NATIONAL FUND FOR SACRED PLACES

QUICK REFERENCE GUIDE | HISTORIC EXTERIOR WOOD





Left: Wood siding replacement in progress on Amana Church, Middle Amana, IA. Photo by Elly Hoehnle.
Center: Wood structure repair on the steeple at Vang Lutheran Church, Dennison, MN. Photo by Jay Schmidt .
Right: Replacement of a wood turret on the steeple at Vang Lutheran Church, Dennison, MN. Photo by Jay Schmidt .

HISTORIC EXTERIOR WOOD

Wood is one of the most important building materials and has been used for thousands of years. Throughout history, wood was readily available in most areas, and with basic tools and simple finishing it could be manipulated into a structure. Wood can be found in buildings throughout the entire history of the United States and in almost every architectural style.

Wood can be used in multiple ways in buildings – such as structural members, siding, roofing, interior finishes, and decorative features – because of its inherent attributes, including:

- a high strength-to-weight ratio
- strength in both tension and compression
- ease of cutting and shaping
- capability to be connected using a variety of fasteners and adhesives
- ability to be painted or stained
- resistance to wear and weather

While wood is one of the most versatile building materials, it is also highly susceptible to deterioration caused by moisture. Wood naturally gains and loses moisture from the air and other water sources, depending on the surrounding conditions. Excess moisture in the wood can cause it to swell, warp, decay, and crack, making it more susceptible to termites and other insects. If left untreated, the moisture in the wood will lead to finish failure, significant wood rot, and possibly structural failure.

In areas prone to wildfires, reference the Resiliency Quick Reference Guide for more information on making historic exterior wood more resilient.

GENERAL RECOMMENDATIONS

All projects funded by the National Fund for Sacred Places must respect the property's historic character and materials, and must adhere to the Secretary of the Interior's Standards for Rehabilitation. Below are general recommendations for the treatment of historic exterior wood, but they do not cover all the specific recommendations. Reference the resources in the section below for more detailed recommendations.

- **RETAIN AND PRESERVE:** Preserve wood features (such as siding, cornices, brackets, window and door surrounds, and steps) and their finishes (such as paint and stain).
- **CONTRACTORS:** Only qualified carpenters who have experience working with historic wood elements should be used.
- **DRAINAGE FEATURES:** Protect and maintain wood features by making sure drainage features and systems (such as roof overhangs, gutters, downspouts, and site grading) are intact, functional, and properly sized to redirect rainwater away from wood surfaces.
- **PEST MANAGEMENT:** Implement a pest management plan to identify appropriate preventive measures (such as installing termite guards, fumigation, and chemical treatments) to protect against insect damage.
- **REPAIR:** Repair wood by patching, splicing, or consolidating the wood using recognized conservation methods.
- **REPLACE IN-KIND:** Replace in-kind entire wood features or specific elements that are too deteriorated to repair.
- **RETAIN COATING:** Retain coatings (such as paint or stain) that protect the wood from ultraviolet light and moisture.
- **REPAINT:** Apply compatible paint coating systems to historically painted wood. Remove damaged or deteriorated paint to a sound layer using the gentlest method possible (such as hand scraping and hand sanding) prior to repainting. Avoid fully removing paint down to bare wood unless it is absolutely necessary due to the existing paint being significantly deteriorated.
- **LEAD-BASED PAINT**: Where lead-based paint is not required to be removed to meet environmental regulations, use coatings that encapsulate lead paint. If lead-based paint is required to be removed, follow proper abatement requirements and use a contractor that has the United States Environmental Protection Agency's Renovation, Repair, and Painting (RRP) Certification.

RESOURCES

The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings | Exterior Wood Recommendations are found on Pages 88-92

Preservation Brief #10: Exterior Paint Problems on Historic Woodwork