



TOWN OF EXETER HISTORIC DISTRICTS 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

These *Guidelines* were developed in conjunction with the Town of Exeter's Historic District Commission (HDC) and the Building Department. Please review this information during the early stages of planning a project. Familiarity with this material can assist in moving a project forward, saving both time and money. The Building Department is available for informal meetings with potential applicants who are considering improvements to their properties.

Guidelines and application information are available at the Town Office and on the Commission's website at exeternh.gov/bcc/historic-district-commission. For more information, to clarify whether a proposed project requires HDC review, or to obtain permit applications, please call the Building Department at (603) 773-6112.

WHY IS HISTORIC PRESERVATION IMPORTANT IN EXETER?

The Town of Exeter recognizes that the character and quality of life enjoyed by its citizens depend in great measure upon the Town'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 Historic District Commission (HDC) of Exeter is charged with safeguarding this heritage as represented by the Town's historical and architectural value.

EXETER'S HISTORIC PROPERTIES

The Town of Exeter currently regulates three locally designated Historic Districts:

- **Front Street Historic District** - Established 1971
- **Downtown Historic District** - Established 1978
- **High Street Historic District** - Established 2006

The Town of Exeter regulates properties in current and future locally designated Historic Districts, as well as the proposed full or partial demolitions of buildings or structures over 50 years old.

In addition, The Town of Exeter also has several individually designated National Register properties and currently two National Register Historic Districts:

- **Front Street Historic District** - Listed 1973
- **Exeter Waterfront Historic District** - Listed 1980



There are several notable institutional buildings that are located within the locally designated historic districts including Exeter Town Hall.

HISTORIC DESIGNATION & LISTING

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.

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 New Hampshire Division of Historical Resources. (Refer to *Preservation Organizations*, page 01-11.)

PRESERVATION ASSISTANCE PROGRAMS

There are federal and state 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 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 01-11.)

Preservation Easements are a tool often used to insure the preservation of the character defining features of a property for the public's benefit. The New Hampshire Preservation Alliance and Historic New England maintain easement programs to protect historic resources. The extent of the protection of the property is dependent on the strength of the easement. Some easements protect just the façade of a building. Other easements protect the larger preservation values including but not limited to the exterior and interior architectural features, materials, landscape features, outbuildings, fences and archeological resources of a property.

The Community Revitalization Tax Relief Incentive (RSA 79E) has been adopted by Town of Exeter to encourage revitalization of underutilized buildings. Program information is available at www.exeternh.gov.

SUSTAINABLE BENEFITS OF PRESERVATION

Historic buildings are intrinsically "green," as reusing an existing building has substantially lower environmental impact than building a new one. Preservation and rehabilitation minimize the wasteful loss of materials while maintaining a distinctive sense of place. Sustainable benefits of preservation include:

- 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 approximately 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/or plastics

PRESERVATION REGULATORY REVIEW

To maintain the character of properties within the Historic Districts, most proposed exterior changes require review and the issuance of a Certificate of Approval (COA) from the HDC prior to commencing work, or if deemed to be an exempt activity or a minor application by Building Department Staff, the approval process can be addressed administratively. 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 building, structure or site feature and/or expansion 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

Certificate of Approval applications are reviewed by the HDC at their monthly meetings. During their reviews, the HDC references the criteria set forth in the Historic Preservation sections of the Town's Zoning Ordinance. Review by the HDC ensures that any proposed changes will be compatible with the character and design of the individual property and/or Historic District.

The process of applying for a COA requires the project representative to provide sufficient information on the HDC's application form and to include drawings, sketches, photographs, a survey, product brochures or samples for certain building features that will be modified. The applicant is encouraged to consult with Building Department staff to ensure that all the information is included in the application. Once the application has been determined to be complete, it will be placed on the HDC agenda. The applicant or a project representative should attend the HDC meeting for COA reviews 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.

DEMOLITION REVIEW COMMITTEE

The Demolition Committee is a subcommittee of the Exeter Heritage Commission charged with the review of the proposed demolition of:

- Any building or structure within the Town limits that is more than 50 years old (with the exception of manufactured homes)
- Any building or structure that is listed or eligible for the National Register of Historic Places
- Any building or structure within a locally established Historic District

If a building or structure is found to be historically significant, the Demolition Review Committee will work with the owner to encourage alternatives to demolition. If alternatives are not agreed upon, the Demolition Review Committee will photographically document the building or structure.

HISTORIC DISTRICT COMMISSION

Established in 1970, the HDC has oversight of the Town's preservation activities and regulatory review within the bounds of the Exeter Historic Districts. The HDC is comprised of seven members and four alternates, including a Selectman and a member of the Planning Board. Although the HDC's primary responsibility is to conduct to review applications for COAs, the HDC also provides recommendations to the Town Council regarding historic preservation activities in the Town including the documentation of historically designated properties.

The HDC can take one of four actions following the review of a COA application:

- **Approval as Submitted** - The Certificate for Approval will be issued
- **Approval with Conditions** - A Certificate for Approval will be issued pending review for compliance of required conditions
- **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 Building 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 Zoning Board of Adjustment

WORKING WITHOUT A COA

The Building Department will inspect all work for compliance with an approved Certificate of Approval (COA). If any changes are proposed after the issuance of a COA, please contact the Building Department at (603) 773-6112 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.

APPROVALS REQUIRED FOR WORK

HDC review and approval is triggered by the application for a building permit. 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 obtaining all necessary approvals prior to commencing with work.

HERITAGE COMMISSION

The Exeter Heritage Commission is advisory to other local boards and commissions; conducts inventories; educates the public on matters relating to historic preservation; provides information on historical resources; and serves as a resource for revitalization efforts

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 *Demolition Review Committee* process (page 01-3). Demolition of designated historic buildings is rarely appropriate.



The symmetry of this twin residence is one of its character defining features that should be preserved.

GUIDELINES FOR HDC DECISIONS FOR ALTERATIONS TO EXISTING BUILDINGS

When reviewing a proposed project for alteration to a historic building, the HDC's review is 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.

TOWN OF EXETER - DESIGN GUIDELINES

The following *Guidelines* were prepared in this project:

- 01 *Guidelines Introduction*
- 02 *Guidelines for Roofing*
- 03 *Guidelines for Exterior Woodwork*
- 04 *Guidelines for Masonry & Stucco*
- 05 *Guidelines for Windows & Doors*
- 06 *Guidelines for Site Elements*
- 07 *Guidelines for New Construction & Additions*
- 08 *Guidelines for Commercial Buildings*

Further information is available at the Building Department and on Exeter's web site at www.exeternh.gov. 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.



The replacement of deteriorated roofing is potentially dangerous work that often requires the access of workers and materials by ladders. Consideration should be given to hiring a professional for any work that is unfamiliar or potentially unsafe.

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 organizations web sites, including:

Asbestos

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

Lead

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

Radon

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

Mold

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

BUILDING CODES

All construction projects in the Town of Exeter must comply with the Zoning Ordinances as well as the International Building and Residential Codes as amended. The intent of the Ordinance and Code 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 Building Department at (603) 773-6112. Applicants are also welcome to meet with an Inspector who can assist with permit applications and regulatory questions.



All proposed exterior alterations, including the modification or installation of signage and awnings, is subject to HDC review and requires a Certificate of Approval (COA).

HDC REVIEW

It is important to remember that all exterior changes to a building or structure within the boundaries of a locally designated Historic District are required to receive a prior approval from the HDC. (Refer to *Preservation Regulatory Review* on page 01-3 or contact the Building Department at (603) 773-6112 for review requirements for proposed work.)

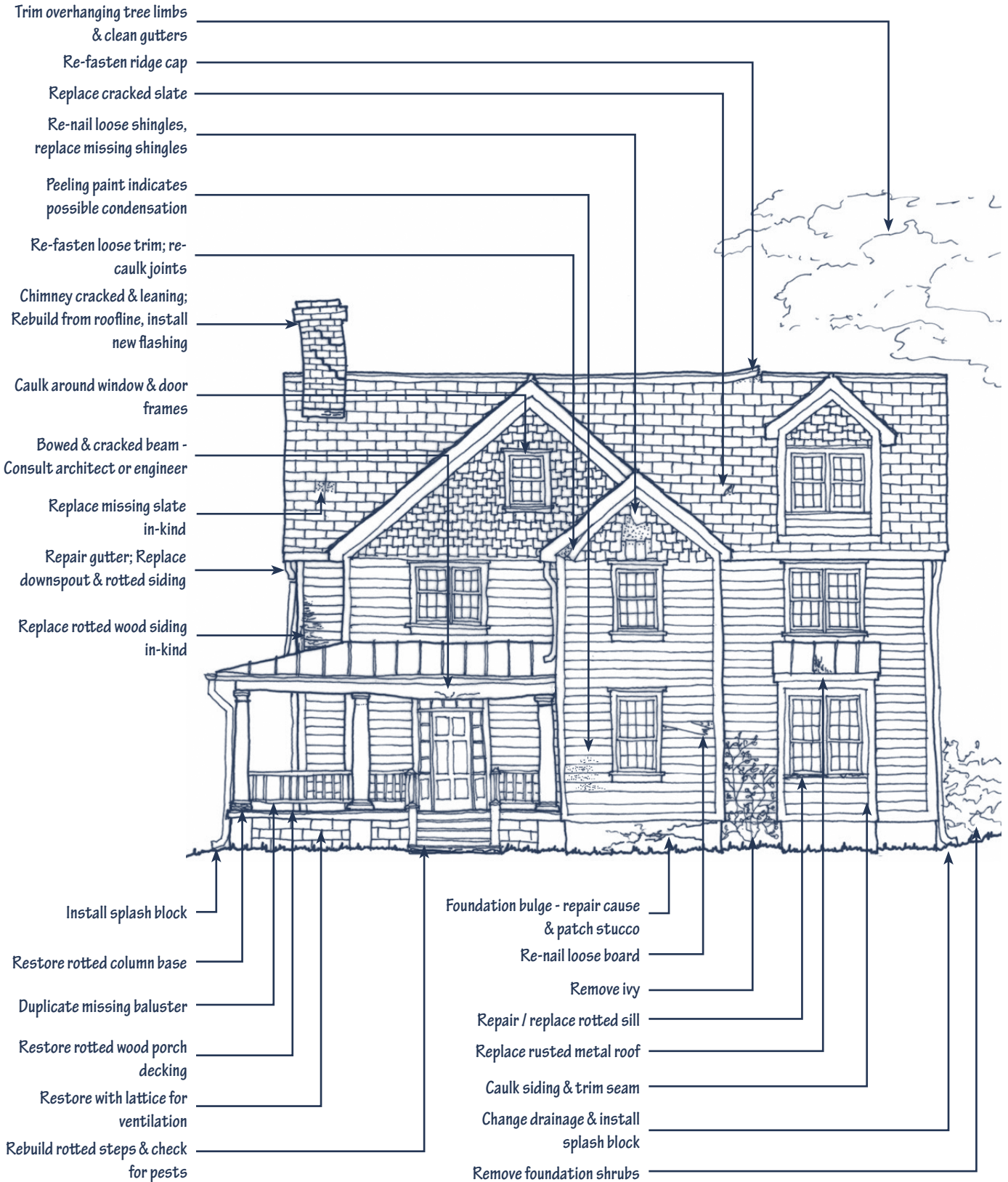
COST VS. VALUE-ADDED

While some of the recommendations in these *Guidelines* do not represent the least expensive options, the HDC strongly believes that selecting a better quality option 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 *Benefits of Historic Preservation*, page 01-2.) 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.

TYPICAL BUILDING MAINTENANCE NEEDS

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



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, with metal flashing at the intersections.

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 including 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 Town's historic buildings to last for centuries.

MAINTENANCE IS PRESERVATION

Regular maintenance helps to preserve buildings and property, protect real estate values and investments, and keeps Exeter 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 regularly inspect buildings, structures and landscape elements 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.

EXTERIOR PAINT AS MAINTENANCE

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. (A list of historic exterior color selections for buildings styles located in historic districts is available on the Town's web site at www.exeternh.gov.)

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, Guidelines for Masonry & Stucco, page 04-7*.)

PROPERTY MAINTENANCE

Properties should be maintained in a manner that allows them to be safe and contribute to the Town culturally and economically. The Town and the HDC encourages 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



An example of an adaptive reuse project is the conversion of a firehouse into a restaurant. If considering a change of use for a building, it is important to have a clear understanding of which uses are permitted under the Zoning Ordinance for a particular parcel, and those that would require a variance. In addition, other modifications, such as the installation of an accessible ramp, may be required.

ALTERATIONS & 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 considering 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



HDC review is required for all alterations of exterior building materials including roofing, siding and windows. In addition the HDC reviews any proposed structure, including garages, fences and walls at properties within the locally designated Historic Districts.

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 Exeter 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
- Conversion of mill buildings into office space or residences

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

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



This 2-story side elevation addition is subordinate and diminutive in scale when compared to the side gable roofed main block. It is stepped back from the front elevation, and utilizes similar but larger windows, trim and siding. It is compatible but clearly identifiable as an addition to the historic building.

ADDITIONS

Additions to a building within a Historic District can dramatically alter the appearance of the individual property, the District and the surrounding landscapes. Exact reproduction of historic buildings is discouraged, while both traditional or contemporary 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 contemporary 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 New Construction & Additions*

NEW CONSTRUCTION

More dramatically than additions, new construction within a Historic District can dramatically alter the appearance of the individual property, the District 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 some of Exeter's commercial corridors.

When considering a new construction or development project, exact reproduction of historic buildings is discouraged, while both traditional design or contemporary 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 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 New Construction & Additions*



This house is sited in a manner similar to its neighbors. The multiple gable and hipped roof break down the overall mass and scale to be similar to its neighbors. The fenestration pattern includes punched window openings, avoiding a front-facing garage door.

RESEARCHING HISTORIC PROPERTIES

Property owners seeking information regarding the history of their property can consult with the Exeter Historical Society as well as reference historic property designation information, town atlases, Town Directories and potentially historic photographs. (Refer to *Preservation Organizations*, page 01-11.)

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.) Contact the Town's Building Department at (603) 773-6112 for a review of your property's significance. 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 Exeter Historical Society is the best resources for local history, (refer to page 01-11), including historic photographs, National Register Nominations and survey forms on historic buildings. Links to information on local history are also available on the Town of Exeter's website. Additional information regarding historic properties is available from the New Hampshire Division of Historical Resources, and on its website. There are also numerous reference organizations and resources, a few of which are listed on page 01-11.

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 those that include an addition or new construction, it is often helpful to informally consult with the HDC in a conceptual review prior to submission of a Certificate of Approval (COA) application. 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: Is the review process expensive? Do I need to hire an outside professional?

A: The HDC does not charge a fee for a reviews; however, other City departments may assess fees, such as notification fees, based on the nature of the project. Carefully 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 requires 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 Building 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 Town's Building Department at (603) 773-6112 for an appointment.

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

A: It is important to thoroughly complete the application and submit all required materials to the HDC for review. It is recommended that you contact the Town's Building 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 Town's Building 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 changes to any building, site or structure within the boundaries of a locally designated Exeter Historic District are required to receive an approval. This includes all work that might be considered ordinary maintenance and repair with the exception of repainting. Refer to applicable *Guidelines* sections for clarifications regarding types of work that is subject to review. Most applications for maintenance and in-kind repair are reviewed at the Staff level within 7 to 10 days of a completed application filing.

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 Approval. 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 Town of Exeter website at www.exeternh.gov or contact the Town's Building Department at (603) 773-6112.

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.

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 & Sons, Inc., 1998.
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PRESERVATION ORGANIZATIONS

Local Organizations

- Town of Exeter Building Department
Historic District Commission (HDC); Heritage Commission
Town Hall; 10 Front Street, Exeter, NH 03833;
(603) 773-6112; www.exeternh.gov
- Exeter Historical Society
47 Front Street; Exeter, NH 03833;
(603) 778-2335; www.exeterhistory.org

State and Regional Organizations

- New Hampshire Division of Historical Resources
19 Pillsbury Street; Concord, NH 03302
(603) 271-3483; preservation@dcr.nh.gov
- New Hampshire Preservation Alliance
7 Eagle Square; Concord NH 03302
(603) 224-2281; www.nhpreservation.org
- Historic New England
Otis House; 141 Cambridge Street; Boston, MA 02114
(617) 227-3956; www.historicnewengland.org



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Julie Gilman, Vice-Chair, Selectboard
Nancy Belanger, Clerk, Selectboard
Don Clement, Member, Selectboard
Anne L. Surman, Member, Selectboard
Russell Dean, Town Manager

Historic District Commission

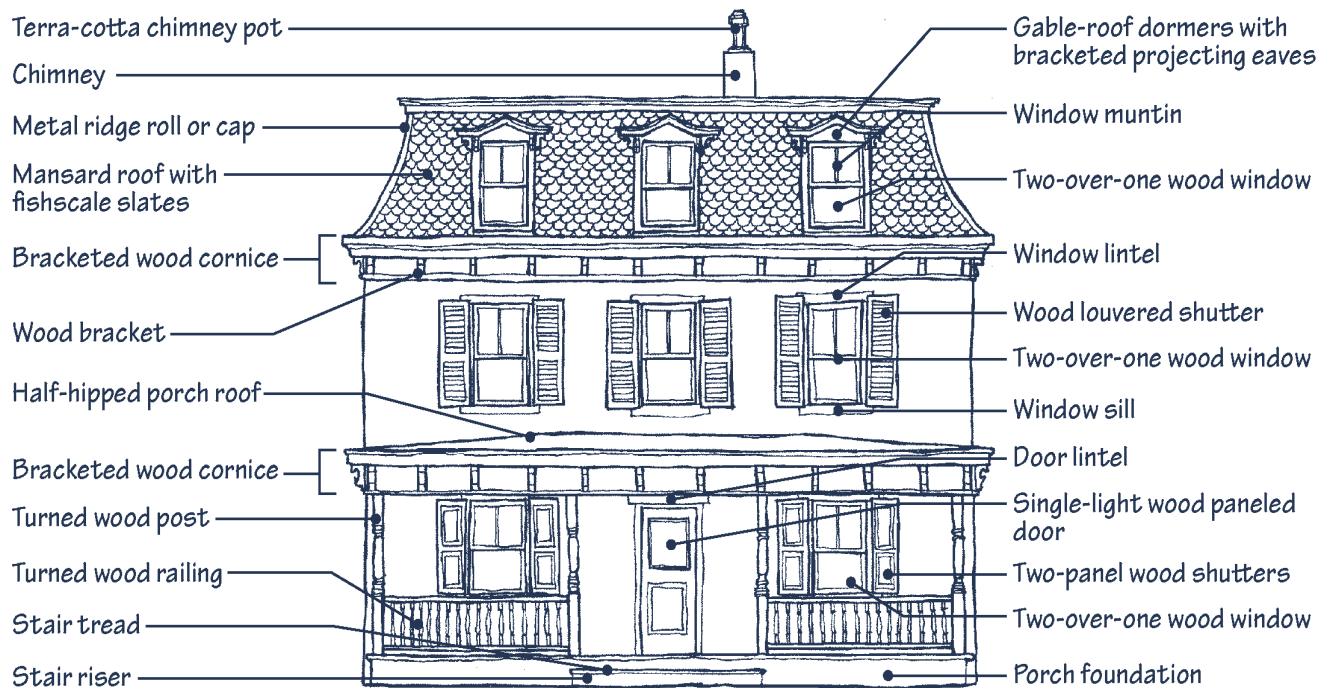
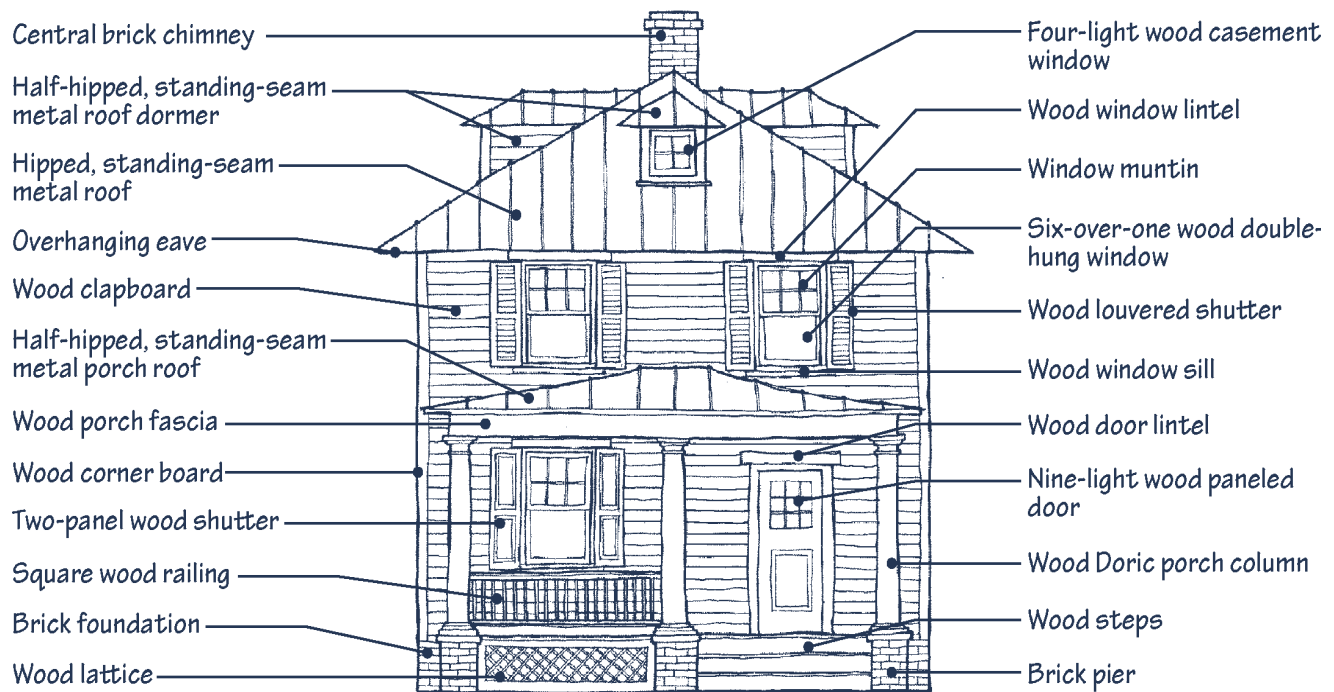
- Patrick Gordon, Chairman
Julie Gilman, Board of Selectman Representative
Pam Gjettum, Clerk
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Nicole Martineau, Member
Valerie Ouellette, Member
Pete Cameron, Planning Board Representative, Alternate

Building Department

- Doug Eastman, Building Inspector/Code Enforcement Officer
Barbara McEvoy, Deputy Code Enforcement Officer

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.



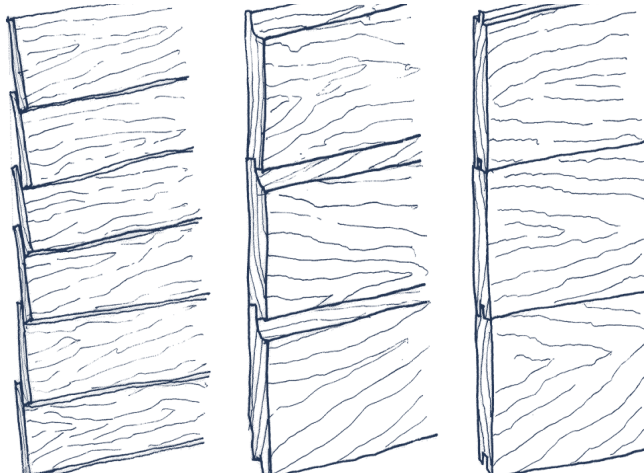
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TOWN OF EXETER HISTORIC DISTRICTS

Exterior Woodwork



Clapboard
Siding

Drop-Lap
Siding

Flush
Siding

WOOD SIDING TYPES

Use of wood siding is widespread on the Colonial and Victorian era buildings of Exeter. The most common type of wood siding is clapboard with drop-lap siding and flush siding being less prevalent. Clapboard siding (also known as weatherboard or beveled siding), is made from long boards, tapered across the width.

Drop-lap siding (also known as German siding), is a flat-faced board with a concave top and notched bottom. Flush siding has tongue-and-groove boards of uniform width. Other types of wood siding that may be found in Exeter include ship-lap siding, which is similar to flush siding with an “L” shaped overlap, and board-and-batten siding, which is wide, vertical boards, with narrow strips of wood covering the vertical joints.

These *Guidelines* were developed in conjunction with the Town of Exeter’s Historic District Commission (HDC) and the Building Department. Please review this information during the early stages of planning a project. Familiarity with this material can assist in moving a project forward, saving both time and money. The Building Department is available for informal meetings with potential applicants who are considering improvements to their properties.

Guidelines and application information are available at the Town Office and on the Commission’s website at exeternh.gov/bcc/historic-district-commission. For more information, to clarify whether a proposed project requires HDC review, or to obtain permit applications, please call the Building Department at (603) 773-6112.

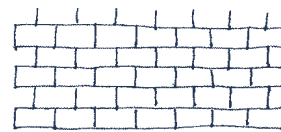
EXTERIOR WOODWORK

Wood siding, shingles, cladding and trim on a building’s wall surface serve both functional and aesthetic purposes. Functionally, exterior woodwork acts as the skin of a building, shedding water and deflecting sunlight and wind. Aesthetically, woodwork is an important design feature that can be applied as siding, shingles, ornamental trim and as larger elements such as porches.

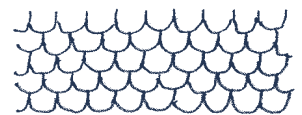
Exterior woodwork and cladding:

- Establishes a weather-tight enclosure, providing protection from rain, wind and sun
- Are affected by temperature variation and building movement
- Establish a building’s scale, mass and proportion, adding visual interest to the streetscape
- Act 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. Other forms of cladding can also be susceptible to deterioration, depending on their properties and the installation conditions.



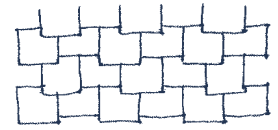
Chisel or Bevel



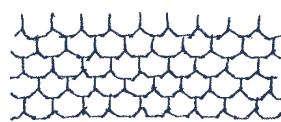
Fishscale



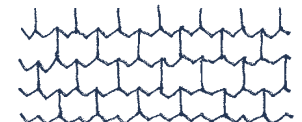
Diamond



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 Exeter 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 03-3.) Clean exterior surfaces annually in warm weather with a garden hose, household detergent and a 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 03-9.)
- **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 03-4.)
- **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 03-4.)
- **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. 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



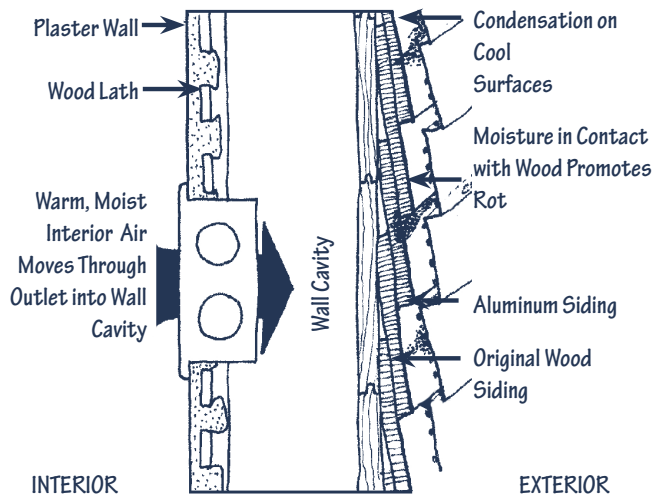
Porches, steps and other areas where the woodwork is laid horizontally or located close to the ground are often the first to deteriorate. Ongoing exposure to moisture can lead to rot of the column bases, porch deck and apron.

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 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 for insulation types, levels and installation recommendations applicable to specific locations and construction conditions.

Although the installation of window-mounted portable air conditioning units does not require a Certificate of Appropriateness from the HDC, it is advisable to consider its 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.

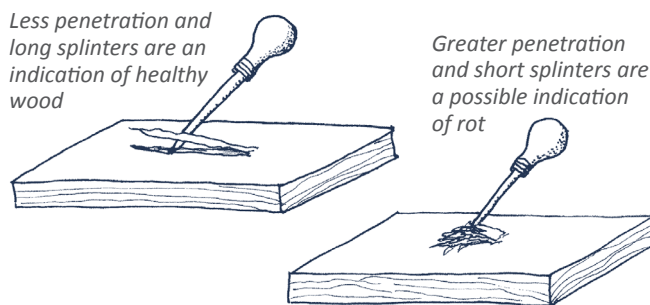
In addition, installing artificial siding or impervious coatings over wood can make a condensation problem worse and conceal deterioration until it is severe. Unlike wood, vinyl and aluminum do not "breathe" and can trap moisture within a building's wall cavity, leading to rot, mold and insect damage 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.



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.

TYPES OF ARTIFICIAL SIDING

Artificial siding has been applied by Exeter's property owners for years to provide an updated appearance and minimize 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.



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

Vinyl & 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 does 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

Fiber-cement siding is a lightweight, solid material that is a durable and visually more compatible material to wood than vinyl or aluminum siding. It is manufactured in similar sizes and shapes to wood products including siding, shingles and trim, making it easier to duplicate historic characteristics. The installation method is similar to wood allowing historic alignments around window and door frames, and it can be cut to shape on-site using hand tools, and painted to match any color scheme, and should be installed following manufacturer's recommendations. Manufacturers indicate that fiber-cement products are resistant to rot, termites, fire and delamination, and are dimensionally stable, allowing paint to last longer. Fiber-cement products cost more than vinyl or aluminum siding but much less than wood siding and can have a manufacturer's warranty as long as 50 years. Although not appropriate for replacement of historic wood siding, fiber-cement siding can often be used at minimally visible areas with a high potential for wood rot, and at new construction.



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

ARTIFICIAL SIDING INSTALLATION

In Exeter, 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 & VENEER

Exeter'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"> • 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. • Vinyl or aluminum siding installed over existing woodwork can trap moisture and lead to costly hidden structural repairs. (Refer to the weatherproof section below.) • Artificial siding can reduce home values by covering distinctive qualities and details.
<i>“Vinyl or aluminum siding improves the appearance of a building”</i>	<ul style="list-style-type: none"> • Exposures, shadow lines, joint layout, texture and the sheen of vinyl or aluminum siding do not typically match wood. • Historic or decorative trim is often covered or removed in the installation process. Installation typically requires damage to historic wall materials. • Stock vinyl and aluminum trim is generally narrower than historic wood trim. • Historic details and decorative elements are generally not available in vinyl or aluminum. • Available colors are limited and might not be appropriate for the building style. • 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.)
<i>“Vinyl or aluminum siding is weatherproof”</i>	<ul style="list-style-type: none"> • 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.) • 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.) • 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.)
<i>“Vinyl or aluminum siding conserves energy”</i>	<ul style="list-style-type: none"> • 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. • 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.
<i>“Vinyl or aluminum siding is maintenance free”</i>	<ul style="list-style-type: none"> • Like wood, vinyl and aluminum siding needs regular cleaning. • 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. • 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.)

Cornerboards are typically found at all wood siding applications. In this case it separate the clapboards to the left from the wood "block" siding to the right, intended to appear like stone.



WOOD TRIM AT SIDING & 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 & Caulk, Guidelines for Windows & Doors*, page 05-7.)

Some building styles do not include corner boards. Instead, the side edges of wood clapboards or shingles are butted together as they wrap corners, often in an alternating pattern. Whether or not a building included corner boards, historically, the wood siding and shingles at most buildings was installed to allow a full-height exposure above window and door heads, even if it 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.

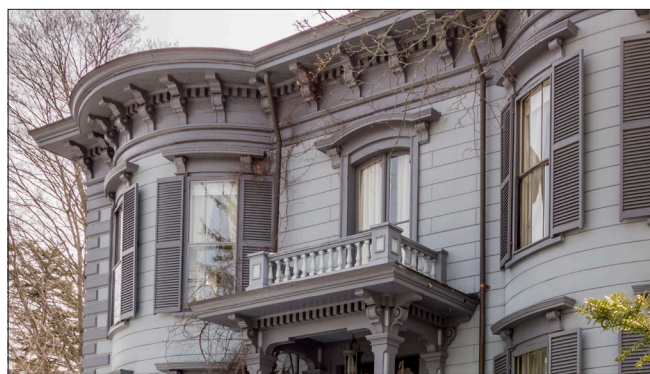
Traditional wood shingled wall cladding can include corner boards as shown on the first floor, or without, as seen on the second floor.



WOOD TRIM & 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.



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

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.

ARTIFICIAL TRIM & 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 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.

STOOPS

With most of Exeter's buildings located adjacent to the sidewalk or street, many of the Town's historic buildings 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, these homes 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, particularly those facing the street, can play a significant role in defining the architectural character of a building while providing a welcoming for visitors.

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 occur 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.

The paint is blistering and peeling exposing the underlying siding to the elements and moisture infiltration. Complete removal of the paint down to bare wood and repair of areas of deterioration is recommended prior to the application of a high-quality wood primer followed by two coats of compatible paint.



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 potentially accelerate deterioration.

Exterior paint provides a layer of protection to a building by adding a barrier that limits 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 deterioration of the exterior envelope and underlying framing, and many metals are susceptible to rust. Although paint is an important protective layer that improves the longevity of a historic resource, it must be viewed as a temporary barrier that is subject to deterioration through cyclical temperature and humidity changes, and that 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 the 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 at 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.

It can be problematic to use encapsulating paints that 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 *Masonry & Stucco Painting, Guidelines for Masonry & Stucco*, page 04-7 for more information on masonry paint removal and application.)

OIL & 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 increasingly more brittle to the point that 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 Exeter'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** - 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** - typically the result of the top coat drying before the underlying coat; sand smooth, repaint
 - **Blistering** - air bubbles under the paint; cut into blister, and 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** - severe cracking and crazing; remove all paint down to bare wood

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 & Stucco Painting, Guidelines for Masonry & Stucco*, page 04-7. **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.



The paint on this door has alligatored, and severe cracking is visible. Removal of paint down to bare wood and proper door repair are recommended prior to repainting.

- 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 03-3 for additional information on how to identify moisture-related problems and some suggestions that might alleviate the situation.)

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 surface preparation should be undertaken 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 at least two coats of paint to previously bare wood or metal.
 - For best results, apply paint during appropriate weather conditions, generally 50°F to 90°F, less than 60% relative humidity, with no direct sunlight

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
- To achieve a smooth transition when a new wood element is being installed as a repair
- To prevent deterioration of historic building features
- To prevent deterioration of masonry

If the existing paint has failed, it might be necessary to strip all or portions of the paint from the surface. There are a variety of tools and chemicals available to strip paint, many of which are potentially hazardous and can cause significant damage to exterior surfaces and the surrounding environment.

PAINT REMOVAL SAFETY

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

- Paint removal, particularly of lead-based paint, must comply with all safety requirements - owners are strongly encouraged to contact the lead safety organizations found in the *Guidelines Introduction* for information prior to completing work potentially involving lead paint
- Always wear safety goggles and a mask or respirator
- Avoid 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 dust mask or respirator, avoid open food or beverage containers in area of paint removal, thoroughly clean work area and exposed skin, launder work clothes

PAINT COLORS

The HDC recommends referencing appropriate historic exterior paint colors for specific building types and architectural styles available on the Town of Exeter web site at www.exeternh.gov or reference books. Property owners seeking historically accurate paint colors for a project can complete a paint analysis.

EXTERIOR WOODWORK REVIEW

Exterior Woodwork Maintenance

The HDC encourages:

- Following the recommendations in *Exterior Wood Review*, page 03-2

The HDC discourages:

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

Artificial Siding and Elements

The HDC encourages:

- Retaining and maintaining existing exterior woodwork including siding and trim
- Repairing or replacing wood siding and trim in kind
- Using painted fiber-cement clapboards with profiles and detailing similar to historic clapboards as an alternative to wood clapboards at minimally visible areas with a high potential for wood rot, and at new construction

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 03-2

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
- Using field painted, modern composite materials as an alternative to wood only in locations where rot is a severe problem, or in areas that are minimally visible

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

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 03-9
- Identifying deteriorated elements

- Finding and correcting sources of deteriorated elements, such as deteriorated, 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, the base can be replaced at a fraction of the cost without replacing the entire column or post
- Replacing missing or deteriorated materials with similar, new materials - avoid replacement of a wood railing with a metal or vinyl railing system
- Repairing damaged elements using standard repair techniques for that material (Refer to the *Guideline* section appropriate for each material, particularly *Guidelines for Roofing* and *Guidelines for Masonry & Stucco*) and restoring the porch to its original historic appearance
- Replacing only irreparable original elements using elements of the same material, size, profile and other visual characteristics
- 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; it 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
- Most porches at framed buildings were historically made of wood; stone or brick porches might only be appropriate on masonry and stucco buildings

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 enclosure systems, such as screens or glazing that can be removed seasonally
- Reversible enclosure systems that do 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, particularly at the front elevation

Paint Removal

The HDC encourages:

- Hand cleaning with mild detergent and bristle brush
- Hand scraping and hand sanding
- Following all manufacturer’s safety recommendations

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

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