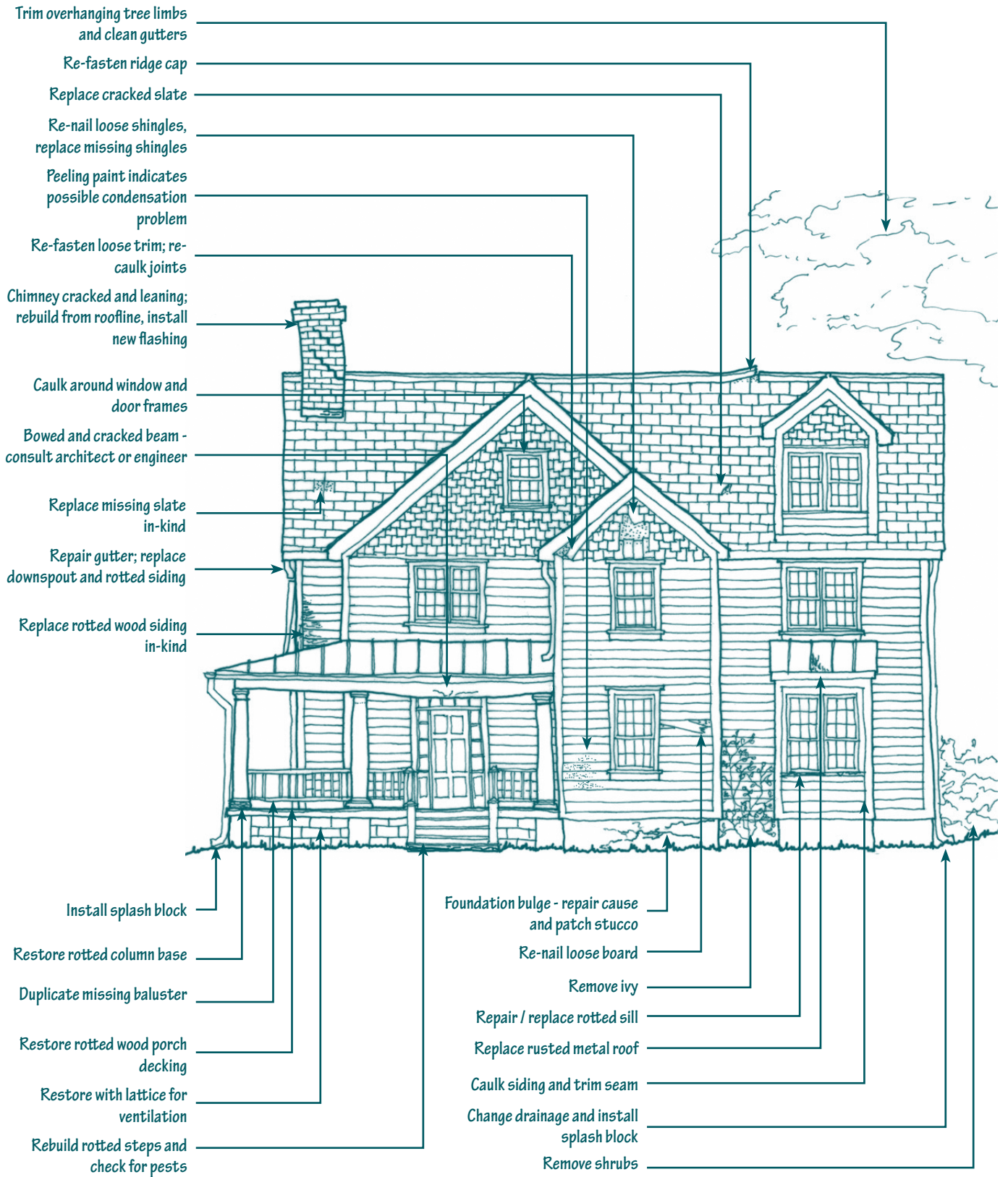
Insulation can be an efficient and cost-effective means of reducing heat transfer through building walls and associated heating and cooling bills. Before installing insulation, ensure all cracks and openings are sealed (caulked) including around pipe penetrations, chimneys, electrical outlets, and lights. (Refer to *Weather Stripping and Caulk*, page 06-10.) Some of the most common types of insulation can be found in the table below. It is highly recommended that all of the insulation manufacturer’s safety and installation recommendations be followed. Property owners should consult [www.energystar.gov](http://www.energystar.gov) for insulation types and levels, as well as recommendations applicable to specific locations and construction conditions.

TYPE /MATERIAL	BENEFITS	DISADVANTAGES
<b>Blanket – Batts and Rolls</b> <ul style="list-style-type: none"> <li>Fiberglass</li> <li>Mineral Wool</li> <li>Plastic Fiber</li> <li>Natural Fiber</li> </ul>	<ul style="list-style-type: none"> <li>Sized to fit between standard spaced studs, joists, and beams that are relatively free of obstructions such as pipes, conduits, and braces</li> <li>Relatively inexpensive</li> <li>Can be do-it-yourself project – <i>Wear protective eye wear and clothing</i></li> </ul>	<ul style="list-style-type: none"> <li>Can become matted-down if wet</li> <li>Vapor barriers found on most blanket insulation can cause condensation problems and rot wood framing – <i>Install without backing or with air barrier only</i> – If installing with vapor barrier, install barrier facing interior</li> <li>Should not be “stuffed” around obstructions – Can be a fire hazard around damaged electrical wiring</li> </ul>
<b>Loose-Fill and Blown-In Insulation</b> <ul style="list-style-type: none"> <li>Cellulose</li> <li>Fiberglass</li> <li>Mineral Wool</li> </ul>	<ul style="list-style-type: none"> <li>Good for irregularly spaced areas and around obstructions</li> <li>Only minor disturbance of finishes required for installation</li> <li>Some materials can be poured rather than blown-in</li> </ul>	<ul style="list-style-type: none"> <li>Generally must be blown-in using special equipment</li> <li>Settles over time, requiring additional application, particularly in walls</li> <li>Cellulose, the most common, is essentially newspaper – When wet, it retains water and can rot wood framing</li> <li>Cellulose can become home for nesting pests or insects such as termites and carpenter ants – Borate treatment can corrode metal pipes, conduit, and electrical wiring</li> </ul>
<b>Radiant Barriers and Reflective Insulation</b> <ul style="list-style-type: none"> <li>Foil-faced craft paper</li> <li>Plastic film</li> <li>Polyethylene bubble</li> <li>Cardboard</li> </ul>	<ul style="list-style-type: none"> <li>Reflects radiant heat, such as sunlight, away from living space – Can be highly effective in attics</li> <li>Sized to fit between standard spaced studs, joists, and beams</li> <li>Bubble systems can be effective around obstructions</li> <li>Can be do-it-yourself project</li> </ul>	<ul style="list-style-type: none"> <li>Must face an air space, such as an attic, to be effective</li> <li>If not properly installed, can act as a vapor barrier and cause condensation and rot wood framing members</li> <li>Cardboard can become home for nesting pests or insects such as termites and carpenter ants – Borate treatment can corrode metal pipes, conduit, and electrical wiring</li> </ul>
<b>Sprayed Foam and Foamed-in-Place</b> <ul style="list-style-type: none"> <li>Cementitious</li> <li>Phenolic</li> <li>Polyisocyanurate</li> <li>Polyurethane</li> </ul>	<ul style="list-style-type: none"> <li>Good for irregularly spaced areas and around obstructions</li> <li>Typically no disturbance of finishes required for installation</li> </ul>	<ul style="list-style-type: none"> <li>Made from fossil fuels, can have toxic fumes and be highly flammable</li> <li>Requires professional installation – Adheres to all surfaces; can have voids if not properly installed – Relatively expensive installation</li> <li>Termites and carpenter ants can tunnel through, increasing infestation risk</li> <li>Open-cell softer, often not a vapor barrier</li> <li>Closed-cell is a vapor barrier and can cause condensation problems and rot at wood framing – Removal generally requires “chiselling out” between all framing members</li> </ul>
<b>Foam Board</b> <ul style="list-style-type: none"> <li>Polystyrene</li> <li>Polyisocyanurate</li> <li>Polyurethane</li> </ul>	<ul style="list-style-type: none"> <li>High insulation value for relatively little thickness</li> </ul>	<ul style="list-style-type: none"> <li>Made from fossil fuels, can have toxic fumes and be highly flammable</li> <li>Must be cut to fit around all obstructions – <i>Requires complete removal of wall finish</i></li> <li>Termites and carpenter ants can tunnel through, increasing infestation risk</li> <li>Can be installed under un-vented, low-sloped roofs</li> </ul>



# TYPICAL BUILDING MAINTENANCE NEEDS

**General:** Scrape all loose paint; sand to smooth surface; prime bare wood and metal; re-paint with historically appropriate colors



Trim overhanging tree limbs and clean gutters

Re-fasten ridge cap

Replace cracked slate

Re-nail loose shingles, replace missing shingles

Peeling paint indicates possible condensation problem

Re-fasten loose trim; re-caulk joints

Chimney cracked and leaning; rebuild from roofline, install new flashing

Caulk around window and door frames

Bowed and cracked beam - consult architect or engineer

Replace missing slate in-kind

Repair gutter; replace downspout and rotted siding

Replace rotted wood siding in-kind

Install splash block

Restore rotted column base

Duplicate missing baluster

Restore rotted wood porch decking

Restore with lattice for ventilation

Rebuild rotted steps and check for pests

Foundation bulge - repair cause and patch stucco

Re-nail loose board

Remove ivy

Repair / replace rotted sill

Replace rusted metal roof

Caulk siding and trim seam

Change drainage and install splash block

Remove shrubs



*Paint can be used to highlight a building's architectural features. When selecting a building's colors, it is often most appropriate to consider the building's style and period of construction. Victorian buildings were often painted with earth-tone colors while Colonial Revival buildings were typically painted neutral tones of white, grey, cream, and light yellow.*

## EXTERIOR PAINT

Paint is one of the most common ways to protect exterior materials from the elements, particularly wood without natural or chemical preservatives, and metals that would otherwise rust. When the painted surface has been compromised, moisture and the elements can infiltrate the underlying material and substrate, accelerating deterioration.

Exterior paint provides a layer of protection to a building by limiting moisture infiltration and damage from the sun, pests and other forms of deterioration. Exterior woodwork without natural or chemical preservatives is susceptible to moisture-related wood deterioration of the exterior envelope and underlying framing. Many metals are susceptible to rust. Although paint is an important protective layer that improves the longevity of a historic building element, it must be viewed as a temporary barrier that is subject to deterioration through cyclical temperature and humidity changes. It requires re-application to maintain its shielding properties.

In addition to providing a protective layer, paint colors can highlight a building's architectural features and style, visually tie parts of a building together, and reflect personal taste. A

building's style, period of construction, materials and setting can all help identify appropriate paint colors.

In general, exterior surfaces should be repainted every 5 to 8 years, with intermediate touch-ups of high traffic, worn or deteriorated areas. If a building requires frequent repainting, it might be an indication of another problem including moisture, inadequate surface preparation and non-compatible paint.

Encapsulating paints can be problematic as they can trap moisture in woodwork and promote rot. These are often referred to as "liquid siding," "liquid stucco" or "liquid ceramic coatings." Painting of previously unpainted masonry is strongly discouraged. (Refer to *Removing Paint from Masonry*, page 05-7.)

## Oil and Latex Paints

Essentially, there are two types of wood paint for buildings, oil and latex. Both types consist of three principal components: a pigment, a binder to adhere the pigment to a surface as the paint dries and a solvent that makes the mixture loose enough to apply with a brush. Even though latex was developed in the mid 1940s, oil was the dominant paint type until about 1970 and is found on many historic homes today.

Oil and latex paints act differently when applied to a surface. Oil paint forms a tough plastic film as the binder reacts with oxygen in the air. The binder can be natural oil, such as linseed, or oil modified with alkyds. Early latex paint used synthetic rubber as the binder, while latex paint today uses acrylic, vinyl-acrylic or vinyl acetate binders. As the water in latex paint evaporates, it forms a flexible film and the binder and pigment move closer together until a protective surface is formed. Critical differences between oil and latex paints are that they do not cure in the same way and they adhere differently to substrates. As oil paint ages it continues to cure and oxidize. It becomes more and more brittle to the point it can no longer expand and contract with the underlying substrate through temperature and humidity cycles. By contrast, latex cures in about two weeks and remains more pliable.

Generally, oil paint adheres better to problem surfaces because the oils are small enough to seep into the wood or microscopic openings in old, even chalky, paint. The resins in latex paint are generally too large to seep into the substrate, allowing water vapor to pass through. This makes latex less likely to peel from a building with excessive interior moisture, although multiple layers of paint can create an impermeable moisture barrier. Another characteristic of latex paint is that its flexibility can impose surface tension to underlying layers of paint, particularly oil, and pull the paint away from the substrate.

In Fall River's climate, it is generally recommended to apply an oil or latex bonding primer to provide a smooth finish, followed by two coats of acrylic latex paint. Property owners should consult with a paint professional to obtain the best recommendation for each specific paint project.

## Repainting

When considering repainting, the following five steps are recommended:

- 1. Determine whether repainting is necessary:** Prior to beginning a painting project, it is appropriate to determine whether complete repainting is required or if cleaning or spot repainting is more appropriate. By painting more often than is necessary, paint layers can build up, increasing the potential for future paint failure. A dingy finish might only require washing with a mild detergent solution and natural bristle brushes to freshen the appearance.
- 2. Inspect existing paint for causes of failure:** To assure the new paint will last as long as possible, property owners should inspect the existing paint for causes of failure. Some common paint problems are:
  - **Peeling** – Possible causes are painting under adverse conditions, inadequate surface preparation or moisture infiltration
  - **Cracking or crazing** – This is typically the sign of a hard surface that does not expand and contract with underlying material – Sand and repaint if cracking and crazing is limited to the surface; remove paint if it extends down to the wood
  - **Wrinkling** – This is usually the result of the top coat drying before the underlying coat – Sand smooth; repaint
  - **Blistering** – This indicates air bubbles under the paint – Cut into blister; if wood is visible the problem is probably moisture related; if paint is visible, the problem area was probably painted in direct hot sun
  - **Alligatoring** – This is severe cracking and crazing – Remove all paint down to bare wood

- 3. Repair causes of failure:** Before repainting, the causes of paint failure should be addressed. The most common cause of paint failure is moisture. The most typical causes of moisture problems are ground water; rain or storm water; leaking plumbing; and condensation. (Refer to *Wood Rot*, page 04-3 and the *Guidelines for Exterior Maintenance Checklists* for additional information.) Portions of the building that are most susceptible to moisture and its related problems include: areas near rooflines, gutters and downspouts; areas near the ground; horizontal surfaces such as window and door sills, porches and wood steps; and areas or walls adjacent to high humidity including kitchens, bathrooms and laundry rooms.
- 4. Prepare surface:** To ensure a long-lasting painted surface, appropriate preparation should occur before repainting.
  - Begin by washing the painted surfaces with a mild detergent solution and a natural-bristle brush
  - Carefully scrape and sand for a smooth finish, removing any paint that is not tightly bonded to the surface
  - Putty or caulk countersunk nails, window glazing, gaps, joints and openings
  - Allow substrate to dry thoroughly before applying primer or paint
  - Spot prime bare wood, areas of repair and wood replacement
- 5. Repaint:** High-quality paint appropriate for the substrate applied in accordance with manufacturer's recommendations should improve the longevity of a paint job. In general, it is best to use compatible primer and paint from the same manufacturer, and apply the primer to base wood or metal. Primer and two coats of paint are recommended for previously unpainted surfaces.
  - For best results, apply paint during appropriate weather conditions, generally 50°F to 90°F, less than 60% relative humidity, out of direct sunlight

## SPECIALTY PAINTS

### Elastomeric or Encapsulating Paint

Encapsulating paints can trap moisture in woodwork, promote rot and/or provide a desirable environment for pests such as termites. These paints are often referred to as “liquid siding,” “liquid stucco” or “liquid ceramic coatings.”

**Use of encapsulating paint is strongly discouraged by the HDC.**

### Masonry Paint

Refer to *Removing Paint from Masonry and Masonry and Stucco Painting*, page 05-7. **Painting previously unpainted brick or stone is strongly discouraged by the HDC.**

### Metal Painting

The paint selected must be compatible with the type of metal and any existing coatings. In the case of iron-based metals, typically found at railings and grates, paint preparation should include the removal of rust to bare metal, cleaning the surface and promptly applying a rust-inhibiting primer to prevent corrosion.

## Complete Paint Removal

It is important to remember that any method of paint removal can result in harm to historic building fabric. Therefore, complete paint removal from a surface should only occur under limited circumstances. Complete paint removal might be necessary in circumstances in which the existing paint on a surface has completely failed. Examples where complete paint removal would be appropriate include:

- Wholesale blistering or peeling that reveals the underlying substrate
- Continuous patterns of deep cracks in the surface of painted wood
- Windows, doors, or shutters that have been painted shut
- Where necessary to achieve a smooth transition between existing surfaces and a new wood repair element
- At historic building features to prevent deterioration
- Painted masonry at historically unpainted masonry surfaces to prevent deterioration

(Refer to *Exterior Woodwork Checklist*, page 02-6 and *Safety Precautions*, page 01-9.)



## HDC EXTERIOR MAINTENANCE PRINCIPLES

### When is HDC Review Not Required?

The HDC encourages regular, ordinary maintenance of the exterior of buildings and structures throughout the historic district. Therefore, a Certificate of Appropriateness is not required for the following maintenance tasks:

- Ordinary maintenance and repair of any architectural feature which does not involve a change in design, materials, or exterior appearance
- Painting or repainting of non-masonry structures
- Maintenance and repair of a fire wall, chimney, entryway or deck in-kind, including design and materials

### Maintenance Principles

#### *The HDC encourages:*

- Providing non-intrusive repairs, focusing on deteriorated areas, to stabilize and protect the building's important materials and features
- When repair is not possible, replacing in-kind to the greatest extent possible, reproducing by new construction the original feature exactly and using similar techniques to match the original material, size, scale, finish, detailing, and texture
- When replacement in-kind is not possible, using compatible materials and techniques that convey an appearance similar to the original feature, and using materials similar in design, color, texture, finish, longevity, and visual quality to the historic elements
- Utilizing sustainable materials such as wood
- Following all city, state and EPA requirements for safe paint disturbance, preparation and removal
- Preparing exterior woodwork by hand washing with a mild detergent and natural bristle brush, hand scraping and hand sanding or carefully using a mechanical sander on flat wood surfaces without decorative profiles
- Consulting with paint manufacturer to determine the best type of paint for a specific application – Pertinent issues include the material being painted, location, existing paint or coating, and existing chemical treatments
- Following all manufacturers' instructions for preparation, cleaning, application and safety – Verify weather conditions are compatible with the paint label guidelines
- Investing in higher quality paint – These generally cost more initially, but can last significantly longer, saving money long-term
- Painting downspouts, security devices, light fixtures, conduit, wiring, fire escapes, etc. to match attachment surface

#### *The HDC discourages:*

- Introducing modern materials that can accelerate and hide deterioration, or encapsulating historic features
- Replacing original materials with non-traditional materials
- Applying semitransparent stain or varnish at exterior woodwork or opaque stain at building elements unless historically appropriate
- Applying latex or oil-based paint at masonry or stucco (Refer to *Masonry and Stucco Painting*, page 05-7)
- Applying elastomeric or encapsulating paint at woodwork
- Painting traditionally unpainted materials, such as slate, terra cotta, and previously unpainted brick and stone
- Applying chemical paint remover – Can raise grains of some woods, be expensive and potentially volatile; runoff is potentially hazardous and should be collected to prevent harm to children, pets, vegetation, and storm water
- Using a flame tool such as a blowtorch to soften paint – Smoldering sparks can start a potentially devastating fire and lead components in paint can vaporize and create highly toxic fumes
- Sandblasting – It can be abrade a surface and wear away a protective exterior coating
- Using a high pressure water wash – It forces water into open joints wetting interior finishes and structural framing and abrading the exterior surface
- "Dipping" to remove paint on an architectural element such as a shutter, window or door, because of the likelihood of uneven shrinkage of individual parts and disintegration of internal glue at joints

#### *The HDC strongly discourages:*

- Postponing maintenance and repair leading to a condition of demolition-by-neglect

### Paint Removal Safety

Paint removal is potentially hazardous work. Keep children and pets clear of work areas. Consult a professional for work that is unfamiliar or potentially unsafe.

- Paint removal, particularly lead-based paint removal, must comply with City Health Department and EPA requirements – Owners are strongly encouraged to contact the lead safety organizations found in the *Guidelines Introduction*, page 01-9, for additional information prior to completing any work potentially involving lead paint
- Always wear safety goggles and a respirator
- If using heat tools – Users should always wear appropriate clothing, keep a fire extinguisher nearby and monitor areas of work for at least one hour after stopping work
- Paint dust from older buildings can contain lead – Wear a respirator, avoid open food or beverage containers in area of paint removal, thoroughly clean work area and exposed skin, launder work clothes separately



# CITY OF FALL RIVER

## Historic District Commission

### Guidelines for Roofing



*In addition to providing the first line of defense against the weather, roofing can play a significant role in defining a building's style.*

## ROOFING

A building's roof provides the first line of defense against the elements while its design greatly affects the building's overall appearance. Fall River's roofs include a number of features that enhance the overall appearance of an individual building. These features include chimneys, dormers, cupolas, bell towers, and steeples. As a result, a building's roof and associated features are also a typical indicator of its architectural style, a reflection of both its climate and its history. The following functional and aesthetic concerns should be evaluated when considering a new roof or roof alteration:

- Weather-tight roofing preserves a building and provides shelter from storm water, wind and sun
- Roofing and roof features help define a building's character, silhouette and architectural style, with variations adding visual interest along a streetscape and the city's skyline
- The form, color, and texture of the roof and its associated features affect the scale and massing of the building

These *Guidelines* were developed in conjunction with the City of Fall River's Historic District Commission (HDC) and the Planning Department. Please review this information during the early stages of planning a project. Familiarity with this material can assist in moving a project quickly through the approval process, saving applicants both time and money.

Additional *Guidelines* addressing other historic building topics are available at One Government Center, Room 534 and on the Commission's website at [www.fallriverma.org/historic-district-commission](http://www.fallriverma.org/historic-district-commission). For more information, to clarify whether a proposed project requires HDC review, or to obtain permit applications, please call the Planning Department at [frhdc@fallriverma.org](mailto:frhdc@fallriverma.org) or (508) 324-2530 or arrange to meet with staff.

- Retaining historic roof features and accessories can enhance a roof's overall character and appearance
- The addition of non-historic elements to a roof, such as roof decks, solar panels, and equipment should be minimized and shielded from view

## ROOFING MATERIALS

Historically, roofing materials were selected based upon practical and aesthetic criteria including pitch, weather conditions, and the availability of materials and craftsmen. The popularity of architectural styles, from the use of wood shingles for Colonial and Federal style buildings to the use of slate for Victorian styles and masonry buildings, also had a great impact on the selection of roof material. With industrialization at the beginning of the 20th century, new roofing materials were introduced, including asphalt and asbestos-based shingles, as well as varieties of rolled or built-up roofing for flat installations. The variety of metal roofing expanded to include copper, tin, and galvanized sheet steel. In addition, although less common in Fall River, terra cotta and concrete tiles were popular in different periods as well.

Each material provides a specific color, texture and pattern to a roof surface. Slate and wood shingles provide a modulated surface with variations in color, pattern, texture, veining, graining and thickness while metal roofing can provide a ribbed or smooth surface. The three-dimensionality of terra cotta and concrete tile often provide distinct shadows and textures across a roof surface.

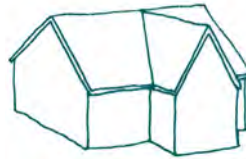
More recently, a larger variety of substitute roofing materials intended to simulate historic materials has been developed, some more successful than others. These include architectural asphalt-composition shingles and fiberglass, metal, tile or recycled rubber shingles intended to evoke the appearance of slate, wood shingle, and terra cotta.



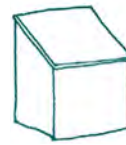
Front Gable



Side Gable



Cross Gable



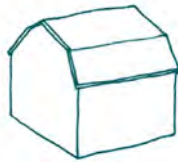
Shed



Mansard



Flat with Parapet



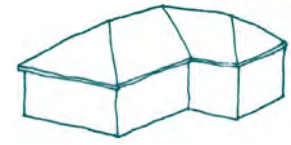
Gambrel



Ridged Hip



Pyramidal Hip



Cross Hipped

## HISTORIC CHARACTER OF ROOF FORMS

The historic form of a roof is critical to the understanding of a building's type and architectural style. Certain roof forms are linked with specific styles, such as mansard roofs with Second Empire style. Alterations to a roof's shape can have a negative impact on the building's historic authenticity and appearance, and can lead to drainage problems or water infiltration. Roof forms can have various pitches and be combined in different manners to provide varied roof types. Some of the most common roof forms found in Fall River are illustrated above.

In addition to its role in defining a building type or architectural style, a roof's pitch or slope, as well as climatic conditions, such as snow loads and high winds, functionally define the appropriate materials for a roof. Low-pitched to flat roofs depend on a continuous or nearly continuous roof surface to minimize moisture infiltration, while moderately to steeply sloped roofs may be roofed with unit materials such as slate and wood shingles.

## INVESTIGATING HISTORIC ROOFING

Some investigation may be needed to determine the historic sloped roof material for a building. A good place to start is in the attic. New roofs are often installed on top of older roof surfaces. Between rafters, older roofs can sometimes be seen. Another area of review is the roof framing, strapping, and sheathing. Because of its weight, slate requires more substantial roof framing, with larger rafters and narrower spacing than wood shingle framing. If the original strapping is visible, there are variations in lath spacing that relate to standard sizes for slate, wood shingles, and other materials. Finally, wood sheathing was often needed in metal and asphalt roof installations, while strapping or boards was used in wood and slate installations.

If physical evidence is not available, investigating documentary evidence such as historic photographs, speaking to neighbors or looking at similar buildings in the area might provide clues about original roof materials. Local resources such as the Fall River Historical Society can offer valuable information. (Refer to *Preservation Organizations*, page 01-15.)

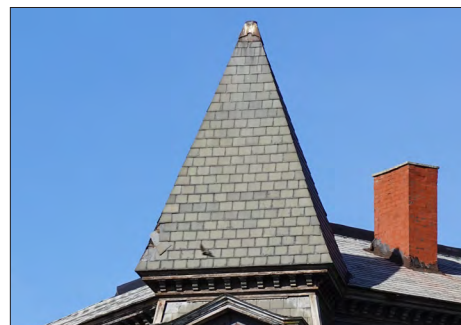
## SLATE

A slate roof can last 60 to 125 years depending on the roof slope, stone properties, installation quality, and regularity of maintenance. Failing slate often slowly delaminates, chips and absorbs moisture, causing the deterioration process to accelerate over time. Problems with slate roofs are typically the result of localized failure, since many of the roof accessories and fasteners do not have the same 100-year life span as the slate itself. To extend the serviceable life of a roof, property owners are encouraged to address localized problems as they become apparent, using a qualified slate roofer.

Typical localized problems and possible repairs for slate:

- Loosening or corroded fasteners for slate or accessories – *Reattach or replace fastener*
- Split or cracked slate – *Install sheet metal under shingle, fill split or hole with roofing cement*
- Missing or damaged slates or roof accessories – *Replace to match original*

If over 20% of the roof slates are damaged or missing, replacement of the roofing might be warranted. In this case, property owners are strongly encouraged to make every attempt to match decorative patterns with replacement materials. When replacing sections of a slate roof, it may be possible to salvage and reuse some of the existing slate. Many imitation slate products have unknown reliability and lifespan, therefore, the HDC recommends retaining slate roofs or, if necessary, replacing them in-kind if possible, or in a visually similar material if not possible. It is critical to select a compatible flashing material and fasteners with a life span similar to or longer than the new roofing.



*Deteriorated or broken slates should be replaced as quickly as possible to reduce potential interior water damage.*





Most mansard roofs were historically slate. This example has wood shingles.

## WOOD

Wood shingles are typically made from cedar, cypress, redwood, oak, elm or white pine. While less common in Fall River today, historically they represented a common sloped roofing material for Colonial and Federal style buildings. A wood shingle roof can last 30 to 60 years depending on the roof pitch, quality of materials, and installation. However, like all exterior wood installations, a shingle roof is subject to deterioration, rot, splitting, warping, and eroding. In many cases, wood shingle roofs are replaced at the first indication of a localized problem, even when regular maintenance or a less intensive repair would be sufficient. Common locations of failure are at roof accessories including fasteners, flashings, and gutters, which might have a shorter life span than the roofing surface. To extend the serviceable life of a roof, localized problems should be addressed as they become apparent.

Typical localized problems and possible repairs for wood shingles:

- Loosening or corroded fasteners for shingles or accessories – Reattach or replace fastener
- Split or punctured shingle – Install sheet metal under shingle, fill split or hole with roofing cement
- Missing or damaged shingles or roof accessories – Replace to match original
- Moss, algae, or fungi on surface – Trim back adjacent trees allowing sun to dry out roof surface; investigate fungicide application; check attic for adequate ventilation

## LIFE-CYCLE COST OF ROOFING MATERIALS

With regular maintenance, traditional historic roofing materials perceived as “more expensive” (such as slate) often have substantially longer lifespans than other forms of roofing. As a result, they do not require replacement as often and may have a lower life-cycle cost than less expensive materials such as asphalt. Full life-cycle costs are also key when considering a building’s sustainability goals. **Overall, a material’s longevity, sustainability, and aesthetic qualities often add to a property’s value.**

## ASPHALT

Asphalt became a popular roofing material at the beginning of the 20th century, providing a relatively inexpensive and easily installed roofing material. Early asphalt roofing was generally made of asphalt-saturated felts in a variety of shapes, styles, textures and colors. Today, asphalt shingles are made generally as three-tab with fiberglass as a single layer of material, or architectural shingles, which include multiple layers of material with an appearance to simulate wood or slate.

An asphalt shingle roof can be expected to last from 15 to 30 years. Architectural shingles last longer due to their multiple layers. Over time, asphalt shingles can curl, lose their mineral coating, be dislodged by wind or become brittle.

Typical localized problems and possible repairs for asphalt:

- Split or puncture – *Install sheet metal under shingle, fill split or hole with roofing cement*
- Missing or damaged shingles or roof accessories – *Replace to match original*
- Moss, algae or fungi on surface – *Trim back adjacent trees to allow sun to dry out roof surface*

If over 20% of the asphalt shingles on a roof slope are damaged or missing, replacement of the roofing might be warranted. Property owners are encouraged to select asphalt colors that visually suggest the original roof material, i.e. weathered wood or slate, in shape, texture and pattern.



Asphalt is a common replacement material for state or wood shingle roofing.

## METAL

Metal became a popular material for roofing after sheet metal production was expanded after the mid-19th century, and can be found on commercial and industrial buildings, as well as some residences and residential outbuildings. Traditional sheet roofing metals include lead, copper, zinc, tin plate, tern plate, and galvanized iron. Some metal roofs require regular painting to minimize the potential for corrosion. If painted, color should be appropriate to the building's architectural type and style and should have a matte or low-gloss finish. Traditional colors include silver, grey, or green.

On shallow-pitch roofs such as those of porches, cupolas or dormers, small rectangular pieces of flat seam metal roofing were installed with edges crimped together and soldered to form a weather-tight surface. On steeper pitched roofs, long continuous seams were used, typically in a standing seam configuration, providing regular ridges down roof slopes. Corrugated or other paneled metal roofing can be found on some more utilitarian buildings and auxiliary buildings, such as sheds and garages.

Deterioration of the metal surface tends to occur from wearing of the protective painted or galvanized surface, chemical action, rusting, pitting or streaking, airborne pollutants, rain, or material acids or galvanic action. Galvanic action occurs when dissimilar metals chemically react with each other causing corrosion, and can result at adjacent dissimilar metals, such as fasteners or at non-adjacent metals (such as roof cresting), via rainwater. If the roof is generally rusting, splitting, pitted, severely buckled or warped, or many of the seams or edges are open or disfigured, replacement of the roofing might be warranted. If considering replacement, property owners are encouraged to make every attempt to match the material and seam patterns with the replacement material.

Typical localized problems and possible repairs for metal:

- Worn paint, galvanizing or coating – *Repaint*
- Slipping sheet, panel, open seam or open solder joint – *Refasten and/or re-solder*
- Isolated rusting or holes – *Replace to match original*



*This copper, flat seam metal roofing is formed from pieces of metal that are joined along a seam and soldered together.*

## FLAT ROOFING SYSTEMS

Although very few roofs are truly “flat”, low-sloped roofs, generally defined as a pitch less 3:12 (3-inch rise for 12-inch run), require a watertight roofing system. There are a variety of flat or low-slope roof systems including: metal roofing, built-up roofing, single-ply roofing, modified bitumen roofing, and green roof systems. By contrast, steeper pitched roof systems generally employ shingles that shed storm water.

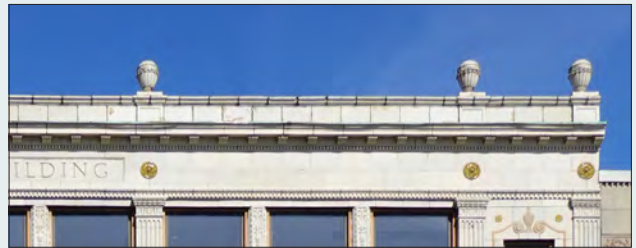
Typical localized problems for flat roofs and possible repairs include:

- Splits, punctures or cracking of surface – *Patch roof*
- Standing water or poor drainage – *Remove roof, taper substrate to drain and patch*

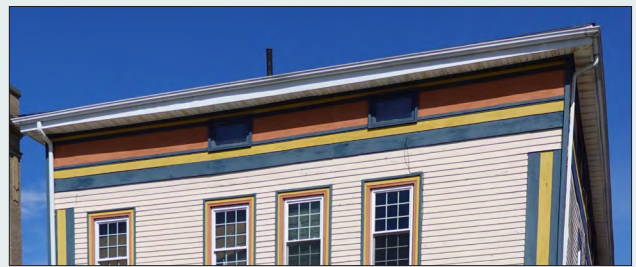
Although uniformly flat roofs are more common in Fall River's commercial buildings, areas of flat roofing are found in some historic residential roof forms such as mansard roofs. When selecting roofing materials, the materials and design should address the building's roof drainage and specific details of the existing conditions including attachment, substrate and weight limitations. The installation of light-colored roofing to minimize solar heat gain is permitted for multi-storied, flat-roof structures only when the surface is not visible from the public way. (Refer to *Roof Decks*, page 03-7.)

Flat roofs can also be an opportunity to utilize alternative energy technologies such as solar collectors and green roof installations. In exploring the use of alternative energy technologies in historic buildings, the HDC considers how proper installation and selection of systems can improve energy-efficiency without adversely affecting a building's historic character. This generally requires concealing these systems, as well as all building equipment, behind parapets where they are not visible from the public way. (Refer to *Roof Mounted Equipment*, page 03-9.)

**Parapet:** The portion of a wall that projects above an adjacent roof surface.



**Cornice:** The projecting horizontal moldings toward the top of the building wall at the roof edge.







*This house features three dormer windows with different roof forms: a standard gable, a gable with flared eaves, and a dormer with a hipped roof. Also note two prominent brick chimneys.*

## CHIMNEYS

Chimneys were designed to complement the style of a building and period of construction. In Fall River, most are constructed of brick or masonry, some of which have been covered by stucco. The rhythm and placement of chimneys typically reflect the internal organization of a building and represent an important building feature. Most building types and styles have square or rectangular chimney shafts, sometimes with molded tops. Victorian period chimneys can include decorative detailing including corbelling, varied patterns, undulating and molded surfaces, and decorative terra cotta chimney pots. Though routine maintenance and repair of a historic chimney does not require a Certificate of Appropriateness from the HDC, removal of historic chimneys is only approved by the HDC if they are structurally deficient. The use of veneer brick chimneys is only appropriate in unique circumstances and is discouraged.

## DORMERS

Dormers, also known as dormer windows, were traditionally used to let light and ventilation into the attic and to create habitable space. At the exterior, they protrude from sloped roof surfaces and visually break up large roof surfaces. Dormers can have various roof shapes, but in the Fall River they typically have a gable, hip, or shed roof form. Historically, the overall height and proportions of dormers is determined by the building style, with upper floors tending to have smaller windows than lower floors.

When considering a new dormer, particularly on historic buildings, property owners are encouraged to review historic dormers at comparable buildings of the same style and period. It is important to keep in mind a poorly scaled or detailed dormer can drastically change the appearance of an otherwise well-proportioned house and have an adverse impact on the architectural appearance.

### NEW DORMER DESIGN PRINCIPALS

- Dormers should be located on roofs with a minimum slope of four-inches of rise in twelve-inches of run, set back a minimum of twelve-inches from the face of the wall below
- Dormers should not be visually overwhelming or exceed a third of the area of any roof slope, and individual dormers should appear as individual objects on the roof
- Small scale, single-window dormers are most appropriate for most historic buildings, and should be used for street-facing roof slopes
- Long shed-roof dormers should not be visible from any street and can include grouped windows, potentially separated by siding, shingles or stud pockets
- Dormer windows generally have vertically proportioned glass panes and shorter and narrower sash than windows at floors below – Required egress windows should be located at an inconspicuous gable end and not in a dormer or visible from the street
- Single window dormers should include a stylistically-appropriate, substantial casing and trim assembly extending from window to dormer corner edge, with the overall dormer width matching width of window openings below – Siding at the front face of a single window dormer is not appropriate

### DORMER MODIFICATIONS FOR FIRE ESCAPES

Several of Fall River's larger homes have been converted into multi-family residences, necessitating the need for a secondary means of egress from upper floors. This has resulted in the modification of dormer windows to provide secondary exists to access fire escapes.

Although the Building Code guides the placement and size of secondary exits, every effort should be made to minimize their view from the public right-of-way. This typically includes locating secondary exits on the rear elevation or as far back on the side elevation whenever possible. To the extent possible, the dormer modification should minimize alteration of the roof and eaves and the egress door should maintain the appearance of a window.

#### Dormer Design, Ask the Following Questions:

- Does the overall width of the dormer (windows plus cheeks) match the width of the windows below?
- Do the cheeks look like a window casing or little walls?
- Do the sideboards follow the house roof slope?
- Is the dormer roof sensibly sized?
- Is the selected trim appropriate for the building style?





*This slate, mansard roof includes three ornate dormer windows and a projecting wood eave. It is topped by delicate metal cresting.*

## ROOF FEATURES AND ACCESSORIES

Roof features are functional and sometimes decorative elements that define the profile of a roof against the skyline and should be appropriate to the building's style. Historic rooftop features include ridge caps, cresting, finials, roof hatches, flashing, gutters, downspouts, weather vanes, widow's walks, and bell towers. More recent additions include skylights, solar panels and mechanical and television equipment. In its review of new roof features and accessories, the HDC considers the appropriateness to the building, existing features and accessories, level of visibility, as well as the visual impact to the roof character and appearance. Property owners considering installation of new roof features or accessories should make every effort to minimize their visibility and the appearance of clutter in order to improve the likelihood of approval.

*This cupola has a deep, projecting, bracketed eave similar to the one at the main roof, below.*



## Cupolas

A cupola, also known as a monitor or belvedere, is a structure that projects up from a roof, is used for ventilation with louvers, or as a lookout with windows. They are often found on agricultural buildings, such as carriage houses or barns to provide ventilation for the animals housed below, but they can also be found in urban areas as a decorative feature on an important residential, institutional, or civic building.

## DEFINITIONS

**Bell Tower** - A structure that typically projects up through a roof or an outside wall of a church building housing bells, with wall openings on the sides to let out the sound

**Steeple** - The top of a tower that diminishes in size in stages, often found at a church

## Widow's Walk and Roof Railing

A widow's walk, also known as a captain's walk or roof walk, is a roof platform, often accessed by a cupola, surrounded by a wood or iron railing. Although traditionally utilized for viewing ships at sea, they were often a decorative feature of the Italianate period, located on high-style residential or institutional buildings, and often accessed by a cupola. Similar to a window's walk which includes a platform, Fall River has some high-style Federal and Greek Revival buildings that have a roof railing, most often found along the transition from a low-pitch to a higher-pitch roofing surface or at the perimeter of a flat roofing surface.

Although widow's walks and roof railings are found historically at specific building types and styles, they do not necessary meet the requirements of a roof-deck railing. Therefore, it might not be safe to occupy the space. However, the HDC does not encourage the modification of a historic roof railing to provide code-compliant guardrails. In addition, in reviewing a new widow's walk or roof railing, the HDC considers the building's style and proposed design to determine whether it would be appropriate. The HDC generally does not approve the installation of a new widow's walk or roof rail at a historic building without appropriate documentation of a prior installation.



*A widow's walk with a wood railing is located at the top of this roof.*



*This roof deck, located on the rear wing of the house, is set back on one side and is minimally visible from the public way.*

## ROOF DECKS

A roof deck provides a space that can be occupied above a building's roof surface, and is more appropriate on flat or low-sloped roof surfaces where its visibility will be minimal from the ground. There are generally two types of roof decks, those that are:

- Tiled walking surface resting directly on the roof surface – Generally found at concrete slab construction
- Wood-framed structures raised above the roof surface by wood posts located around the perimeter of the deck – Generally found at roofs supported by wood rafters

When considering the installation of a roof deck, it is important to understand the building's structural system. The type and capacity of the structural system will:

- Identify whether surface paving or a raised deck is more appropriate
- Identify best post and attachment locations for raised decks
- Ensure the deck can be adequately supported by the building, i.e. tile flooring weighs substantially more than wood decking

In addition to understanding the appropriateness of a roof deck based upon its potential visibility, it is critical to ensure that the deck will not compromise the ability of the roof to perform its most critical function, keeping storm water out of the building. Prior to installing a deck:

- The weather-tightness of the roof should be confirmed as well as its anticipated lifespan – It is far more complex to address a leak in a roofing system if it is partially or completely obscured by a deck
- The roof pitch should be adequately sloped to the drains to prevent pooling on surfaces, particularly at tile roofs – Pooled water can migrate under tile through small mortar cracks, freezing and cracking tile in the winter

- An adequate weather-stop must be present at access door locations to prevent rainwater or melting snow from migrating into the building

Another potential concern with wood-framed decks is that because they are raised above the roof surface, they tend to be more visible from ground level, particularly as the roof below slopes to drain. This tends to be most problematic at roof slopes with greater pitches or slopes, and can result in the exposure of the deck framing from the ground if not sufficiently pulled back from the roof edge.

Typically, the most visible portion of a roof deck is the railing. Although the Building Code dictates the required height of railings, their visibility can be minimized if concealed behind a parapet or if they are located away from the outside building walls. In addition, the use of visually minimal railing materials such as metal and cable rail systems tends to be less prominent than wood railing.



*This penthouse houses a stair to provide access to the roof, with the size minimized by the sloped roof form. The penthouse is held away from the roof edge, minimizing its visibility from the public way.*

## Rooftop Penthouse

A penthouse is a small addition on top of a roof providing access to a roof level, typically housing an access stair and/or an elevator, but not habitable rooms. Penthouses should be designed in a manner in keeping with the architectural qualities and materials of the existing building upon which it is located or as part of the overall design of a new building. In addition, penthouses should be located a minimum of ten-feet from outside building walls. (Refer to *Compatible Design Principles, Guidelines for New Construction and Additions*, page 08-2.)

In some cases, it is not possible to access roof decks by penthouses and an exterior stair is preferred instead. In the same manner as decks, exterior stairs are subject to HDC review, and property owners are encouraged to minimize visibility of stairs and associated railings from the public way.

## ROOFTOP ADDITIONS

In cases where a property owner is considering adding habitable space at the roof level, such as a bedroom, office, bathroom or kitchen facilities, it is considered a rooftop addition and subject to different Building Code requirements. Refer to the *Guidelines for New Construction and Additions* for additional information regarding rooftop additions.



*Stepped flashing is often installed in locations where a roof surface intersects a wall surface to prevent moisture from entering between the two surfaces.*

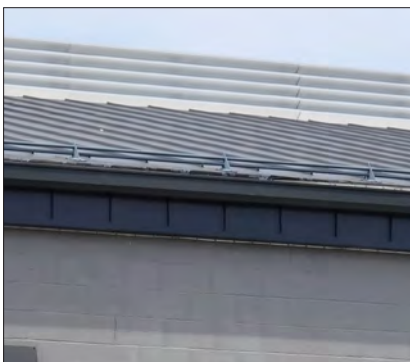


## Flashing

Flashing is typically made of thin sheet metal formed to prevent water from entering a building at joints, intersections and changes of pitch. It is installed around chimneys, parapets, dormer windows, roof valleys, vents and intersections of porches, additions, and projecting bays. Flashing often fails before roof surfaces, particularly at more durable roofing such as slate, wood shingles, or terra cotta tile. Failures result in interior leaks and deterioration of framing. If the flashing deteriorates, it is possible for a qualified roofer to replace it without replacing the entire roof.

When replacing flashing or installing a new roof, it is important to select a flashing material that has an anticipated life span similar to or longer than the roofing. Copper, terne, steel, lead, and aluminum are all used for flashing. The longevity of each material is based upon its thickness, its propensity for deterioration from environmental conditions, and whether it is galvanized, treated, or coated. Generally, copper or lead-coated copper has the longest life span, followed by stainless steel, with aluminum being highly susceptible to punctures, tears, and galvanic reaction with other metals and some roofing materials. It is important to verify that flashing materials are sympathetic and compatible with existing roofing materials, including fasteners, to prevent premature deterioration.

*The snow guards, located near the eaves, prevent snow from sliding off the roof surface. Snow guards reduce potential injury and damage and the layer of snow can act as insulation*



## Snow Guards

Snow guards are typically cast metal or bent wire devices arranged in a staggered pattern near an eave to prevent large masses of snow from sliding off a roof slope. Another form of a snow guard is spaced brackets supporting metal rods above the roof surface. Both types of snow retention can protect eaves, cornices and gutters, and take advantage of the insulating effect of snow.

## Skylights and Roof Hatches

Skylights were historically used in commercial and warehouse buildings. Advancements in technology allowed them to be installed at residences. Similar in form to a skylight, a roof hatch can provide access to a roof for snow removal and maintenance, as well as provide a means of ventilating attic spaces. The installation of new skylights and roof hatches should minimize alteration of the roof structure with the long dimension oriented down the roof slope. Skylights and roof hatches should be hidden or minimally visible from public view, and should not disturb historic roof materials such as slate or terra cotta tile, nor require the significant modification of existing roof framing.



*The skylight is installed at a rear of the side elevation and is parallel to and only few inches above the roof surface. The glass and frame color are compatible to the roof material, minimizing its visibility.*

## Gutters

Gutters typically are located near or along the bottom edge of a roof slope to collect rainwater. Although some Fall River buildings were not designed with gutters, installing them can significantly reduce water damage to building walls and foundations. Built-in gutters are often not visible from the ground, and are typically within or behind architectural features such as cornices or parapets. Pole gutters are located near the bottom edge of a roof slope and project perpendicularly to the roof surface. Both built-in gutters and pole gutters are formed of flashing materials typically wrapped around or within wood enclosures.

Hanging gutters are located just under the roof slope edge and are usually metal with half-round or profiled cross sections. Gutter materials have different life spans. Generally, copper has the longest potential life span, followed by steel, with aluminum being highly susceptible to punctures, tears, dents and galvanic reaction to other metals. When installing or reinstalling gutters, property owners should reproduce any special or historic molding, strap or bracket used to support or attach a gutter to a building and repair or replace wood eave detailing and trim.

*This copper gutter is located along the roof edge and is connected to the downspout with an elbow.*







*This downspout is painted to match the adjacent wall surface. The downspout extension directs storm water away from the building foundation.*

## Downspouts

Downspouts, also known as rainwater conductors, conduct a gutter's water down the face of the building to the ground or a drainage system via a cast iron boot and are generally surface mounted to a building's exterior. Similar to gutters, downspouts can be fabricated of copper, galvanized metal, or aluminum, in a round or rectangular profile. An advantage of a lead-coated copper or galvanized metal downspouts is that they can be painted to match the building colors.

When adding downspouts to a structure for the first time, they should be arranged in an orderly fashion and mounted to the building rather than a porch post or column.

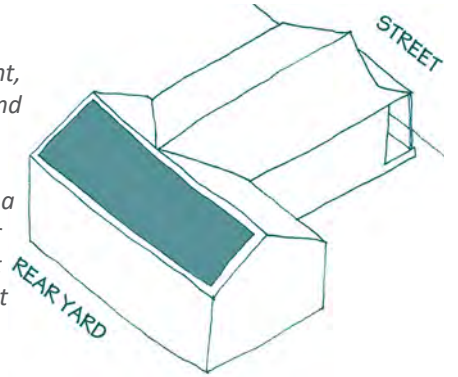
*Rain barrels can collect storm water for future use in the garden, reducing run-off into the river. Property owners are encouraged to select neutral colors and shield rain barrels from public view with plantings to the extent possible.*



## Green Roofs and Rain Barrels

Much of the rain that falls on a roof surface is typically diverted to a gutter, then a downspout, and from there, discharged at the perimeter of a building or into a storm sewer. Reducing the amount of water that reaches the gutter or collecting the water as it is discharged from the downspout, prevents the soil around a building from becoming saturated, potentially impacting the foundation. In addition the sewer system is less likely to become overwhelmed in a significant storm. One of the means of controlling the quantity of water diverted to a gutter system is installing a green roof so that the planted material is not visible from the public way. An option for flat and sloped roofs is installing rain barrels at the bottoms of downspouts. Rain barrels collect storm water discharged from downspouts. They typically include a spigot near the bottom for a hose hook-up, allowing the collected storm water to be used for watering gardens and lawns.

*Placement of roof-mounted equipment, solar collectors, wind turbines, skylights and roof hatches is encouraged facing a rear yard wherever possible. If it is not possible, placement as far back on a side roof slope as possible is preferred.*



## ROOF-MOUNTED EQUIPMENT

Roof-mounted equipment including mechanical equipment, vents, television dishes and antennae, and mobile telecommunication equipment are all examples of modern mechanical equipment and roof penetrations that can affect the historic integrity of a building. Although it is understood that some roof penetrations are required for items such as plumbing vents, property owners are encouraged to limit the amount of rooftop equipment and penetrations, and minimize the overall appearance of clutter. For more information on additions that change the appearance of an existing roof, refer to the *Guidelines for New Construction and Additions*.

## RENEWABLE ENERGY

Solar collectors provide a renewable energy source. The City of Fall River encourages solar collectors for space heating, hot water, and electricity. However, property owners are encouraged to locate solar collectors where they are hidden or minimally visible from public view. To minimize their visibility, the frame and panels should be the same color as the roof structure, and located parallel to and as close to the roof structure as possible. The proximity and seasonal shading characteristics of adjacent and neighboring trees and structures should also be considered to ensure sufficient year-round solar exposure to justify the expense of installation. (Refer to Roof-Mounted Equipment diagram above for placement.)

Similarly, wind turbines are a renewable energy source. However, because turbines need to be located to benefit from consistent breezes, they are often taller than adjacent buildings and highly visible. Similar to solar collectors, the visibility of wind turbines should be minimized from public view.

An "invisible" form of renewable energy is geothermal heating and cooling. Geothermal systems use the thermal energy generated and stored in the earth to heat/cool a building through a series of pipes bored into the ground. Typically, the only component of the system that is visible at the exterior of a building is a valve access cap, generally located flush with the ground. (Refer to *Alternative Energy Sources*, page 01-7.)



Massive central chimneys are often found at Fall River's oldest buildings.

## ROOF SYSTEMS AND STORM PREPAREDNESS

Some of the greatest damage to buildings during major storms, such as winter nor'easters and Atlantic hurricanes, generally occurs as a result of high winds that compromise the roof system by uplift, causing the entire roof or roof components such as slates to blow off. Although some preventative measures can be taken to existing roof systems, some improvements cannot be completed unless a new roof is installed or an existing roof replaced.

*Storm preparedness options for roofs include:*

- Adding bracing or additional structural elements to roof framing and gable ends – *Consultation with an architect or engineer might be required*
- Strengthening connections between roof framing elements using hurricane straps, clips, sheathing attachments, etc. – *Consultation with an architect or engineer might be required*
- Repointing chimneys with mortar
- Fastening gutters, downspouts, and snow guards securely to building
- Verifying connectors at roof decks are secure and moving all furnishings to the building's interior
- Ensuring all roof mounted equipment is securely fastened and will not become airborne
- Installing a secondary roofing system such as self-adhered roofing applied to plywood under wood shingles with a breather system, beneath slate, tile or metal roofing in case the primary roof is damaged – *Verify material installation requirements for primary roofing*
- Sealing and protecting skylights, cupolas, roof vents, including gable-end vents and roof hatches prior to a storm to minimize wind-driven rain and uplift damage
- Installing metal roofing and flashing with double-lock seams and edges and closely spaced, high-strength fasteners
- Avoiding gravel or other loose material on rooftops that could become airborne in the event of a storm
- Reviewing the underside of roofs from attic for visible signs of moisture or daylight indicating potential cracks or holes, paying particular attention at roof penetrations such as chimneys and vents
- Installing ice and water shields along roof edges and changes in slope such as ridges and hips

## HDC CRITERIA FOR ROOF REVIEW

When evaluating a proposed repair, modification or replacement of a historic roof, chimney, dormer or roof feature, the HDC's goal is to preserve the integrity of the remaining historic fabric in Fall River's Historic District to ensure continued access to this shared heritage. One of the major factors in the review process is the property's historical and/or architectural value as determined by the historic designation. The more significant the property, the more critical its authenticity.

- **Contributing Properties** — Restoration of historic roofs, chimneys, dormers and roof features is encouraged, particularly at street-facing facades, with more flexibility possible at secondary elevations with limited visibility from the street
- **Non-Contributing Properties** — Restoration of historic roofs, chimneys, dormers and roof features is encouraged, with greatest possibility for flexibility for alterations, particularly at secondary elevations
- **New Construction and Additions** — Roof forms appropriate to the architectural style and compatible to adjacent construction is encouraged, with the screening of all rooftop amenities and amenities from the public right-of-way

When considering substitute materials, care is recommended since they might not have the longevity advertised, may not be appropriate for weather conditions and can potentially damage historic building fabric.

### When is HDC Review Not Required?

A Certificate of Appropriateness is not required for:

- Ordinary maintenance and repair of a fire wall or chimney in-kind, including design and materials
- Re-roofing of a building or structure while maintaining the roof plane and material regardless of color
- Roof mounted equipment on a single-family or two-family residence where the equipment is not visible from the public way
- Construction of chimney caps or bishop pots in masonry or bluestone, or constructed of another material with a black, dark brown, or copper finish

## HDC CRITERIA FOR ROOF REVIEW (CONTINUED)

### Roof Form

#### *The HDC recommends:*

- Maintaining a building's roof slope appropriate to the architectural style at primary and ancillary structures
- Designing new buildings with a roof slope similar to existing buildings on a site and neighboring construction (Refer to *Guidelines for New Construction and Additions*)

#### *The HDC discourages:*

- Modification of the roof plane for the installation of insulation or any other purpose

### Slate Roofing

#### *The HDC recommends:*

- Localized repairs rather than fully replacing historic material where possible; addressing localized issues as they arise to avoid larger-scale problems
- Matching the color, shape, texture, and pattern of the historic material when repairing or replacing slate
- Matching appearance of historic material with substitute materials, such as slate imitation products or architectural or commercial-grade, asphalt shingles in slate color, shape and pattern, when replacement with slate is not feasible
- Selecting compatible flashing material and fasteners with a lifespan similar to the new roofing

#### *The HDC discourages:*

- The permanent removal of slate roofs

### Wood Roofing

#### *The HDC recommends:*

- Localizing repairs rather than fully replacing historic material where possible; addressing localized issues as they arise to avoid larger-scale problems
- Matching the shape and pattern of the historic material when repairing or replacing wood shingles
- Installing weathered wood colored, architectural shingles, when replacement with wood is not feasible
- Selecting compatible flashing material and fasteners with a lifespan similar to the new roofing
- Keeping nearby vegetation trimmed away from the roof to avoid issues with moisture damage

### Asphalt Roofing

#### *The HDC recommends:*

- Matching the color, shape, texture and pattern of original historic material when repairing or replacing asphalt shingles (Refer to *Investigating Historic Roofing*, page 03-2)
- Keeping nearby tree limbs and vines trimmed away from the roof to avoid issues with moisture

### Metal Roofing

#### *The HDC recommends:*

- Matching material, color, seam patterns, and edge and ridge details of historic metal when replacing or repairing metal roofing to be sympathetic to the existing building, while minimizing joints and potential glare

- Using flashing with a lifespan compatible to the roofing material to avoid need for premature repairs
- Considering the level of visibility and location of roofing when evaluating substitute materials
- Using metal roofing panels that are flat between the primary ribs, with no striations or pencil ribs
- Installing bubbled ridge caps with metal roofing, or standing seam ridge caps with the lowest profile possible
- Minimizing the use of pre-manufactured metal roof details including ridge, hip, and roof edges

#### *The HDC discourages:*

- The installation of corrugated or similar sheet metal roofing at locations other than secondary buildings such as garages, sheds, and outbuildings

### Flat Roofing Systems

#### *The HDC recommends:*

- Installing historically appropriate roofing, including material and color, at all visible roof surfaces
- Installing a roof system that is appropriate for climatic conditions and snow loads
- Ensuring the roofing is installed with adequate slope to drain
- Installing light-colored roofing to minimize solar heat gain where not visible from the public way
- Using alternative technologies, when appropriate, in areas that are not visible from the public right-of-way and do not adversely impact the appearance, structure or moisture-performance of a historic structure

### Chimneys

#### *The HDC recommends:*

- Retaining and properly maintaining historic chimneys and detailing, even in instances where the interior of the chimney has been removed
- Placing new chimneys in a location appropriate to the building's architectural style, with a brick, stone, or stucco finish if visible from the public way – *Clad metal flues in brick, stone or stucco for a historic appearance*
- Detailing chimneys with the height, spacing and materials appropriate to the building style and to meet code requirements
- Installing a dark colored projecting chimney cap
- Extending chimneys on outside building walls to grade
- Installing flue extensions of clay tile or galvanized metal left natural or painted black

#### *The HDC discourages:*

- Replacing a historic masonry chimney with a framed chimney covered with brick or stone veneer
- Removing or relocating exterior portions of historic wood or gas burning chimneys
- Using a cantilevered stack emerging from the outside wall of a house for a gas-stove or fireplace



## HDC CRITERIA FOR ROOF REVIEW (CONTINUED)

### Dormers

#### **The HDC recommends:**

- Maintaining existing dormers
- Reconstructing missing or previously modified dormers with documentation
- Constructing a new dormer that is appropriate for the architectural style of the building (Refer to *New Dormer Design Principals*, page 03-5)
- Constructing a new dormer that is located in a way that is logical for and proportionate to existing architectural style – with attention to size, location, rhythm, spacing, symmetry and materials

#### **The HDC discourages:**

- Covering the roof almost entirely with dormers
- Large dormers that cover most of the roof
- Oversized dormers that are wider than the window(s) below
- Modifying dormers for fire escape egress
- Using a 45-degree roof pitch on a dormer
- Roof slopes less than four-inches of rise in twelve-inches of run
- Wide cheek walls
- Extending the dormer to the face of the wall below
- Siding anywhere above the window head except in the pedimented portion of a gable-front dormer

### Widow's Walk and Roof Railing

#### **The HDC recommends:**

- Maintaining historic widow's walks and roof railings - Refer to *Guidelines for Exterior Woodwork*
- Regular repainting of wood and metal components - Refer to *Exterior Paint*, page 02-14

#### **The HDC strongly discourages:**

- Installing a widow's walk or roof railing where it did not exist historically

### Cupola

#### **The HDC recommends:**

- Maintaining historic cupolas - Refer to *Guidelines for Exterior Woodwork* and *Guidelines for Windows and Doors*

#### **The HDC discourages:**

- Installing a cupola where it did not exist historically

### Flashing

#### **The HDC recommends:**

- Installing any new or replacement flashing with a life span longer than or equal to the life span of the roof material

- Installing flashing compatible with all roof materials

### Snow Guards

#### **The HDC recommends:**

- Retaining original snow guard system and appearance

### Gutters

#### **The HDC recommends:**

- Retaining original gutter system, appearance, and materials when possible
- Installing plain, half-round gutters
- Cleaning gutters regularly, typically each spring and fall
- Anchoring gutters securely to minimize snow and ice damage

### Downspouts

#### **The HDC recommends:**

- Retaining original downspout or, if necessary, replacing with new of similar size, shape, texture, and pattern
- Painting of downspout to match adjacent wall color
- Cleaning regularly, typically each spring and fall

### Roof Decks and Penthouses

#### **If considering a roof deck, the HDC encourages:**

- Locating roof decks on flat, or low-sloped roof surfaces, preferably behind a parapet
- Installing roof decks in a manner that does not damage historic building materials
- Concealing deck framing, railing, roof decks, and other non-movable furnishings from the public right-of-way
- Minimizing the size of the penthouse for required stair and/or elevator access
- Selecting exterior materials for roof decks that minimize their visual prominence
- Minimizing visibility of exterior stairs

### Roof Mounted Equipment

#### **The HDC recommends:**

- Installing solar collectors in a manner that is not visible from the public right-of-way
- Replacing existing or installing a new skylight or roof hatch with components that are relatively flat, minimally visible, sympathetic to and compatible with the existing roofing materials
- Minimizing the visibility of all rooftop equipment from the public way including mechanical, television, and telecommunications equipment

#### **The HDC discourages:**

- Installing new roof mounted equipment in a manner that is visible from the public right-of-way or visually prominent or highly reflective equipment



# CITY OF FALL RIVER

## Historic District Commission

### Guidelines for Exterior Woodwork

#### EXTERIOR WOODWORK

Wood siding, shingles, cladding and trim is used extensively on many of Fall River's residential buildings and to a lesser extent on its commercial buildings. Exterior woodwork serves both functional and aesthetic purposes. Functionally, exterior woodwork in the form of cladding acts as the skin of a building, shedding water and deflecting sunlight and wind. Aesthetically, it is an important design feature that can be applied as siding, shingles, ornamental trim and as larger elements such as porches.

Exterior woodwork and cladding:

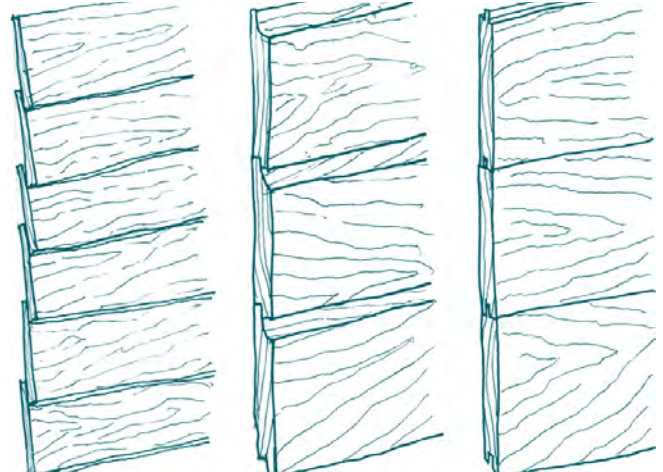
- Establishes a weather-tight enclosure, providing protection from rain, wind and sun
- Are affected by temperature variation and building movement
- Establishes a building's scale, mass and proportion, adding visual interest to the streetscape
- Acts as important design features, helping to define a building's architectural style while adding pattern and casting shadows on wall surfaces

With proper maintenance, exterior wood elements can last for centuries; however, improper maintenance can result in problems and deterioration from water, fungus, mold and insects. One of the most maintenance tasks is regular repainting. (Refer to *Exterior Paint*, page -02-14.)

While it may be tempting to install synthetic forms of woodwork and cladding, they are also susceptible to deterioration, depending on their properties and the installation conditions.

These *Guidelines* were developed in conjunction with the City of Fall River's Historic District Commission (HDC) and the Planning Department. Please review this information during the early stages of planning a project. Familiarity with this material can assist in moving a project quickly through the approval process, saving applicants both time and money.

Additional *Guidelines* addressing other historic building topics are available at One Government Center, Room 534 and on the Commission's website at [www.fallriverma.org/historic-district-commission](http://www.fallriverma.org/historic-district-commission). For more information, to clarify whether a proposed project requires HDC review, or to obtain permit applications, please call the Planning Department at [frhdc@fallriverma.org](mailto:frhdc@fallriverma.org) or (508) 324-2530 or arrange to meet with staff.



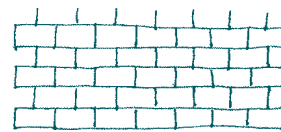
Clapboard Siding

Drop-Lap Siding

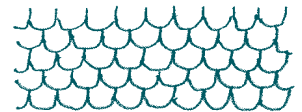
Flush Siding

#### Wood Siding Types

Use of wood siding is widespread on the Colonial Revival and Victorian era buildings of Fall River, particularly clapboard siding. Clapboard siding (also known as weatherboard or beveled siding), is made from long boards, tapered across the width. Flush siding is composed of tongue-and-groove boards of uniform width that are stacked and form a uniform surface.



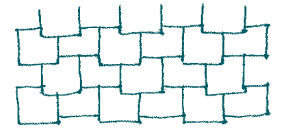
Chisel or Bevel



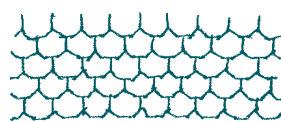
Fishscale



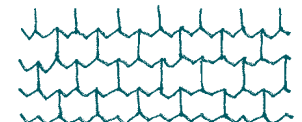
Diamond



Staggered



Octagonal



Sawtooth

#### Shingle Types

Decorative wood shingles provide a highly textured wall finish and were used as a cladding material most often in historic Fall River homes of the Victorian era. Similar to clapboard siding wood shingles are tapered and installed in an overlapping pattern with staggered joints to minimize potential moisture infiltration.



Leaking plumbing, including exterior hose bibs, can regularly expose woodwork to moisture, eventually resulting in rot. Wet wood can also be a desirable home for pests such as termites.

## EXTERIOR WOOD REVIEW

Property owners may not notice their exterior woodwork unless a problem occurs, or there is desire to improve the appearance or reduce maintenance. Typical exterior woodwork concerns include lack of regular maintenance, peeling paint, rot or deterioration, infestation or loose, cracked, or missing elements. Hiding these problems with materials such as vinyl without addressing the root cause of the problem will result in further deterioration.

Even when poorly maintained exterior wood appears severely deteriorated, it is often not beyond repair. In addition, a deteriorated component or area typically does not necessitate the replacement or covering of all exterior woodwork. In most instances, selective repair or replacement of damaged parts and implementation of a regular maintenance program is all that is required. Full exterior woodwork replacement is rarely necessary and should be avoided whenever possible. Encapsulation with artificial siding or another material is never appropriate.

The following approach should be considered to maintain exterior woodwork:

- **Conducting semi-annual inspections of all exterior wood elements to verify their condition and determine maintenance needs.** Look for signs of deterioration including excessive paint peeling that might indicate moisture problems. Look for veins of dirt on the exterior walls that might be termite mud tunnels. (Refer to *Wood Rot*, page 04-3.) Clean exterior surfaces annually in warm weather with a garden hose, household detergent and a natural bristle scrub brush. **Avoid using power washers that can force water into wall cavities through crevices and damage decorative details.**

- **Maintaining and repainting exterior woodwork on a regular basis.** A high-quality paint job can last 5 to 8 years. For best results, address any moisture or deterioration problems prior to painting. Hand scrape and sand where possible to avoid removing or damaging decorative details with power tools or burning. Apply high quality and compatible primer and paint to clean and dry surfaces. Paint colors and luster should be appropriate to the building style. (Refer to *Exterior Paint*, page 02-14.)
- **Repairing smaller areas of deterioration by reinforcing or patching as required.** Small cracks and checks can be repaired with an exterior wood filler, glue, or epoxy. Loose elements can be refastened with careful nailing or drilling and screwing. (Refer to *Wood Repair Options*, page 04-4)
- **Selectively replacing deteriorated wood elements when they are beyond repair.** Replacement wood pieces should be the same size, profile, and character as the historic wood element. It might be helpful to take a sample of the historic wood to the lumber yard or millwork shop for the best match. Wood filler in the joints between the new and old wood will help provide a smooth finish. (Refer to *Wood Repair Options*, page 04-4.)
- **Replacement wood elements should have the same visual characteristics as the historic woodwork including its dimensions, profile, and materials.** Large scale or significant replacement of exterior wood might be necessary if deterioration of exterior woodwork is severe and extensive. Replacement wood elements should have the same visual characteristics as the historic woodwork, including its size, profile, and visual characteristics. Replacement wood siding materials should be installed in the original pattern being as careful as possible to match the original exposures and alignments relative to historic building elements such as door and window frames. Select replacement wood species appropriate for exterior use and location.

## ASBESTOS SIDING

Great care should be taken when working with broken asbestos products and during their removal. It is recommended that all asbestos-related work be undertaken by a licensed contractor. Property owners are responsible for ensuring that all asbestos removal and disposal is handled in compliance with all applicable regulations and procedures.





## Wood Rot

Almost all wood rot is caused by fungi that break down dead wood to return it back to the earth. Spores of decaying fungi are continuously produced and airborne at the interior and exterior of buildings. Rot-causing fungi need four basic elements to thrive: oxygen, moisture, a food source, and moderate temperatures. If one of these elements is missing, rot can be controlled. Since oxygen and moderate temperatures are prevalent in the environment and most historic buildings are full of wood, an excellent food source, the best hope to minimize rot is to control moisture. Moisture that leads to wood rot generally comes from one of four sources: ground/surface water, precipitation, plumbing leaks, and condensation.

**Ground water** can migrate from the soil into a building by: direct contact between wood and soil; improper drainage away from the foundation; vegetation that is too close to the foundation or growing on the building; and capillary action or rising damp in masonry foundation walls or piers carrying water several feet up to wood sills.

**Precipitation** in all of its forms, such as rain, snow, hail, and mist, can find its way into a building through small openings and crevices, trapping moisture within a wall cavity. Painted surfaces and caulked joints can reduce the potential for moisture infiltration. Blocked or undersized gutters and downspouts can overflow and direct water towards building surfaces. Rainwater splashing on hard ground surfaces can rebound, saturating exterior woodwork and masonry. In cold weather, ice build-up along roof eaves without appropriate flashing could back-up under shingles and melt.

**Leaky plumbing** can be both sudden, such as a cracked pipe; or slow, where a gradual, unnoticed leak can soak a wood structure until significant damage occurs. Cracks in grout and tiles on floors and around bathtubs, sinks, and washing machines can admit enough water to rot wood framing. Periodic inspections for signs of leaking behind bathtub access panels, within sink vanities and around washing machines and dishwashers can help catch a problem before it becomes serious.

**Condensation** is an insidious source of moisture since the water comes from air vapor rather than an obvious source such as rain or a cracked pipe. Condensation occurs when warm moist air contacts a cold surface. Warm air can hold more moisture than cold air. If warm moist air comes in contact with a cold surface that is below the dew point temperature, the excess moisture changes to water droplets on the cold surface. Some common areas for condensation and possible solutions include:

- High humidity in kitchens, bathrooms, and laundries – *Consider: Exhaust fans directing humid air to the outside and exterior clothes dryer vents (may be required by the Building Code if renovating a bathroom or kitchen)*
- Cold water pipes in humid weather and frozen pipes in winter – *Consider: Pipe insulation*

- Basements and crawl spaces beneath a building where water can condense on framing members such as sills and joists, especially in corners with poor air circulation or if occupied spaces above are air conditioned – *Consider: Plastic sheathing on the ground in a basement or crawl space*
- Exterior wood framed wall on top of foundation wall or piers – *Consider: Exterior wall insulation with no vapor barrier or an exterior-facing vapor barrier, painting of interior wall surface with latex paint, and installation of interior humidity control*



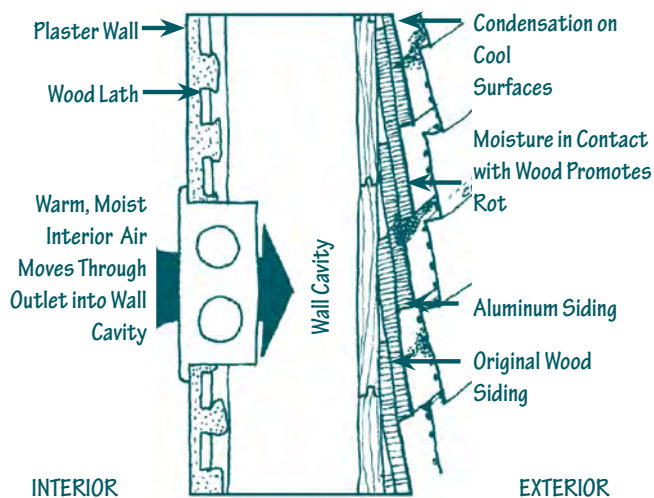
*Porches, steps and other areas where the woodwork is laid horizontally or located close to the ground are often the first to deteriorate. Ongoing exposure to moisture can lead to rot of the column bases, porch deck and apron.*

## Decay Resistant Wood

Readily available new growth timber tends to be much softer and susceptible to deterioration than hardwoods of the past. Some types of wood, generally hardwood, are naturally decay resistant, while others have a higher propensity to rot. Naturally decay-resistant woods tend to be denser than woods less-resistant such as pine. In some cases, these naturally decay-resistant woods are more expensive than common woods but are not necessarily suited for all uses, such as detailed trim work. Therefore, it is prudent to understand the proposed location and final finish of exterior woodwork when considering wood for a project, to ensure the greatest longevity. Available decay-resistant woods include:

- Cedar
- Mahogany
- Redwood
- Air-dried, pressure-treated, southern yellow pine
- Pressure-treated wood for framing members

Note that pressure-treated wood should be thoroughly dried before applying paint, generally at least two to three months after installation. Specially formulated paint is required for best results.



## Condensation

As a result of changes in our living standards, condensation has become a significant problem in historic buildings. Today's buildings include air conditioning and central heating to stabilize indoor temperatures and relative humidity, as well as insulation that can trap moisture. Buildings also include moisture-intensive conveniences such as plumbing, bathrooms, laundry, and cooking facilities. While interior conditions have stabilized and moisture-laden activities have increased, exterior temperatures and relative humidity are continuously changing. The more extreme the differences between interior and exterior conditions, the higher the likelihood of condensation. The differences in temperature and relative humidity between the interior and exterior of buildings is "bridged" through the thickness of the exterior building walls. If the temperature is below the dew point at any location within the wall, condensation will occur, causing evaporated moisture to change into water droplets. Wall insulation can adjust the dew point location. When combined with a vapor barrier, integral on most batt insulation, it can reduce moisture migration through a building's envelope. It is recommended that property owners consult [www.energystar.gov](http://www.energystar.gov) for insulation types, levels and installation recommendations applicable to specific locations and construction conditions. (Refer to *Building Insulation*, page 02-12.)

Although the installation of window-mounted portable air conditioning units does not require a Certificate of Appropriateness (COA) from the HDC, it is advisable to consider their potential to generate condensation when locating, installing, or maintaining a unit, how the condensate is to be directed away from building elements, and the structural effect on the window sash and frame.

In addition, installing artificial siding or impervious coatings over wood can make a condensation problem worse and conceal deterioration until it is severe. Unlike wood, vinyl and aluminum do not "breathe" and can trap moisture within a building's wall cavity, leading to rot, mold and insect damage of the wood structure. As a result, it is important to inspect and repair potential water sources to minimize the moisture within the wall cavity.

## Detecting Wood Rot

A simple means of testing for rot is to stab the wood member perpendicular to the grain with an awl or ice pick, particularly in areas where the wood appears darker in color, then measure the penetration depth. Evaluate the depth of splintering using the following criteria:

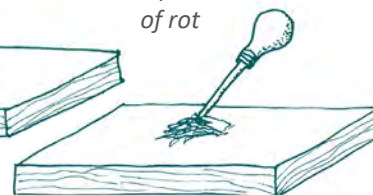
- If the penetration is less than 1/4", the component does not need replacement
- If the penetration is more than 1/4", the component might need replacement
- If long, dry splinters are produced, the wood is healthy and the component does not need replacement
- If short sections broken across the grain are produced, the component might need replacement

If replacement is required, it is recommended that the replacement wood be decay resistant and match the size, profiles, and detailing of the historic woodwork.

*Less penetration and long splinters are an indication of healthy wood*



*Greater penetration and short splinters are a possible indication of rot*



## Wood Repair Options

If a portion of a decorative exterior element is deteriorated beyond repair, it is often possible to replace only the deteriorated sections. Replacement of the entire component or unit might not be necessary. (Refer to *Detecting Wood Rot*, above.) The two most appropriate methods of repair are epoxy consolidation and Dutchman repair.

Epoxy consolidation can be performed in place in the early stages of wood deterioration, where the deteriorated area is small or at decorative or ornate elements that can be costly to replace. The process involves inserting penetrating liquid epoxy into porous wood, generally by injection through small drilled holes. As the epoxy dries, it hardens and strengthens the deteriorated wood, allowing the maximum amount of historic fabric to be retained.

A Dutchman should be used for larger areas of deterioration and involves removing the deteriorated portions of wood, not necessarily the entire element, and replacing the removed section in-kind. The replacement piece should match the original in design, shape, profile, size, material and texture. The deteriorated section is removed with a sharp-edged recessed cut and the Dutchman is installed with a tight joint. Replacement siding sections should be a minimum of 5-feet in length to minimize the opening of joints over time. When painted, the Dutchman and the existing building fabric should appear continuous.



## INCOMPATIBILITY OF ARTIFICIAL SIDING

The installation of artificial siding is often sought by property owners as a means of providing an updated appearance and minimizing periodic exterior maintenance and repair needs. Artificial siding materials include asphalt and asbestos and, more commonly, vinyl and aluminum siding and “capping” applied over trim. These materials can significantly change a building’s character and appearance and are not maintenance free. Most forms of artificial siding can trap moisture within a wall thickness, accelerating potential rot and decay.

To maintain the integrity of Fall River’s historic resources, all siding should be wood, whenever possible, and painted, smooth-finish, composite material, such as fiber-cement or quality composite material trim, when not feasible.



*Replacement of this aluminum siding is the best way to repair this puncture. A wood-grained texture is inappropriate.*

### Vinyl and Aluminum Siding

Vinyl and aluminum siding often attempt to simulate a clapboard pattern. Because vinyl and aluminum are extruded pieces of plastic and metal, they are thinner and visually lighter than wood. It should also be noted that in the event of a fire, the fumes from vinyl can be very hazardous.



*Fiber-cement siding and trim generally do not have the same dimensions as traditional wood elements including the width of corner boards and the depth of individual clapboards. This results in visual differences when compared to wood siding.*

### Fiber-Cement Siding

Unlike vinyl and aluminum siding, which are both sheet materials, fiber-cement siding is a lightweight, solid material that is manufactured in similar sizes and shapes to wood products including siding, shingles, and trim. The installation method is similar to wood, and it can be cut to shape on-site using hand tools, and unlike vinyl and aluminum, it can be painted to match any color scheme.



*Aluminum and vinyl siding were sometimes installed to conceal an underlying problem. In some cases, removal might be necessary to repair a deteriorated condition.*

In Fall River, many of the historic framed buildings were originally clad with wood clapboard, which allowed some flexibility in installation by carpenters. Most artificial siding materials, particularly vinyl and aluminum siding, must be installed at a consistent vertical spacing as defined by the manufacturer. They do not allow flexibility to accommodate historic alignments at existing building fabric such as at window and door frames. (In historic buildings, siding was typically installed with a horizontal band aligning with the top and bottom of window and door frames.)

Most historic buildings have wood door and window frames, moldings and trim that can be damaged or concealed in inappropriate artificial siding installations. The loss of these features can significantly alter the character of a building. Artificial siding installation over existing materials can also increase the wall thickness, causing the wood trim to appear set back from the wall rather than projecting from it. This can further diminish the visual characteristics of the building.

## Removing Artificial Siding and Veneer

Fall River’s property owners should consider removing artificial siding and restoring underlying woodwork. Artificial siding removal allows buildings to function as originally designed and exposes problems that might have developed since its installation. If removing artificial siding from woodwork:

- Expect to replace about 20% of woodwork
- Anticipate surprises such as removed ornament and trim
- Sell aluminum siding for recycling



## EXTERIOR WOODWORK OR ARTIFICIAL SIDING

Property owners generally install artificial siding to avoid maintenance issues associated with repainting and because of aggressive claims made by the artificial siding industry. They believe that artificial siding provides a maintenance-free solution that will solve their exterior building problems for a lifetime. The table below contrasts common statements by the artificial siding industry with the viewpoint of preservation professionals.

ARTIFICIAL SIDING VIEW	PRESERVATION VIEW
<i>“Vinyl and aluminum siding is a cost effective alternative to wood”</i>	<ul style="list-style-type: none"> <li>• Vinyl siding and aluminum is usually guaranteed for 20 years and costs approximately the same as two quality paint jobs. (Guarantees over 20 years are usually prorated.) Properly maintained wood siding has been found to last hundreds of years.</li> <li>• Vinyl or aluminum siding installed over existing woodwork can trap moisture and lead to costly hidden structural repairs. (Refer to the weatherproof section below.)</li> <li>• Artificial siding can reduce home values by covering distinctive qualities and details.</li> </ul>
<i>“Vinyl or aluminum siding improves the appearance of a building”</i>	<ul style="list-style-type: none"> <li>• Exposures, shadow lines, joint layout, texture and the sheen of vinyl or aluminum siding do not typically match wood.</li> <li>• Historic or decorative trim is often covered or removed in the installation process. Installation typically requires damage to historic wall materials.</li> <li>• Stock vinyl and aluminum trim is generally narrower than historic wood trim.</li> <li>• Historic details and decorative elements are generally not available in vinyl or aluminum.</li> <li>• Available colors are limited and might not be appropriate for the building style.</li> <li>• Colors are difficult to change. (If change is desired, the type of paint should be compatible in material and color to minimize peeling, warping and curling.)</li> </ul>
<i>“Vinyl or aluminum siding is weatherproof”</i>	<ul style="list-style-type: none"> <li>• They can be weatherproof if properly installed, but on many historic buildings there are crevices and uneven surfaces that allow moisture behind the artificial siding or capping. (Generally, new buildings with vinyl or aluminum siding are constructed with an internal vapor barrier to exhaust moisture-laden air.)</li> <li>• Unlike wood, vinyl or aluminum siding does not breathe and can trap moisture within a building’s wall cavity. Trapped moisture condenses when it reaches the dew point, changing to water droplets that can drip and run through the wall’s structure. This can lead to rotting of sills and structural components and potential mold and insect damage. (To reduce trapped moisture, install continuous wall vents under eaves and add weep holes to artificial siding.)</li> <li>• Installing vinyl or aluminum over deteriorated wood will not make the problem disappear. (Generally, by trapping additional moisture, the deterioration accelerates and can lead to costly hidden structural repairs.)</li> </ul>
<i>“Vinyl or aluminum siding conserves energy”</i>	<ul style="list-style-type: none"> <li>• Insulation value of vinyl or aluminum siding is minimal, even when it is backed by a thin layer of insulating foam or rigid board insulation. Furthermore, the insulation could trap additional moisture within the wall cavity.</li> <li>• Studies have shown that as much as 75% of a building’s heat loss can be through its roof. Installing attic insulation is a much more cost effective method of reducing a heating bill.</li> </ul>
<i>“Vinyl or aluminum siding is maintenance free”</i>	<ul style="list-style-type: none"> <li>• Like wood, vinyl and aluminum siding needs regular cleaning.</li> <li>• Vinyl and aluminum siding is subject to denting, warping, cupping, and fading from sunlight exposure. Vinyl siding is prone to cracking in cold weather. Replacement patches usually do not match the earlier installation.</li> <li>• Painting vinyl or aluminum siding to change or to freshen its appearance typically voids the manufacturer’s warranty. (Type and color of paint used over vinyl siding should be compatible to minimize potential peeling, warping and curling. Once painted, artificial siding will need to be repainted as or more often as wood.)</li> </ul>



Trim and ornament can help to define a building's architectural style.

## WOOD TRIM AT SIDING AND SHINGLE WALLS

Wood trim elements provide an end termination to most wood siding and/or shingle installations. Types of vertical trim can include window and door casings as well as corner boards (vertical wood boards at outside corners) or trim at inside building corners. In these installations, the side edges of the siding or trim are butted against the sides of vertical boards. Caulking is often installed between the siding and vertical trim elements to provide a weather-tight joint. However, caulk and sealant can affect paint adhesion, and care should be taken to minimize application to finished surfaces. (Refer to *Weather Stripping and Caulk*, page 06-10.)

Historically, the wood siding and shingles at most buildings were installed to allow a full-height exposure above window and door heads, even if they required altering the spacing or exposure of rows. Because of the standardized size of aluminum and other artificial siding, this is often not possible with newer forms of siding.



## WOOD SHINGLES VS. WOOD SHAKES

A wood shingle is sawn while a wood shake is split, historically by hand, resulting in more variable thickness and more surface texture. In these *Guidelines*, the term wood shingle is used to refer to either wood shingles or shakes.

## WOOD TRIM AND ORNAMENT

Wood trim includes window and door surrounds, corner boards, rake boards, and wood sills. Similar to exterior woodwork and cladding, wood trim typically serves multiple purposes. Visually, exterior wood trim frames areas of wood siding or shingles and serves as the transition to building elements such as doors, windows, cornices, and porches. Functionally, it seals siding and shingles at joints, corners and openings, providing a weather-tight building enclosure.

In addition to wood trim, there are numerous types of wood ornament, some of which are also functional, including porch posts and columns, brackets, balustrades, newel posts, spindles, and other decorative details. Historically, wood trim and ornament profiles, details and sizes varied with building styles and whether a building was "high-style" or vernacular. As a result, wood trim and ornament are considered architecturally significant features.

## ARTIFICIAL TRIM AND ORNAMENT

One of the newest types of synthetic trim and ornament is made from PVC. Similar to wood, PVC trim can be cut and shaped, however it tends to lack the visual qualities and irregularities of wood. In addition to trim, PVC ornament is also available. Although PVC products are meant to replace wood elements, the dimensions and profiles of PVC trim and ornament often vary from their historic counterparts.

Although PVC products are rot-resistant, the expansion and contraction of PVC tends to be greater than wood, resulting in larger gaps required in running trim. This can be minimized if paint colors are limited to light and medium tones, reducing expansion. For the best visual likeness to wood, artificial trim and ornament should have a smooth finish and be painted in-place, following installation. The paint tends fill-in minor gaps between components and provide a more traditional, and unified appearance.



## PORCHES

Historically, porches were an outside room where residents could find a sheltered transition into their homes, exterior living space, and a place to meet and converse with neighbors. When they were constructed, their form, details and decorative elements were often intended to complement the style of the house. Porches are one of the most visible house elements and play a significant role in the appearance of the house and the streetscape. They can act as an extension of a home, providing a welcome for visitors. Unfortunately, porches today can be one of the most altered components of a building, either because they are not properly maintained or they are viewed as potential enclosed indoor space.

Because of the importance porches play in the perception of historic buildings and streetscapes, original materials and details should be preserved. Typically, areas covered by a porch roof tend to require less maintenance; however, steps, railings, and roofs are usually exposed to the weather and might require additional maintenance. One of the best ways to preserve wood porch features is regular painting. If a component is deteriorating, repair or replacement in kind is recommended as part of the porch's regular maintenance. (Refer to *Exterior Paint*, page 02-14.)

## STOOPS

Buildings located adjacent to the sidewalk or street often do not have front porches at their façade, but instead have steps, also known as stoops, leading directly to a small landing or the entrance door. In many cases, residences will often include a porch at a rear or side elevation.



## DECKS

In the late-20th century, decks became a more prevalent constructed form of outdoor space, beginning with decks located above the ground, and, later, roof decks on top of buildings. Decks are typically wood-frame construction, using stock lumber and components that are generally stained or sealed rather than painted. One of the critical differences between a deck and a porch is that a porch is integrated into the overall design of a building, while a deck, although attached, is stylistically different. As a result, they must be carefully considered relative to their visibility from the public right-of-way.



*Porches serve as a welcoming transition from the exterior to the interior. Front porches are often more ornate than side or rear porches.*

## Enclosing Porches

Porches were intended to be open exterior spaces. Enclosing a front porch is a radical change to the building and its visual perception from the streetscape. If considering porch enclosure, it is recommended that this occurs only at a side or rear elevation porch. If enclosing a porch, it is recommended that the finished space look more like a porch than an enclosed room.

## EVIDENCE OF PRIOR PORCHES

It is important that documentation be found when replacing a missing porch. This can be physical evidence that a porch was present or documentation that shows or describes a porch, such as:

- Visible building evidence (such as an outline) on the wall or trim from roofs, posts or railings, evidence of nailing patterns on siding, repairs to masonry walls and evidence of former porch foundations in the landscape
- Historic photos, drawings or maps and original components that may be visible from attics or garages
- Comparable porches on neighboring buildings of similar type, design, style, and date of construction

There are times when property owners might consider the construction of a new porch. This can occur when a previous porch is reconstructed; a new porch is added onto an existing house or is part of an addition; or when a new residence is erected.



## FIRE ESCAPES

Many of Fall River's larger residences have been modified to accommodate multiple apartments. To improve the resident's safety, fire escapes have been installed to allow escape in the event of an emergency. In balancing the safety need for the fire escapes and the goal of maintaining the historic character of the building, the installation of fire escapes should be limited to locations required by code officials and installed in a manner that minimizes their visibility from the street. This would typically involve locating them on the rear of the building or a side elevation pushed back away from the street. In addition, to minimize its visibility it is preferable to paint a fire escape the same color as the adjacent wall surface.



*The fire escape is located on the side elevation towards the rear of the residence. The metal platform and ladder are visually minimized.*

In some instances, it may be possible to remove fire escapes from a building. This may be possible where a secondary stair can be accommodated within a building or as an addition to a building, or where a multi-family residence is converted back into a single-family residence.

## EXTERIOR WOODWORK REVIEW

### Exterior Woodwork Maintenance

#### *The HDC encourages:*

- Following the recommendations in *Exterior Wood Review*, page 04-2 and *Guidelines for Exterior Maintenance*

#### *The HDC discourages:*

- Removing or encapsulating siding, trim, decorative features and trim elements such as brackets, spindles, cornices, columns, posts, balustrades, etc.

### Siding and Shingles

#### *The HDC encourages:*

- Retaining and maintaining existing exterior woodwork including siding and trim
- Repairing or replacing wood siding and trim in-kind
- Installing wood siding and shingles at all existing and new construction

#### *When replacement of wood siding and shingles is warranted, the HDC encourages:*

- Reusing original window frames and trim when replacing windows, or exactly replicating the dimensions and profiles of original frames - refer to *Guidelines for Windows and Doors*
- Using field painted, smooth-finish, modern composite materials such as fiber-cement as an alternative to wood matching historic shapes, patterns and dimensions

#### *The HDC discourages:*

- Installing aluminum or vinyl siding or coatings

### Wood Trim and Ornament

#### *The HDC encourages:*

- Retaining historic wood trim and ornament
- Following guidelines for maintenance and repair of historic wood trim and ornament as outlined in the *Exterior Wood Review*, page 04-2 and *Guidelines for Exterior Maintenance*

#### *When replacement of wood ornament and trim is warranted, the HDC encourages:*

- Reusing original window frames and trim when replacing windows, or exactly replicating the dimensions and profiles of original frames - refer to *Guidelines for Windows and Doors*
- Using field painted, modern composite materials as an alternative to wood only in locations where rot is a severe problem

#### *When replacement of wood ornament and trim is warranted, the HDC discourages:*

- Removing, altering, or concealing original trim and detailing including window and door trim, corner boards, soffits, porch posts, railings, etc.
- Applying historically inappropriate ornament or trim or applying it where it did not historically exist
- Installing wood-grained trim or ornament

### Porches

#### *The HDC encourages:*

- Painting porches regularly to preserve wood
- Applying a painted finish complementing the architectural characteristics of the house - refer to *Exterior Paint*, page 02-14
- Identifying deteriorated elements
- Finding and correcting sources of deteriorated elements, such as cracked, blocked, inappropriately hung, broken, or missing gutters or downspouts
- Replacing only those parts which cannot be repaired - in some instances, such as columns and posts, where the base can be replaced at a fraction of the cost without replacing the entire column or post
- Repairing damaged elements using standard repair techniques for that material (Refer to the *Guidelines* section appropriate for each material, particularly *Guidelines for Roofing* and *Guidelines for Masonry and Stucco*) and restoring the porch to its original historic appearance

## Exterior Woodwork Review (continued)

- Replacing missing or deteriorated materials with similar, new materials - avoid replacement of a wood railing with a metal or vinyl railing system
- Replacing only original elements that are beyond repair using elements of the same size, profile, and other visual characteristics and, where possible, materials
- Rebuilding a porch based on appropriate documentation
- If a substantial portion of the porch is deteriorated and cannot be repaired or replicated, or if a porch is missing, creating a simplified design using stock lumber and moldings that convey similar visual characteristics as the original porch, duplicating the dimensions and materials but not necessarily all of the detailing

### **The HDC discourages:**

- Replacing wood porch posts and railings with metal
- Replacing wood steps with concrete or brick - wood steps are typically appropriate for wood porches
- Using “natural” or stained wood at a porch is generally not appropriate for a porch on a painted historic building

### **If constructing new porches, the HDC encourages:**

- New front elevation porches are encouraged where there is evidence of a historic porch
- At existing buildings, new construction should not damage, destroy, conceal, or negatively affect existing historic material and features
- On additions, porches should be simple in design and relate to the existing building
- Side and rear elevation porches should typically be simpler in design than front elevation porches
- On new buildings, porches should visually relate to the proposed building in a manner similar to historic porches on neighboring buildings
- The size, shape, scale, massing, form, materials, and color of the design and its appropriateness to the house and streetscape should be considered
- Porches at framed buildings were historically made of wood; stone or brick porches are not appropriate

### **If constructing new porches, the HDC discourages:**

- New decks visible from the streetscape

### **If enclosing a porch, the HDC encourages:**

- Retaining porch elements in place and constructing enclosure framing inside of porch columns and railings
- Temporary, reversible enclosure systems, such as screens or glazing that can be removed seasonally that does not damage decorative or unique historic building fabric

- Translucent enclosure systems, with large screened or glazed openings
- Vertical and horizontal framing members that align with porch elements like columns and railings

### **If enclosing a porch, the HDC discourages:**

- Enclosing porches that are prominent from the right-of-way

## Fire Escapes

### **The HDC encourages:**

- Installing fire escapes only when required in the least obtrusive location possible
- Verifying that fire escapes are securely fastened to the building
- Painting fire escapes regularly with rust-inhibitive paint to minimize rusting to match the color of the adjacent wall surface
- Removing fire escapes when no longer required by the City’s Building Official

### **The HDC discourages:**

- Locating fire escapes at highly visible locations, particularly at the front elevation

## Paint

(Refer to *Exterior Paint*, page 02-14.)

### **The HDC encourages:**

- Hand cleaning with mild detergent and bristle brush
- Hand scraping and hand sanding
- Following all manufacturer’s safety recommendations
- Selecting paint colors compatible with building style

### **The HDC discourages:**

- Rotary tools - can leave circular marks and wires can tear into surface
- Heat guns and heat plate - can ignite paint or underlying surface if left in one location too long
- Chemical paint removers - can raise grains, be expensive and potentially volatile; runoff can be hazardous and should be collected to reduce harm to children, pets, vegetation, and ground water
- Flame tools such as blowtorches to soften paint - smoldering sparks can start a potentially devastating fire; lead components in paint can vaporize and create toxic fumes
- Sandblasting - can be abrasive to surface, wear away protective exterior coating and raise the wood grain
- High-pressure water wash - forces water into open joints affecting interior finishes and structural framing; can be abrasive to exterior surface and raise the grain





# CITY OF FALL RIVER

## Historic District Commission

### Guidelines for Masonry and Stucco



*18th-19th Century Brick - A soft, fired-clay, fairly regularly shaped building component; often with color and surface variations*



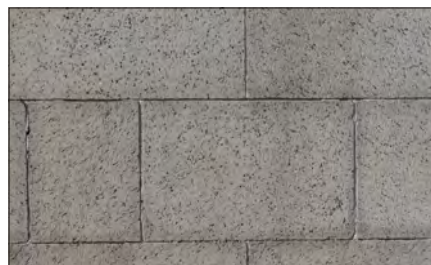
*20th Century Brick - A hard, dense, fired-clay, regularly shaped building component; sometimes glazed.*



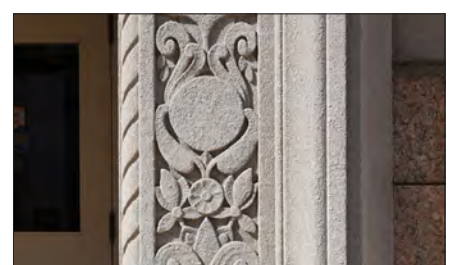
*Cast Stone Units - Formed masonry units made from water, cement, and sand aggregate.*



*Fieldstone - Locally quarried stone (in this case granite), typically uncoursed of varied sizes, shapes, and colors.*



*Granite - A hard rock consisting of small, yet visible, grains of minerals; can be highly polished or textured.*



*Limestone - A sedimentary rock; used for building walls, window sills and lintels, ornamental stone trim and sculpture.*

## USE OF MASONRY AND STUCCO

In the Fall River, masonry can be found at many the city's most significant buildings including: commercial, manufacturing, large-scale residential, civic and institutional buildings. At residential properties, masonry and stucco tend to be limited to foundations and chimneys at wood framed homes and masonry landscape and retaining walls. Stucco is often applied over less costly materials, such as concrete block, to achieve a more finished appearance.

These *Guidelines* were developed in conjunction with the City of Fall River's Historic District Commission (HDC) and the Planning Department. Please review this information during the early stages of planning a project. Familiarity with this material can assist in moving a project quickly through the approval process, saving applicants both time and money.

Additional *Guidelines* addressing other historic building topics are available at One Government Center, Room 534 and on the Commission's website at [www.fallriverma.org/historic-district-commission](http://www.fallriverma.org/historic-district-commission). For more information, to clarify whether a proposed project requires HDC review, or to obtain permit applications, please call the Planning Department at [frhdc@fallriverma.org](mailto:frhdc@fallriverma.org) or (508) 324-2530 or arrange to meet with staff.

## MASONRY AND STUCCO

Historically, a building's exterior masonry surface serves both visual and functional purposes. Visually, it is an important design feature that establishes the rhythm and scale of a building. Functionally, historic exterior masonry typically acts as the principal load bearing system for the building, as exterior walls, or as a building foundation, and can serve as its "skin" by shedding water and deflecting sunlight and wind.

Historic exterior masonry:

- Acts as an important design feature, helping to define a building's architectural style
- Establishes a building's scale, mass, and proportion
- Adds pattern and texture by casting shadows on wall surfaces
- Acts as a principal element in the structural system
- Establishes a weather-tight enclosure, providing protection from rain, wind, and sun

With proper maintenance, exterior masonry and stucco can last for centuries. However, if maintenance and repairs are not completed properly and in a timely manner, masonry and stucco can be severely damaged. Typical issues that cause deterioration are moisture penetration, freeze-thaw cycling, the installation of very hard mortar, inappropriate painting or coatings, as well as harsh or abrasive cleaning.



## MASONRY COMPONENTS

Masonry walls, foundations and piers were historically constructed of either bricks or stones, stacked on top of each other. The individual units were bonded by mortar, which served to hold the masonry units together and fill the gaps or joints between them.

Historically, the masonry was bearing, meaning it carried its own weight to the ground, as well as the load of other building elements atop it, such as walls, floors and a roof. Beginning in the 20th century, thin masonry veneers, often of brick, marble, or granite, were “hung” on an underlying support structure at storefronts and, later, at entire façades.

### Brick

Brick is a common masonry material in Fall River and can be found at several of the City’s historic residential, commercial and institutional buildings, and it continues to be used today. Bricks are made by pressing clay into a mold and then firing or baking the brick at very high heat. While historic brick sizes vary, modern brick is generally a standardized unit, 8- by 4- by 2-1/4-inches in size.

The color of brick can vary, but red is by far the most common. Other colors can include yellow, orange, and brown. The color is determined by the chemical and mineral content of the clay and the temperature and conditions of the kiln or oven. Similar to the color, the strength or hardness of brick is determined by the clay ingredients and the firing method, but it is also determined by the way the brick is manufactured.

- **Hand-pressed bricks** tend to be very soft and can be found on buildings and structures built during the 18th and 19th centuries. They were made by pressing wet clay into a wood or metal mold, historically by hand; the shaped clay was then dried and fired. In this process, small air pockets and impurities were trapped in the clay, and the bricks were often slightly irregularly shaped with holes or voids and rounded edges and corners.
- **Dry-pressed bricks** are similar to hand-pressed bricks except the clay used is drier and it is pressed into the molds with greater force and fired longer. The result is a brick of medium hardness with sharp corners and edges. Dry pressed bricks gained in popularity in the second half of the 19th century.

- **Extruded bricks** were popularized in the early-20th century and are the hardest bricks. Unlike hand pressed bricks and dry pressed bricks, which were often made near the construction site, extruded bricks are typically made in large factories and shipped to the site. To make extruded bricks, very dry clay is forced through a form to create a long ribbon that then is cut into individual bricks. With large-scale production it is easier to achieve higher quality control and uniformity in color and hardness.
- **Veneer bricks** are thin extruded bricks, often about 1/4-inch thick, adhered to an underlying surface. Brick veneers have no structural capacity and are more susceptible to damage from freeze-thaw cycles and impact, which can result in cracking or popping off the underlying surface.

### Stone

The most common type of stone in Fall River is granite. Brownstone and limestone detailing can sometimes be found at brick buildings and some of Fall River’s historic buildings include fieldstone. The stone hardness varies by type with brownstone and limestone being soft, while granite and marble are very hard. The finish can be rubble stone of varied size and arrangement, or range from a rusticated base to a highly polished, reflective surface such as stone veneer at a storefront. In addition, stone can be carved for decorative elements and sculpture.

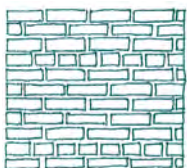
### Cast Stone

Cast stone is a cast concrete product intended to simulate cut stone. In Fall River, it can be found at chimney caps and foundations.

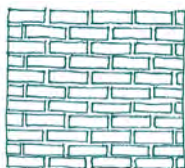
### Concrete Masonry Units

Concrete masonry units (CMUs), also known as concrete blocks, are similar to bricks in that they are formed, structural elements made from a mixture of water, cement, sand and aggregate, which is placed in forms to harden. CMUs are typically 8- by 8- by 16-inches in size with internal voids. Similar to brick, they are stacked and bonded with mortar and laid in a running-bond pattern. Today, CMUs are available in various colors with different textures and finishes, including rusticated masonry, also known as split-faced block.

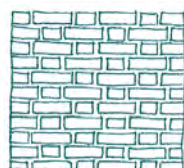
## BRICK BONDING PATTERNS



Common Bond



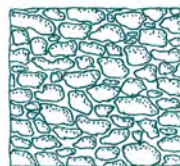
Running Bond



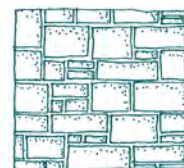
Flemish Bond

The most frequently constructed brick pattern is common bond, which features stretcher courses with a header course every sixth row. Other familiar brick bonding patterns include running bond, comprised of only stretcher course, and Flemish bond, alternating stretchers and headers.

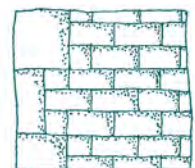
## STONE BONDING PATTERNS



Uncoursed  
Fieldstone



Coursed  
Fieldstone



Coursed Cut Stone  
with Quoins

Uncoursed and coursed field stone are common foundation materials in Fall River. There are fewer cases of cut stone walls. Quoins are large rectangular stones located at a building’s outside corners. Historically, quoins were used in a variety of bonding patterns including fieldstone.

## MORTAR

Historically, mortar was composed of only three ingredients: sand, lime and water, and sometimes additives such as animal hair or oyster shells. Starting in the mid-19th century, a small amount of Portland cement was added into the mix to improve workability and hasten setting time. In the early-20th century, corresponding with the manufacture of harder bricks, the amount of Portland cement in mortar was increased, resulting in harder mortar.

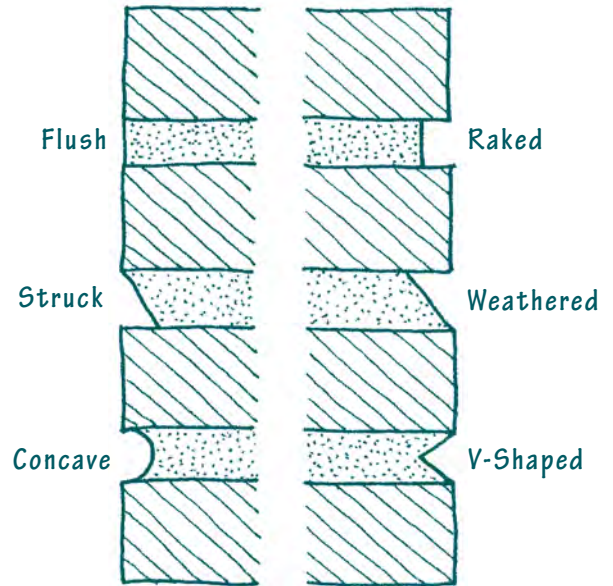
**Sand** is by far the largest component of mortar and defines its color, character and texture. Since masons utilized readily available products, sand from historic mortars tended to have weathered, rounded edges, and was available in a great variety of grain sizes and shades of white, grey and yellow. Most sand available today has sharper edges and comes in standard sizes from being mechanically broken and sieved. As a result, mixing sand colors and sizes might be needed to match historic mortar's visual characteristics.

**Lime and Portland Cement** act as binders for the mortar. High lime mortar is soft, porous and varies little in volume with seasonal temperature fluctuations. Because lime is slightly water-soluble, high-lime mortars can be self-healing and reseal hairline cracks. Lime-based mortars can also deteriorate with continual wet-dry cycles, similar to hand pressed brick. By contrast, Portland cement shrinks significantly upon setting, undergoes relatively large thermal movements, can be extremely hard and resistant to water movement, and is available in white or grey, which can be mixed to achieve a desired color. **In general, high lime mortars are recommended for nearly all repointing projects at 18th and 19th century brick and soft masonry construction to ensure a good bond with original mortar and masonry.** It is possible to add a very small percentage of Portland cement to a high lime mixture to improve workability and plasticity. In most cases, Portland cement generally can be increased when repointing 20th century brick or harder stone such as marble and granite.

**Water** needs to be potable, clean, and free of salts, harmful minerals and acid. If not, it can break down the mortar and adjacent masonry and discolor finished surfaces.

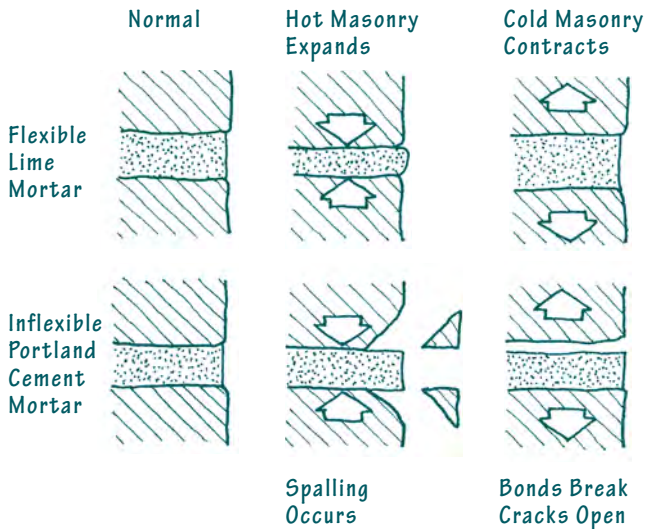
**Historic Additives** included oyster shells, animal hair, and clay particles. To duplicate the character of historic mortar, it might be necessary to include additives to match the original in hardness, texture, appearance, and color. It should be noted that there are several types of chemical additives available today including those that increase or reduce setting time or expand the recommended temperature installation range. **The use of newer chemical additives is strongly discouraged at historic masonry unless they have been specifically tested over an extended period of time with historic materials similar to the proposed installation conditions.**

## Joint Profiles



There are numerous mortar joint profile types, or shapes, with each producing different shadow lines and highlights. When repointing an area of masonry, it is important to tool the mortar to match the existing joint profile for a consistent appearance.

## MORTAR HARDNESS AND MASONRY



Temperature changes cause masonry units to expand when heated and contract when cold. This expansion and contraction results in compression and flexing of the adjacent mortar joints.

Lime-based mortar is pliable and more likely to compress and flex through temperature cycles. Properly installed mortar should be softer than the adjacent masonry.

Portland cement-based mortars are significantly harder than lime-based mortars and far less elastic. In addition, cement mortars tend to be substantially harder than historic masonry. When masonry units expand in warm temperatures, they press against the harder cement mortar and tend to spall at the edges. During colder temperatures, masonry units tend to pull away from mortar, resulting in open cracks that can admit moisture.



## TYPICAL MASONRY PROBLEMS

It is important to identify masonry problems early to minimize damage. This is particularly true of masonry that is exposed to moisture. Once water is permitted to penetrate a masonry wall, the rate of deterioration accelerates very quickly, becoming more severe and costly. The following images include some typical masonry problems in Fall River and possible repairs. Some conditions, such as movement or settlement issues, might require professional evaluation by a registered architect or engineer.

- 1. Many problems associated with historic masonry result from failure to keep mortar joints or coatings in good repair.** Deteriorated mortar joints allow moisture to penetrate the masonry and cause severe interior and exterior damage. The principal causes of mortar joint failure as described below.
- 2. Weathering** of mortar or stucco occurs when rain, wind, and pollution erode softer historic mortar over time. Historic mortar and stucco were purposely soft to allow the masonry wall to expand and contract with seasonal temperature changes. (Refer to *Mortar Hardness and Masonry*, page 05-3.)



*The mortar has weathered from most of the brick joints, reducing the structural capacity of the wall. The surface of some bricks has spalled, and a settlement crack has developed near the corner of the window.*

- 3. Uneven settling** of masonry walls and piers may result in cracks in stucco surfaces, along masonry joints or within masonry units.

### Definitions

**Efflorescence:** Water-soluble salts leach out of masonry or concrete by capillary action and deposit on a surface by evaporation, usually as a white, powdery coating

**Mortar Joints:** The exposed joints of mortar in masonry

**Repointing:** Repairing existing masonry joints by removing defective mortar and installing new mortar

**Spalling:** Chipping or popping off the surface of masonry or stucco



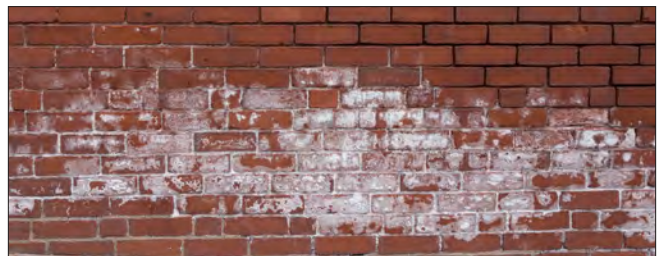
*The surface of the center brick has spalled. The repointing mortar is harder than the brick and likely includes too much Portland cement. The mortar should be completely replaced with softer mortar.*



- 4. Temperature cycles** can cause masonry, stucco and mortar to expand and contract at different rates, breaking the masonry's bond with the stucco and mortar. This situation can be worsened if moisture enters an open joint, then freezes and expands, potentially spalling, that is, popping off the surface of the stucco, mortar and the masonry.

*Chimneys, particularly end chimneys, are highly prone to wide temperature cycles*

- 5. Poor original materials** can cause ongoing problems if the masonry and mortar are incompatible or inappropriate for their installation location, or if the masonry does not properly shed water.



*Efflorescence, or white bloom, is an indication of moisture in the wall. There is a lack of mortar at the upper right.*

- 6. Insufficient exterior maintenance** may result in water entering a masonry wall and accelerating deterioration. Potential areas of concern are open joints in masonry or stucco; poorly functioning gutters, downspouts, and flashing; rising damp from saturated soil; standing water at foundations; water splashing off hard surfaces onto walls; condensation discharge from air conditioners; or water-entrapping vegetation such as vines or shrubs on or near a masonry wall, foundation, pier, or chimney.





*A saw was used to cut out the joints during repointing, thereby extending the vertical joints and damaging the bricks. In addition, both the vertical and horizontal joints have been widened.*

### Repointing Historic Masonry

Repointing work can last at least 50 years when completed properly. For the best results, skilled craftsmen are needed to remove the existing mortar with hand tools to minimize damage to adjacent masonry, achieve the appropriate mortar mix, color and hardness, apply the mortar, and tool it to match the historic joint style and appearance. As a result, it is generally recommended that repointing projects be limited to areas of deterioration rather than an entire building unless deterioration is prevalent.

To achieve the best results, repointing work is best completed when the temperature ranges between 40°F and 90°F for at least two days after the installation of the mortar to help the mortar bond to the masonry. Mortar should be placed in joints in layers no more than 3/8-inch thick and allowed to harden. The final outer layer should be tooled to match the historic joint profile. (Refer to *Joint Profiles*, page 05-3.)



*The central bricks have been repointed with what appears to be a Portland cement mortar that is harder than the hand-made brick. In addition, the mortar color and tooling poorly match the original mortar.*



*Long cracks at masonry, particularly cracks that split individual bricks or stones, can be an indication of a significant structural problem. In cases of more significant or recurrent cracking, consultation with an architect or structural engineer may be prudent prior to repointing.*

### Repairing Historic Masonry

When repairing masonry walls, infill pieces of masonry and mortar should match the existing in visual characteristics and hardness. For example, deteriorated hand-pressed brick must be replaced with hand-pressed brick; a granite sill should be replaced with a granite sill. (Salvaged materials should be reused with care since historic materials can have different properties based upon their installation locations. For example, brick can be exterior or interior grade.) Mortar must match the original tooling, appearance and hardness.

Although mortar can easily be matched by analyzing the composition of the remaining mortar, matching brick and stone is more difficult. Fabricating new brick by hand to achieve similar irregularity and coloration can be costly. Matching stone with new stone is more likely if the original quarry remains active.

An alternative to obtaining new masonry is to utilize salvaged units. Although the labor to clean off excess mortar and prepare salvaged material for reuse could be more expensive than purchasing new brick, the visual characteristics, irregularity and hardness would be comparable to the existing material.

### USING THE CORRECT MORTAR AND STUCCO

Most pre-mixed mortar available from hardware stores is generally inappropriate for historic masonry as it contains too much Portland cement and is too hard for older brick and many types of stone.

The best method of matching historic mortar and stucco is having an existing sample analyzed by a professional lab. The HDC is also available to provide guidance based upon the type, location, and condition of the masonry.

## Masonry Cleaning

Appropriate masonry cleaning can enhance the character and overall appearance of a building. However, improper cleaning of historic masonry can damage historic surfaces and cause more harm than good, both physically and visually. Masonry cleaning methods fall within three general categories:

- Low pressure water, with the possible use of gentle detergent and brushing with a natural bristle brush
- Chemical cleaning
- Mechanical cleaning including sand blasting, high-pressure power washing, grinding, sanding, and wire brushing

**Because of the softness of historic brick and some types of stone, as well as the potential damage to historic masonry surfaces, cleaning should be completed only when absolutely necessary, using the gentlest means possible.** In many cases, soaking the masonry with low pressure water can remove much of the surface dirt and deposits. If the soaking method is not successful, it might be necessary to add a non-ionic detergent, such as dish washing detergent, and brush the wall surface with a natural bristle brush.

Chemical cleaners can etch, stain, bleach, or erode masonry surfaces. The use of mechanical methods, including abrasive blasting, power washing, sanding or grinding, can potentially remove decorative details and the protective surface of the masonry, resulting in an eroded surface and permanent damage. Abrasively cleaned masonry usually has a rough surface that can hold dirt and be more difficult to clean in the future. Both mechanical and chemical cleaning methods can destroy the outer protective layer, making masonry surfaces more porous and deteriorating mortar joints, thus allowing water entry and accelerated deterioration. **The use of mechanical methods for cleaning masonry is strongly discouraged by the HDC. The use of chemical cleaners should only be used when all other methods are unsuccessful. Cleaners must be diluted and tested at a discrete area prior to general application.**

Cleaning should be scheduled to allow the wall to thoroughly dry out prior to potential frost to minimize spalling. Consideration should be given to completing repointing of the wall surface prior to cleaning if the use of water, detergent or cleaning solution may cause damage within the wall system.



*The rough texture and uneven surface suggest an aggressive cleaning method was used. Stucco patches replace bricks and efflorescence, a white powdery substance, can be seen on the surface.*

## Masonry Coating

Water repellent and waterproof coatings generally are applied to prevent water from entering a masonry wall. They can be unnecessary on weather-tight historic buildings and are problematic long-term. Water infiltration through masonry buildings is often caused by other moisture related problems including open mortar joints and deferred maintenance.

**In instances where the surface of the masonry has been compromised severely, such as by sandblasting, the use of water repellent coatings may be appropriate.**

**Water Repellent Coatings**, also referred to as “breathable” coatings, keep liquid from penetrating a surface while allowing water vapor to escape. Many water repellent coatings are transparent when applied, but might darken or discolor over time, and require frequent reapplication.

**Waterproof Coatings** seal surfaces and prevent water and vapor from permeating the surface. Generally, waterproof coatings are opaque or pigmented and include bituminous coatings or elastomeric coatings and some types of paint. Waterproof coatings can trap moisture inside a wall and intensify damage. Trapped moisture can freeze, expand, and spall masonry surfaces.

## STUCCO

Stucco is a relatively inexpensive material that can provide a more finished appearance to brick, or stone or, in rare examples in Fall River, wood-framed buildings. In some cases, stucco was scored or rusticated to look like stone. Stucco acts as a weather repellent coating, protecting the building from the elements including rain, snow, sunlight, and wind. Stucco can also provide an insulating layer to a wall, reducing the passage of air, as well as improving a building’s fire resistance. A stucco wall surface is generally about 1-inch thick and applied in three coats.

Stucco was not historically used as a primary wall material in Fall River. Instead, it was applied on some buildings and structures as a remodeling material when constructing an addition to vary the original appearance or to conceal a modification or deterioration. The components of stucco are similar to pointing mortar and include sand, lime, Portland cement, water, and possible binders like animal hair or straw. In some cases, pigments are added to alter the finished color.

### Stucco Application

Stucco is essentially a skin of mortar held in position by the bond formed with the underlying material. Historically, on masonry walls, one of the best ways to achieve a bond was to “rake-out” the mortar joints approximately 1/2-inch to form a groove that holds the stucco in place. When installed on masonry, stucco becomes an integral part of the wall when set. When stucco was installed on wood framed walls, the stucco was generally “hung” on strips of wood called lath that were nailed to wall studs in the same way interior plaster was applied. By the mid-20th century, metal lath replaced wood lath for stucco application on wood-framed buildings.



## Patching Stucco

Similar to repointing mortar, stucco should be applied in moderate weather conditions, avoiding extreme heat, sun, humidity, and freezing temperatures. The final appearance should duplicate the existing as closely as possible in composition, color, and texture. Successful patching of stucco surfaces requires the services of a skilled craftsman.

Hairline cracks in stucco can generally be filled with a thin slurry coat of the finish coat ingredients. By contrast, larger cracks and bulging wall areas need to be cut out and prepared for a more extensive repair. For the best appearance, the area to be patched should be squared off and terminated at a building joint or change in materials such as a window or door frame. Larger stucco repairs are applied in three coats similar to initial stucco application. (Refer to *Stucco*, page 05-6.) Similar to pointing mortar, if stucco patches are too hard, they can cause additional damage to the adjacent historic stucco surfaces or lead to the formation of cracks that can allow water migration into the wall.

*When painting stucco, it is recommended that loose or flaking paint be removed prior to applying a breathable masonry paint..*



*Badly peeling paint can be an indication of poor preparation or moisture issues.*

## Removing Paint from Masonry

When considering whether to remove paint from a masonry surface, it is important to determine whether removal is appropriate. In some instances, the building might have been meant to be limewashed or painted, or limewash or paint was used to hide deterioration, later changes, or additions. It might be appropriate to consider stripping paint if the existing paint has failed, the paint was applied to cover other problems such as a dirty building, or to reduce the long-term maintenance requirements associated with repainting.

Signs of failed paint include paint that is badly chalking, flaking, or peeling, possibly due to moisture penetration. Prior to repainting, it is recommended that the cause of the moisture infiltration be identified and repaired to minimize the potential for future failure. It is also prudent to review whether the masonry has been “sealed” by excessive layers of paint or by waterproof coatings. The underlying masonry might not be able to “breathe” and dispel the internal moisture and salts. Eventually, pressure from moisture and salts can build up under paint layers and cause the paint to peel and masonry to spall.

If paint is stable, complete paint stripping might not be necessary. However, new paint should be compatible with previous paint layers and surface for best adhesion.

## MASONRY AND STUCCO PAINTING

If the exterior of the masonry surface has been compromised through previous sandblasting, moisture infiltration or the use of harsh chemicals, painting with mineral silicate paint can provide a degree of protection. Repaired masonry or stucco walls often will need to be repainted for a uniform appearance. When selecting paint, it is important that the new paint be compatible with earlier coats of paint and the stucco material and be applied following the manufacturer’s recommendations.

When repainting masonry, proper preparation is critical to a successful masonry painting project. This includes: removal of vegetation and loose or flaking paint; maintenance of adjoining materials, such as leaking downspouts or gutters; and repointing of open joints.

The HDC generally recommends mineral silicate paint for the best long-term adhesion, which includes lime and silicate that binds to masonry, providing long-lasting durability and weather resistance. Lime-based paint is also appropriate for historic masonry, although it is not as weather resistant. If the building has been painted previously, it is important to select a type of undercoat and paint appropriate for the surface coating on the building and apply them following manufacturer’s recommendations. (Refer to the *Exterior Paint*, page 02-14.)

## Synthetic Stucco

The Exterior Insulation and Finish System, or EIFS, is a synthetic stucco system popularized in the United States in the late-20th century. One significant problem with EIFS is that it does not “breathe” and can trap moisture within the wall thickness. This can lead to powdering or melting of soft, hand pressed bricks, rotting of wood sills and framing, and potential mold and mildew development in the building. In addition, EIFS can provide a desirable home for termites and carpenter ants where they can easily migrate to other parts of a building. In addition to problems with its physical properties, EIFS is typically installed with control joints or grooves to allow the surface to expand and contract with temperature patterns, often resulting in unusual wall patterns that distract from the architectural design.

**Because of the differences in the visual characteristics of EIFS from stucco and the potential to harm historic building fabric, the HDC does not recommend the application of synthetic stucco or EIFS to any existing building or structure.**



## MASONRY AND STUCCO GUIDE

### *The HDC encourages*

- Replacement masonry that matches the historic in appearance, type, color, texture, size, shape, bonding pattern, and compressive strength
- Replacement masonry that is toothed into existing masonry, continuing the historic pattern
- Repointing mortar or stucco of the same hardness or softer than the original mortar or stucco and always softer than the original masonry - older buildings typically of high lime content with limited Portland cement
- Using mortar and stucco that matches the appearance, color, texture, pattern, joint size, and tooling of the historic installation
- Carefully removing algae, moss, vines, and other vegetation from masonry and stucco walls and removing shrubs from the building perimeter
- Completing masonry and stucco work in fair weather, for improved bonding and curing

### *The HDC discourages:*

- Widening or extending the existing mortar joints or overlapping the new mortar over the masonry surface
- Removal or covering of historic masonry surfaces or details
- Removal of historic stucco from masonry surfaces exposing the soft, underlying brick to the elements
- Installing stucco over brick, stone, or wood framed buildings that were not intended to have stucco unless covering previously damaged masonry
- Installing brick or stone veneer at a historic building
- Exposed concrete masonry units at buildings, structures, or landscape walls
- Installing modern bricks for patching historic masonry, even if they are “antiqued,” since they are generally much harder and do not match the historic masonry
- Using pre-mixed mortar that does not match the appearance of the historic mortar
- Using pre-mixed mortar or stucco that contains a high percentage of Portland cement at softer or historic masonry or stucco installations
- Using power tools to remove existing mortar from joints since they can damage historic masonry - these methods can damage the exterior and inappropriately change the visual appearance
- Using modern chemical additives in mortar or stucco
- Installing pointing mortar or stucco in a single layer greater than 3/8-inch deep

- Installing an Exterior Insulation and Finish System, or EIFS

### **Masonry Cleaning**

#### *The HDC encourages:*

- Cleaning using the gentlest means possible
- Making sure mortar joints are sound and building is water-tight before water cleaning
- Using water without traces of iron or copper that can discolor masonry
- Conducting water cleaning a minimum of one month before freezing temperatures to minimize the potential for spalling
- Minimizing water pressure, generally no more than 100 psi, to reduce potential etching of masonry surfaces
- Using non-ionic detergent and natural bristle brushes when water soaking is not successful

#### *The HDC discourages:*

- Using mechanical methods including sand blasting, grinding, sanding, and wire brushing - these methods can damage the exterior and inappropriately change the visual appearance
- Using water with excessive salts, acids, or minerals that can deposit on masonry surfaces
- Using chemical cleaning

### **Masonry Coating**

#### *The HDC encourages:*

- Applying mineral silicate paint, in lieu of latex paint, where it is appropriate to paint masonry

#### *The HDC discourages:*

- Applying water repellent or waterproof coatings to weather-tight historic masonry or concrete unless it is below the surface of the surrounding grade
- Painting previously unpainted historic brick or stone

### **Removing Paint from Masonry**

#### *The HDC encourages:*

- Considering paint-removal appropriateness
- Removing paint using the gentlest means possible

#### *The HDC discourages:*

- Applying water repellent or waterproof coatings to intact masonry, including paint that can trap moisture and prevent the wall from “breathing”
- Applying waterproof coatings on masonry above the surface grade level





# CITY OF FALL RIVER

## Historic District Commission

### Guidelines for Windows and Doors

#### WINDOWS AND DOORS

Windows and doors typically comprise at least one quarter of the surface area of the exterior walls of most historic buildings. In terms of operation, windows and doors provide access to natural light and ventilation for a building. In terms of appearance, they are an important design feature that helps to define the style and period of a building. Whether elaborate or simple, windows and doors demonstrate both the history of the building and the history of the methods of manufacturing when they were created. These histories help to tell the story of Fall River's rich manufacturing tradition.

Windows and doors, including their shutters, trim, and associated features, are important elements of historic buildings because they can:

- Act as a welcoming transition from the building's exterior to the interior
- Act as the "eyes" of a building
- Provide natural light and ventilation
- Help define architectural style and building type
- Help date the age of construction
- Define the character of each individual building and provide a visual connection to the streetscape
- Contribute to the visual cohesiveness and architectural vocabulary of the surrounding area

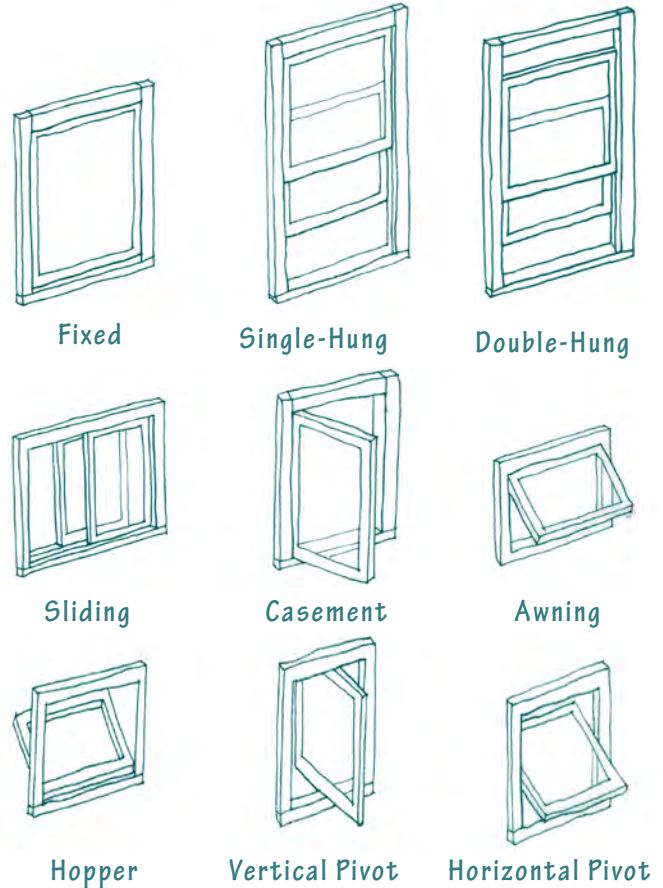
#### Other Window Types:

**Dormer Windows:** Refer to *Dormers*, page 03-5.

**Storefront Windows and Doors:** Refer to *Guidelines for Commercial Properties*.

These *Guidelines* were developed in conjunction with the City of Fall River's Historic District Commission (HDC) and the Planning Department. Please review this information during the early stages of planning a project. Familiarity with this material can assist in moving a project quickly through the approval process, saving applicants both time and money.

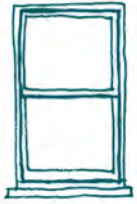
Additional *Guidelines* addressing other historic building topics are available at One Government Center, Room 534 and on the Commission's website at [www.fallriverma.org/historic-district-commission](http://www.fallriverma.org/historic-district-commission). For more information, to clarify whether a proposed project requires HDC review, or to obtain permit applications, please call the Planning Department at [frhdc@fallriverma.org](mailto:frhdc@fallriverma.org) or (508) 324-2530 or arrange to meet with staff.



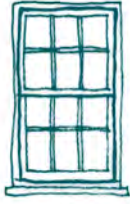
#### COMMON WINDOW TYPES

All of the identified window types can have different muntin patterns or configurations. Muntin patterns are defined in terms of the number of panes or lights. (Refer to *Window Configurations*, page 06-2)

- **Fixed:** Non-operable framed glazing
- **Single-hung:** Fixed upper sash above a vertically rising lower sash
- **Double-hung:** Two sashes that can be raised and lowered vertically
- **Sliding:** Either a fixed panel with a horizontally sliding sash or overlapping horizontally sliding sash
- **Casement:** Hinged on one side, swinging in or out
- **Awning:** Hinged at the top and projecting out at an angle
- **Hopper:** Hinged at the bottom and projecting in at an angle
- **Vertical Pivot:** Pivots vertically along its central axis
- **Horizontal Pivot:** Pivots horizontally along its central axis



1/1 Window



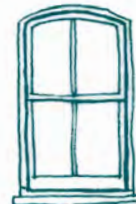
6/6 Window



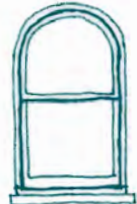
4/4 Window



6/1 Window



2/2 Arch-Top Window



1/1 Arch-Top Window

## WINDOW CONFIGURATIONS

Window patterns and configurations are intrinsically linked to a building's period of construction and architectural style. Older buildings, such as those built in the Colonial and Federal periods, typically have double-hung or casement windows with smaller panes of glass and more simplified detailing reflective of the materials and hand manufacturing processes readily available at that time. Late-19th century buildings, such as those from the Victorian period, often had windows of varying shapes with elaborate frames, casings, applied ornament and trim, and larger glass lights. Finally, Colonial Revival buildings of the early-20th century often reproduce aspects of the Colonial and Federal styles, but might include larger lights.

Because all of the components and details of a window are essential to defining the construction period and style, the pattern and configuration of a proposed replacement window should be historically appropriate for each building. If considering a replacement window, it is important to keep in mind that altering the window type, style, shape, material, size, component dimension, muntin pattern or location can dramatically alter the appearance of the building.



Arched-top windows are often found at Italiante buildings, which also feature decorative cornice brackets.



The projecting, second floor oriel window provides a third floor balcony accessed by a central door. This two-story feature provides a visual focus for an otherwise simple elevation.

## DEFINITIONS

**Glazing:** Glass

**Light:** A pane of glass

**Mullion:** The vertical framing element separating two window or door frames

**Multi-light:** Having many glass panes, as a window or door

**Muntin:** The narrow molding separating individual panes of glass in a multi-paned window sash

**Sash:** The part of the window frame that holds the glazing, especially when movable

**Simulated Divided Light (SDL):** A window or door in which muntins are applied to a larger piece of glass at the exterior, interior and/or between layers of insulated glass

**Single-light:** Having one glass pane, as a window or door

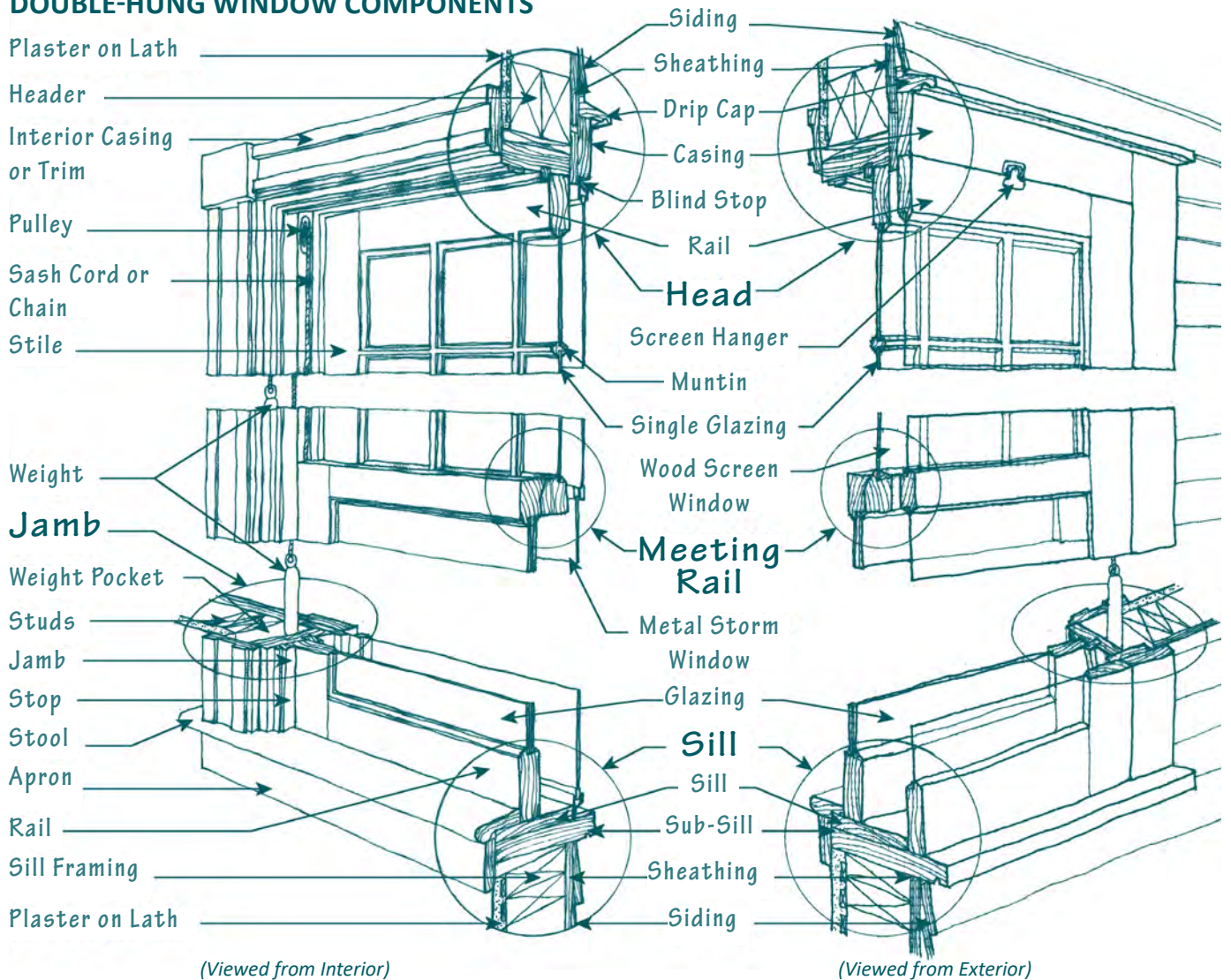
**True Divided Light:** A window or door in which a glass area is divided into several small panes

## WINDOW AND DOOR TRIM

Refer to *Wood Trim and Ornament, Guidelines for Exterior Woodwork*, page 04-7.



## DOUBLE-HUNG WINDOW COMPONENTS



(Viewed from Interior)

(Viewed from Exterior)

## HISTORIC WINDOW PROBLEM SOLVING

Property owners may not pay attention to their windows until a problem occurs. Typical concerns include operability, air infiltration, maintenance and appearance. Generally, the appearance of a window that has not been properly maintained can seem significantly worse than its actual condition. Replacement of an entire wood window because of a deteriorated component, typically the sill or bottom rail, is rarely necessary. In many instances, selective repair or replacement of damaged parts and the implementation of a regular maintenance program is all that is required. It is generally possible to repair windows in fair or good condition relatively economically.

### Maintenance

- Regularly review condition, repair, and repaint windows

### To improve operation

- Verify that sash cords, chains, and weights are functional — Install metal sliders or sash tape, balances, or operators at jambs if repair is not practical
- Repair or replace deteriorated components such as parting beads that separate window sash

- Remove built-up paint, particularly at jambs

### To reduce air infiltration

- Replace broken glass (glazing)
- Install weather-stripping snugly between moving parts — Quality metal weather-stripping can last 20 years (Refer to *Weather Stripping and Caulk*, page 06-10)
- Re-caulk perimeter joints
- Remove and replace missing or cracked glazing putty
- Add sash locks to tighten windows
- Add interior or exterior storm window — A storm window can achieve similar R-values to a new thermal window
- Insulate weight pockets if no longer in use

### To reduce solar heat gain or heat loss

- Install and utilize operable exterior shutters where historically appropriate
- Install interior blinds, curtains, or UV window shades
- Plant deciduous trees at south and west elevations to block summer sun and allow in winter sun, and plant conifer trees at north to reduce effect of winter winds
- Install clear, transparent low-e film or glass



One of the advantages of historic wood windows over a modern prefabricated unit is repairability. This photograph demonstrates a Dutchman repair at the corner of the historic wood window sash. Also note the application of new glazing putty as part of the repair.

## WINDOW MATERIALS: PAST AND PRESENT

Wood windows were historically manufactured from durable, close-, straight-grained hardwood of a quality uncommon in today's market. The quality of the historic materials and relative ease of repairs allows many well-maintained old windows to survive from the early-20th century or earlier.

Replacement windows and their components tend to have significantly shorter life spans than historic wood windows.

### WOOD WINDOW REPAIR

Given the significance windows play in defining the architectural character of a building, **the HDC strongly encourages the maintenance and repair of existing windows**. If portions of a window are deteriorated, it is often possible to replace only the deteriorated portion or component of the window. Replacement of the entire component or unit might not be necessary. (Refer to *Detecting Wood Rot* and *Wood Repair Options*, page 04-4.)

**A property owner wishing to pursue historic window replacement is required to demonstrate that the existing windows are beyond repair and replacements are warranted.**

When evaluating window repair versus replacement, the following guidelines can be helpful:

**1. Perform routine maintenance:** Replace broken or missing components such as trim, glazing or sash cords. Verify that caulking, glazing putty, parting beads and weather-stripping are applied securely and repaint the window. (Refer to *Weather Stripping and Caulk*, page 06-10.)

Selecting replacement windows is further complicated by manufacturers who tend to offer various grades of windows, with different types and qualities of materials and warranties. Today, lower cost wood windows are typically made from new growth timber, which is much softer and more susceptible to deterioration than the hardwoods of the past. Vinyl and PVC materials, now common for replacement windows, break down in ultraviolet light, and generally have a life expectancy of less than 20 years. Fiberglass and composite windows, typically made from a combination of wood material and plastic resins, have only been available since the 1990's, so their longevity has not been fully evaluated. Because of the great variety of finishes for aluminum windows, they continue to be tested to determine projected life spans.

Other areas of concern with replacement windows, beyond the construction materials used in the frame and sash, include the type and quality of the glazing, seals, fabrication, and installation. Double glazing or insulated glass, used in most new window systems, is made up of an inner and outer pane of glass sandwiching a sealed air space. The air space is typically filled with argon gas sealed around the perimeter. This perimeter seal can fail in as few as 10 years, resulting in condensation between the glass layers, necessitating replacement to allow for clear visibility. Many of the gaskets and seals that hold the glass in place also have a limited life span and deteriorate in ultraviolet light.

Significant problems with replacement windows also result from poor manufacturing or installation. Twisted or crooked frames can make windows difficult to operate. Open joints allow air and water infiltration into the wall cavity or building interior. When selecting replacement windows, it is important to consider life span and life-cycle costs.

- 2. Treat or repair deteriorated components:** At the earlier stages of wood deterioration, it is possible to complete in-place treatments that do not necessitate component replacement. These include treating wood for insects or fungus, consolidating with epoxy and applying putty at holes and cracks and painting. Refer to *Wood Repair Options, Guidelines for Exterior Woodwork*, page 04-4.
- 3. Replace Deteriorated Components:** Replace either the deteriorated portion of wood with a "Dutchman" or the entire component if the majority is deteriorated. (A Dutchman is a repair with a piece of the same material in a sharp-edged recessed cut. Refer to photograph above.) The replacement piece should match the original in design, shape, profile, size, material, and texture. New wood sills are usually easily installed, while complete sash replacement might solve problems of broken muntins and deteriorated rails.
- 4. Replace Window:** If the majority of the window components are deteriorated, damaged, or missing and in need of replacement, installation of a new window that matches the original window might be warranted with appropriate documentation.





*Sash that are curved or those with intricate muntin patterns can be costly to duplicate. Every effort should be made to preserve the original sash.*

## WINDOW REPAIR VERSUS REPLACEMENT

When considering repair and retention of existing windows versus installation of replacement windows, applicants are encouraged to retain existing historic windows except in the case of extensive deterioration. In such a case, documentary evidence must be provided with an application. It can often be less costly to repair an existing historic wood window than to install a replacement window. (Refer to *Historic Window Problem Solving*, page 06-3.)

It is important to remember that just because a portion of the window or door is deteriorated, replacement of the entire component or unit might not be necessary, particularly for wood windows. A simple means of testing wood window deterioration is to probe the element with an awl or ice pick. Pierce the element perpendicular to the grain at an angle where the wood appears darker in color and measure the penetration depth and damp wood and assess the type of splintering. (Refer to *Detecting Wood Rot*, page 04-4.)

## HDC WINDOW REVIEW

**The HDC strongly encourages window repair or replacement of only those components of windows that are deteriorated beyond repair. If a property owner wishes to pursue window replacement, it will be necessary to demonstrate that the existing windows are beyond repair and replacements are warranted by providing detailed photographs for review.**

## FIBERGLASS AND COMPOSITE WINDOWS

Fiberglass windows are made from sand, while composite windows are made from sand combined with wood pulp. When compared to vinyl windows, fiberglass and composite windows:

- Are stronger, harder, and more rigid than vinyl - Thus requiring smaller frame and sash dimensions and allowing greater glass sizes and admission of sunlight
- Have similar expansion and contraction rates as wood and glass, minimizing seasonal opening of seams and joints
- Can be fabricated with profiled exterior frames and exterior muntins to approximate the appearance of wood windows
- Can have a paintable, exterior finish

Both fiberglass and composite windows tend to be more affordable than wood windows. However, there is great variety in the types of detailing, with some manufacturers doing a better job of approximating the appearance of wood windows. Care should be taken in reviewing the appearance with regard to all dimensions, such as frames, sash, and muntin thicknesses, as well as overall configuration.

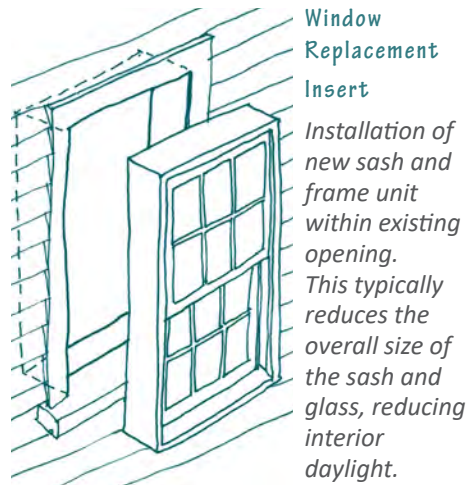
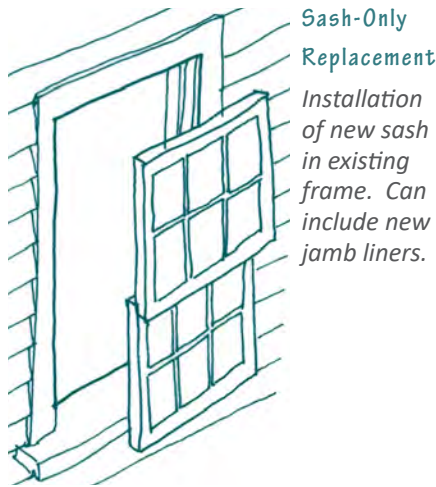
## ALUMINUM WINDOWS

When the majority of windows in commercial and large-scale residential buildings are deteriorated, property owners often seek a quality replacement window that will not require a high level of maintenance. An option that is often considered is aluminum replacement windows. Because aluminum replacement windows are typically custom made to fit within existing masonry openings, they are frequently used in larger commercial applications rather than as replacement windows for single or two-family homes.

Some of the advantages of aluminum replacement windows is that they can usually be made to replicate historic wood windows while including insulated glass for better thermal performance. This replication can include the sash operation and exterior profiled muntins matching the historic configuration. In addition, because they have a factory-applied, baked on paint finish, which can be selected to match historic paint colors, they do not require the regular repainting associated with wood windows.

Because of the strength of aluminum and its ability to fasten the parts of the window together with strong connections, aluminum replacement windows can easily outlast the lifespan of vinyl alternatives by two to three times depending on the quality of each product. Although the initial costs associated with aluminum replacement windows is typically greater than vinyl, the life-cycle costs associated with more frequent replacement of lower-quality windows might provide overall costs savings in the long run. In addition, the overall thermal performance of an aluminum replacement window tends to be higher than most vinyl windows, allowing for energy costs savings for the building occupants.





## WINDOW OPTIONS

**Repair or replacement of existing components:** Deteriorated sills, sash and muntins are repairable by craftsmen with wood consolidant or replacement parts, retaining original fabric and function. (Refer to *Wood Repair Options*, page 04-4.) In-kind replacement sash components and sills can be custom-made to replace deteriorated elements if necessary. Property owners are strongly encouraged to explore repair and selective replacement parts options prior to considering whole sash or frame replacement, particularly at historically significant buildings.

### **Repair and selective component replacement benefits:**

- Original building fabric and historic character remain
- Historic profiles, dimensions, and proportions can be retained and matched
- Repairs can be completed by skilled local carpenters
- Timber used in historic windows can last substantially longer than replacement units

**Sash replacement package:** If the sash is beyond repair, some manufacturers offer replacement jamb liners and new sash for installation within existing window casings. (Jamb liners are the vertical internal facing between the window sash and structural frame.) Because of the loss of the historic sash, this option is discouraged by the HDC.

### **Sash replacement package disadvantages:**

- Stock replacement sash are often inappropriate to the size, profiles, and proportions of existing openings and detailing
- Replacement sash have a limited warranty, likely needing another partial or full replacement in 10 to 25 years as seals and joints open
- Modification of the jambs is necessary
- Liner often made from vinyl or other inappropriate material
- The jamb liners do not always work well in existing window openings and might need more frequent replacement
- Out-of-square (wrecked) openings can be hard to fit, making window sash hard to operate, and seals might not be tight
- Historic sash are removed and become landfill debris

**Frame and sash replacement unit:** If the frame is beyond repair, a frame and sash replacement unit is a complete frame with a pre-installed sash of various muntin patterns for installation within an existing window frame opening. Due to the total loss of the sash and modification of the frame, this is not recommended by the HDC for historic buildings. It might be an option in new construction, based upon the specific circumstances of a project.

### **Frame and sash replacement unit disadvantages:**

- Stock replacement sash are often inappropriate to the size, profiles, and proportions of existing openings and detailing
- As the surrounding frame typically must be modified, alteration of built-in surrounds might be required and two frames and sills are typically visible at the exterior
- The size of the window sash and glass openings are reduced due to the new frame within the old frame
- In-fill might be required for non-standard sizes
- Modification of existing casing and sills may be required
- Historic sash are removed and become landfill debris

## INSTALLING REPLACEMENT WINDOWS

When installing windows, it is important to keep in mind that the overall appropriateness of any installation is largely based upon its details. It is generally best to review buildings of similar style, materials, and construction period for the appropriate details for a project.

- **Wall Plane** — An easy way to identify new windows is by how far back a window is set into a wall plane from the outside wall face. A historic window tends to have greater depth than a new window, with the window casing, frame, and sash receding back from the wall plane, providing shadow lines between components.
- **Casing and Sill** — Many replacement windows do not come with a factory-installed casing or sill, requiring them to be field-applied by a contractor during installation. To ensure that the replacement windows look like they “fit” a building, the stylistically appropriate casing and sill should be installed related to the building’s style and construction type, either masonry or wood-framed.

Vinyl windows with applied muntins lack the profiles and details of traditional wood windows and are not appropriate at historic buildings.

They are also mounted flush to the outside wall without trim or casings.



## MAINTAINING REPLACEMENT WINDOWS

One of the selling points of replacement windows is that they do not require maintenance. With the relatively short life expectancy of many of the materials and components, this is a very optimistic viewpoint.

As joints or seals in replacement windows deteriorate, openings can be formed that allow air and water to enter into the window frame, wall cavity and/or building interior, causing additional damage. Repair of these openings typically requires replacement of the deteriorated parts. This can present a problem if the manufacturer has modified their designs or is no longer in business, necessitating custom fabrication of deteriorated elements or replacement of the window.

As previously described, the double-glazing has similar problems over time due to deterioration of the perimeter seal. In addition, if the glazing unit is cracked or broken, it will require full replacement. This is further complicated when the double-glazing includes an internal muntin grid. By contrast, a good carpenter can generally repair a historic wood window with single-pane glazing and install an interior or exterior storm window to improve thermal performance.

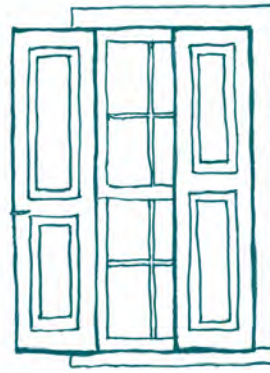
## REPLACEMENT WINDOW QUALITY

Reputable mill shops, lumber yards, and window specialists typically provide a better selection and higher quality replacement window options than companies that advertise with bulk mailings or flyers. Local companies are often familiar with the unique attributes of window detailing for building types and periods in Fall River and are a better option for matching historic detailing.

## REPLACEMENT WINDOW COSTS

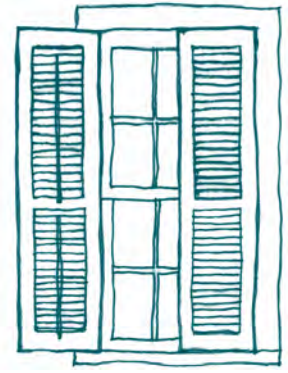
The costs that should be anticipated when considering the installation of replacement windows include:

- Labor to remove old windows and the disposal fee
- Purchase price and delivery of new windows
- Labor and materials to modify existing framing for new windows
- Labor to install new windows
- Life-cycle cost of more frequent replacement of deteriorated components, sash, and window units



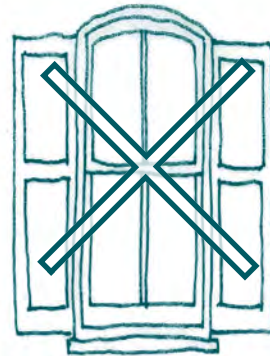
### Paneled Shutter

Six-over-six double-hung window with paneled shutters



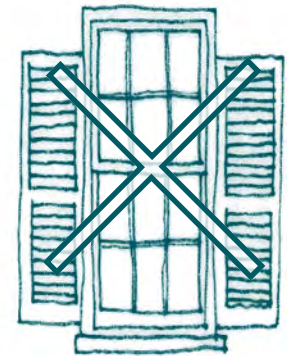
### Louvered Shutter

Six-over-six double-hung window with louvered shutters



### Not Recommended

The shutters do not fit the arched opening of the window



### Not Recommended

The shutters are too short and narrow for the window

## SHUTTERS

Historically, exterior shutters were used as shielding devices to modulate light and protect against inclement weather. Paneled shutters were installed to provide a solid barrier when closed and louvered shutters were used to regulate light and air. Shutters were not used on all historic buildings or in all locations. Some building styles did not typically include shutters. It is often possible to determine if shutters previously existed by looking for hardware such as hinges or tie-backs or evidence of their attachment, such as former screw holes in the window casing.



Shutters should be wood, operable and sized to fit window openings when closed. Shutter hardware should be compatible with the building style and typically includes hinges and "shutter dogs" or hold-backs.



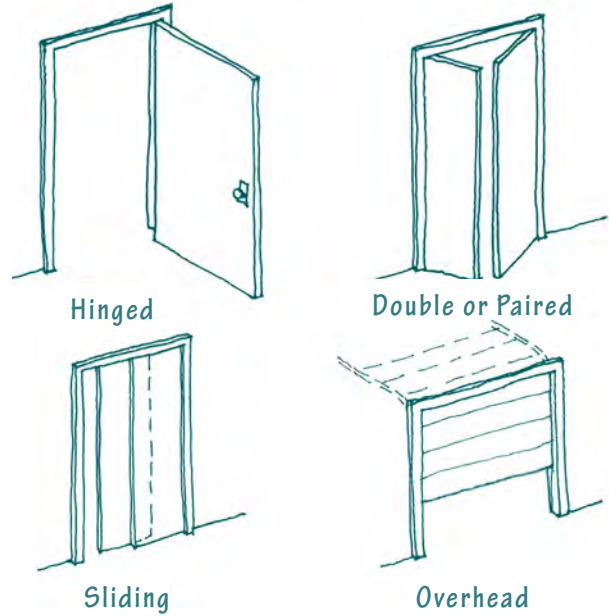


Most of the doors found at historic homes in Fall River are paneled wood. This example includes decorative panels and a single-light transom window.

## DOORS

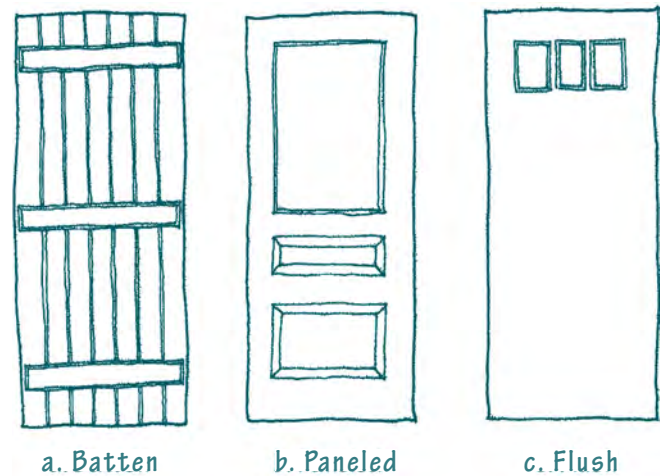
Entrance doors serve an important role in regulating the passage of people, light and air into a building, as well as providing a threshold separating the exterior and interior. Historically, most doors were wood and varied stylistically based upon the architectural style of the building, with some more “high-style” and others simpler interpretations. Similarly, a building can have a grand front door, and a simpler side or rear door. As a result, doors are considered an important feature and the retention, maintenance and repair of historic doors is recommended. Traditionally, a door’s hardware and trim complemented the overall building style. When selecting hardware for a door it is important to complement its historic style.

Doors are typically constructed of numerous parts. By the mid-18th century, elaborate paneled doors became more common, and now represent the most common door type in American residences. Paneled doors can be constructed in a variety of configurations that can reflect the style of the building. Late-19th century doors often included glazed panels. In the 20th century, new door types, including flush doors and metal doors, had periods of popularity.



## COMMON DOOR TYPES

- **Hinged:** Swings to close at opposite jamb – almost always mounted at interior thickness of wall swinging inward
- **Double or Paired:** A pair of swinging doors that close an opening by meeting in the middle – includes French doors
- **Sliding:** Either a fixed panel with a horizontally sliding door or overlapping horizontally sliding doors – includes patio doors
- **Overhead:** Horizontal sections that open upward by sliding on tracks – most often found at garages

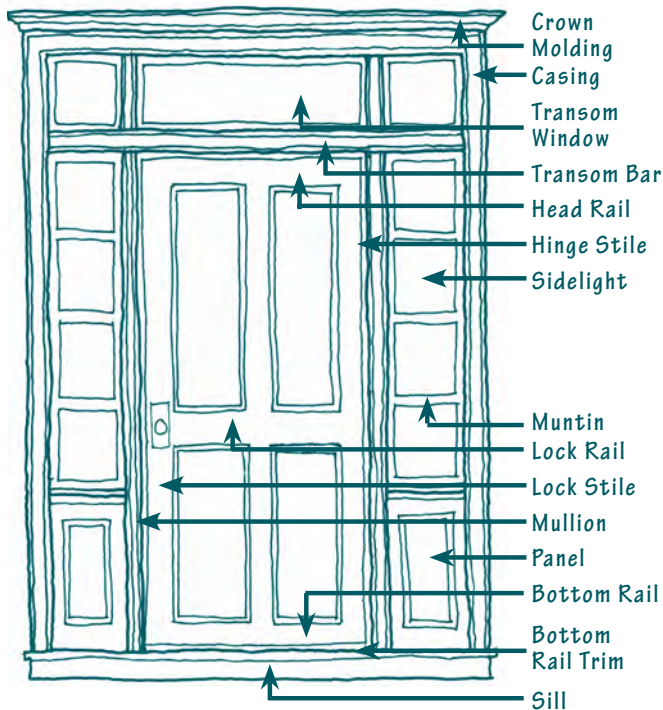


## COMMON WOOD DOOR STYLES

All door styles can have glazing installed in different configurations.

- **Batten:** Full height boards attached edge to edge with horizontal boards nailed to the verticals
- **Paneled:** A frame of solid wood parts with either glass or wood panels
- **Flush:** A single plain surface on its face, typically wood veneer





## PANELED WOOD DOOR COMPONENTS

In Fall River, paneled wood doors are the most common at historic residences. The diagram above identifies typical wood paneled door components. Door configurations vary with a building's architectural style.



Grand homes often have ornate entrance doors to impress visitors, while simpler doors tend to be located at side and rear elevations. This Classical Revival example includes a four-light transom window, flanked by four-light sidelights.



Wood checking and peeling paint is visible. Minor repair and maintenance can prolong the serviceable life of this door.

## HISTORIC DOOR PROBLEM SOLVING

Since doors tend to be one of the most operated elements on the exterior of a building, they are more likely to deteriorate from wear or damage and require regular maintenance, such as painting. If deterioration occurs, selective repair or replacement of damaged parts and the implementation of a regular maintenance program is often all that is required to retain a historic door.

### To improve operation:

- Verify that doors fit properly in their frames and joints are tight
- Verify that hardware is operational, particularly that hinges are tight and hinge pins not worn
- Remove built-up paint at door and jambs
- Repair or replace deteriorated components such as trim and stops (molding inside a door frame that stops a door from swinging)

### To reduce air infiltration:

- Install weather-stripping snugly between door and frame (quality metal weather-stripping can last 20 years)
- Replace broken glass (glazing) and missing or cracked glazing putty
- Caulk perimeter joints around casing and frame
- Install a storm door

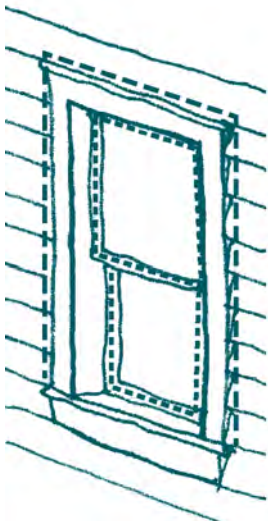
### To reduce solar heat gain or heat loss:

- Install and utilize operable exterior shutters
- Install clear, transparent low-e film or glass

### Door maintenance:

- Regularly inspect, repair and repaint doors

If door replacement is warranted, the door should be appropriate to the architectural style and character of the building. Similar to windows, replacement doors should match the original materials, type, size, shape, configuration, panel pattern, glazed window type, pattern, proportions, profiles and details as historic doors. Salvaged doors may be more appropriate than new doors. However, salvaged doors must match the size, shape, type, configuration, proportions, and profiles of the original doors to be appropriate. (Refer to *Doors* page 06-8, and the HDC for additional information.)



**Recommended weather-stripping**

**locations:**

- Behind window sash track
- Between window meeting rails
- At perimeter of doors/windows

**Recommended caulk locations:**

- Between door/window frame and adjacent wall
- Between abutting materials such as corner boards and siding, porch and wall surface
- Between dissimilar materials such as masonry and wood, flashing and wall surface

## WEATHER STRIPPING AND CAULK

Proper application of weather stripping and caulk around windows and doors can greatly reduce air infiltration and drafts. When selecting weather stripping or caulk, choose materials appropriate for each location and follow the manufacturer’s installation recommendations for best results. Because weather stripping is used between the moving parts of windows and doors, it can easily become damaged, loose, bent, or torn. Inspect weather stripping regularly, preferably every fall, and replace it as needed. For heavy-use installations such as entrance doors, it may be beneficial to install more durable weather stripping, such as spring metal or nailed felt.

The installation of caulk or other sealants should occur throughout the exterior of the building to minimize interior drafts and to protect the building’s wall system from wind-driven rain. Locations where caulk is recommended include where two dissimilar materials meet; where expansion and contraction occur; or where materials are joined together. Select caulks and sealants that can be sanded and/or painted to minimize their visual appearance. In addition, care should be taken to prevent caulk or sealant from being smeared onto the face of adjacent materials since the residue might affect paint adherence. It is also important to select the appropriate type for each location and exercise care when removing old caulk that might contain lead. (Refer to *Safety Precautions*, page 01-9.)

### DEFINITIONS:

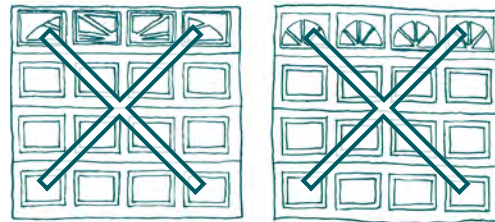
**Weather Stripping:** A narrow compressible band used between the edge of a window or door and the jambs, sill, head, and meeting rail to seal against air and water infiltration; made of various materials including spring metal, felt, plastic foam, and wood with rubber edging.

**Caulk:** Flexible sealant material used to close joints between materials; made of various materials including tar, oakum, lead, putty, and modern elastomerics such as silicone and polyurethane.

## SCREEN / STORM WINDOWS AND DOORS

Screens and storms should conceal as little of the historic window or door as possible and should be selected to complement each window or door type. This generally means selecting a half-screen for double hung windows and a wood storm window that has rails that coincide with the frames, rails, stiles, and glazing pattern and overall configuration of the associated window.

The most recommended option for a screen or storm door is a simple wood framed opening with a large screen and minimal ornament. If more elaborate detailing is desired, the style and level of detailing should complement the building style; for example, a screen or storm door with Victorian gingerbread would not be appropriate for a Colonial or Federal style house.



*Garage doors with arched or round window openings are generally not appropriate at historic buildings.*

## GARAGE AND NON-TRADITIONAL DOOR TYPES

Occasionally, modern functions require openings not found in historic architecture. These may include: garage doors, loading dock doors, doors that must swing outward to meet safety or code requirements, or other special conditions. The goal of the HDC is to integrate these types of openings in a sensitive manner to maintain the historic character of the building and the surrounding neighborhood.

If an opening can be made which copies another opening type which could have reasonably existed on a particular building, then it may be desirable to do so. In some cases it may be impossible to make certain desired changes, such as adding a garage door opening, simply because the style or type of building does not lend itself to such modification. Where existing additions or modifications do not fit the pattern of Fall River’s historic development, every effort should be made to minimize its impact rather than making the intrusion more prominent by potentially locating them at secondary elevations and in a manner that minimizes removal of character-defining features.

## MODIFYING OR ADDING OPENINGS

The arrangement, size and proportions of window and door openings are key components of a building’s style and character. As a result, the modification or addition of window or door openings, particularly on more prominent building façades, is strongly discouraged. This includes modifying a window for fire escape access, the infill of all or part of an opening to make it smaller or to visually remove it. It also includes increasing the size of a door opening to provide a larger opening for a display window, garage, loading dock, or other use.

## HDC CRITERIA FOR WINDOW AND DOOR REVIEW

### When is HDC Review Not Required?

#### HDC review is not required for:

- A replacement exterior door, window or storm window, provided that it matches the historic design and materials — or if the materials used restore the original architectural features, including but not limited to the number and arrangement of window lights, use true and non-removable divided lights, and ensure that the size of window openings does not change
- Window-mounted air conditioner units that are temporary and seasonal
- Installation of window flower boxes
- Installation of unobtrusive, electronic security devices

#### HDC is not required in order to replace shutters provided they are:

- Constructed of wood
- Sized at one-half the width of the sash they are to cover
- Installed with hinges and shutter dogs as appropriate to the building style
- Louvered, paneled or constructed of boards as appropriate to the location and building's architectural style

#### HDC review is not required for a storm or screen window and door installation or replacement provided:

- They are constructed with wood frames, with any metal or vinyl tracks concealed by the wood frames
- Replacements are the same design and materials as the elements they are replacing or restore the original architectural features

### Windows

When evaluating a proposed replacement window material, the HDC utilizes the Criteria for Review and will consider the following replacement window materials, with all options to include profiled, exterior muntins, appropriate to the building style and period of construction:

1. Wood — Wood windows can either be true or simulated divided lights with insulated glass and exterior muntins
2. Aluminum (At commercial buildings and new construction only) — Details and profiles should generally match wood construction, with the exception of storefront windows
3. Fiberglass / Composite — Preferably with a painted exterior finish
4. Aluminum clad — Details typically vary and it is difficult to modify color
5. Vinyl clad — Generally lacks sharp details of wood, has a glossy finish, and is difficult to modify color
6. Vinyl — Lacks exterior profiles and details of wood, glossy finish, difficult to modify color, tends to require more frequent replacement — Not appropriate

#### *The HDC encourages:*

- Retaining and maintaining serviceable historic windows
- Using storm windows rather than replacement windows as the best means to achieve energy efficiency with color and meeting rail location matching historic window
- Installing weather stripping, caulk, glazing putty, and sash locks to reduce air infiltration
- Reducing solar heat gain or loss through such activities as: utilizing shutters, blinds or curtains, strategically locating trees, and installing UV protection
- Installing clear glass at all openings unless replacing cracked historic colored, beveled, or frosted glass in-kind

#### *If replacement windows are warranted, the HDC encourages:*

- Reviewing grades of windows offered by manufacturers
- Utilizing quality materials in the installation process
- Understanding the limits of the warranties for all components and associated labor for replacement
- Selecting reputable manufacturers and installers who are likely to remain in business and honor warranties
- Installing quality true divided-light or simulated divided-light replacement windows with a paintable finish to match the original material, size, shape, configuration, operation, dimensions, profiles, and detailing of historically appropriate windows to the greatest extent possible, including the use of egress windows
- Maintaining the daylight opening (size of glass) at replacement windows
- Selecting wood- or aluminum-clad wood replacement windows for street elevations
- Installing replacement windows in less visible areas and relocating historic windows to more prominent locations such as the front elevation
- Maintaining serviceable trim, hardware, and components or utilizing hardware appropriate for the historic period
- Removing fire escape egress openings and reinstalling historically appropriate windows

#### *If replacement of a window is required for fire egress, the HDC encourages:*

- Selecting an inconspicuous location for the egress window
- Maintaining the size and appearance of the historic window

#### *The HDC discourages:*

- Replacing historic wood windows that are not significantly deteriorated and remain serviceable
- Interior or internal muntin grids for multi-paned appearance
- Installing glass block
- Installing exterior, window security grilles or bars





Center-hall homes generally have an door flanked by a pair of windows at each level. In this example, the windows all have 6/9 double-hung sash with wood louvered shutters.

## HDC CRITERIA FOR WINDOW AND DOOR REVIEW (CONTINUED)

### Shutter Review

#### *The HDC encourages:*

- Maintaining historic shutters
- Installing new shutters where they existed historically
- Operable shutters made of wood or other materials with a paintable finish
- Shutters of the appropriate style for the building and location, with a painted finish
- Appropriately sized and shaped shutters for the window opening, fitted to cover the window when closed
- Period-appropriate hardware
- Refurbished historic shutter hardware appropriate to the building style

#### *The HDC discourages:*

- Shutters where they did not exist historically
- Shutters screwed or nailed into the building wall
- Vinyl or aluminum shutters

### Door Review

#### *The HDC encourages:*

- Retaining historic doors and surrounding trim
- If the originals do not survive, matching replacement doors as closely as possible to the original doors or using salvaged doors appropriate to the period and style of the building
- Installing historically and stylistically appropriate wood replacement doors when level of deterioration requires replacement

#### *The HDC discourages:*

- Removing or encapsulating surrounding trim
- Replacing original doors, unless seriously deteriorated

### Screen/Storm Windows and Door Review

#### *The HDC encourages:*

- Simple storm/screen windows and doors with large screened openings that reveal as much of the historic window or door as possible and fit historic openings
- Removable storm/screen windows to facilitate maintenance of historic windows
- Storms/screens (half screens) that minimize the change to the exterior appearance
- Painting the wood storm/screen window or door frame to match the adjacent window or door trim

#### *The HDC discourages:*

- Vinyl, aluminum, metal, or other synthetic materials for storm/screen frames – Wood frames can be custom made to fit any size or shape opening
- Visually opaque screen material
- Plexiglas, or similar material, fastened to window or door frames, screens, or shutters
- Storms/screens adhered or fastened directly to window or door trim, shutters, or blinds
- Storm/screen windows that are too small or a different shape than the opening and require in-fill trim or panels
- Full window screens covering the entire window opening — Half screens are appropriate for single- and double-hung windows

### Garage and Non-Traditional Door Review

#### *The HDC encourages:*

- Retaining historic doors
- Stylistically appropriate replacement doors
- New paneled doors with a paintable exterior finish
- Single-bay garage openings that do not require removal of decorative features or modification of opening

#### *The HDC discourages:*

- Non-traditional door types that are visually prominent from the street



# CITY OF FALL RIVER

## Historic District Commission

### Guidelines for Site Elements



*Granite retaining and landscape walls are an important site feature in Fall River's historic residential neighborhoods. They define property edges and help to navigate steep slopes.*

### FALL RIVER'S SITE ELEMENTS

Established site features such as sidewalks, street trees, yards, walls, fences, walkways, and driveways can define the unique character of a neighborhood and frame the city's architecture. For each property, the relationships of landscape elements can be viewed in terms of the front, side and rear yards around primary structures, as well as the locations of secondary structures within the landscape setting. Aspects of the landscape surrounding individual or groups of historic structures represent important associations of traditional organization and visual and physical relationships. Site elements and landscape features include:

- Plantings of trees, shrubs, and gardens and their placement in relation to structures
- Fences, walls, and gates
- Walkways, driveways, and parking arrangements
- Site lighting
- Mechanical equipment
- Recreational features such as pools and play equipment

These *Guidelines* were developed in conjunction with the City of Fall River's Historic District Commission (HDC) and the Planning Department. Please review this information during the early stages of planning a project. Familiarity with this material can assist in moving a project quickly through the approval process, saving applicants both time and money.

Additional *Guidelines* addressing other historic building topics are available at One Government Center, Room 534 and on the Commission's website at [www.fallriverma.org/historic-district-commission](http://www.fallriverma.org/historic-district-commission). For more information, to clarify whether a proposed project requires HDC review, or to obtain permit applications, please call the Planning Department at [frhdc@fallriverma.org](mailto:frhdc@fallriverma.org) or (508) 324-2530 or arrange to meet with staff.

### PLANTINGS: TREES, SHRUBS AND GARDENS

Historically, plantings and vegetation around residences in the City of Fall River consisted of trees, shrubs, and mixed gardens. The trees and shrubs surrounding the house provided shade and protection, while gardens provided food, herbs, and flowers. In many cases, the perimeter or decorative planting beds or sections of lawn have granite curbing, particularly at street elevations. Native plants were transplanted from nearby and traditional plants were carried from homelands. Showy, ornamental trees, shrubs, perennials and annuals became more common in the 19th century.

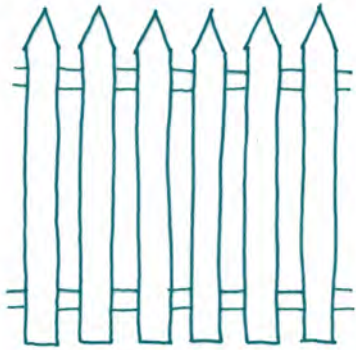
Today, Fall River benefits from a well-developed tree canopy that provides shade in the summer and a colorful display in the fall, contributing to the overall character of the community. Property owners are encouraged to maintain the trees on their parcel as well as large-scale shrubs and plantings. Because native plants are more tolerant to the local temperature and environmental conditions, they tend to be more resistant to weather conditions and can require less maintenance, water and fertilizer than plants from other locations.

In the City of Fall River, vegetation and plantings do not come under the jurisdiction of the HDC unless they are installed to visually screen a non-historically appropriate site feature, such as an air conditioner unit.

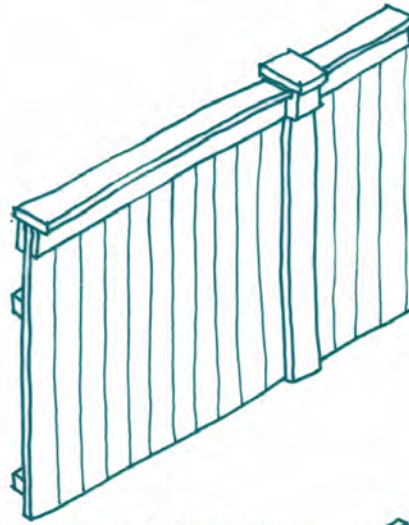
### ZONING REQUIREMENTS

Lighting, fencing, walls, and paving are all subject to the requirements of the City of Fall River's Zoning Ordinances. The ordinances dictate the height and location of fences and walls, the amount of paving permitted, the level of illumination allowable, and other requirements. These are separate and independent from historic preservation review, and it is highly recommended that applicants contact the Planning Department at (508) 324-2530 to review requirements prior to filing.

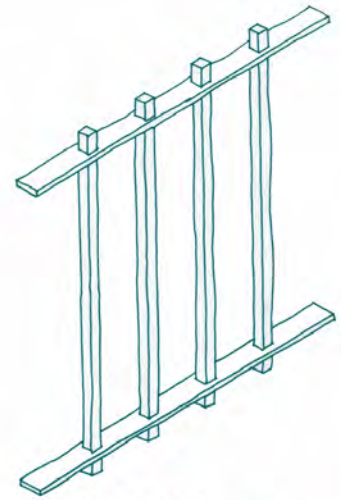




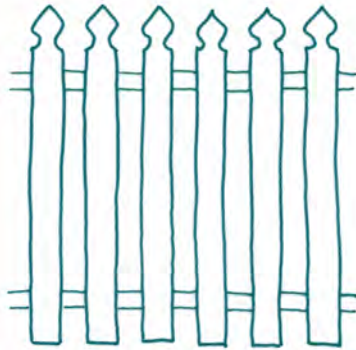
A. Pointed Wood Picket



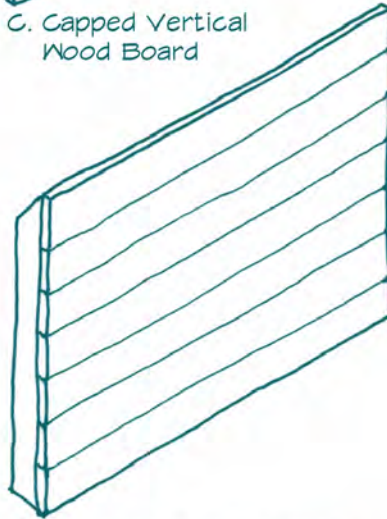
C. Capped Vertical Wood Board



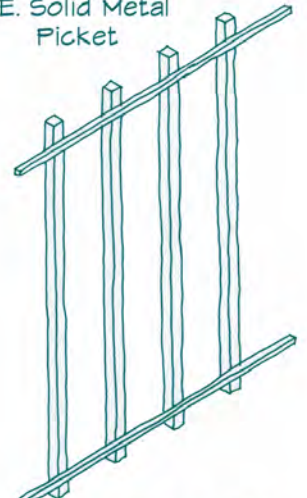
E. Solid Metal Picket



B. Gothic Style Wood Picket



D. Horizontal Wood Board



F. Metal Picket With Welded Bars

There are a variety of fence styles that can be found at different properties in Fall River. Wood picket fences, with either a picket or Gothic style top, Examples A and B, are often found in front yards and are generally 3- to 4-feet in height. Vertical or horizontal wood board fences, Examples C and D, are typically about 5- to 6-feet tall and tend to be located in side and rear yards to provide privacy from neighboring properties. Metal fences can be highly decorative or a simple picket with the height limited by the zoning ordinance depending on its location on the property. If installing a metal picket fence, the pickets should be solid and punched through the horizontal bar as shown in Example E. Pickets welded onto a bar, Example F, should be avoided.

## FENCES, WALLS AND GATES

Walls, fences, and gates are important elements of the overall character of a neighborhood. They:

- Identify property boundaries
- Provide privacy and security
- Are often a major element of a streetscape, separating public from private property
- Relate to a building's type and architectural style

Many of Fall River's residences that with a front yard set back include fence or a wall along a sidewalk. In addition to separating a property from the sidewalk, walls and fences are used to separate adjoining properties. When considering the construction of a new fence, wall or gate, it should be designed to be compatible with the architectural character of the building type and style.

## FENCE AND WALL HEIGHT

The height of fences and walls is dependent on their location on a property and are regulated by the zoning ordinance. When considering a fence or wall at a historic property, it is highly recommended that the visibility of the historic building be considered.

On relatively flat parcels whose height is similar to the adjacent sidewalk, fences in front yards should be limited to 36 inches in height, and should use a picket style that is at least 30% open. Simpler wood fences often separate neighbor's properties at side and rear yards, and can include privacy fences that are taller and solid. Walls along sidewalks should be limited to 24 inches in height to maintain public visibility of historic buildings. Parcels with significant slopes will require individual review to evaluate visibility





The details of wood picket fences can vary in detail. This example includes capped posts and rests on a masonry curb.

## FENCES

Historically, fences in Fall River are either wood or metal, and sometimes installed on top of a masonry wall or granite curb. The style of a fence and its level of detailing was often linked to the building's style and the fence's location on the property. More elaborate and expensive fences, such as highly detailed wood fences, cast or wrought iron, tended to be located at the front elevation of a building that was set back from the street.

### Wood Fences

Wood is a traditional fence material in the City of Fall River. They can be ornate or simple, or more elaborate detailing can be limited to areas adjacent to entrances and gates.

A common problem with wood fences is they deteriorate over time. Exterior woodwork, and particularly fences and gates that are fully exposed to the elements, are subject to rot and deterioration from moisture and pests. Regular repainting, maintenance and repair can postpone the need for replacement. (Refer to the *Guidelines for Exterior Maintenance* and *Guidelines for Exterior Woodwork*.)



Ornate fences can be made of cast metal.

### Metal Fences

The casting of metal into molds allowed fences and gates to be made of highly elaborate and detailed patterns. By contrast, wrought iron tended to be used for simple, slender pickets. One of the advantages of iron fencing is that it is visually "thinner" than wood, increasing the view of the front of the building from the public right-of-way. In Fall River, metal fencing was often installed on top of a granite curb.

## LANDSCAPE WALLS AND PIERS

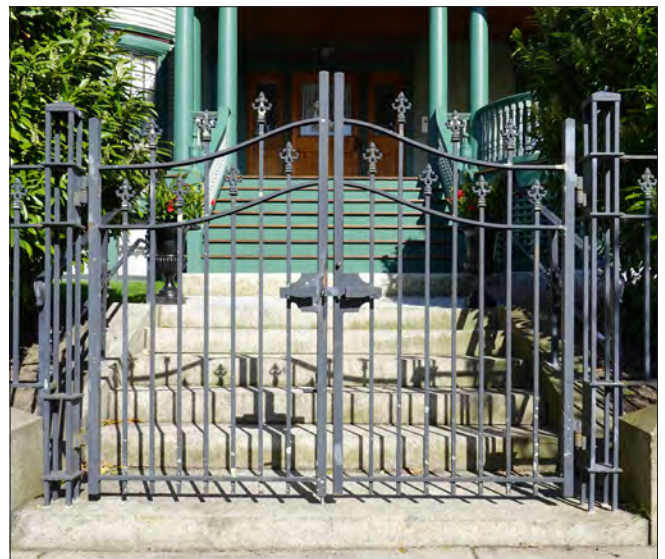
Historically, landscape walls and piers were constructed of stone and occasionally brick. They can be installed alone or in combination with metal picket fencing or wood fencing. They can also be used for retaining walls to address changes in grade at a sloped property. The type, size and shape of the stone used in the construction of a wall can dramatically alter its appearance, as can whether it is dry-laid, without mortar, or includes mortar joints. Similar to masonry on a building, stone and brick walls and piers require regular maintenance. (Refer to *Guidelines for Masonry and Stucco*.)



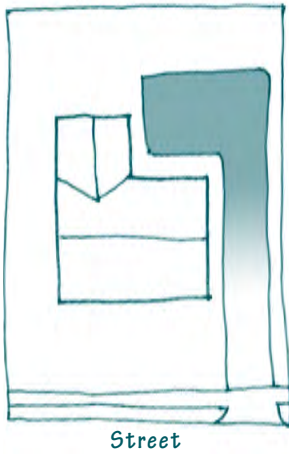
This granite stone landscape wall includes an inset brick detail.

### Gates

Pedestrian gates, traditionally along a walkway, are generally 3- to 4-feet wide. Gates for residential vehicular access are generally 10- to 12-feet wide. When installed with a fence, gates tend to be of the same material and similar design as the fence, although often more elaborate. When installed with a wall, they are generally flanked by piers, or gate posts that can be either wood or metal.



These high-style, paired metal gates are compatible with the residence.



*The preferred location for parking, as indicated by the darker shaded area, is towards the rear of the property, preferably concealed by a building, and away from the public roadway.*

## PAVING

Paving, which includes sidewalks, walkways, patios and driveways, has changed significantly with the development of new materials. Historic paving could be as simple as gravel or crushed shells, or hard materials such as brick or stone, laid in simple or ornamental patterns. Materials popularized in the 20th century include concrete and asphalt, and more recently cast concrete pavers, often colored and shaped to resemble brick or stone.

In an effort to retain the quality of Fall River's historic properties, the retention and maintenance of existing historic paving materials is encouraged. Property owners are also encouraged to minimize new paving and to use porous paving whenever possible to minimize runoff onto neighboring properties and into storm drains and roadways.

Since the character and context of every property is unique, each application for changes in paving location and material is reviewed on a case-by-case basis. When submitting an application for proposed paving, applicants should provide detailed, dimensioned site plans indicating the size and location of all existing buildings, paving and proposed paving changes.



*Brick can be used as an alternative paving material to asphalt. Also not the small, wood enclosure for garbage receptacles.*



*Granite curbs and steps are a distinguishing characteristic of Fall River's historic residences.*

## SIDEWALKS

Property owners may, with City approval, replace sidewalks and curbing at their own expense, particularly at a commercial development. If historic sidewalks and curbing require replacement, use of a compatible replacement material with granite curbs is recommended. Please contact the Planning Department at (508) 324-2530 for additional information regarding sidewalk and curbing requirements including compliance with the Americans With Disabilities Act.

## SIDEWALK CURBS

A distinguishing characteristic of Fall River's historic residences are granite curbs that separate the public sidewalk from a property's front lawn. Though not as tall as a retaining wall, granite sidewalk curbs contribute to the historic character of properties and should be maintained.

## SITE DRAINAGE

Substantial damage to a building can occur through ground water. One of the best ways to mitigate damage from storm water is to establish positive site drainage away from a building to prevent standing water along or near foundation walls. Additionally, the drainage pattern of a property should not be modified in a manner that increases storm water runoff to a neighboring property.

## SNOW AND ICE REMOVAL

The use of salt and chemical snow and ice removal techniques can damage stone and brick foundations and to be harmful to the environment. In addition, melting snow against wood elements such as building siding and fences can saturate woodwork. Removal of snow away from a building by shoveling or a snow blower is recommended.





*Exterior lighting should complement the style of the building.*

## EXTERIOR LIGHTING

Outdoor lighting is an amenity of modern life. For a historic house, outdoor lighting should highlight the architecture and be of a style appropriate for the historic building. (For storefront lighting, refer to *Sign Illumination*, page 09-7.) A wide variety of wall-mounted or free-standing reproduction replica historic lighting is available to meet the lighting needs of historic properties.

Prior to installation of lighting please consult the City of Fall River ordinance which regulates light pollution, illumination and requires dark sky lighting. Residential lighting should be installed to illuminate only pathways and access routes, limiting the spillage onto adjacent properties and the public way. Generally, lighting on one property should not extend onto the neighboring lots or into the night sky. To minimize light spillage, many lights are available that cast light downward where it is needed to illuminate walking surfaces. In addition, existing lights can often be fitted with hoods or shields to direct light downwards.

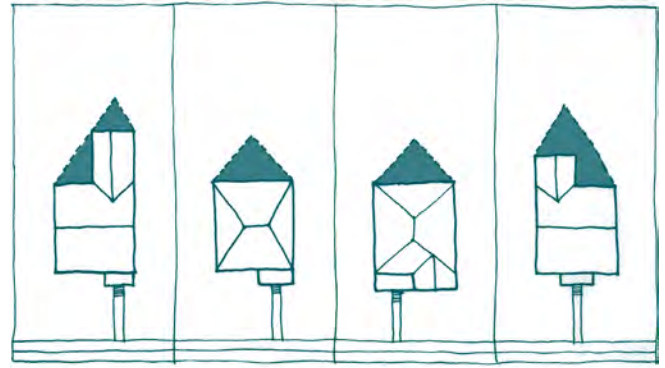
If security lighting is desired, it is recommended that it be located as discretely as possible, generally limited to side and rear elevations. The number of security lights should be limited, and they should be activated by motion sensors whenever possible.



*The location of this small structure makes it minimally visible from the public right-of-way.*

## SITE SCREENING

In instances where it is necessary to locate modern amenities in a location that may be highly visible, the HDC may request the installation of evergreen shrubs and plantings or solid fencing to minimize the visibility.



*Street*

*The HDC's jurisdiction extends to all visible portions of a designated parcel. This diagram illustrates the areas of a property that are out-of-view from a public right of way (concealed by buildings).*

*It is generally more appropriate to conceal modern landscape features, equipment and small structures from the public way, and to minimize their visibility.*

## MODERN LANDSCAPE FEATURES, EQUIPMENT AND SMALL STRUCTURES

Modern site amenities can greatly increase the enjoyment of a property as well as serve functional needs. However, many of these amenities can be visually obtrusive and are not appropriate within a historic context or setting.

- **Landscape Features:** Landscape features such as pergolas, fountains, and sculpture and play equipment such as jungle gyms, swimming pools, hot tubs, and tennis courts can add to the outdoor enjoyment of our properties, but can be visually obtrusive in a historic setting. If installing pergolas or fountains in a visible location, consideration should be given to their compatibility with the historic character of the building.
- **Ground-Mounted Equipment:** Air-conditioner condensers, generators, solar collectors, and satellite dishes are all examples of modern, ground-mounted mechanical equipment that can affect the historic integrity of a site and its surroundings. All equipment and associated conduit should be installed in an unobtrusive location and screened to limit visibility.
- **Small Structures:** Small structures can be functional and provide enjoyment for property owners. Generally less than 100 square feet in size, they include tool or garden sheds, play houses, dog houses, permanent sun shading canopies, building or wall-mounted awnings, and gazebos. These modern alterations can affect the historic integrity of a site and its surroundings. (Refer to *Secondary Buildings and Structures*, page 08-11 for garages and larger secondary structures.
- **Refuse and Recycling:** Refuse and recycling bins can be enclosed in small structures and bins, as well as behind fences and shrubs to minimize their public visibility.



## HDC CRITERIA FOR SITE ELEMENT REVIEW

### Building Site

#### *The HDC recommends:*

- Maintaining large-scale trees and shrubs
- Front yard development with traditional, simple arrangements, appropriate to the historic context
- Planting regionally native plants well-adapted to the site environment to minimize the use of water and chemicals in their upkeep
- Arranging plantings and site elements to allow visibility of historic buildings from the street
- Keeping a site clear of debris to aid in drainage during a storm and reduce the potential for debris becoming airborne in high winds
- Removing site debris, such as garden waste and wood items, to discourage termites and other pests

### Fences, Walls and Gates

#### *The HDC recommends:*

- Using traditional materials for walls, fences, gates, and other boundary markers in an appropriate manner
- Maintaining building views open to the surrounding public streets and sidewalks
- Installing fence posts towards the interior of a property
- Retaining and regularly maintaining fences, walls, and gates
- Regular repainting of wood and metal fences and gates

#### *The HDC discourages:*

- Blocking views to historic buildings and settings with solid walls, or dense fencing materials or planting
- Installing front yard fences that are greater than 48-inches in height, or walls that are greater than 36-inches in height
- Using stockade fencing at publicly visible locations

#### *The HDC strongly discourages:*

- Removing historic fences, walls and gates
- Installing chain-link fencing
- Installing non-traditional fence materials such as vinyl, PVC, or other synthetic materials for fences
- Installing concrete block at landscape walls that are publicly visible

### Paving

#### *The HDC recommends:*

- Minimizing the amount of paving on a site
- Retaining and maintaining historic paving, particularly brick or stone paving

- Replacing existing brick or stone paving in-kind, matching what is existing in material and pattern appropriate to the building type and construction period
- Installing patios in lieu of raised decks

#### *The HDC discourages:*

- Installing asphalt paving at walkways
- Installing stamped concrete paving or concrete pavers except at new construction
- Creating a parking area in the front yard of a residence

### Lighting

#### *The HDC recommends:*

- Installing lighting fixtures that complement the building's architectural style and material
- Installing unobtrusive lighting of historic properties that limits light spillage onto neighboring properties and into the night sky

#### *The HDC discourages:*

- Installing lighting fixtures that are not stylistically appropriate on historic buildings
- Installing obtrusive lighting of historic properties that illuminates neighboring properties
- Highly visible security lighting, particularly if always "on"

### Modern Landscape Features, Equipment and Small Structures

#### *The HDC recommends:*

- Maintaining building views open to the surrounding public streets and sidewalks and locating landscape features, equipment small structures where they are not publicly visible
- Constructing small structures in a manner that their walls and roof are of the same historic materials as those of the existing main building
- Screening modern site features such as air conditioning units and trash collection receptacles with plantings (preferably native) or fencing
- Screening of refuse and recycling bins from the public way by plantings, shrubs, or fencing

#### *The HDC discourages:*

- Locating landscape features, ground-mounted equipment and small structures to be visible from the public way
- Installing pre-manufactured sheds visible from the public way, particularly those with metal or vinyl wall cladding



# CITY OF FALL RIVER

## Historic District Commission

### Guidelines for Additions and New Construction

#### ADDITIONS AND NEW CONSTRUCTION

Building construction is a sign of economic health and vitality in a City. It can take many forms, including an addition to an existing building, a new primary building, or a new secondary building such as a garage. All forms of new construction within a historic district can be vibrant, but at the same time should be sensitive to their 100 to 200 year old neighbors. Vacant lots and structures that are non-contributing to the Historic District provide the greatest opportunity for creative and sensitive new ground-up construction, while an addition or new secondary building can allow the continued use of a historic building or property.

**It is not required that historic properties or styles be “copied” in new construction, but the HDC encourages new construction to be well-designed and sympathetic to its distinctive surroundings.**

In many but not all cases, successful new buildings are those that are clearly contemporary in design but compatible with the character of neighboring properties. Additions should be constructed in a manner that is stylistically sensitive and subservient to the existing building. The information presented in this *Guidelines* section is intended to provide the principles of appropriate design for structures when constructing a new building or addition in historic Fall River’s context, regardless of architectural style.

Prior to undertaking an addition or new construction project, the HDC encourages property owners to understand the unique architectural character of Fall River and its streetscapes. The HDC is available to provide guidance early in the process to discuss appropriate design and materials for a specific site.

These *Guidelines* were developed in conjunction with the City of Fall River’s Historic District Commission (HDC) and the Planning Department. Please review this information during the early stages of planning a project. Familiarity with this material can assist in moving a project quickly through the approval process, saving applicants both time and money.

Additional *Guidelines* addressing other historic building topics are available at One Government Center, Room 534 and on the Commission’s website at [www.fallriverma.org/historic-district-commission](http://www.fallriverma.org/historic-district-commission). For more information, to clarify whether a proposed project requires HDC review, or to obtain permit applications, please call the Planning Department at [frhdc@fallriverma.org](mailto:frhdc@fallriverma.org) or (508) 324-2530 or arrange to meet with staff.



*The side elevation addition is subordinate to and compatible with this residence.*

#### REVIEW REQUIREMENTS

Property owners are welcome to contact the Building Department early in the design process if considering an addition, new construction, relocation, or demolition project to identify potential issues, offer guidance, clarify specific submission requirements, and identify other required reviews, potentially streamlining the process.

**Concurrent Reviews:** The Commission works with other branches of City government to coordinate approvals involving use, zoning, site design, appearance, and other regulated items. The HDC often provides comments to the reviewing bodies including the Zoning Board of Adjustment (ZBA), Planning Board and Select Board when appropriate. Inter-departmental meetings can be arranged on an as needed basis. Approval by the HDC is required for the issuance of a Building Permit.

**Zoning Requirements:** Designs for new buildings, structures or additions must conform to or obtain relief from zoning requirements.

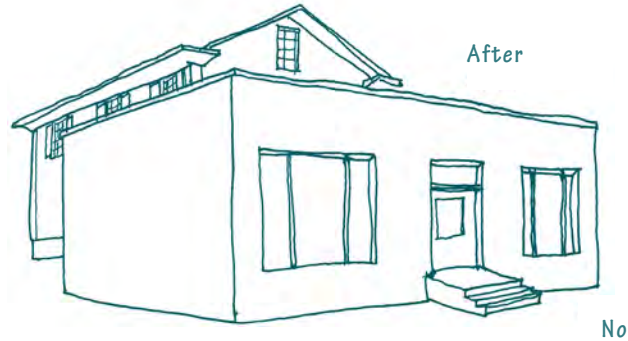
**Demolition Review of Significant Structures:** In addition to the review of demolition applications within locally designated Historic Districts, the HDC reviews demolition applications for any building or structure listed on the Fall River Register of Significant Structures.

## COMPATIBLE DESIGN PRINCIPLES

The development of Fall River followed its own pattern and rhythm. As the heart of Fall River, the heritage and culture of Fall River’s early inhabitants are expressed through the architectural and built environment. To continue the District’s evolution and respect the high degree of architectural and historic diversity and integrity, the HDC encourages design excellence and creative design solutions for additions and new construction that are sensitive to the character of their surrounding context. Generally, there are two appropriate design approaches in Fall River:

- **Traditional:** A design that is consistent with the surrounding context or, a design that could have been constructed on a property for which there is insufficient evidence
- **Reconstruction:** A design that faithfully duplicates details and materials based upon clear documentary evidence

The appropriate approach, style, and type of new construction or an addition will vary at each site depending on the context, authenticity and historic integrity as well as the architectural and historic importance as guided by its significance.



*An inappropriate addition can have a detrimental impact on a historic building and streetscape.*

DESIGN PRINCIPLES	ADDITIONS AND NEW CONSTRUCTION
<b>Scale: Height and Width</b>	Proportions and size of the addition/new building compared with existing building/neighbor buildings
<b>Building Form and Massing</b>	The three-dimensional relationship and configuration of the addition/new building footprint, its walls and roof compared with existing building/neighbor buildings
<b>Setback</b>	Distance of the addition/new building from the street or property line relative to the setback of other buildings on the block/existing building
<b>Site Coverage</b>	Percentage of the site that is covered by building/addition, when compared to nearby sites of comparable size
<b>Orientation</b>	Location of the front of the addition/new building and principal entrance relative to other buildings on the block
<b>Alignment, Rhythm and Spacing</b>	Effect the addition/new building will have on the existing patterns on its block
<b>Architectural Elements and Projections</b>	Size, shape, proportions, and location of each entrance, balcony, gallery, porch, roof overhang, chimney, dormer, parapet, and other elements that contribute to the building’s overall shape and silhouette relative to neighbor buildings
<b>Façade Proportions: Window and Door Patterns</b>	Relationship of the size, shape, and location of the addition/new building façade and building elements to each other, especially when compared to other buildings on the property, block/existing building
<b>Trim and Detail</b>	Moldings, decorative elements and other three-dimensional features of a building that are secondary to major surfaces such as walls and roofs and how they relate to the existing building/neighbor buildings
<b>Materials</b>	Products with which an addition or new building is composed or constructed and how these relate to existing building/neighbor buildings



## ADDITIONS TO EXISTING BUILDINGS

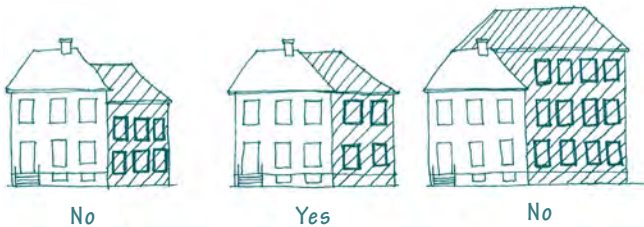
Historically, the need for increased space was often addressed by constructing additions to existing buildings. Additions to existing historic buildings can provide increased space while maintaining the historic character of the original building and streetscape.

Consistent with *The Secretary of the Interior's Standards for Rehabilitation*, an addition to a historic building should be subordinate to the historic building and read as an addition. The subordinate appearance of an addition can be achieved through its placement, form, size, massing, materials, and details.

Traditional or contemporary design and additions to existing properties should not obscure, damage or destroy significant architectural material, and should be compatible with the design of the property and the neighborhood. Whenever possible, additions should be constructed in a manner that, if removed in the future, the essential form and integrity of the historic building would be unimpaired.

### *It is Generally Appropriate to...*

- Locate additions at rear or side elevations that are subordinate to the historic building and consistent or compatible with the design of the property and surrounding neighborhood wherever possible
- Construct additions so that the historic building fabric is not radically changed, obscured, damaged, or destroyed
- Review *Guidelines* to better understand the historic context and appropriate design and materials
- Consult zoning requirements and meet with the HDC at the beginning of the design process



The addition to the left has a scale, proportion, overall form and window pattern similar to the existing building. The addition to the right is significantly larger than the existing building and is visually overwhelming and inappropriate.

## PRINCIPLES FOR ADDITIONS

### Scale: Height and Width

Additions to existing buildings should generally be smaller than the original building with similar floor-to-floor and first floor heights.

### *It is Generally Appropriate to...*

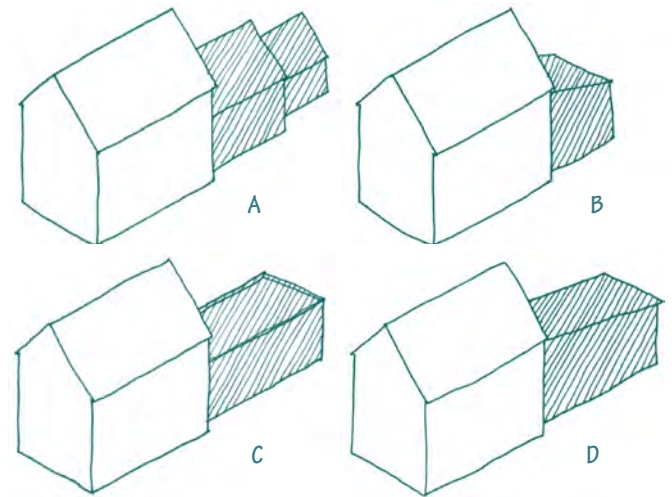
- Construct an addition that is smaller or similar in scale to the existing building or those on adjacent sites
- Construct an addition larger than adjacent buildings by breaking the building mass, dividing its height or width to conform with adjacent buildings
- Construct taller masses of the buildings at the rear of properties, away from the street and adjacent buildings

## Building Form and Massing

Building form refers to the shape of major volumes while massing refers to the overall composition of the major volumes. The form and massing of an addition should complement, but not necessarily match, the original building. For example, it is often appropriate to construct a smaller gable roof form at the rear of an existing gable roof building.

### *It is Generally Appropriate to...*

- Construct an addition with similar form and massing to the existing building and buildings on adjacent sites
- Construct roof forms, wings, ells, and bays and other projecting elements that are similar to those found on the existing building and the block of the proposed building



**Example A:** The two gable roof additions with decreasing roof heights and widths represent an appropriate composition with regard to form, mass, and proportions to the original gable roof building. Additions with decreasing geometry similar to these are typical of historic construction.

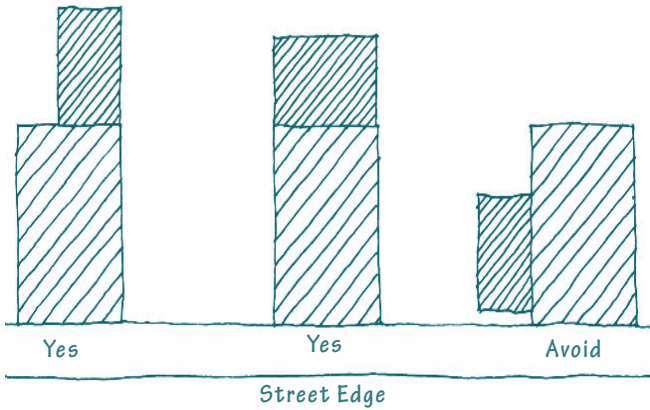
**Example B:** The small shed roof addition is appropriate in some locations.

**Examples C and D:** The flat roofed addition and long shed roof addition are inappropriate for the original gable roof building. The length of the single mass competes visually with the original building.

## HDC REVIEW

Recognizing that what might be appropriate at one property is not appropriate at another, the HDC does not mandate specific design “solutions” for additions or new construction. However, when determining the appropriateness of additions or new construction, the HDC is guided by *The Secretary of the Interior's Standards* and the design principles identified on page 08-2.

When considering a potential addition or construction of a new building within a historic context, it is recommended that property owners request an informal review with the HDC to allow for initial feedback prior to expending time and money developing Construction Documents.



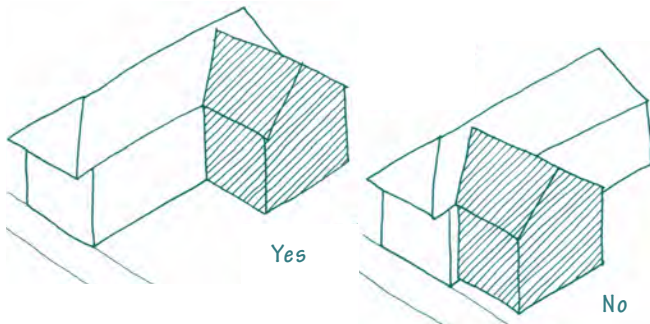
In this site plan, the visibility of the left and middle examples would be limited from the sidewalk and the street. The addition to the right is visible from the sidewalk and street and should be avoided, particularly at corner properties.

### Setback

An addition should be positioned to have the least visible impact to the streetscape. An addition at a front façade generally is prohibited and a rear addition generally is appropriate. An addition at a side elevation is rarely appropriate and, if proposed, should be located as far as possible from the street.

#### It is Generally Appropriate to...

- Construct the addition at the rear of the building or at a side elevation as far back on the site as possible
- Use landscape elements, such as walls and fences, to screen the addition visually



An addition at a side elevation should be as far back from the street as possible.

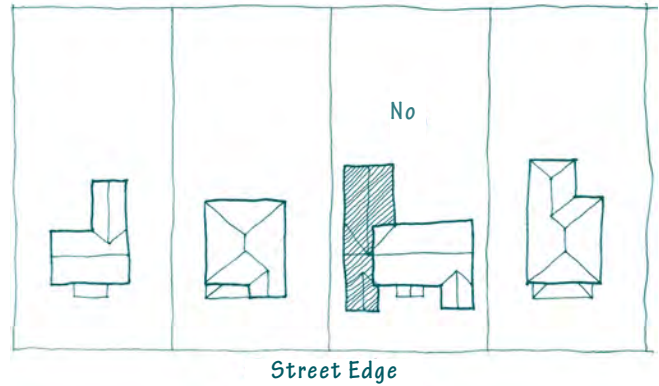
### Site Coverage

The percentage of a lot that is covered by buildings should be similar to those of adjacent lots. Although City of Fall River Zoning Ordinances regulate the maximum allowable coverage area and minimum setbacks, the overall building-to-lot area should be consistent along a streetscape. If parcels are combined for a larger development, the site coverage proportions should be minimized by breaking large building masses into smaller elements to be more compatible with adjacent buildings.

#### It is Generally Appropriate to...

- Maintain the building-to-lot proportions found on similarly sized adjacent lots including front and side yard setbacks,

- Set back and screen larger-scaled additions to minimize their visual prominence from the streetscape
- Screen parking, mechanical equipment and garbage collection from public view with walls or fencing



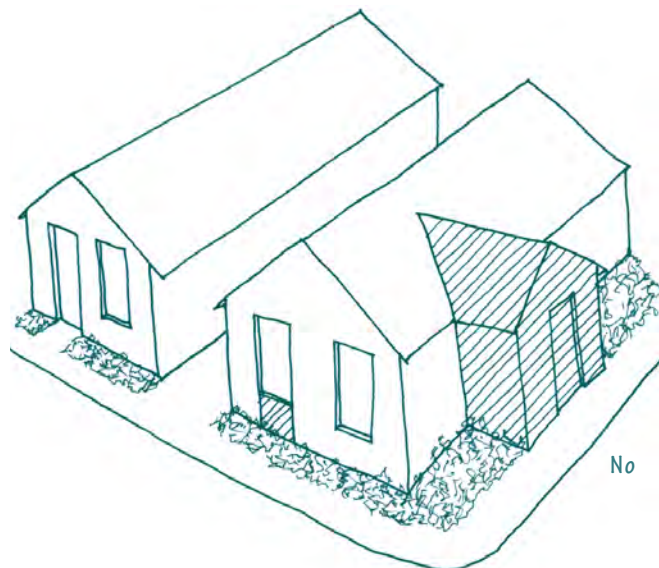
Although the addition might meet setback requirements, its footprint greatly exceeds its neighbors and is inappropriate.

### Orientation

The principal façade of a building should be oriented in the same direction as the majority of the buildings on the streetscape unless originally designed with a corner entrance. When adding to an existing building, the addition should be located, planned and detailed so as not to confuse the dominant historic orientation of the original building. In most instances, the addition should not have the effect of creating a new primary façade and it should not be visually dominant, and it should be screened from the public right-of-way as much as possible.

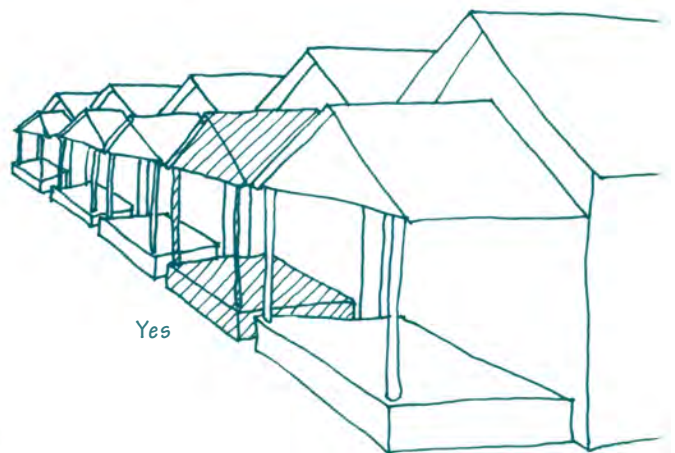
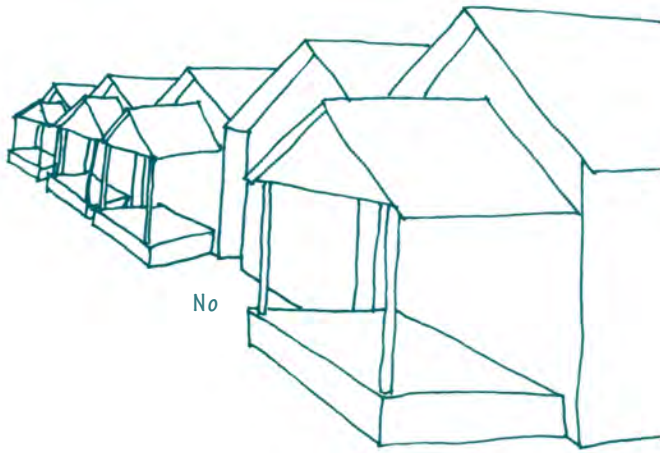
#### It is Generally Appropriate to...

- Maintain the visual prominence of the historic front door even if it is no longer used as the primary entrance
- Orient the primary façade or principal elevation of a building towards the street elevation



The addition to the right building is inappropriate as it relocates the entrance door to the side elevation and eliminates the original front door of the original building.





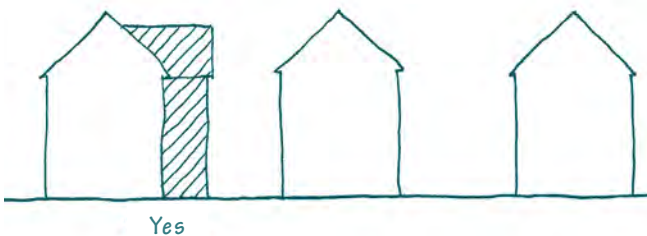
The HDC encourages the reconstruction of a removed porch in a manner that is compatible in size and scale to the building and streetscape on which it is being proposed with appropriate documentation.

### Alignment, Rhythm and Spacing

The consistent spacing of buildings establishes a historically prevalent rhythm along a streetscape and should be applied to an addition at an existing building. The construction of an addition should not make an existing building appear substantially wider or closer to its neighbors than the existing visual arrangement. Vertical considerations for alignment, rhythm and spacing include floor-to-floor heights; first floor, porch and balcony heights above the ground; and cornice heights.

#### *It is Generally Appropriate to...*

- Construct an addition in a manner that does not significantly alter the visual alignment, rhythm or spacing of buildings along a streetscape
- Construct an addition in a manner that does not significantly increase the apparent visual size of a building on a property when viewed from the public right-of-way



The addition in the top row almost doubles the width of the house and is inappropriate. The addition in the lower row is more modest and is keeping with the building spacing.

### Architectural Elements and Projections

Throughout Fall River’s residential neighborhoods, the rhythm of the streetscapes is highlighted by the projection of porches and bays which relieve otherwise flat façades. Projecting chimneys, dormers, and cupolas also contribute to the overall shape and silhouette of the buildings and the skyline.

Adding a new architectural element or projection to a building’s street elevation is generally not appropriate unless there is evidence that it existed previously or is common for the particular type or style. A new architectural element or projection is more appropriate at a rear elevation or towards the rear of a non-street elevation. (Refer to *Dormers* and *Chimneys*, page 03-5 and *Porches*, page 04-8)

#### *It is Generally Appropriate to...*

- Replace a missing architectural element or projection designed and detailed similar to those found at neighboring buildings or according to documentation at a building whose type and style would have included one
- Install consistent or compatible, simplified detailing on new architectural elements or projections, particularly if they will be located at a side or rear elevation rather than a new architectural element designed for a building from a different period of design



*This eclectic residence includes asymmetrical inset porches at the second floor and a small balcony at the third floor, visually relieving the otherwise flat facade.*



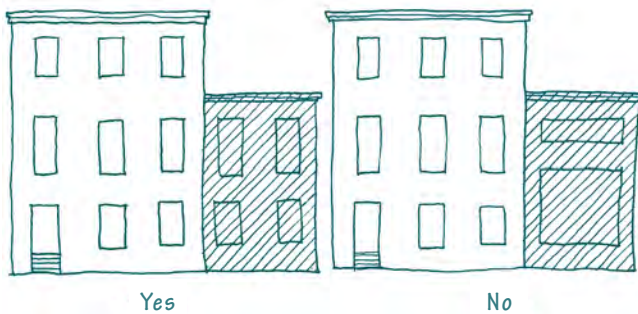
## Façade Proportions; Window and Door Patterns

The rhythm and patterns of a principal façade of an addition should reflect that of the existing building. Similar to new construction, the dominant patterns at a façade are determined by the number of bays and spacing between windows, doors, and major building features, such as cornices. On a smaller scale, these patterns can be reflected in the selection of wall materials and details like brackets or repetitive trim or moldings.

Windows and doors on additions should be of similar size, shape, design, proportion, spacing, and placement to those in the existing building. Windows should be proportionally and functionally similar and have comparable muntin or grid patterns as the existing windows. Doors should reflect the original type; and, the proportions of windows and panels should be similar. It is important to keep in mind that shutters act as an extended “frame” for windows and doors and should be considered in the overall composition. In some instances, where the proposed use and scale of an addition prevents maintaining the existing pattern, the design should incorporate detailing to suggest it, such as false windows and pilasters that give the impression of bays or multiple buildings. This is particularly important at a street-facing façade.

### *It is Generally Appropriate to...*

- Construct an addition with a façade height and width comparable to the existing building and adjacent sites
- Use similar proportions, sizes, locations, and types of windows, doors, and shutters as found on the existing building and adjacent sites



*The proportions of the windows of the left addition are consistent with those at the original building. The windows of the right addition are much wider with the first floor window being significantly taller and the second floor much shorter.*

## Trim and Details

In the same way that the form and mass of an addition should be compatible with, but not necessarily be a copy of a historic building, new details should be compatible with, but not necessarily copy, historic trim and details. Existing details and trim may be used as the basis for those on an addition and be simplified to provide compatibility without requiring duplication of historic features. Using similar forms, such as those found at parapets, roof lines, windows, doors, trim, porches, decks, and other façade elements, can help establish continuity and compatibility within a building, block and the historic setting, as a whole.

Detail and trim should be used to accomplish purposes similar to those used historically. Examples of functional and decorative elements include cornices, lintels, arches, balustrades, chimneys, shutters, columns, posts, and other common details. When used, details and trim should create a unifying effect on a building and be consistent or compatible with the context of the neighborhood.

### *It is Generally Appropriate to...*

- Construct an addition with details and trim that complement historic neighboring trim and details
- Install detail that is functional with a high level of craftsmanship rather than simply applied decoration
- Apply detail and trim that is stylistically consistent or compatible to the existing building at the addition
- Apply simplified trim at a lesser addition

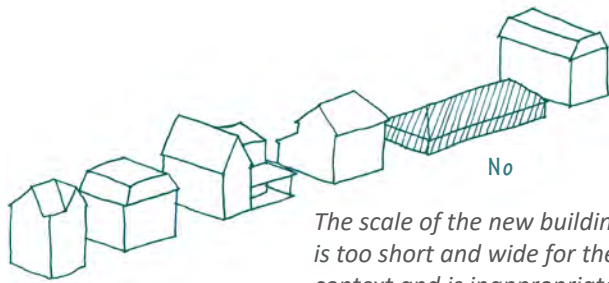


*The rear addition is constructed of similar materials to the historic building, with compatible, simplified trim and detailing.*

## Materials

The materials used in the construction of an addition for walls, sloped roofs, windows, doors, trim, porches, decks, and other exterior visible elements contribute to a building's character and appearance. Typically, materials for an addition should match or complement the materials found on the existing building. However, there are times when this is not economically feasible or practical. In these cases, it is appropriate to alter materials on additions, as long as the material is a “lesser” material than the original construction. This would include adding a wood clapboard or stucco addition to a stone or brick building; it is not appropriate to construct a brick addition onto a wood clapboard building.

Inappropriate materials include those which unsuccessfully pretend to be something they are not, such as plastic “bricks,” aluminum or vinyl “clapboards,” or synthetic stucco and EIFS. All are imitations which fail to produce the texture, proportions, finish and color of the real materials. It is important to note that the size, texture, color and other characteristics of exterior materials can be as important as their composition.



The scale of the new building is too short and wide for the context and is inappropriate.

## NEW CONSTRUCTION

New construction on a historic property or within a historic context can dramatically alter the appearance of the property and the streetscape. Because of the historical sensitivity of the area, property owners should take great care when proposing new construction, understanding how contemporary design will appear within the streetscape and surrounding neighborhood context. Depending on the specific location, this context could include Colonial, Tudor Revival, or Modern style homes, or potentially institutional or former industrial buildings.

Fall River benefited from expansion, with houses, commercial, institutional, and industrial buildings being added to the community as need arose. As a result, many of the blocks and streetscapes have a cohesive architectural style with buildings of similar form, mass, scale, setbacks, and materials.

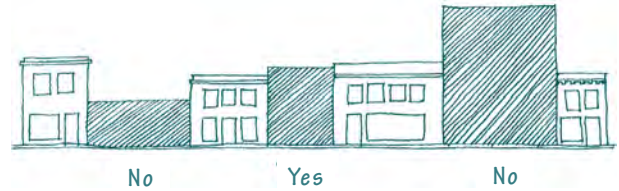
Recognizing this cohesion in each neighborhood, new buildings should seek to maintain the consistent and historic ambiance with compatible and sympathetic contemporary construction.

### *It is Generally Appropriate to...*

- Preserve of the cohesive ambiance of historic properties and neighborhoods with compatible and sympathetic contemporary construction that is not visually overwhelming
- Match setbacks (distances to property lines) of adjacent buildings on a streetscape
- Utilize compatible siting, proportion, scale, form, materials, fenestration, roof configuration, details, and finishes to adjacent and nearby properties
- Reference the related *Guidelines* to better understand the historic context and appropriate design and materials within a historic context



The one-story residence is not appropriately scaled nor does it have appropriate form and massing for the streetscape. The form has a horizontal rather than vertical emphasis. The building to the right has a similar scale and form to the existing buildings.



The two-story building in a row of two-story buildings is an appropriate scale along the streetscape, while the one- and four-story buildings are inappropriate in a historic context.

## PRINCIPALS FOR NEW CONSTRUCTION

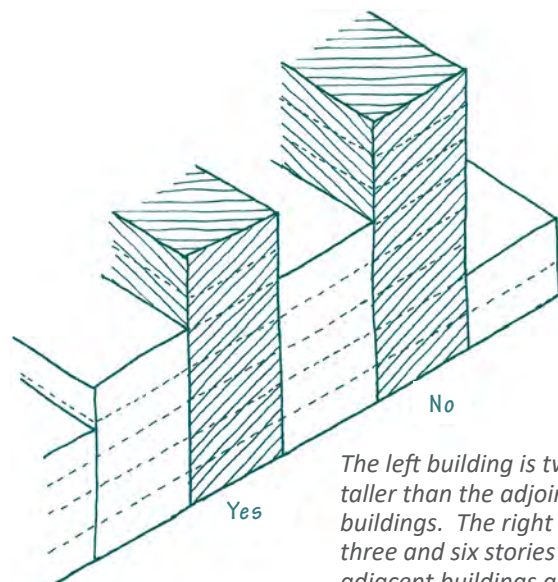
### Scale: Height and Width

The proportions of a new building and its relationship to neighboring buildings establish its consistency or compatibility within a neighborhood or block. The height-width ratio is a relationship between the height and width of a street façade and should be similar in proportion to neighboring buildings. New construction should neither be visually overwhelming or under-whelming when compared to its neighbors.

Where two- to four-story buildings are the norm, buildings that digress from these standards by any great degree can negatively impact a neighborhood. If large-scale construction is considered, particular attention will be given to the location, siting, setbacks of the building and its upper stories, façade treatments (materials, window and door openings, etc.) and the effect of the proposed building on the streetscape and neighborhood as a whole.

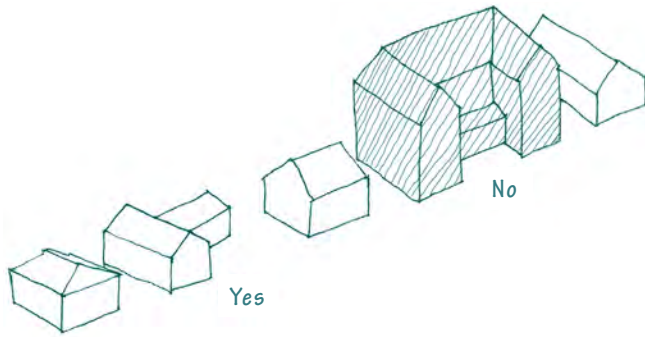
### *It is Generally Appropriate to...*

- Construct a new building that is similar in height and width to buildings on adjacent sites
- Construct a new building that is larger than adjacent buildings by breaking up the building mass, by dividing its height or width to conform with adjacent buildings
- Construct portions of the buildings taller than neighboring buildings away from the street



The left building is two stories taller than the adjoining buildings. The right building three and six stories than the adjacent buildings and not appropriate.





The one-story, “L”-shaped building to the left is of a similar form and mass to other buildings along the streetscape. The two and a half-story building to the right has a much more complex form and is substantially more massive than those along the street.

### Building Form and Massing

Building form refers to the shape of major volumes while massing refers to the overall composition of the major volumes, its overall “bulk” and how it sits on the site. Elements that are typically used to define building form and massing include the roof form, as well as wings, ells and other projecting elements, such as bays. New buildings with form and massing similar to adjacent construction will allow the new building to be consistent or compatible with the surrounding neighborhood.

#### It is Generally Appropriate to...

- Construct a new building with similar form and massing to buildings on adjacent sites
- Construct roof forms, wings, ells, and bays and other projecting elements that are similar to those found on the block of the proposed building
- Match adjacent cornice heights



The central building in each case is 5-stories tall. In the top example, it abuts adjoining walls and steps up in the center. The new 5-story building in the lower example is approximately the same size, but a single volume, and appears to be more massive and out of scale with the streetscape..



New construction should not step forward or recede back from buildings within the streetscape context.

### Setbacks: Yards (Front, Side and Rear)

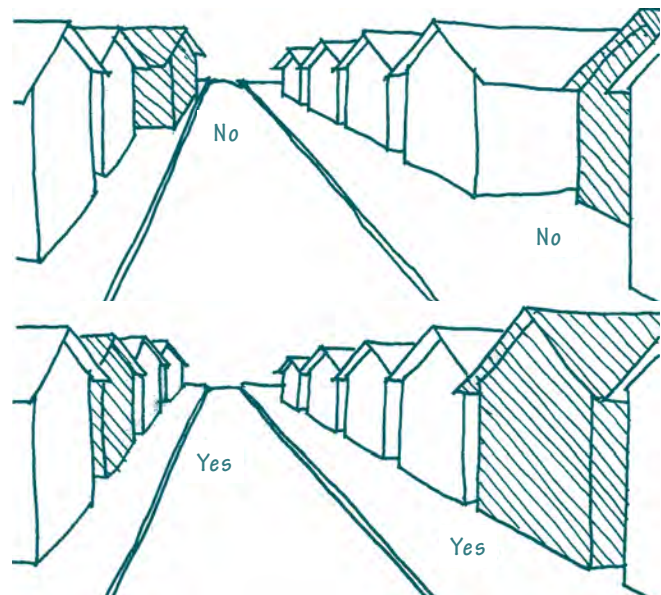
New construction should reflect prevailing setbacks and yard dimensions (distances between the building and the property line, adjacent buildings, street and/or sidewalk are determined by zoning requirements). Physical elements that define historic properties and buildings create visual continuity and cohesiveness along a streetscape. These elements typically include walls, fences, building façades, porches, and balconies. A consistent setback maintains the visual rhythm of the buildings and site elements in the neighborhood and makes new construction more consistent or compatible in its setting.



New construction should not step forward or recede back from buildings within the streetscape context.

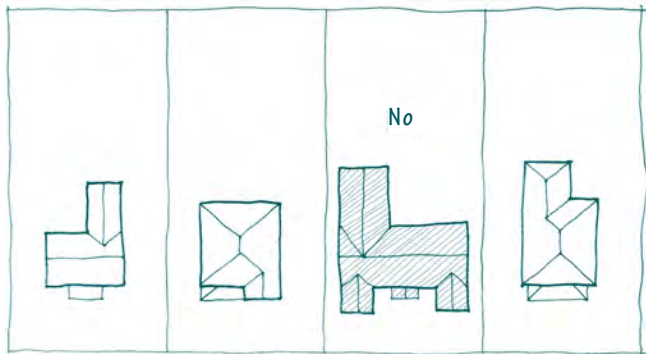
#### It is Generally Appropriate to...

- Keep the visual mass of the building at or near the same setback as buildings on adjacent sites
- Keep landscape elements, such as walls and fences, and projecting elements, such as porches and balconies, at setbacks similar to those at adjacent buildings



New construction should match prevailing setbacks along a streetscape and should not step forward or back from adjoining buildings.





Street Edge

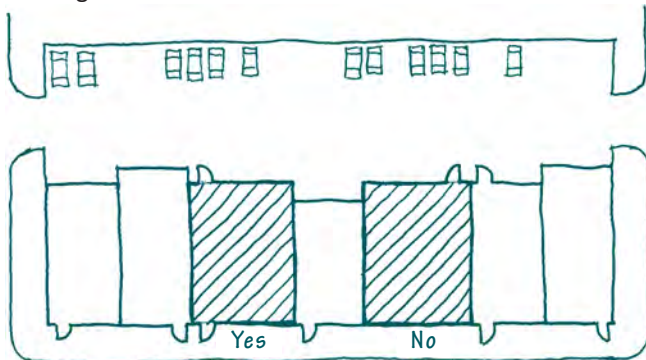
Although the new building might meet setback requirements, its footprint greatly exceeds its neighbors and is inappropriate.

### Site Coverage

The percentage of a lot that is covered by buildings should be similar to those of adjacent lots. Although City of Fall River Zoning Ordinances regulate the maximum allowable coverage area and minimum setbacks, the overall building-to-lot area should be consistent along a streetscape. If parcels are combined for a larger development, the site coverage proportions should be minimized by breaking large building masses into smaller elements to be more compatible with adjacent buildings.

#### It is Generally Appropriate to...

- Maintain the building-to-lot proportions found on similarly sized adjacent lots
- Adjust the massing to suggest building-to-lot proportions found on similarly sized adjacent sites
- Screen parking, mechanical equipment, and garbage collection from public view with walls or fencing or evergreen shrubs

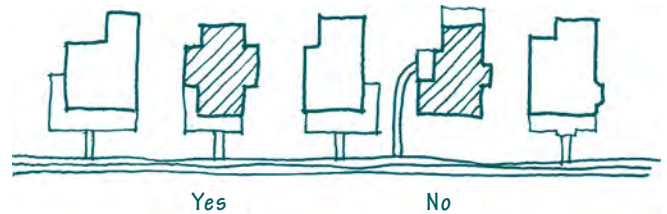


Street Edge

Commercial buildings should retain a street entrance. A secondary entrance and parking area can be added.

### Orientation

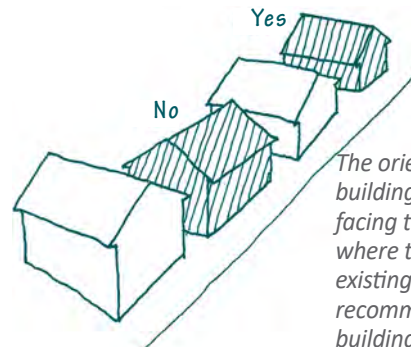
The principal façade of new construction should be oriented in the same direction as the majority of the buildings on the streetscape, with main entrances located on the principal façade. In the case of new construction on a corner site, the front façade should generally face the same direction as the existing buildings on the street and follow the rhythm of the streetscape. (Refer to the City of Fall River Zoning Ordinance for specific site orientation requirements.)



The primary entrance for residential buildings should face the street unless the building historically had a different orientation.

#### It is Generally Appropriate to...

- Orient a building's roof form in a manner that is compatible with neighboring buildings
- Orient the primary façade and principal door parallel with the street



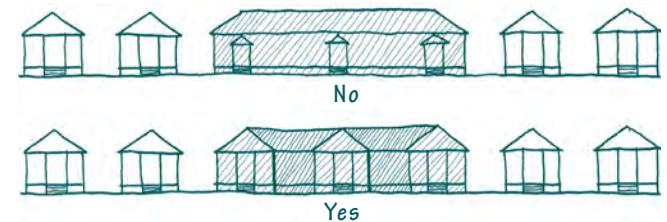
The orientation of the existing building has the gable end facing the street. In cases where there is an overwhelming existing orientation, it is recommended that new buildings be similarly oriented.

### Alignment, Rhythm and Spacing

Although the architecture of Fall River is characterized by a great variety of building types and styles, within each block there tends to be consistency in façade proportions and the space between buildings. The consistent spacing establishes a rhythm which should be applied to new construction. This rhythm and spacing not only refers to the building, but also the porch projections along the streetscape.

#### It is Generally Appropriate to...

- Align the façade of a new building with the façades of existing adjacent buildings
- Align roof ridges, porches, cornices, eaves and parapets with those found on existing adjacent buildings
- Construct new buildings that have similar widths and side yard setbacks relative to neighboring buildings
- Construct new buildings larger than those on adjacent sites, only if the larger building is visually divided to suggest smaller building masses



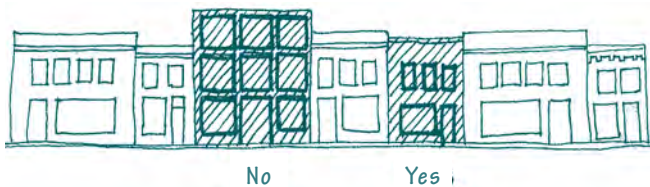
Larger-scale buildings should be visually divided to suggest the rhythm and spacing of buildings on the streetscape. The projecting porches on the lower example suggest multiple residences of spacing similar to adjacent buildings, and is more compatible than the upper example.

## Architectural Elements and Projections

Throughout Fall River, the rhythm of the streetscapes is highlighted by the projection of bays and porches to relieve otherwise flat façades. At the roof line, extended eaves, projecting chimneys, dormers, and parapets contribute to a building's overall shape and silhouette. The choice, size, location and arrangement of elements of a proposed building should reflect those of surrounding buildings. In most cases, these projections are parallel to the street and provide shelter for the primary building entrance. In the case of porches, the entrances are raised a few steps above ground level.

### *It is Generally Appropriate to...*

- Construct a building with an architectural element or projection designed and detailed similarly or more simply to those found at neighboring buildings
- Construct porch floor and ceiling heights at heights similar to those found on neighboring buildings when permitted by code



*The streetscape generally has first floor storefront windows and doors with smaller punched windows at the upper floor, similar to the right example. The building to the left has a grid pattern of large windows at each of the floors which is inconsistent with the streetscape and is inappropriate.*

## Façade Proportions: Window and Door Patterns

The rhythm and pattern of principal façades of new construction should reflect and maintain neighborhood patterns. Across the width of a façade, rhythm and patterns typically include the number of bays and the location and spacing between doors, windows and shutters. There are also vertical components of rhythm and pattern. These include the distance from the ground level to the first floor or porch above ground level, building floor-to-floor heights, cornice heights, and the distance between rows of windows. In some instances, where the proposed use and scale of a new building prevents maintaining rhythms and patterns, the property owner is encouraged to incorporate detailing to suggest the rhythm with elements such as pilasters that give the impression of bays or multiple buildings.

### *It is Generally Appropriate to...*

- Construct a new building whose façade height and width proportions are similar to existing adjacent buildings
- Use similar proportions, sizes, locations and numbers of windows and doors as adjacent sites
- Install windows and doors at new construction stylistically compatible with those found on existing neighboring buildings

## Trim and Details

Trim and details include the moldings, decorative elements and features of a building that are secondary to major surfaces such as walls and roofs. Historically, they were often installed to serve functional needs. Over time, trim and details were modified to enhance the building type and style. Trim is decorative and often serves to infill or provide a transition between different materials or building elements such as walls and windows. Functional and decorative detail elements include cornices, lintels, balustrades, chimneys, shutters, columns, posts, and other common architectural features. For example, louvered shutters visually frame a window opening, provide security and can regulate light and air when closed. By contrast, shutters screwed into a building wall do not serve a functional purpose.

In most cases, the exterior details and forms of new construction should provide a visual link to neighboring historic buildings. In the same way that new buildings should be consistent or compatible but not necessarily be a true copy of historic buildings. New details should be compatible and not necessarily copy historic trim and details. However, existing details and trim on other buildings may be used as the basis for those on new buildings. The trim and details of new construction should be used to accomplish purposes similar to those used historically, both functionally and decoratively, and incorporate three-dimensional elements that project and recede from the principal wall plane. When installed, they should unify a building and should be consistent or compatible with the context of the neighborhood.



*Materials should be appropriate for their context. Materials appropriate for a commercial building may not be appropriate for a residence.*

## Materials

The materials used in the construction of a new building, including walls, roofs, windows, doors, trim, porches, and other exterior visible elements, contribute to a building's character and appearance. Typically, materials for new construction should match those predominantly found on surrounding buildings. However, materials need not be identical to those found locally if they are complementary, particularly along streets where existing buildings are of diverse materials.

Inappropriate materials include those which unsuccessfully pretend to be something they are not, such as plastic "bricks," aluminum or vinyl "weatherboards," or synthetic stucco and EIFS. All are imitations which fail to produce the texture, proportions and colors of the real materials. It is important to note that the size, texture, color, and other characteristics of exterior materials can be as important as its composition.





To the extent possible, secondary structures should be compatible to the historic building or residence.

## SECONDARY BUILDINGS AND STRUCTURES

Many residential properties in Fall River include more than a principal building. In most instances, secondary buildings, structures or landscape features contribute significantly to the overall property, setting and historic context. A secondary building or structure in Fall River can be a service or accessory outbuilding, a barn, a carriage house, garage, pool house, or shed.

Secondary buildings or structures can contribute significantly to the understanding of Fall River’s history and development. Although most secondary buildings were designed to be utilitarian, those associated with a residence, such as a service or accessory outbuilding, were constructed to be complementary to the property’s principal building. This complementarity can include the building’s form, materials and simplified detailing.

In general, a secondary building or structure is historically or architecturally significant if it was:

- Constructed at or about the same time as the principal building on the site
- Constructed after the principal building on the site but was used for a significant function
- Representative of an important architectural design or in an important construction method
- Associated with an important event or person related to the property
- Built incorporating distinctive characteristics of form, style, materials or detailing, or shares those characteristics with other buildings on the site

### HDC REVIEW OF SECONDARY BUILDINGS AND STRUCTURES

The HDC reviews the alteration, construction or demolition of any secondary building or structure within a locally designated Historic District and demolition of any secondary building listed on the Fall River Register of Significant Structures. Property owners are encouraged to contact the HDC to obtain the significance of a secondary building or structure prior to application submission for an alteration or demolition.

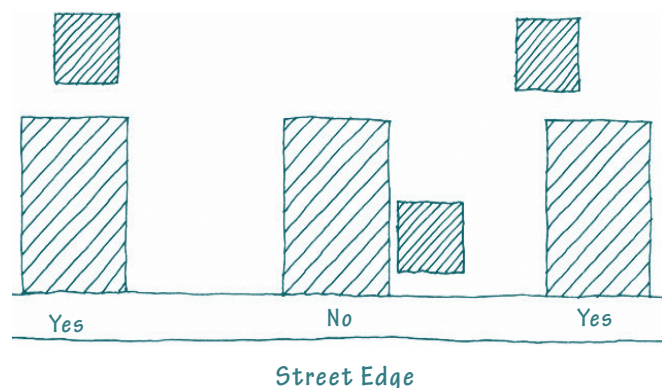
## New Secondary Buildings and Structures

Similar to an addition, a secondary building or structure should be subordinate to and visually compatible with the primary building without compromising its historic character. Although the type and location of these features can be limited by zoning and other requirements, ideally, the secondary building or structure should be located so it is minimally visible and does not detract from historic buildings.

Contact the Planning Department to determine the allowable location, footprint, height, and applicable regulations for a proposed secondary building or structure prior to submitting a design to the HDC.

### It is Generally Appropriate to...

- Maintain a historically and/or architecturally significant secondary building or structure as carefully as the principal building
- Design a new secondary building or structure to complement the period and style of the principal building and other buildings on the site; this includes using similar form, materials, colors, and simplified detailing
- Locate a secondary building or structure, including a garage, storage building, shed, animal shelter, or pool house, away from the principal entrance or street elevation
- Construct a new secondary building in a manner that does not damage other resources on the site, respecting the footprints and foundations of previous secondary structures, as well as potential archaeological resources
- Adapt functionally obsolete buildings for new uses such as converting a service building into additional living space, a play house, or storage
- Use exterior materials for an addition that are present in the existing building
- Install materials that are compatible with each other and will not react chemically with existing materials (Refer to specific *Guidelines* sections or contact the HDC for more information)



The visibility of the secondary buildings or structures at the right and left is limited from the street. The secondary building or structure in the middle example does not conform with the street pattern, is very prominent, and should be avoided.



## DEMOLITION OF HISTORIC RESOURCES

Once resources or buildings that contribute to the heritage of the community are destroyed, they cannot be replaced. The demolition of all or portions of resources on properties within a historic area is considered a drastic action since it alters the character of the streetscape, surrounding buildings and the demolition site. This could represent a lost educational resource for the community, whether the building was an example of past construction techniques or has associations with a significant individual or event in the City's history. As a result, demolition of historically or architecturally significant buildings or structures is rarely considered to be an appropriate option, and when the demolition is to occur within the Historic District, is strongly discouraged by the HDC. The HDC can deny a demolition permit within the District.

To protect from the loss of significant historic resources throughout the City, the City established the Fall River Register of Significant Structures. The HDC has the responsibility of reviewing applications for the complete or partial demolition of any building identified on the Register under the Demolition Delay Ordinance, whether or not it is located within a local Historic District.

As an alternative to demolition, property owners are encouraged to re-purpose the building for an alternative use or evaluate whether a compatible addition would provide needed functionality to allow the continued preservation of the historic building or structure. Under the Ordinance, the HDC has the jurisdiction to delay demolition for up to six months as they try to come to an agreement with the property owner.

Demolitions limited to the interior of a building, typically associated with a renovation project, are not subject to the HDC's review.

### BUILDING TYPE AND ARCHITECTURAL STYLE IN A HISTORIC CONTEXT

A single building type or style is not required for new construction, except as required by Zoning regulations. However, a review of the area surrounding the project site is strongly recommended as a means of influencing and directing the proposed design. When constructing new buildings, property owners are strongly encouraged to seek high quality design and materials that relate to a site's historic context to allow for the creation of the City's future landmarks.

In cases in which a property owner prefers to construct a reproduction of a historic building type or style, it is strongly recommended that all dimensions, profiles, details, and materials be consistent with the historic building type or architectural style being referenced.

## ARCHAEOLOGY AND EXCAVATION

It is recommended that property owners treat below-grade areas with potential resources carefully. Many of the City's properties may have archaeological deposits. These deposits can include Native American shards and objects as well as remnants of earlier buildings and related construction, such as wells and privies, that might yield additional materials such as discarded household items and animal remains.

Once a site has been disturbed without proper care, the ability to understand the site through professional interpretation might be lost forever. If the construction of a new building or addition will require substantial excavation at a previously undisturbed site, there is potential to destroy important archaeological resources.

It is recommended that property owners with known archaeological resources locate new construction or ground-disturbing activities in a manner that avoids affecting the archaeological resources until it can be professionally excavated and recorded. The HDC encourages property owners to contact Fall River's Historical Society for historical information and consultation prior to beginning work.

### ADDITION, NEW CONSTRUCTION AND DEMOLITION REVIEW

The HDC reviews proposed demolition in locally designated Historic Districts and at properties listed on the Fall River Register of Significant Structures.

#### *The HDC encourages:*

- Limiting demolition to those buildings, structures or portions of buildings that are non-contributing
- Constructing additions that follow the *Compatible Design Principles* outlined in this *Guidelines* section
- Constructing new primary buildings and structures that follow the *Compatible Design Principles* outlined in this *Guidelines* section
- Constructing secondary buildings in a manner that is compatible with the primary structure
- Minimizing disruption of archaeological resources when considering additions or new construction (If it is not possible to prevent disruption, conducting archaeological investigations prior to construction is recommended)

#### *The HDC discourages:*

- Demolishing a historically or architecturally significant building or structure that does not pose an immediate health or safety hazard
- Installing a pre-manufactured metal shed, carport, enclosure, or outbuilding at a property



# CITY OF FALL RIVER

## Historic District Commission

### Guidelines for Commercial Properties

#### COMMERCIAL PROPERTIES

The economic development of Fall River's retail areas and the commercial properties within it is encouraged. It is recognized that Fall River's vibrance is linked to the viability of its businesses and institutions. Every effort will be made to assist commercial building owners and tenants with revitalizing older retail areas and buildings, helping to attract new customers while promoting an appreciation of historic architecture. The goals for commercial properties are to:

- Encourage compatibility and provide a visual connection with the historic building and context
- Provide variety and vitality along commercial corridors
- Encourage the greatest amount of design flexibility
- Identify those elements that are indisputably detrimental to the historic streetscape
- Encourage the consideration of how a proposed storefront and sign or awning relates to each property, the streetscape and the historic context

#### INFORMATION FOR NEW BUSINESSES

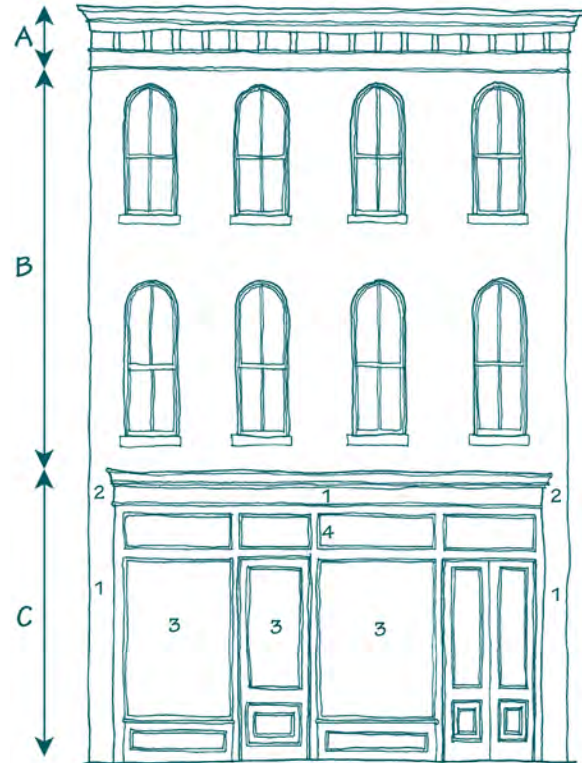
If considering opening a new business in Fall River, Building Department representatives are available to discuss zoning, construction and other requirements applicable to a specific project. Please contact them at (508) 324-2530 for more information.

#### INSTITUTIONAL BUILDINGS

Institutional buildings share many of the same concerns as commercial buildings including signage and accessibility. Applicable references throughout this section should also be applied to institutional buildings.

These *Guidelines* were developed in conjunction with the City of Fall River's Historic District Commission (HDC) and the Planning Department. Please review this information during the early stages of planning a project. Familiarity with this material can assist in moving a project quickly through the approval process, saving applicants both time and money.

Additional *Guidelines* addressing other historic building topics are available at One Government Center, Room 534 and on the Commission's website at [www.fallriverma.org/historic-district-commission](http://www.fallriverma.org/historic-district-commission). For more information, to clarify whether a proposed project requires HDC review, or to obtain permit applications, please call the Planning Department at [frhdc@fallriverma.org](mailto:frhdc@fallriverma.org) or (508) 324-2530 or arrange to meet with staff.



#### COMMERCIAL BUILDING COMPOSITION

This represents a typical multi-story, commercial building in Fall River. It has three distinct vertically stacked zones:

- A. The bracketed ornamental building cornice provides a visual cap or termination at the top of the building
- B. Upper floor operable windows appear to be "punched" through the flat, relatively solid, typically masonry, wall surface in a regular pattern that does not align with the storefront openings below
- C. A storefront capped by a storefront cornice runs along the ground floor with large display windows topped by transom windows

In reviewing potential locations for signage on the building above, the following should be considered:

1. Wall Mounted Sign
2. Projecting Sign
3. Window Sign
4. Awning Sign

It is important to note that the location, number, and size of signs is limited by the Zoning Ordinance. The HDC is available to consult with owners and tenants of historic properties, whether or not they are locally designated.



Historic commercial buildings typically include storefronts extending along the sidewalk edge with punched windows in the wall plane above.



## STOREFRONTS

The attractiveness and overall maintenance of a storefront can greatly influence a casual observer's perception of a building and the business within. Because a positive impression can help draw potential customers, regular maintenance and careful design can be positive on the bottom line. The storefront is one of the most significant features of a commercial building, the business within it and the overall streetscape. Storefronts often included large sheets of glass at display windows with minimally sized mullions and often recessed entries. This configuration allowed merchants to maximize the visibility of their wares to attract potential customers.

Historic storefronts were typically constructed of wood, metal (cast iron, bronze, copper, tin, galvanized sheet metal, cast zinc, or stainless steel), masonry (brick or stone) and clear, translucent or pigmented glass at transoms. Although the specific configurations of storefronts can vary greatly based upon architectural styles, at different buildings and locations, a common feature is large expanses of glass to display merchandise. In addition, it is typical to have a principal entrance to the commercial space and a separate entrance that includes a stair for access to the upper levels.

## STOREFRONT MODIFICATION

Because of the unique nature of every storefront, property owners are encouraged to consult with the HDC early in the process when contemplating historic storefront modifications.

## STOREFRONT COMPONENTS

A storefront is made up of a number of different components. One of the key aspects of a successful storefront is that it is designed holistically, with all of the various pieces and parts forming a unified expression. It should be noted, however, that all storefronts do not necessarily include all components.



Storefront cornices can be highly decorative and serve to separate the storefront from the building above.

**Storefront cornices** are projecting moldings at the top of storefronts, providing a visual cap or termination to the storefronts and a separation with the upper floors. Cornice materials can vary widely and include wood, pressed metal, limestone, terra cotta or decorative brick patterns. Cornice details can include brackets, dentils, and panels.



**Transom windows** may be located above display windows and doorways to provide additional daylight, and can be either fixed or operable for ventilation. They can be either single or multi-paned and historically were often leaded, stained or textured glass. Transom windows can also include signage, lettering, or other ornamental details.

*The transom window allow natural light to illuminate the interior of the shop.*



**Display windows** are typically large expanses of glazing to present the available merchandise within a shop. Display windows typically flank the entrance doorway or alcove to a store and can include additional advertising to further entice potential customers.

*A well organized display window can highlight items offered for sale, attracting potential customers.*



**Aprons** or bulkheads act as the base for the display windows and at the interior can provide a raised platform for merchandise display. Aprons can be constructed of a variety of materials with different finishes including wood, masonry, and tile.

*Marble was a common apron material in the early 20th century. This example includes a ventilation grille.*



*Storefront entrance doors typically include a lot of glass, allowing potential patrons a clear view inside. This entrance door is located within an alcove, increasing the display possibilities and providing shelter to those entering the building.*

**Entrances** at storefronts can be located flush with the outside of the building or recessed within an alcove providing additional display areas and shelter from the elements. In addition to commercial entrances, there can be secondary entrance doors that provide access to upper building floors.



*Structural supports carry the load of the building above the storefront. They can be an integral part of the display window support system, as in this example, or imperceptible, as in the entrance photograph above.*

**Structural Supports** at storefronts are necessary to carry the weight of the building and roof above and can be decorative, reinforcing the storefront's architectural style. Typically, structural supports flank entrance doors and display windows and can be constructed of wood, cast iron, or masonry.

## STOREFRONT TREATMENT APPROACH

Changes to storefronts can be a costly endeavor that if not properly planned might negatively impact a building's architecture or the business located in it. Prior to considering alterations, property owners should identify the key storefront elements and consider options. By carefully studying alternatives, property owners tend to be much happier with the finished results. When contemplating storefront work, the following approach is recommended:

- 1. Identify Key Historic Elements:** Develop an understanding of the architectural character of the storefront including the overall size, major divisions or bays, placement of components such as doors, windows and distinctive elements. This can be based on selective removals or documentation such as old photographs or drawings.
- 2. Retain, Preserve and Repair:** Once important historic elements have been identified, they should be incorporated into the storefront design. Deterioration of some historic elements might require stabilization, replacement in-kind, or replacement with a similar substitute material utilizing the historic material as the guide.
- 3. Replacement:** Replacement of a historic storefront is only encouraged when the existing storefront materials are too deteriorated to be repairable, or a historic storefront has been encased in a newer storefront and the historic form and detailing are still present allowing for an accurate representation. Replacement of historic storefronts with modern storefront systems is strongly discouraged. However, appropriate suitable alternate materials that convey the same historic visual appearance can be used where the use of original materials is not technically or economically feasible.
- 4. Reconstructing a New Storefront With Historic Documentation:** If there is no physical evidence of a historic storefront, there might be sufficient historical or pictorial evidence to allow for appropriate reconstruction. Appropriate research is recommended to ensure the greatest degree of accuracy feasible in the reconstruction.
- 5. Installing a New Storefront Without Historic Information:** If there is not sufficient information and documentation to accurately reconstruct a storefront, the new design should be compatible in size, pattern, scale, material, and color as the overall building and similar storefronts from the period, but have distinctly contemporary characters that reflect rather than copy historic storefronts.

### HISTORIC STOREFRONT APPEARANCE

Often, remnants of earlier storefronts or "ghosts" of earlier materials are concealed under newer storefront materials and careful selective removals can reveal elements or clues. Another potential source of information is old records, photographs or drawings. These can be advertisements or articles, newspapers, previous business promotional materials or postcards.



*The accessible ramp allows all visitors to enter through the same door while maintaining the stair configuration.*

## ACCESSIBILITY

The Americans with Disabilities Act (ADA) strives to improve the quality of life of people with disabilities. The ADA recognizes that, for people with disabilities to participate in the everyday activities in their communities such as going to work, eating in a restaurant or shopping in a store, they need to have access to the goods and services provided by businesses. Many business and institutional facilities in Fall River were constructed prior to the enactment of the ADA in 1992 and lack features to accommodate people with disabilities, including those who use wheelchairs.

As existing buildings are renovated, they are often required to make accommodations for people with disabilities. One of the most visible exterior alterations required by ADA is the installation of a wheelchair ramp or lift to provide building access. In many locations, these ramps or lifts have been successfully incorporated at the interior of the building envelope with modification of existing door sills. When installing ramps, it is important to remember that if the ramp is too steep or railings are not secure, it can potentially be hazardous.

## ALLOWABLE SIGNAGE

The Zoning Ordinance governs allowable signage at each property in Fall River. For locally designated properties, it is recommended that potential applicants for signage and awnings contact the HDC early in the design process to understand the allowable signage at their property.

## HISTORIC SIGNAGE

Historic signage is often an architectural feature that reflects the original owner and use of the building. Although abandoned signs from recent tenants should be removed, it is encouraged that historic signage be retained.





## TYPES OF SIGNS IN FALL RIVER

Historically, there are two types of signs; those that are attached to the building and those that are freestanding and placed near buildings. New signs can use similar features of traditional signs to both enhance the character of the building and convey the necessary information to the public.

The choice between attached or freestanding signs may be based upon the property's specific location, needs of the occupant, and limitations in the Zoning Ordinance. The following illustrations are intended to provide general examples of sign types that can be found at historic properties and within a historic context.



*The contrasting gold lettering on the black background makes this wall sign highly legible.*

**Wall signs** are the most common type of signage in Fall River. They are single sided signs mounted parallel to and generally flat against a wall of the building.



*This freestanding sign complements the historic building.*

**Freestanding signs** are not attached to the building. They are most appropriate when a building is set back from the street, and often reflect the building's style. They can include information on one or two sides, mounted on the ground or suspended from a rail or bracket that is supported by one or two posts that are set in paving or landscape areas.



*A projecting sign can create visual interest along a streetscape.*

**Perpendicular projecting signs** are generally two sided signs, suspended from an iron or metal bracket, or projecting building feature, mounted perpendicular to the face of the building or element such as a wall.



*Window signs can provide an alternative to wall mounted signs for stores.*

**Window Signs** are applied to the interior of the window or door glazing. Signs that are attached to the glazing are generally painted, vinyl appliqué or etched glass. A related option is stained glass. All window signs that are attached to the exterior of the glazing are subject to HDC review at locally designated properties. Window signs mounted at the interior of the glazing are not subject to HDC review but must comply with the Zoning Ordinance.



*Awnings provide shelter for pedestrians and protect merchandise from the sun's rays.*

## AWNINGS

Awnings are a historically popular means of sheltering pedestrians, advertising a business, and protecting window merchandise from sun damage, particularly for storefronts oriented to the south or west. Historically, awnings project at a continuous angle away from the face of the building on a metal frame, terminating at a skirt or valance. Awnings can be fixed or retractable in configuration. Retractable awnings tend to be open sided, while fixed awnings can be either open or close sided.

Awnings that include text, logos, graphics or designs are considered to be signs that are subject to the applicable Zoning Ordinance requirements. By contrast, plain cloth awnings are not signs, but are still subject to HDC review at designated properties.



## SIGN MATERIAL

Early signs were typically made of wood, either attached directly to the building or suspended from metal brackets or galleries. As technology advanced and building styles changed, a wider range of materials were used. These included bronze, cast iron, stainless steel, etched or painted glass, leaded glass, gold leaf, tile, terrazzo, concrete, stone, and enamel and metal panels. Each material was popular during particular time periods, and might not be appropriate at all building locations.

Some materials might no longer be practical for signage installations due to limited availability or expense. When using modern materials care should be taken to select those that offer improved performance, while replicating the appearance of traditional materials. Some modern materials such as plywood may replicate the appearance of a traditional wood sign but will warp or split over time. In addition to materials that appear historic, the HDC welcomes innovative designs and alternate signage materials that are appropriate to the building style and location.



*The granite piers supporting this freestanding sign complements the wall material of the historic mill building.*

## SIGN LOCATION

Although it is helpful to understand a building's type, style and design when locating a sign, in general:

- Signs should not be installed in locations that damage or obstruct important architectural features
- Signage for first floor businesses should be located below second floor window sills
- No sign or sign support should be located on the roof or extend above a roof cornice

In addition, the sign location should comply with all Zoning Ordinance requirements. (Refer to *Commercial Building Composition* on page 09-01 for additional sign location information.)



*This freestanding sign is also a directory sign. Directory signs for professional offices employ small, changeable nameplates, matching in size, color, and type style mounted to a larger sign.*

## SIGN SIZE AND SHAPE

Fall River's Zoning Ordinance establishes the maximum size and type of signage; however, in locally designated historic districts, the HDC determines the appropriateness of the placement relative to the building's design. In general, the HDC utilizes the following guidelines when reviewing the appropriateness of proposed sign's size:

- Signage should be compatible to scale of the building, adjacent buildings, the streetscape and adjacent signage
- Small scale signs are appropriate to smaller scale buildings and pedestrian traffic, while larger scaled signs are more appropriate to vehicular traffic
- Small scale signs are appropriate to primarily residential areas and uses such as professional offices
- Small scale signs are appropriate for buildings that require several signs, which can be grouped in a single directory sign for a unified appearance
- A well-designed smaller sign can have more of an impact than a larger sign, particularly in historic commercial corridors, where the means of travel is by foot or slow moving vehicles
- A sign's shape, particularly a wall sign, should fit proportionally within the area in which it is mounted
- A sign's shape can reflect the type of business or institution at the location, increasing its impact



## SIGN ILLUMINATION

In many instances, available ambient street or storefront lighting can illuminate signs, which is preferred to the installation of additional lighting. The use and placement of sign illumination is subject to the approval of the HDC. Gooseneck lighting or other unobtrusive light fixture is often the most appropriate choice to illuminate wall signage. Backlit signs are typically inappropriate.



*The clear lettering and strong contrast between the letter color and background make this sign very legible. Discrete gooseneck lights located above the sign provide illumination of the sign in the evening.*

## SIGN AND AWNING COLOR AND LEGIBILITY

The contrast between the logo or lettering and background color can greatly increase the overall legibility of the sign. In many instances, limiting the number of colors to those necessary to convey the information also increases the legibility. Similar to selecting a color, when considering letter style for signs and awnings, business owners must balance the need to make them legible, convey the business identity or logo, and complement the historic character of the building and environment. Excessive amounts of text or highly stylized type styles can overwhelm a viewer and render the message ineffective or illegible.

In general, there are three styles of lettering available; serif, non-serif and script. Within each general style are numerous typefaces available, many of which can be varied by making them bold or italicized. Similar to materials, different styles of lettering were typically utilized for specific architectural periods. Applicants are encouraged to utilize lettering and materials that complement their particular building.



*Numerous holes have been drilled into the face of this granite pier and several abandoned fasteners still remain. Fasteners should be removed, existing holes reused for future signs, abandoned holes filled and the stone surface cleaned. (Refer to Guidelines for Masonry and Stucco.)*

## MOUNTING SIGNS AND AWNINGS

Care should be taken in mounting walls signs and awnings to minimize the damage to historic materials. This includes reusing hardware or brackets from previous signs or awnings. If reusing existing hardware or attachment locations is not an option, remove abandoned hardware and patch holes. When installing new signage or awnings, select mounting locations that can be easily patched if the sign or awning is relocated or removed. An example would be to locate anchors in mortar joints rather than mounting directly into brick or stone faces.

When installing signage, such as wall mounted signs, business owners are encouraged to recess fasteners and patch the fastener opening to match the sign background for a more finished appearance, unless the fasteners are part of the overall design.



*Projecting signs are generally most effective if placed near the entrance door.*

## HDC CRITERIA FOR COMMERCIAL PROPERTIES

### Storefront Guide

#### *The HDC encourages:*

- Following the *Storefront Treatment Approach* on page 09-4
- Maintaining historic storefront components
- Opening previously closed windows
- Maintaining the planes of the historic storefront relative to the building façade including recessed areas such as alcoves
- Selecting paint colors that complement the style and features of a storefront and building

#### *The HDC discourages:*

- Altering, enclosing or removing elements, such as building cornices, storefront, and angled storefront glazing
- Installing stylistic elements from periods that are different from the storefront or building and do not complement the overall stylistic expression
- Installing inappropriate materials at storefronts including vinyl siding, some types of wood siding, or artificial brick
- Installing textured or colored glass in a display window
- Installing window air conditioners or thru-wall air conditioners that are visible from a public way
- Incompatible designs or false historic appearance based upon insufficient documentation

### Accessibility Guide

#### *The HDC encourages:*

- Retaining historic entrance stairs and doors
- If front door access is not possible, providing a respectful accessible entrance that is located close to the principal entrance and designed in a manner that is visually unobtrusive and complements the building's style
- Complying with all aspects of the accessibility requirements, while minimizing alterations of the primary building façade and architectural features
- Modifying sidewalk or walkway elevation a few inches, where possible to provide an accessible entry and meet all code requirements
- Installing ramps and/or lifts within the building envelope where it is possible – The design of interior features are not subject to HDC review
- Install a lift in lieu of a ramp if it would be less obtrusive
- Installing compatible ramp or lift styles and railings that are as simple and visually unobtrusive

### Sign and Awning Guide

#### *The HDC encourages:*

- Maintaining and repairing historic signage with materials to match the original whenever possible
- Installing innovative signs reflecting the architectural characteristics with materials that are consistent with the historic character of the building and scaled for the location
- Utilizing existing ambient street light or storefront lighting in lieu of lighting whenever possible
- Installing lights that are compatible with the building character including location, orientation, and brightness
- Installing compatible canvas fixed or retractable awnings, whose shape, color, style, and location are compatible with the building and the associated openings
- Awnings whose slope projects down approximately 3-feet from the face of the building in a continuous angle of approximately 45-degrees, possibly with an 8- to 12-inch straight or scalloped valance
- Limiting lettering and logos to awning valances

#### *The HDC discourages:*

- Installing signs or awnings that obscure architectural features, or fasteners and hangers that destroy important building fabric for the installation of signs or awnings
- Paper signs or graphic films adhered to the exterior of glazing or any signage that obstructs views into the store through storefront windows and glazing
- Installing contemporary awning shapes, such as balloon or barrel awnings
- Installing awning materials that act as wall signs

#### *The HDC strongly discourages:*

- Removing, damaging, altering, or encasing historic architectural features with signage or awnings
- Installing exposed conduit, junction boxes, and raceways for signage or lighting
- Installing new billboards, internally illuminated box signs, LED reader boards, flashing or changable message signage
- Installing neon signs at the interior or exterior of a building that are highly visible from the street
- Installing awnings in locations where they are non-functional, such as under a balcony or overhang
- Installing contemporary or glossy awning materials such as vinyl, plastics or leatherette, internally illuminated awnings or awnings with a solid or closed underside







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