NATIONAL FUND FOR SACRED PLACES

QUICK REFERENCE GUIDE | ROOFING





Left: Reroofing on the sanctuary of Mokuaikaua Church, Kailua-Kona, HI. Photo by Eric Moxley, Ali'i Builders.
Center: Installation of synthetic shakes on the roof by Dickson Construction on First Indian Presbyterian Church, Kamiah, ID. Photo by Volkhard Graf.
Right: Century Slate crew installing new clay tile on the roof of Crossnore Presbyterian Church. Crossnore, NC. Photo by George W. Riggsbee.

ROOFING

A building's roof is one of the most important elements to ensure that the structure is protected from rain, snow, sunlight, wind, and extreme temperatures. It is also an important design element for historic structures. Its form, materials, color, pattern, and features (such as dormers, cupolas, chimneys, and cresting) define the building's style and contribute to the building's aesthetic.

The most common roofing material throughout American history is wood shingles (split and sawn), but clay tile, slate, and metal (such as lead, copper, zinc, iron, steel, tin-plated iron, terne-plated iron, galvanized metal, etc.) were also used as roofing materials in the United States before the end of the nineteenth century. In the late nineteenth century and throughout the twentieth century, the materials used for roofing grew exponentially to include concrete roofing tiles, composition roof (built-up roof or roll roofing), asbestos fiber cement, asphalt shingles, modified bitumen, synthetic rubber (such as EDPM and TPO), liquid, vinyl membrane, and synthetic recycled materials.

A weather-tight roof is essential to the preservation of a historic building, but it is also the most vulnerable element and will eventually fail. A roof in poor condition will accelerate the deterioration of historic building materials and can lead to the destruction of the historic building. The roofing materials can fail due to natural decay of the roofing material, deterioration from chemical or galvanic action, material fatigue or failure, cracking or breaking from an act of nature, or from natural wear and tear.

The roof system is more than just the roof covering. It is a complex system composed of several parts (such as roof framing/structure, roof decking/sheathing, flashing, fasteners, gutters, and downspouts) that must work together to ensure that a historic building is protected. In some cases, it is not the roof covering that fails, but parts within this complex system. These materials can deteriorate, crack, break, or become clogged with debris.

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 roofs on historic buildings, but they do not cover all the specific recommendations. Reference the resources in the section below for more detailed recommendations.

- **RETAIN AND PRESERVE:** Preserve historic roof forms, roofing materials, size, color, patterning, and functional and decorative features (such as cupolas, cresting, parapets, monitors, chimneys, weathervanes, dormers, ridge tiles, and snow guards).
- **CONTRACTORS:** Only skilled roofers with experience working on similar projects (specific roofing material and building type), and on historic buildings should be used. Reputable roofers will perform an inspection of the existing roofing system to identify areas of deficiency and damage, create a safe installation methodology, and develop an accurate bid.
- **PROTECT AND MAINTAIN:** Protect and maintain the roof by regularly cleaning the gutters and downspouts and maintaining flashing.
- **TEMPORARY REPAIR:** If needed, temporary patching methods should be carefully chosen to prevent inadvertent damage to sound or historic roofing materials and related features. The temporary patches should also be removable.
- **REPAIR:** Repair the roof to ensure it is watertight.
- **REPLACE MISSING SECTIONS:** Replace missing or damaged roofing tiles, shingles, or slate rather than replacing the entire roof covering.
- **REPLACE:** Replace in-kind an entire roofing system or feature that is too deteriorated to be repaired. If using the same material is not feasible, a compatible substitute material may be considered. If the roof is visible, the alternative materials should match the historic or existing roofing material as closely as possible in scale, texture, and color. When replacing the entire roof, replace flashing and fasteners with the correct, compatible material that has a life span that matches the roofing material.
- **MODERN EQUIPMENT:** Modern equipment (such as plumbing stacks, air vents, and mechanical equipment) installed on roofs should be done in a way that is as unobtrusive as possible and not visible from the public right-of-way.

RESOURCES

The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings | Recommendations for Roofs are found on Pages 98-101

Preservation Brief #4: Roofing for Historic Buildings

Preservation Brief # 19: The Repair and Replacement of Historic Wooden Shingle Roofs

Preservation Brief #29: The Repair, Replacement, and Maintenance of Slate Roofs

Preservation Brief #30: The Preservation and Repair of Historic Clay Tile Roofs

Preservation Brief #16: The Use of Substitute Materials on Historic Building Exteriors