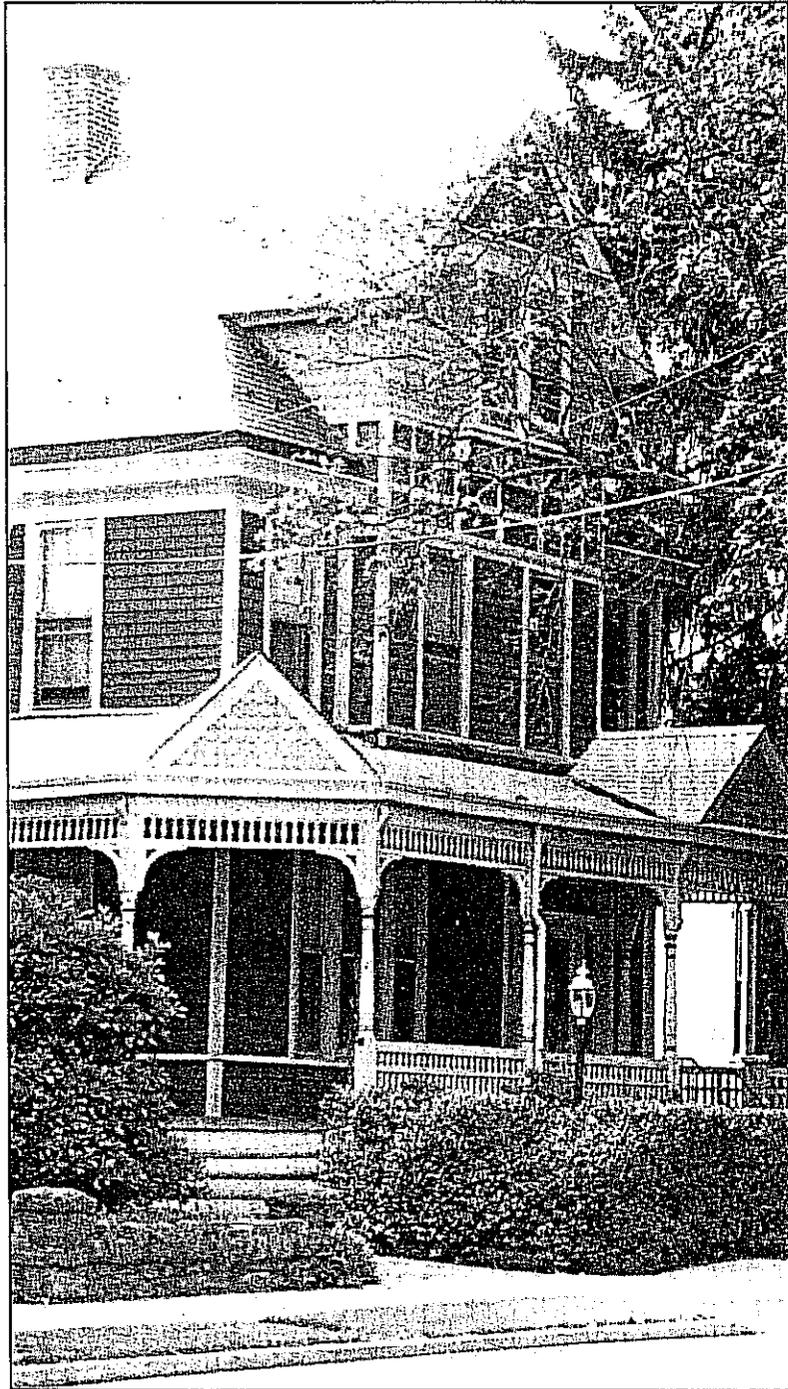


Buildings in the 300 and 400 blocks of S. Washington Street, looking north, around 1884.  
Photo courtesy of the U.S. Army Military History Institute.

# WOODEN WALLS

# EXTERIOR WALLS of WOOD



The house at 204 Carlisle Street features wood in a variety of sidings, facings and ornament.

Wood is a surprisingly durable material. Properly maintained, it can last centuries. But it does have enemies: water, fungus, and insects can dramatically shorten the life of wood.

Wood is used in many forms on the exterior of buildings in Gettysburg — in clapboards, shingles, ornament and trim; and these elements contribute significantly to the building's character. They also protect the frame of the structure from the weather, which extends the life of the building. Consequently, these elements should be protected so that they may continue to contribute to the beauty and integrity of the building for generations to come.

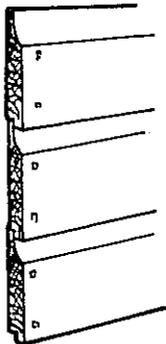
One of the most common projects encountered in historic building rehabilitation in Gettysburg is the maintenance and repair of wooden siding. Options for dealing with these projects are outlined on the following pages.

# WOODEN WALLS

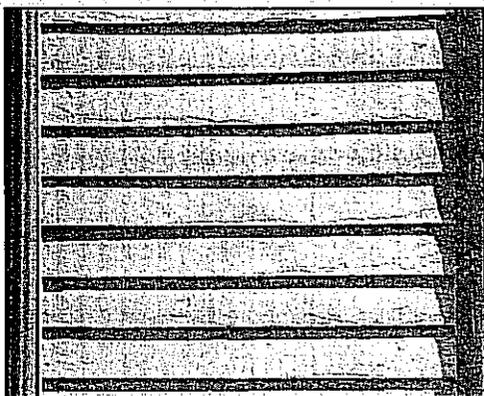
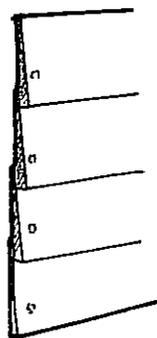
## Types of Wood Siding

In Gettysburg the most common types of wood siding are drop siding and clapboards.

Drop siding, also called German siding (pictured at the right), is composed of interlocking horizontal panels. Each panel has a flat surface with a rounded channel at the top.



Clapboard (pictured at the right), also called bevel siding, lap siding, and weatherboard, is composed of single boards, tapered from the top to the bottom, and nailed in overlapping fashion. Boards are typically about 4" wide and the overlap produces a distinctive shadow effect that has not been successfully reproduced by artificial siding.



Wood clapboards at 139 Carlisle Street.

## TREATING WOOD DETERIORATION

Water infiltration, poor maintenance, and the lack or improper use of paint can lead to decaying wood and loose, cracked, and missing siding and other wooden elements. The options listed below pertain to all wood siding, shingles, ornament and trim.

### OPTIONS

- 1 FIRST CHOICE:** Repair damaged wooden siding by reinforcing, patching, or piecing. Repair simple cracks and splits with strong exterior wood glue. Warping may be repaired by careful, slow, and well placed nailing or drilling.
- 2 SECOND CHOICE:** Repair the pieces of wood that can be repaired; replace the pieces that are too deteriorated for repair with new wood of the same size, profile, and character as that of the historic wood. Putty or wood filler should be used to smooth out the seams between old and new wood.
- 3 THIRD CHOICE:** When deterioration is too severe or extensive, replace all deteriorated wood with new wood of the same size, profile, and character as that of the historic wood. Take a sample of your siding or other wooden element to the lumber yard to get a close match.

**NOTE:** Occasionally, the installation of new wooden siding is not feasible. In such special instances, a compatible artificial siding that conveys the same visual appearance as the historic siding should be chosen. See the appendix on Guidelines for Artificial Siding for more information on this subject.

### PRIORITIES FOR WOOD IN GETTYSBURG:

- Retain, to the greatest extent possible, remaining wood clapboards, wood shingles, and other historic wood materials.
- Maintain wooden exterior elements with hand scraping, hand sanding, and repainting.
- Conduct regular inspections on wooden exterior elements.
- Paint wooden elements that were historically painted. Don't leave these surfaces unpainted; don't treat with a "natural" finish. Treated wood should be painted following the required period of weathering.

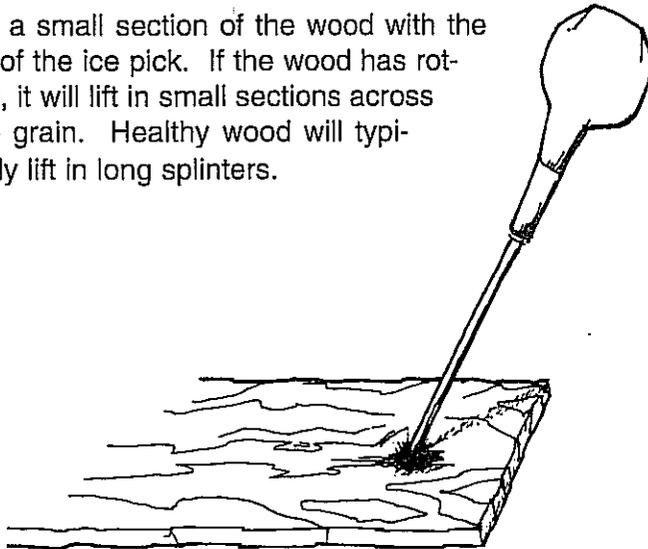
## DEALING WITH ROTTEN WOOD

Most wood deterioration is caused by fungi that thrive if given enough water and suitable temperatures. The prevention of wood decay begins with the elimination of excessive moisture and the use of wood preservatives that act to poison the "food" needed by the fungi to survive.

### THE ICE PICK TEST

To determine if your wood really is rotten, perform this test:

1. With gentle hand pressure, push an ice pick into the surface of the wood that you think may be rotted. If easy hand pressure pushes the pick into the wood to a depth of about  $\frac{1}{2}$  inch, your wood may be rotten.
2. Lift a small section of the wood with the tip of the ice pick. If the wood has rotted, it will lift in small sections across the grain. Healthy wood will typically lift in long splinters.



### NEVER

Never paint or otherwise cover a deteriorated wooden surface without repairing the source of the deterioration.

### FOR MORE INFORMATION SEE

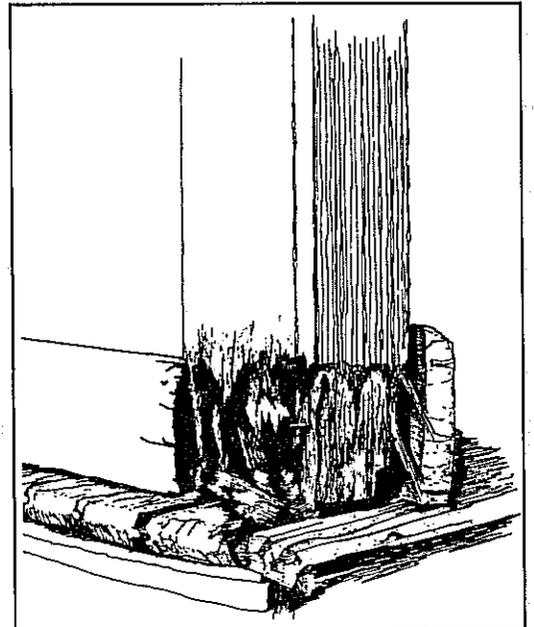
- Building Maintenance/  
Water & Your Building
- Exterior Color and Paint

## WOODEN WALLS

### Types of Wood Rot

**Soft Rot** is a slow decay that appears as a cracked surface and is caused by extended saturation or alternating wet-dry cycles.

**Brown Rot** is a serious form of rot resulting from excess moisture and fast-moving inner deterioration of the wood. The result is a crumbly surface that turns wood a brown color. Cracks are visible across the grain of the wood, and they permit greater amounts of water to penetrate, which results in greater deterioration.



**Dry Rot** is the most serious type of rot. It is a fungal infestation caused by excessive moisture. Infested wood crumbles to the touch and is easily and deeply penetrated by a penknife. This rot conducts water deep into the wood, and may leave white strands or tendrils that eventually form into sheets.

# ARTIFICIAL COVERING OF WOODEN WALLS

## A Siding Quiz

### True or False?

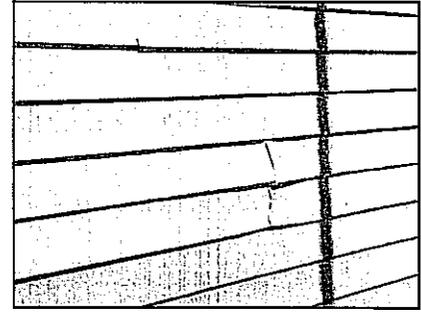
Artificial siding is maintenance free.

### False.

- Artificial siding can cause and increase maintenance problems by hiding structural defects, water damage, and insect damage, and by allowing such damage to progress unnoticed.
- Aluminum siding is easily dented; its painted surface is easily scratched. Panels can fade in the sun, and need to be painted with special products to renew their appearance.
- Vinyl siding is prone to cracking in cold weather, and it is difficult to match replacement pieces for both aluminum and vinyl.
- Although much vinyl siding comes with a lifetime warranty, because it is a relatively new building material, it is difficult to predict how long it will really last. Other vinyl products, such as windows, appear to have life spans that are considerably shorter than expected.
- In recent years, many homeowners have turned to painting their aluminum and vinyl siding, becoming tired of the color, or realizing that these materials were really not "maintenance free." Once painted, the artificial siding will need to be painted as often as wood.

## ARTIFICIAL SIDING

Mass-produced siding was intended to imitate traditional building materials; but the imitation is rarely convincing. Aluminum and vinyl siding are extruded pieces of metal and plastic, respectively, and are much thinner and lighter in weight than their wood counterparts.



Vinyl siding is susceptible to bending and denting. Its method of attachment leaves unsightly joints. Both of these conditions give vinyl siding an appearance that is uncharacteristic of wood siding.

***It is the policy of the Gettysburg HARB that highly visible walls of buildings in the historic district should remain covered with wood siding.***

### Why *Not* to Use Artificial Siding on Your Historic House

**DESTROYS APPEARANCE:** The installation of synthetic siding often results in the visual and physical loss of significant historic building material and distinctive detailing that defines and characterizes a home. This diminishes the historic character of your building.

**INCREASES DETERIORATION:** Covering the original siding can lead to rot (from moisture infiltration) and deterioration (from fasteners), and the installation of new siding makes monitoring the condition of your house difficult.

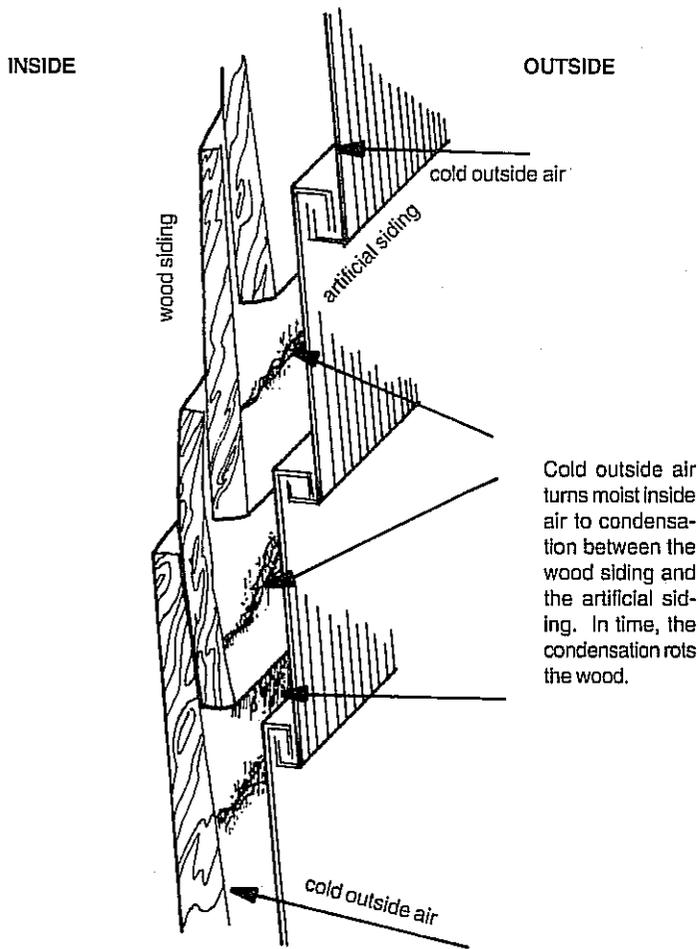
**REDUCES VALUE:** By removing the unique detail and character of your home and covering it with a mass-produced product, your house looks mundane — more like all the others. It loses its distinctive qualities that can mean a higher value in the marketplace. Also, many potential home buyers buy historic houses specifically for their special character — a character that is destroyed by installing artificial siding.

### When *NOT* to Use Artificial Siding

- Over brick, stone, or other masonry
- Over unusual examples of historic siding
- When wood siding is still functional
- When paint on wood siding has failed simply due to poor preparation, incompatible paints, or lack of maintenance
- To achieve a "maintenance-free" house

## POTENTIAL PROBLEMS WITH CONCEALING WOOD SIDING

Concealing wood siding with other materials can lead to a variety of problems. One of the worst problems occurs when artificial siding reduces the ability of your building to "breathe." Artificial sidings create a sealed barrier between the original siding and the new siding. In the cold weather, moist air from inside the house tries to escape to the exterior. When it reaches the synthetic siding, it cannot escape, and so it remains, resulting in the deterioration of the wood siding and underlying structural elements. Moisture penetrating the historic siding from other sources results in the same type of deterioration.



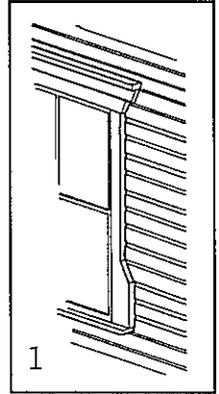
### ALSO:

- Curved areas cannot be duplicated in artificial siding.
- Improper installation of artificial siding is the major cause of problems.
- It is difficult to change the color of your house once artificial siding has been installed.

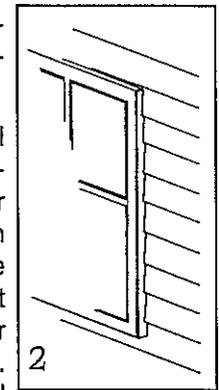
## ARTIFICIAL COVERING OF WOODEN WALLS

### New Siding and Old Windows & Doors

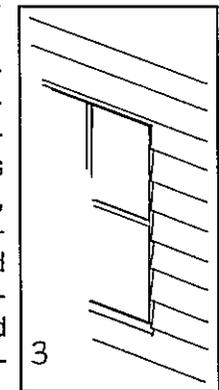
Many historic windows and doors have significant frames, molding, and trim (1). A typical problem with artificial siding on historic buildings is the damage, removal, or covering of these elements. Some installers cut down these elements, which permanently damages them (2). Some install vinyl channels at the edges of the frame. Others remove the elements, which gives the building a barren, characterless look. Still others wrap the elements in vinyl or aluminum, which hides the historic features and increases deterioration.



The addition of artificial siding over existing materials results in a greater wall thickness, which gives frames and trim the appearance of being set *back* from the wall, rather than projecting *from* it (3). This is a significant visual change that diminishes the character of the building.



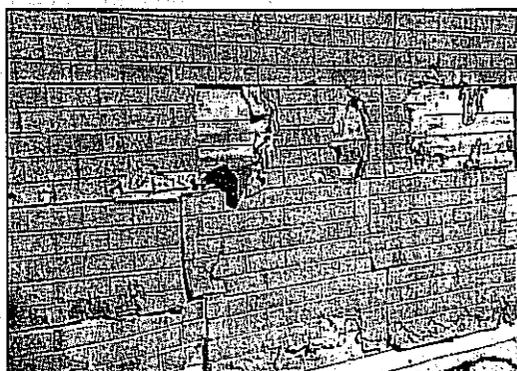
To avoid these problems, be sure your contractor will retain windows, doors, and all related elements. Don't allow them to be cut down or covered. Older materials may need to be removed to maintain the appropriate depth, or spacers may need to be installed, which will require meticulous work by experienced professionals. If trim elements must be removed due to deterioration, replace them with new elements of the same material and detailing.



# ARTIFICIAL COVERING OF WOODEN WALLS

## Replacement Materials

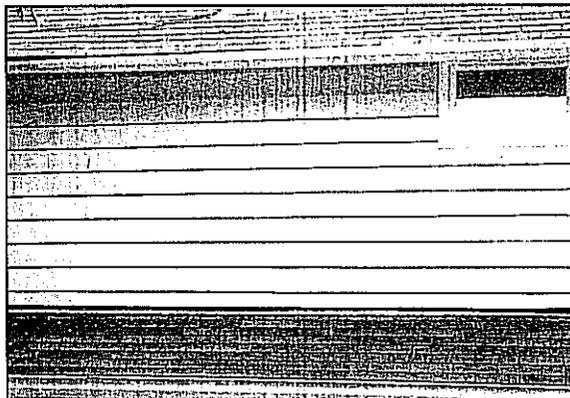
Over the years, a wide variety of materials has been used by property owners to cover wood siding in an attempt to gain relief from maintenance and repair. The pictures below illustrate how this practice significantly changes the appearance of historic resources, and show that such materials are generally not maintenance-free.



## POTENTIAL PROBLEMS WITH VINYL AND ALUMINUM SIDING

Vinyl and aluminum siding, like other substitute materials, have characteristics that easily identify them as substitutes, and qualities that are not usually advertised by the manufacturer or installer.

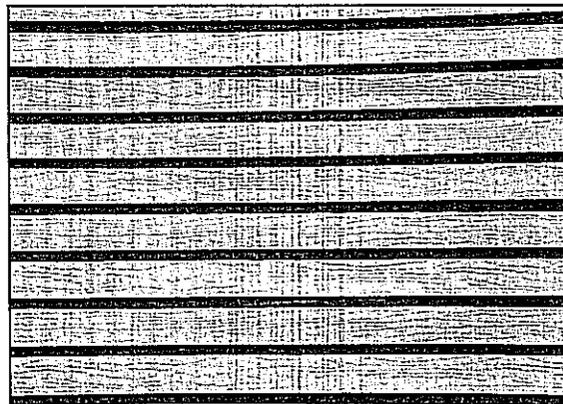
This artificial siding is dented and warped. Its uneven surface and obvious joints diminish the historic character of the building.



This metal siding was torn apart and large pieces were subsequently removed. Parts of the damaged substitute siding remain, detracting from the appearance of the house, and the historic wood siding is left open to the weather.



The simulated wood graining of this vinyl siding in Gettysburg does not make it a convincing substitute for wood siding.



### TRY THIS: Consider Removing Your Artificial Siding and Restoring Your Wood Clapboards.

- This will allow your building to function as originally designed and will expose problems that may have developed since the artificial siding was installed.
- Expect to replace about 20% of the wood clapboards.
- Expect surprises. Trim and detailing may have been removed.
- Aluminum siding can be sold for recycling.