Library of Congress Guide to Preservation Matting and Framing

To increase the life and enjoyment of your print or photograph and to save money in the future on conservation treatments, you should invest in appropriate preservation matting and framing.

*What is preservation matting and framing?*
It is the appropriate housing to display the intrinsic beauty and interest of an object, while prolonging its life by securing the object in a mechanically and chemically stable environment. It minimizes the problems caused by deterioration of the components of the object itself and other problems introduced by environmental factors such as air pollution, heat, light, and humidity.

*What should I look for in a frame shop?*
There is a growing awareness of preservation issues in matting and framing. Indiscriminate use of terms such as "preservation quality" and "archival quality" can be misleading. However, there are established specifications for materials, and standards for procedures. Make sure the frame shop you select follows them. The field of Preservation is constantly evolving. Be an educated consumer; keep abreast of new developments in the preservation techniques and materials used in this field.

*What materials and techniques should be used for mats?*
A mat is made of a series of components is constructed to fit the object.

*The most basic guidelines are the following:*

* 1. Mat /mounting board should be made of cotton rag or chemically purified wood pulp and must test negative for lignin. It should be pH neutral (pH 7) or slightly alkaline (pH 8.5). The addition of buffering agents to unpurified wood pulp papers does not render them fit for preservation use. Colored board must not bleed and the color must not rub off or fade. Board used for photographic materials must have passed the photographic activity test (PAT). **Yellowing board suggests acid degradation and must be replaced to prevent damage to the object.**

* 2. Board should usually be a minimum of 4-ply. Six and 8-ply boards provide greater support and deeper windows where needed.

* 3. **The object must be kept from contact with glazing materials** (the glass). This is particularly important for photographs, otherwise they may adhere to the glazing. This may be accomplished with the use of a window mat. Sometimes the planar dimension of an object will necessitate incorporating spacers in the mat. If a window mat is not used, spacers must be added along the edges of the back mat board.
* 4. The window mat should be secured to the back mat board with water activated linen tape adhered along one side only. This hinge must prevent the window mat from sliding around over the object. The object should not come in contact with the linen tape.

* 5. The object should be secured in a way which accommodates some expansion and contraction. In most instances, the object can be hinged with long-fibered Japanese tissue adhered with wheat or rice starch paste. There is no known pressure-sensitive adhesive suitable for hinging an object. Dry mount and lamination processes and glues are damaging also. Non-adhesive attachments -- such as acid-free paper or polyester film corners and strips -- may be used.

*What materials should be used for glazing?*

* 1. Glazing should only be glass or acrylic sheets (e.g. Plexiglas ®, Lucite ®, Perspex ®, and Lexan ®). Acrylic sheets are lighter and shatterproof, but develop a static charge, and should not be used with dry, unfixed pastels, charcoals, soft pencil or any other powdery media. The static charge may displace the powdery media.

* 2. Sunlight and fluorescent lights emit high amounts of ultraviolet(UV) radiation. Glass and acrylic can both be bought with an added UV filtering component to reduce the damaging effects from UV. Include UV filtration in the glazing to protect the object from UV radiation. It should be noted that UV filtration does not eliminate the damage caused by visible light.

* 3. Avoid non-glare etched glass; it may have been etched with acid that may not have been completely neutralized.

*What materials should be used for frames?*

* 1. Frames can either be wood or metal; if you choose wood, ask that the rabbet be lined with a barrier of some type, e.g., aluminum or polyester tapes with acrylic adhesives. This prevents acid in the wood from transferring to the mat package.

* 2. Frames should be strong enough and have a deep enough rabbet to hold the mat package securely inside the frame.

* 3. The mat package should be held in place with pins or brads, never with pressure sensitive tape.

* 4. A moisture barrier such as polyester film or polypropylene should be placed between the back board and the dust cover if the object will hang on an outside wall.
*What are safe places to hang or store my framed object?*

* 1. Avoid hanging or storing anything in the basement, attic, or any other place with extremes in temperature and humidity. A stable, cool, dry environment is best.

* 2. Avoid hanging pieces on outside walls, but if you must, request that a moisture barrier be placed in the mat package.

* 3. Avoid hanging objects in direct sunlight or any other intense light source. Control exposure to ultra violet light through glazing or placement away from a UV source. Occasionally rotate framed objects to cut down on the duration of light exposure.

* 4. Avoid hanging framed objects directly above working fire places or radiators.