



# CITY OF PORTSMOUTH

## Historic District Commission

### Guidelines for Exterior Woodwork

#### 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.

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

In its review, the HDC considers a property's classification, recommending the greatest historic authenticity at focal buildings, with more flexibility at contributing structures, and the most at non-contributing properties. The HDC Staff in the Planning Department is available to provide informal informational meetings with potential applicants who are considering improvements to their properties.

Additional *Guidelines* addressing other historic building topics are available at City Hall and on the Commission's website at [www.planportsmouth.com/historicdistrictcommission](http://www.planportsmouth.com/historicdistrictcommission). For more information, to clarify whether a proposed project requires HDC review, or to obtain permit applications, please call the Planning Department at (603) 610-7216.

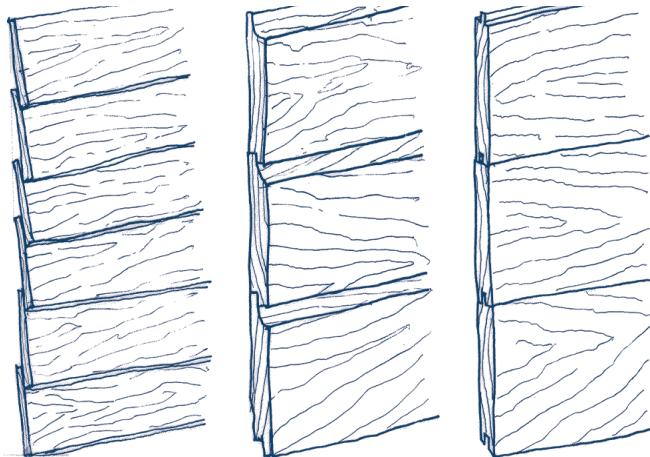


Woodwork can be utilized for a variety of exterior building elements. It can be easily cut in intricate patterns and details, such as those found at this Queen Anne Style double porch.

#### 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 is 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.



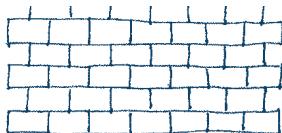
Clapboard  
Siding

Drop-Lap  
Siding

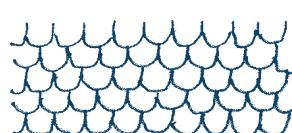
Flush  
Siding

## WOOD SIDING TYPES

Use of wood siding is widespread on the Colonial and Victorian era buildings of Portsmouth. 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 Portsmouth 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.



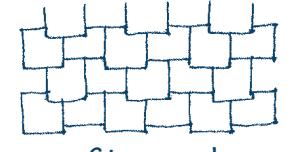
Chisel or Bevel



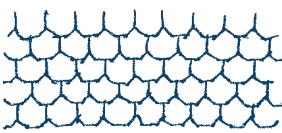
Fishscale



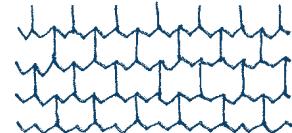
Diamond



Staggered



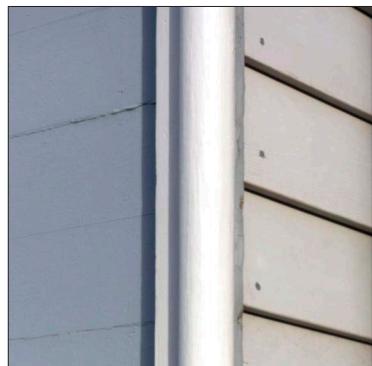
Octagonal



Sawtooth

## SHINGLE TYPES

Decorative wood shingles provide a highly textured wall finish, and were used as a cladding material most often in historic Portsmouth 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.



Flush siding is located at the left side of the photograph and clapboard siding is located at the right as the building turns the corner. This example includes an unusual beaded corner board.

## 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 08-10.)

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.



Victorian-era buildings often include a variety of shingle shapes as a decorative feature at gable ends. Note the ornate rake boards.

## 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.



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 CHECKLIST

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.

### To maintain exterior woodwork, the HDC encourages:

- **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 05-4.) 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, Guidelines for Exterior Maintenance*, page 03-14.)
- **Repairing smaller areas of deterioration by reinforcing or patching as required.** Small cracks and checks can be repaired with an exterior wood filler, glue or epoxy. Loose elements can be refastened with careful nailing or drilling and screwing. (Refer to *Wood Repair Options*, page 05-5.)
- **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 05-5.)
- **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. (Refer to *Safety Precautions, Guidelines Introduction*, page 01-16.)



## 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



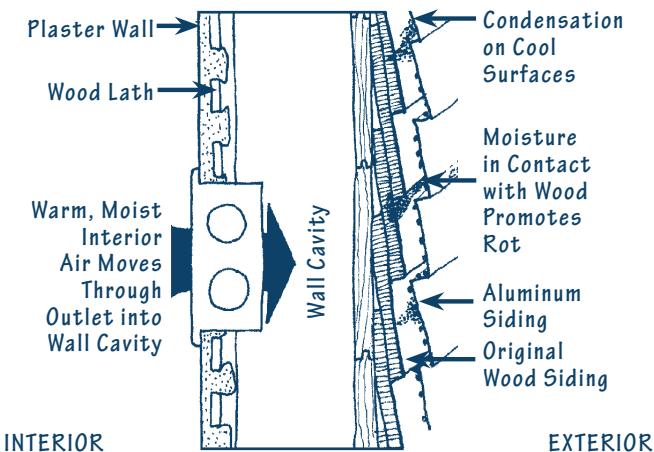
*The application of a quality wood primer and two coats of paint can minimize the potential for wood rot. Note the alignment of the siding with the bottom of the window sill.*

## 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](http://www.energystar.gov) for insulation types, levels and installation recommendations applicable to specific locations and construction conditions. (Refer to *Building Insulation, Guidelines for Exterior Maintenance*, page 03-12.)

Although the installation of window-mounted portable air conditioning units does not require a Certificate of Approval 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.

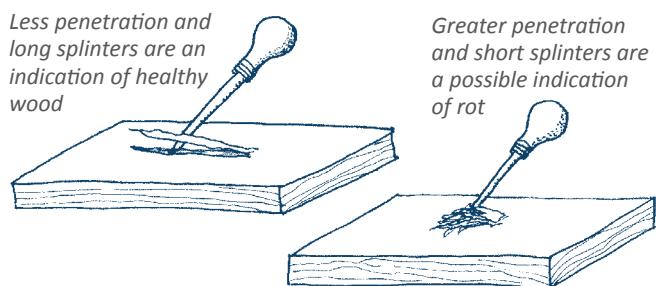
In addition, installing artificial siding or impervious coatings over wood can make a condensation problem worse and conceal deterioration until it is severe. Unlike wood, vinyl and aluminum do not "breathe" and can trap moisture within a building's wall cavity, leading to rot, mold and insect damage 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. (Refer to *Exterior Paint, Guidelines for Exterior Maintenance*, page 03-14.)

## 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. (Refer to photograph, *Guidelines for Windows & Doors*, page 08-4.)

## ARTIFICIAL WOODWORK

In Portsmouth, 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 elements such as at window and door frames, and are not recommended on historic buildings. (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.

Artificial siding has been applied by Portsmouth'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 of underlying woodwork and framing.



The removal of vinyl or aluminum siding can reveal underlying wood siding, shingles and trim.

### 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 be noted that in the event of a fire, the fumes from melting vinyl can be very toxic.

### Fiber-Cement Siding & Shingles

Fiber-cement siding is a lightweight, solid material that is a durable and visually more similar to wood than vinyl or aluminum siding. It is manufactured in sizes and shapes similar 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. It can be cut to shape on-site using hand tools and painted to match any color scheme. 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 less than wood siding and can have a manufacturer's warranty as long as 50 years.



*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 a visual difference, including shadow lines, as compared to wood siding.*

### PVC 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.

### Removing Artificial Siding & Veneer

Portsmouth'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 trim and ornament
- Sell aluminum siding for recycling

## EXTERIOR WOODWORK OR ARTIFICIAL SIDING

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

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

## HDC CRITERIA FOR EXTERIOR WOODWORK REVIEW

When evaluating a proposed repair or replacement of exterior woodwork, the HDC's goal is to preserve the integrity of the remaining historic fabric in Portsmouth's Historic District to ensure continued access to this shared heritage. One of the major factors in the review process is the property's historical and/or architectural value as determined by the historic designation. The more significant the property, the more critical is its authenticity and the use of traditional materials, such as wood.

- **Focal Properties** — Maintain the highest historic integrity with restoration of historic wood elements and detailing, or replacement with matching wood elements throughout
- **Contributing Properties** — Restoration of historic woodwork encouraged; wood siding, shingles, trim and ornament should be installed at street-facing facades; more flexibility is possible at secondary or rear elevations with limited visibility from the street
- **Non-Contributing Properties** — Restoration of historic woodwork encouraged, with greater possibility for flexibility for alternate materials, particularly if appropriate for building type and construction period
- **Addition** — Exterior woodwork encouraged, particularly where highly visible from the public way, with greatest possibility for flexibility for alternate materials at areas with limited publicly visibility
- **New Construction** (Single- and double-family residences) — Exterior woodwork encouraged, particularly where highly visible from the public way, with greatest possibility for flexibility for alternate materials at areas with limited public visibility
- **New Construction** (Large-scale commercial and residential) — Exterior woodwork encouraged, particularly where highly visible from the public way, aluminum trim possible at masonry clad buildings with appropriate detailing

### When is HDC Review Not Required?

A Certificate of Approval is not required for:

- The maintenance, repair or replacement of exterior wood siding, shingles, trim or ornament, provided that the same design and materials are used — or if the materials used restore the original architectural features, including but not limited to the dimensions, profiles, joints and painted finish
- The painting or repainting of exterior woodwork at buildings or structures

This material is funded by the City of Portsmouth, NH  
on behalf of the Historic District Commission  
Planning Department, City of Portsmouth, NH  
[www.planportsmouth.com/historicdistrictcommission.html](http://www.planportsmouth.com/historicdistrictcommission.html)

### Replacement Woodwork Materials

Replacement woodwork materials are generally not recommended for historic buildings. However, when evaluating a proposed replacement woodwork material, the HDC utilizes the Criteria for Review and will consider the following materials, with all options including dimensions, profiles, joint configurations and finishes appropriate to the building style and period of construction:

1. Wood
2. Fiber-Cement Siding — Preferably with a smooth, field painted exterior finish
3. PVC Trim & Ornament — Preferably with a smooth, field painted exterior finish
4. Aluminum (At commercial buildings and new construction only) — Details and profiles should generally match wood construction, with exception of storefront assemblies
5. Vinyl & Aluminum Siding — Encapsulating materials that cover existing woodwork are not appropriate within the Historic District unless building was constructed with vinyl or aluminum siding

### The HDC encourages:

- Retaining and maintaining existing exterior woodwork including siding, shingles, trim and ornament
- Repairing or replacing wood siding, shingles, trim and ornament in-kind using wood material of the same size, dimensions and profiles as the existing
- Following guidelines for maintenance and repair of historic wood trim and ornament as outlined in the *Exterior Wood Checklist*, page 05-3
- Applying a painted finish to all exterior woodwork and composite materials, with appropriate type of paint for material and color appropriate to the building style (Refer to *Exterior Paint, Guidelines for Exterior Maintenance*, page 03-14)

### If replacement of exterior woodwork is warranted, the HDC may allow:

- Using modern fiber-cement and PVC composite materials as an alternative to wood only in locations where rot is a severe problem, and there is minimal visibility from the public way

### The HDC discourages:

- Removing or replacing wood siding, shingles, trim, ornament and decorative elements such as brackets, spindles, cornices, columns, posts, etc.
- Installing fiber-cement siding or PVC trim at areas visible from the public way
- Installing vinyl siding or capping in lieu of wood as a building material
- Installing aluminum siding or capping over exterior woodwork



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