

APPENDIX E—Alternative Materials for Rehabilitation and New Construction

An alternative material is a material which differs from that used to create the original. Terms used to describe alternative materials also include “non-original,” “imitation,” “synthetic,” “substitute,” and “replacement.” Where a historic feature is entirely missing, or damaged beyond repair, a visually identical and physically compatible alternative material may be considered by the board for contributing structures, and will be considered for non-contributing structures. Alternative materials may also be appropriate in the construction of new primary or ancillary buildings or additions.

When reviewing the appropriateness of alternative materials the board will consider the following:

Potential Impact to Architectural Character and Historical Significance. Removing and replacing historic material will generally diminish a building’s historic integrity and retaining original or historic materials is always preferred. If an applicant proposes to remove historic material and replace it with an alternative material, the board will need to be convinced that this is necessary. The extent to which the feature is an important character defining feature will be considered in determining whether an alternative material is an acceptable substitute in lieu of other criteria.

Durability. The alternative material must be demonstrated to the DRB to have proven durability, longevity, and repairability.

Appearance. An alternative material shall have a similar profile, texture, detail, and finish as the historic material, so that the only aspect of the alternative material that varies from the original being replaced is the material itself. Products which have simulated wood graining or a bright sheen are generally incompatible with historic materials. Visual appearance on close inspection is a good baseline standard.

If a feature being replaced was historically made of painted wood, the replacement alternative material must be paintable, painted upon installation, and maintained as a painted feature, so that it appears like other painted wooded features on the exterior of the property and those properties around it. In some instances, such as windows with baked enamel finishes, unpainted alternative materials may be considered.

Location. The location of alternative materials is an important factor in their approval. Alternative materials are more appropriate for rear or non-readily visible side elevations than for primary elevations. The distance of alternative materials from the casual observer on the street or sidewalk is also important. An alternative material may be appropriate for roof cornices or other parts of a building where the material cannot be observed up close.

Sustainability. The sustainability of alternative materials may also be considered including assessing the amount of recycled product content, and use of non-renewable resources. A materials manufacturing process, transport, and ability to be recycled may also be considered.

Interaction with Historic Building Materials. Some alternative materials can interact negatively with historic materials. For example, some alternative siding or window materials may contract and expand differently than the historic material they replace and adversely affect weather-protection properties, and future appearance. Alternative materials age differently than original historic materials and the appearance of pre-finished and painted materials differ as they age, often substantially. Because of these realities, care must be taken and future differences in appearance taken into consideration when considering whether an alternative material can be used in close proximity to the original material it will be replacing. Some metals may corrode and stain adjacent materials.

In considering alternative materials, the DRB may review:

1. Samples of the material;
2. Product literature, including information on the expected lifespan, durability of the material, and long term life cycle costs;
3. Ability to accurately replicate the visual and aesthetic characteristics of the historic material in the specific application requested;
4. The level of detail, significance, and characteristics of the feature being replaced;
5. Ability to expand and contract with historic materials ; and,

The DRB may request a mock-up of the product installed in the requested location to determine how it will appear on site.

The guidelines leave room for the further development and acceptance of alternative materials that meet the visual standards that are ultimately the most important aspect of rehabilitation and the retention of historic character. However, while the National Park Service guidelines recommend the replacement of entire character-defining features under certain well defined circumstances, they never recommend removal and replacement with an alternative material of a feature which, although deteriorated or damaged, could reasonably be repaired and thus preserved. Repair of deteriorated historic features is always the most appropriate treatment, followed by in-kind replacement.