The Least You Need to Know:

- Properly maintained, wood can be a long lasting and durable material.
- The biggest enemy of wood is water so it is important to keep wood surfaces protected with a good coating of paint.
- Replacement of deteriorated wood should be undertaken carefully and new members should match the original as closely as possible.
- Artificial siding, such as vinyl, is not maintenance free and is generally NOT appropriate within a historic district.

Introduction

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 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 is the maintenance and repair of wooden siding. Options for dealing with these projects are outlined on the following pages.
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.

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.

- 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.

- 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.

- 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: Rarely, 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.
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. Artificial siding is susceptible to bending and denting. Its method of attachment leaves unsightly joints. Both of these conditions give this siding an appearance that is uncharacteristic of wood siding.

Artificial Siding is NOT Maintenance Free

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 as compared to wood, 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.
Potential Problems with Covering Wood Siding

Covering existing 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. Eventually this can lead to severe mold growth which is bad for not just the wood but for the health of the occupants.

Cold outside air turns moist inside air to condensation between the wood siding and the artificial siding. In time, the condensation rots the wood.

New Alternate Materials

New materials are always being introduced to the market that are promoted as an alternate to traditional building materials. The HARB will consider these requests and will approve uses of some of these new materials in certain situations. Detailed information about the alternative material should be provided to the HARB for consideration.

Cement Fiberboard (i.e. Hardiplank) is often proposed as an alternative to wood. The largest criticism to it is its lack of shadow and depth as compared to traditional wood clapboard. The boards can take on a wavy appearance and the product is difficult to install requiring special cutting tools.

Use of Cement Fiberboard

- Its use is generally not allowed on primary facades of historic buildings
- It may be allowed in less visible locations, rear elevations and garages
- It will be allowed on new construction
Guidelines for Cement Fiberboard

- Use only as the main siding on non-primary elevations. It may not be installed over any other siding material.

- All fiberboard used must have a smooth finish. No pre-finished or wood grain finishes will be allowed. The exposed face of the fiberboard lap siding may not exceed six inches in width (height when installed).

- All trim elements to be used in conjunction with cement fiberboard must be wood (i.e. door trim, window trim, cornice, fascia, etc.)

- When used on an addition to a historic building, the cement fiberboard must match the existing siding or shingles in size, exposed face profile, scale, finish and articulation.

* Drawings used with permission from Borough of Gettysburg.