

Caring for your collections: Matting and framing

Framing artworks and heritage collections, if done to conservation standards, will help protect and preserve. Unfortunately many matting and framing techniques fail to do so and can potentially damage the object being framed. Preservation framing limits potential damage from humidity, light and pollutants. This is achieved through the use of stable, inert materials.

Extremely light sensitive items include natural dyes and textiles, photographs, watercolours and works on paper. Long term display of paper and textile objects is not recommended as light exposure causes irreversible fading. On special occasions, display sensitive collections in conservation framing for short periods. Consider what would be best in the long term for the type of object to be framed.

Conservation materials can protect valuable framed items from discolouration, embrittlement, fading and other irreversible damages. The best option for preservation is to maintain stable storage and display environment, considering temperature (18-24°C) and relative humidity (40-50%), with minimal 10% fluctuation.

An alternative option is to frame a good quality reproduction, whilst extending the life of the original item in storage. If the original object must be framed, conservation matting and framing is essential to minimise potential damage.

Mat boards (for window and back-mat)

- Most mat boards used for framing purposes in the past were of poor quality and acidic in nature. Over time poor quality mat boards start to deteriorate, causing acidic discolouration, mat burn, and damage to the framed object.
- When framing, use buffered 100% cotton or cellulose fibre/rag board. Buffered mat board contains an alkaline reserve that neutralises the acidity of pollutants in the atmosphere and from the object itself. Most good framers offer customers museum quality, archival mat board options.
- Photographs and some printing processes are alkaline sensitive and should be framed with unbuffered board. The alkaline reserve in buffered board may adversely affect photographic material. Ensure that boards and materials used pass the Photographic Activity Test. For further information see [National Archives of Australia PAT test](#).
- As a general rule all window mats and frames should be assessed after 20-30 years. Replace window mat boards to rejuvenate the alkaline reserve and to remove any absorbed acidic pollutants.

Hinges

- The safest mounting option is to use archival photo-mounting corners (paper, polyester or polypropylene) or Japanese tissue hinges applied with wheat starch paste.

- Avoid directly adhering objects to the back-mat with adhesive tape or double-sided tape as they are very difficult to remove. They can also cause staining, tears and buckling. As non-archival adhesives deteriorate, they seep into the object causing unsightly stains and permanent damage.
- Safe reversible mounting options, allow for simple non-invasive removal of an object without damage.

Frame backing boards

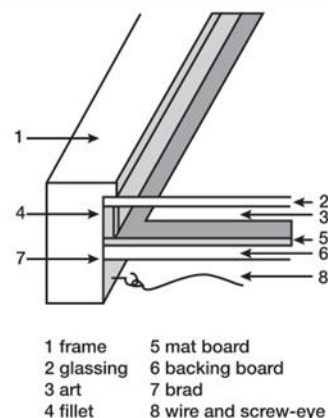
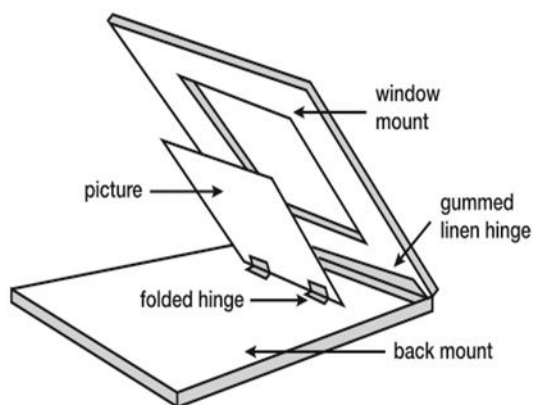
- A frame backing board needs to be rigid enough to firmly hold the contents of the frame in place.
- Use boards that are made of stable, inert paper or plastic in the form of acid-free corrugated or corflute board. Paper boards are breathable and provide a buffering layer in humid climates. Beware of plastic as it can trap humidity inside the package, and is best used in consistently climate controlled conditions.
- Secure backing board into place using glazier's points or heavy duty brackets.
- To securely hold all the contents in the frame, seal the outer edges with a framer's tape, such as Tyvek® or aluminium tape.

Glazing

- Glazing is used to protect the surface of an object and prevents dirt and dust intruding.
- The glazing should never come in direct contact with the object being framed. To avoid contact with the glazing use spacers along the perimeter of the mat or a mat window.
- Glazing can be glass or acrylic Perspex®. Acrylic weighs less than glass and is shatterproof.
- However, glass is preferred for friable media, such as pastels and charcoal. Perspex® can create static which lifts the loose media off the surface.
- Both glass and Perspex® are available with UltraViolet (UV) filtering, which helps reduce fading of pigments.
- For valuable arts works or documents invest in Museum Glass® or acrylic such as True Vue Optium museum acrylic with UV filtering, anti-static and anti-reflective qualities. Most good picture framers would stock this product.

Frames

- Use frames made out of metal or wood.
- Old frames can be of historical significance and care must be taken when reusing them. Make sure all inscriptions and framing labels are preserved and that the frame is structurally sound.
- When choosing a new wooden frame, avoid using unseasoned wooden frames as they can off gas damaging volatile organic compounds, which can be trapped inside the frame.
- Frame rebates should be sealed or lined with a barrier film or spacer to prevent acid migration from the wood.
- Frames must be of sufficient depth to hold complete matting package including the backing board. All contents of the matting package must be assembled securely into the frame to minimise warping or bowing.



Protect your conservation framing

- Use appropriate hanging hardware that is strong and secure for the weight of the frame.
- Avoid hanging frames by a single string or wire at one point. Hanging from D-rings attached to the frame at two points is the most ideal.
- Hang framed objects away from direct sunlight and other intense light or heat sources such as fireplaces, heaters and exhaust vents. Hang on interior walls that are not susceptible to changes in temperature or moisture.
- Light exposure can also be minimised by displaying for short periods.
- When storing framed objects beware of attics, sheds, basements or areas prone to environmental fluctuations, pests and water leaks. Interior cupboards or rooms in the house are the most ideal and remember to keep objects elevated off the floor.

For further information

Caring for your collections: [Suppliers and guide to selecting preservation materials](#)

Useful Websites

- [AICCM Australian Institute for Conservation of Cultural Material](#)
- American Institute for Conservation <https://www.culturalheritage.org/>
- Find a conservator in private practice through the Australian Institute for Conservation of Cultural Material (AICCM) <https://www.aiccm.org.au/need-a-conservator>

The procedures described here have been used by State Library of Queensland in the care of its collections and are considered suitable by State Library as described; however, State Library will not be responsible for damage to your collections should damage result from the use of these procedures.

Need further information?

(07) 3840 7810 | <http://www.slq.qld.gov.au/preservation>



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