



Stained Glass Projects - Tip Sheet

Stained glass preservation projects can be complex fusions of historic preservation and art conservation. There are many approaches to stained glass preservation, from a very conservative preventive conservation approach, to a full re-leading project. This handout provides guidance on reviewing stained glass preservation projects by summarizing the requirements written in the Grants Manual and including suggestions drawn from professional standards.

Grant Requirements

Stained Glass in National Register Properties:

- All work must conform to the Secretary of the Interior's Standards for the Treatment of Historic Properties.
- Treatment of architectural decorative arts elements including but not limited to stained glass, murals, mosaics, and original linoleum floors, should comply with the Code of Ethics and Guidelines for Practice of the American Institute for Conservation (AIC). Conservation documentation such as a condition report and treatment proposal should be included in any application for treatment.
- Applications **MUST** include the following required documents:
 - Construction drawings
 - Photographs
 - Photo Key
 - Scope of Work form

Minnesota Historical and Cultural Heritage Grants Manual, Historic Properties

Stained Glass NOT in National Register Properties:

- All conservation surveys and treatments must comply with the Code of Ethics and Guidelines for Practice of the American Institute for Conservation (AIC).
- Treatments should be suitable for the preservation of the aesthetic, conceptual and physical characteristics of cultural property, be as reversible as practical, and employ materials that are appropriate and consistent with currently accepted conservation practices.

Minnesota Historical and Cultural Heritage Grants Manual, Museum Environment and Conservation

Application Suggestions

Applicable Professional Standards:

- Code of Ethics and Guidelines for Practice of the American Institute for Conservation
- Standards and Guidelines for the Treatment of Stained Glass Windows by the Stained Glass Association of America
- Preservation Brief 33 - The Preservation and Repair of Historic Stained and Leaded Glass
- Guidelines for the Conservation and Restoration of Stained Glass; produced by the Corpus Vitrearum Medi Aevi (CVMA)



General Notes:

- All stained glass windows deserve to be treated in the same manner, regardless of perceived value. Values change over time, and treatment should be based on the condition of the window.
- If circumstances limit resources, the quality of work must not be compromised. In these cases, the applicant should consider a phased approach.
- The preservation of stained glass windows should be well documented, emphasize repair over replacement, treatment reversibility, and the use of preventive conservation measures where possible.

Documentation:

- Detailed photographs must be taken before the window is removed, and after the window is reinstalled.
- Before treatment, the selected consultant must produce an examination record and treatment plan. This documentation should include unique identification information, a description of materials and condition, justification and objectives of treatment, proposed course of treatment, and a list of materials to be used.
- After treatment, the selected consultant must prepare a treatment report which includes an accurate and complete description of all procedures used, a description of materials removed during treatment, materials used during treatment, and recommendations for future care.

Cleaning:

- The cleaning of stained glass windows should always start with the least aggressive option. Acidic, caustic, abrasive, or ammonia-containing cleaners should never be used.
- When possible, cleaning should be undertaken in a localized, well-controlled manner.
- Professional standards disagree on whether stained glass windows should be soaked in water. If a proposed treatment includes soaking, the consultant should provide justification.

Repair:

- The repair of stained glass windows must take into consideration the window's condition, its physical environment, the potential risks versus the anticipated benefits, and safety. Treatment materials and methods should be recognized as currently accepted practice through appropriate testing and publication.
- Professional standards disagree on whether lead comes are a sacrificial element of a stained glass window, like mortar is to brick; or whether they are an integral part of the artistic design of the window and contribute to its historical value. If a proposed treatment includes removing and replacing the lead came, the consultant should provide justification.
- Minor cracks, sagging, and oxidation are not indications that repair is needed. Significant glass breakage, cracked lead comes, cracked solder joints, wire ties torn away from the window, and visible daylight between the glass and lead all indicate that treatment is required.
- In situ repairs are ideal for stained glass windows when the lead came is still in good condition. This includes replacing a few isolated pieces of broken glass and adding an appropriate support system.
- Flattening and straightening a window in situ can make cracks in lead came worse and cause glass breakage. Windows subjected to this treatment will deteriorate rapidly. It is possible to flatten a window in a horizontal position, install additional support, and then reinstall the window.
- Total releading should only be undertaken when necessary to avoid or slow the loss of historic fabric.



- Broken glass should be repaired rather than replaced when possible, as replacement glass is rarely 100% identical and is of lesser historic value.
- Treatment materials must be compatible with and distinguishable from the materials of the cultural property, removable with the least damage, and chemically and physically stable.

Glazing:

- Protective glazing can relieve a stained glass window of its function as a weather shield and protect against vandalism and other forms of damage. However, when improperly installed, protective glazing may hasten deterioration of stained glass windows.
- Protective glazing should be ventilated to reduce the risk of condensation and heat gain.
- Internal and external glazing forms are both acceptable.

Qualified Consultants:

- At all National Register listed buildings, construction work must be based on construction documents completed by a qualified historic architect.
- The selected consultant must strive to attain the highest possible standards for preventive conservation, examination, documentation, and treatment.
- Qualified consultants should be selected based on their education, continuing professional development and their experience.
- Ideally the selected consultant should have Lead Safety Certification, references, and familiarity with the applicable professional standards.