CONSERVATION TIPS: Is your textile suitable for framing?

Not all textiles are suitable for framing. This tip sheet will help you decide whether or not your textile can be safely mounted and framed. Textiles that are painted, three-dimensional or larger than 18 inches by 24 inches have their own special needs that are not addressed here. If you wish information about a larger textile, please contact the Minnesota Historical Society Conservation Department.

The framing of any textile is a tricky process. A frame may provide a permanent environment in which a textile will stay on exhibit forever. However, spun and woven fibers are fragile materials by nature. They will disintegrate at a rapid rate if framed improperly. Because framing impacts textiles so completely, it is important to assess a textile's special or unique needs before framing it.

Historic textiles are especially demanding because of their age and uniqueness. As artifacts, they offer a direct link to our past, especially if created by an ancestor. Because they are fragile and irreplaceable, these fabrics should be handled carefully when framing. Often needlework textiles are brittle and fragile because of their age.

Appropriate framing will promote their long-term survival. For this reason, it is strongly recommended that you consult an experienced and trained conservator for framing advice.

Overall stability of any textile is of utmost importance when considering display. An item that will tear or fracture with gentle handling or that has areas of loss will require delicate and supportive treatment while mounting. An unstable textile mounted improperly will have a greatly shortened existence.

When examining your textile, ask the following questions:

- Are there loose threads sticking up from the surface or strings hanging freely in only one direction?
- Are these loose threads breaking?
- Are seams, if any, intact?
- Are there breaks or fragments in the ground fabric?
• Are there large areas of loss, such as tears or small holes, caused by infestation or splits within the textile?

Areas of loss or breaks in the fabric result in an unstable textile. If these areas are not supported correctly they will pull, sag and grow larger over time causing the textile to distort.

• Is the textile discolored due to staining or light fading?

Areas discolored by stains or fading caused by light are visible signs of damage. Even if the textile looks and feels strong at this time, you can be assured that a stained area will likely weaken and disintegrate within a few years.

• Is the textile brittle to the touch?
• Has the textile turned brown?
• Does the surface feel powdery to the touch?

Brittle, darkened and powdery surfaces are all signs the textile is weak and breaking down. Little can be done to stop this process. It is probably the result of a variety of catalysts over a long period of time.

The likely villains are light, humidity, temperature fluctuations and acidic environment. Sometimes wet cleaning will restore some of the textile's elasticity while removing acidic and abrasive impurities and balancing the pH. However, wet cleaning is often not an option for needlework because of dye bleeding, mixing of incompatible materials or the current overall fragility of the textile.

If your textile has some or all of the problems above, don't lose heart. It is possible to exhibit fragile textiles. Certain concerns and issues can be addressed by delicate mounting procedures in consultation with a trained professional.

If your textile is important to your family, consult a trained textile conservator for advice on framing. However, if your textile is strong, flat and does not have an historic provenance, it is a candidate for framing.

In conclusion, if you use safe materials and good techniques, handle your items carefully and do not use more light than necessary, you can significantly increase the life of your textile while enjoying it on display.

If you have questions, contact the Conservation Outreach Program at the Minnesota Historical Society for advice. Program staff can be reached by phone at 651-297-1867, 1-800-657-3773, FAX at 651-296-9961 or e-mail at conservationhelp@mnhs.org.

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Glossary

Glossary terms provided
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Acid-free: A popular and loosely applied term referring to matting, framing, and storage materials having at the time of their manufacture a neutral pH; sometimes used inaccurately as a synonym for alkaline or buffered.

Alkaline: Characterized by having a pH of more than 7.0

Alkaline reserve: The amount of alkaline precipitates which forms in deacidified paper upon exposure to air. A reserve of two to three percent of precipitates is considered a reasonable level for permanence. 2. In accordance with ANSI Z39.48-1984, the compound, typically calcium carbonate, in mat board and other paper-based storage materials, deliberately introduced in order to impede acid degradation, by acting as a buffer to maintain a pH greater than 7.0. A 3% reserve is generally recommended.

Archival: (Archivally Sound) A non-technical qualitative term that describes a material or product that is permanent, durable, or chemically stable, and can therefore be safely used for preservation purposes; more accurately describes documents or records deemed significant and worthy of preservation.

Backboard: (Back Mat or Bottom Mat) The mat in direct contact with the verso (back) of the artwork and to which the artwork is typically attached.

Backing Board: The stiff foam board, corrugated paper or plastic board inserted into the frame to protect its contents from physical and atmospheric damage.

Buffering agent: (Buffer) In chemistry, a solution or material which contains both a weak acid and its conjugate weak base such that the addition of other acid or alkali causes only slight changes in the pH; also, the alkaline reserve contained in paper based materials in order to counteract acids that may form in the future.

Cockling: (Waving, Buckling, Warping, Curling, Undulation, Gondolage) Localized deformation or a repeating and regular pattern of deformation in paper, usually across the sheet or around the edges due to irregular drying or
fluctuating relative humidity. Cockling is sometimes considered to be more closely and regularly spaced than buckling.

**Glazing:** The glass or acrylic sheet used in a frame as a protective interface between the environment and the work of art.

**Japanese tissue:** (Japanese Paper) Hand- or machine-made bast fiber paper, typically made in Japan, used in conservation because of its strength, suppleness, and stability; in printmaking because of its softness, absorbency, and dimensional stability. It is often erroneously called "rice paper" or "mulberry paper."

**Methyl cellulose:** A chemically modified cellulose ether which has many used in conservation as an adhesive, poultice, and sizing agent.

**Polyethylene:** A translucent thermoplastic material prepared by polymerizing ethylene at high pressure and temperature in the presence of oxygen. In sheet form it is used for lamination of documents in lieu of cellulose acetate or for encapsulation. It can also be used as a hot-melt adhesive or made into foams.

**Polypropylene:** A stiff, heat-resistant, chemically stable plastic. Common uses include storage enclosures.

**Sizing:** (Size) A substance that inhibits the penetration of water into the internal structure of paper and therefore decreases the swelling of the paper fibers in response to moisture. Sizing affects the stiffness, strength, smoothness, and weight of the paper, as well as its aging characteristics. Sizing agents include rosin, gelatin, animal and synthetic glues, starch, cellulose ethers, synthetic resins. 2. Chemicals added to paper and board that make it less absorbent so that inks applied will not bleed. Acidic sizing can be harmful and can cause paper to deteriorate.

**Verso:** (Reverse) The back or opposite side of a sheet on which appears an image or printed text, usually characterized by having no image or printed text or one deemed to be of lesser importance. Also called the reverse. The left hand side of an open Western codex.