Caring for your collections: Parchment documents

Parchment is a term often used generically to refer to animal skin prepared for writing purposes, although it is more correctly applied only to sheep and goat skin, with the term ‘vellum’ reserved for calf skin. The information outlined in this guide applies to both parchment and vellum but for simplicity’s sake only the term ‘parchment’ will be used.

There are many inherent factors affecting the quality of parchment including the type of animal skin used, its diet, health and age. Over time, there has been widespread misunderstanding about the appropriate handling and care of parchment. Instead of working with its nature, people have worked against it, mistakenly treating it like paper.

Causes of Damage

- Parchment is very hygroscopic (i.e. it absorbs and emits moisture easily) and reacts dramatically to changes in relative humidity (RH) and direct contact with water or other fluids.
- The process by which parchment is made creates a highly stressed sheet material which is relatively inelastic and stiff. As long as it stays dry, it cannot revert to the original shape of the animal. However, if exposed to fluctuating (e.g. 50% to 70% RH within 24 hour period) or high (over 60%) relative humidity levels, significant distortion can occur as the skin tries to return to its original shape. This can cause splitting of the skin and cracking and flaking of any pigments applied to the skin’s surface. This damage can be exacerbated if the parchment has been restrained in some way such as glued to a backing board.
- The addition of moisture to the surface of parchment causes swelling and thickening of the affected area causing transparency, contraction, and inflexibility. In the case of a parchment book, blocking or sticking together of the pages can occur.
- If parchment is too dry it will become very hard and brittle increasing the potential for cracking and breaking. If it contains too much moisture it turns soft and putrefies.
- It is important to treat parchment in a manner that compensates for its inherent nature. Never force curled or distorted parchment to open out or to lie flat – this can cause damage such as cracking of the skin and of pigments. Gentle humidification can relax parchment allowing safe handling. This treatment should be undertaken by a conservator.

Storage Environment

- Parchment should be stored in a cool, stable environment, ideally around 50% relative humidity and 20°C. If the parchment becomes too dry it will become very hard and brittle. If it contains too much moisture it can become soft and rancid. Significant fluctuations in temperature and humidity can cause distortion.
• Choose a room that is cool, well insulated and well ventilated. If possible avoid rooms with external walls. Protect parchment from direct daylight and artificial light. This will minimise fading of any inks or pigments.
• Keep storage areas uncluttered and clean to discourage insect and rodent activity.
• If stored in the correct conditions, parchment is a durable material.

Storage methods
• Methods of mounting parchment flat such as sandwiching between glass or adhering to a backing board are not recommended. It is important for mounting systems to compensate for the natural movement of the skin. A number of safe techniques have been devised by the conservation profession. For further details, consult a conservator.
• If mounting is not required, the parchment object should be housed in a suitable acid-free, lignin-free storage box. This will provide some buffering against changes in humidity and temperature and will not hinder the skin’s movement. Some natural distortion of the parchment should be expected and should not cause concern.

Applied and pendant seals
• Many legal parchment documents have either paper or wax seals. Wax seals contain beeswax, shellac, and often a pigment. They are hard, brittle, and adhere to the surface of the paper or hang from the bottom of a document. The wafer or gummed paper seal is much like a postage stamp. The adhesives used in affixing them to a cover vary widely. They are generally marked in ink with a printed monogram or initial. Some of the larger wafer seals are sensitive to moisture.
• Care should be taken to prevent them from being broken or crushed as they are often brittle. Folding or rolling of the document can cause significant harm. A protective barrier in the form of a padded calico bag or acid-free tissue around the seal will provide a shock absorber and keep the seal clean. If a seal is broken, a padded bag around it will stop the pieces from being lost.
• In the case of framing, a depression made in the mount will secure the seal, often without further need for fixings.
• Light, delicate cleaning with a dry cotton bud is all that is required in most cases.
• Seal repair should only be done by a suitably trained conservator.

For more information on appropriate storage systems, conservation treatment, or mounting parchments we recommend you contact a Paper Conservator in private practice through the Australian Institute for Conservation of Cultural Material (AICCM) www.aiccm.org.au.

Useful Websites
• AICCM Australian Institute for Conservation of Cultural Material www.aiccm.org.au
• AIC American Institute for Conservation www.conservation-us.org

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?