National Alliance of Preservation Commissions Alternative Materials Flowchart

ALTERNATIVE MATERIAL EVALUATION FOR WORK ON HISTORIC BUILDINGS				
Decision Matrix	**SOI Considerations**	**Applicable SOI Standards**	**Environmental Considerations**	**Questions to Consider**
Repair existing feature?	• Significance • Location • Distinctiveness • Visibility	• #2: Avoid altering features that characterize a property. • #5: Preserve distinctive features that characterize a property.	• Durability • Embodied energy	• Where is the feature located? • Is the feature distinctive? • How visible is the feature? • What is the condition of the historic fabric? • Are local tradespersons skilled in preservation available?
Replace the deteriorated feature with a new element matching the original in design and material?	• Compatibility • Location • Visibility	• #5: Preserve distinctive features that characterize a property. • #6: Replacement feature shall match in design, color, texture, visual qualities, and, where possible, materials.	• Durability • Embodied energy • Energy efficiency • Energy source	• Can matching features be salvaged or secured from other locations for reuse? • Does the proposed substitution replicate the original feature? • Is there sufficient documentation to recreate the feature? • Can parts of the existing feature be salvaged for reuse elsewhere?
Replace the feature with a new element of alternative materials, but matching the original in design?	• Compatibility • Visibility • Visual effect • Documentation	• #6: Replacement feature shall match in design, color, texture, visual qualities, and, where possible, materials.	• Durability • Embodied energy • Energy efficiency • Energy source • Toxicity • Recyclability	• Does the proposed substitution replicate the original feature? • How visible is the feature? • What is the visual impact of the new material? • Is the new material compatible with the existing fabric of the building? • Can parts of the existing feature be salvaged for reuse elsewhere?
Replace the feature with a new element of new non-imitative materials?	• Compatibility • Visibility • Visual effect • Reversibility • Impact on historic fabric	• #9: Do not destroy historic materials when constructing exterior alterations. Differentiate the new work from the old and protect historic integrity by requiring compatible architectural features.	• Durability • Embodied energy • Energy efficiency • Energy source • Toxicity • Recyclability	• How visible is the feature? • Is the new material compatible in scale and finish? • What is the visual impact of the new material? • How does the work affect perception of the building and existing historic fabric? • Is the work reversible? • Can parts of the existing feature be salvaged for reuse elsewhere?
Remove the existing feature and introduce a new one?	• Compatibility • Visibility • Visual effect • Reversibility • Impact on historic fabric	• #9: Do not destroy historic materials when constructing exterior alterations. Differentiate the new work from the old and protect historic integrity by requiring compatible architectural features.	• Durability • Embodied energy • Energy efficiency • Energy source • Toxicity • Recyclability	• How visible is the feature? • Is the new feature compatible in scale and finish? • What is the visual impact of the new feature? • How does the work affect perception of the building and existing historic fabric? • Is the work reversible? • Can parts of the existing feature be salvaged for reuse elsewhere?

* Adapted from Source: Becker, D., & Williams, J. “A Sustainability Framework for the Local Consideration of Alternative or Substitute Materials - Part II.” *The Alliance Review* (Nov-Dec 2009), 11-17.