


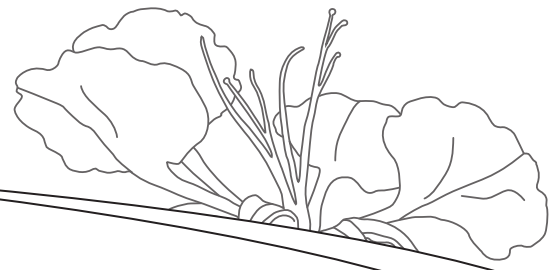


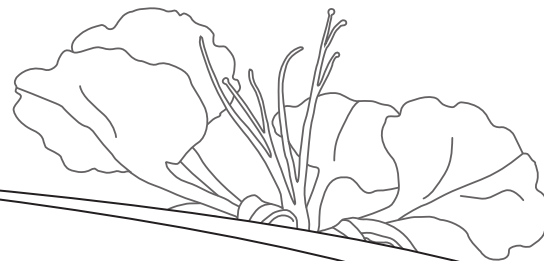
# A guide to selecting safe enclosure materials

Level (of suitability):  
1 – Conservation standard  
2 – Use but monitor regularly

Enclosure material	Uses	Suitable heritage objects	Availability	Level	Potential issues
<b>Plastics</b>					
<p><b>PETE: Polyethylene Terephthalate</b> (uncoated)</p>  <p><b>PETE</b></p> <p>Common name: <b>Polyester</b></p> <p>Tradenames:</p> <ul style="list-style-type: none"> <li>• Mylar™ (polyester film)</li> <li>• 100% polyester lining fabric, eg Parsilk</li> <li>• Dacron (polyester fibre).</li> </ul>	<ul style="list-style-type: none"> <li>• Mylar: photograph sleeves and corners, encapsulations, lining of shelving, cabinets etc.</li> <li>• Parsilk – covering for book pillows and ethafoam inserts and display supports.</li> <li>• Dacron – to provide extra cushioning. Always cover with Parsilk or calico to prevent objects catching.</li> </ul>	<ul style="list-style-type: none"> <li>• Works on paper</li> <li>• Photographic prints</li> <li>• Thin bound volumes (e.g. pamphlets).</li> </ul>	<ul style="list-style-type: none"> <li>• State Library Shop</li> <li>• Preservation suppliers</li> <li>• Polyester and Dacron – fabric and craft stores</li> <li>• Polyester photo corners – photography and craft stores.</li> <li>• Some newsagents.</li> </ul>	1	<ul style="list-style-type: none"> <li>• Not suitable for use in areas of high humidity, particularly where fungal activity is a problem. If used in these conditions, check regularly, particularly after a long period of wet or humid weather.</li> <li>• High level of static. Never use for materials with flaking, friable surfaces (eg. charcoal, pastels, crayons, or damaged photographic emulsions).</li> <li>• Avoid plastic that has anti-static or anti-glare agents.</li> </ul>
<p><b>PP: Polypropylene</b> (uncoated)</p>  <p><b>PP</b></p> <p>Tradenames:</p> <ul style="list-style-type: none"> <li>• Promeg™ (plastic used for boxing, sleeves and albums)</li> <li>• Corflute (rigid corrugated plastic sheets).</li> </ul>	<ul style="list-style-type: none"> <li>• Sleeves</li> <li>• Albums</li> <li>• Boxing</li> <li>• Film cans and cores</li> <li>• Photo mounting corners</li> <li>• Backing board for framing (Corflute) (N.B. can attract dust).</li> </ul>	<ul style="list-style-type: none"> <li>• Bound volumes</li> <li>• Works on paper</li> <li>• Photographic prints</li> <li>• Motion picture film.</li> </ul>	<ul style="list-style-type: none"> <li>• State Library Shop</li> <li>• Preservation suppliers</li> <li>• Albox™ albums &amp; boxes</li> <li>• Many readily available clear plastic storage containers. (Avoid coloured lids as they are made from polystyrene.)</li> <li>• Corflute can be bought at sign writing suppliers as well as preservation suppliers.</li> </ul>	1	<ul style="list-style-type: none"> <li>• As above.</li> </ul>
<p><b>HDPE: High Density Polyethylene</b></p>  <p><b>HDPE</b></p> <p>Tradenames:</p> <ul style="list-style-type: none"> <li>• Ethafoam (dense polyethylene cell foam)</li> <li>• DuPont™ Tyvek®</li> </ul>	<ul style="list-style-type: none"> <li>• Sleeves</li> <li>• Ethafoam – padding out boxes.</li> </ul>	<ul style="list-style-type: none"> <li>• Works on paper</li> <li>• Photographic prints</li> <li>• Three-dimensional objects. (Ethafoam)</li> </ul>	<ul style="list-style-type: none"> <li>• Readily available.</li> </ul>	2	<ul style="list-style-type: none"> <li>• As above</li> <li>• Check regularly and remove if plastic begins to discolour.</li> <li>• Sometimes good idea to cover ethafoam with Parsilk to ensure smooth edges. Can also pad out with Dacron to provide cushioning.</li> </ul>



Paper and board					
<p><b>Buffered archival paper</b> 100% cotton fibre (cellulose), lignin-free mount board (alkaline buffered)</p> <p>Product:</p> <ul style="list-style-type: none"> <li>• Zetta Florence 500 Year Watermarked Archival Paper</li> <li>• Zetta Florence Barrier Board.</li> </ul>	<ul style="list-style-type: none"> <li>• Wrapping</li> <li>• Folders</li> <li>• Backing paper for sleeves</li> <li>• Photocopying.</li> </ul>	<ul style="list-style-type: none"> <li>• Works on paper</li> <li>• Textiles (silk).</li> </ul>	<ul style="list-style-type: none"> <li>• State Library Shop</li> <li>• Preservation suppliers.</li> </ul>	1	<ul style="list-style-type: none"> <li>• Avoid coloured paper</li> <li>• Buffered paper is not suitable for some photographic processes such as albumen prints.</li> </ul>
<p><b>Rag paper</b> 100% cotton fibre (cellulose), lignin free paper (unbuffered).</p> <p>Good quality artist's drawing paper usually meets this criteria.</p> <p>Product:</p> <ul style="list-style-type: none"> <li>• Alpha Cellulose Paper</li> <li>• Arches White Vellum drawing paper</li> <li>• Silver Safe Photo Paper.</li> </ul>	<ul style="list-style-type: none"> <li>• Four flap enclosures</li> <li>• Wrapping</li> <li>• Backing paper for sleeves.</li> </ul>	<ul style="list-style-type: none"> <li>• Photographic materials</li> <li>• Works on paper.</li> </ul>	<ul style="list-style-type: none"> <li>• Good art suppliers</li> <li>• Preservation suppliers.</li> </ul>	1	<ul style="list-style-type: none"> <li>• Avoid coloured paper (particularly black)</li> <li>• Make sure paper contains no sizing or other additives.</li> </ul>
<p><b>Photomount board</b> 100% cotton fibre (cellulose), lignin-free mount board (unbuffered).</p>	<ul style="list-style-type: none"> <li>• Mounting</li> <li>• Four flap enclosure support</li> <li>• Backing board in sleeves</li> <li>• Enclosures.</li> </ul>	<ul style="list-style-type: none"> <li>• Photographic materials</li> <li>• Works on paper</li> <li>• Textiles (silk).</li> </ul>	<ul style="list-style-type: none"> <li>• Good art suppliers</li> <li>• Selected framer &amp; framing suppliers</li> <li>• Preservation suppliers.</li> </ul>	1	<ul style="list-style-type: none"> <li>• Avoid coloured board (particularly black).</li> </ul>
<p><b>Museum mount board</b> 100% cotton fibre (cellulose) mount board (buffered).</p>	<ul style="list-style-type: none"> <li>• Mounting</li> <li>• Backing board in sleeves</li> <li>• Enclosures.</li> </ul>	<ul style="list-style-type: none"> <li>• Works on paper, particularly acidic material (inc. bound volumes).</li> </ul>	<ul style="list-style-type: none"> <li>• Selected framers and framing suppliers</li> <li>• Preservation suppliers.</li> </ul>	1	<ul style="list-style-type: none"> <li>• Avoid coloured board</li> <li>• Buffered mount board is not suitable for some photographic processes such as albumen prints.</li> </ul>
<p><b>Archival board</b> Cotton or linen pulp (may have small percentage of treated wood pulp), non-bleeding dyes, neutral or alkaline sizing, usually buffered.</p> <p>Product:</p> <ul style="list-style-type: none"> <li>• Corrugated board (single wall and double wall).</li> </ul>	<ul style="list-style-type: none"> <li>• Enclosures (eg. boxing or folders)</li> <li>• Backing board in framing (Corrugated archival board often used).</li> </ul>	<ul style="list-style-type: none"> <li>• All materials (with the exception of some photographs) particularly in environments with high humidity.</li> </ul>	<ul style="list-style-type: none"> <li>• State Library Shop</li> <li>• Preservation suppliers.</li> </ul>	1-2	<ul style="list-style-type: none"> <li>• Boards made with 100% cotton or linen pulp will be more stable than those with any wood pulp content. If concerned, regularly check for signs of discolouration</li> <li>• Buffered board is not suitable for some photographic processes such as albumen prints.</li> </ul>



<p><b>Unbuffered acid-free tissue</b> Cotton or linen pulp, no buffering.</p> <p>Product: Light Impressions Renaissance Tissue™</p>	<ul style="list-style-type: none"> <li>• Interleaving photograph albums</li> <li>• Wrapping (including textiles such as silk).</li> </ul>	<ul style="list-style-type: none"> <li>• Photographic materials</li> <li>• Textiles (silk).</li> </ul>	<ul style="list-style-type: none"> <li>• State Library Shop</li> <li>• Preservation suppliers.</li> </ul>	1-2	<ul style="list-style-type: none"> <li>• There are many tissues available at craft shops etc. Ask for manufacturing specifications if unsure of the quality as not all acid free tissue is made of stable materials. Most readily available acid-free tissue is buffered.</li> </ul>
<p><b>Buffered acid-free tissue</b> Cotton or linen pulp, three per cent calcium carbonate buffering.</p> <p>Product: Light Impressions Apollo Tissue™</p>	<ul style="list-style-type: none"> <li>• Interleaving</li> <li>• Wrapping.</li> </ul>	<ul style="list-style-type: none"> <li>• Works on paper</li> <li>• Bound volumes (non photographic content).</li> </ul>	<ul style="list-style-type: none"> <li>• State Library Shop</li> <li>• Preservation suppliers.</li> </ul>	1-2	<ul style="list-style-type: none"> <li>• As above.</li> </ul>

### Things to consider

A good approach to housing your collections is to provide several layers of protection: first place individual objects into sleeves or envelopes, then into suitable boxes or folders.

Always be cautious when purchasing storage material. Many commercially available enclosures are labelled “archival” or “acid-free”. However, some of these items may contain lignin, dyes, sizing agents, coatings, plasticisers, or other harmful additives. Always ask for product specifications and if in doubt consult a conservator.

Never use enclosures made from unprocessed wood pulp paper, glassine, or polyvinyl chloride (PVC). Never laminate objects that are precious to you as the process is harmful, irreversible and deteriorates with age.

### Paper or plastic?

There are two main materials used for archival enclosures: paper and plastic. The choice between paper and plastic enclosures should be based on the type of object being housed and its condition: the anticipated amount of use; financial resources; and environmental storage conditions.

Items that are used frequently can be abraded by repeated removal from and insertion into paper enclosures, thus plastic may be more suitable as the object can be viewed in-situ. In areas of high humidity, paper enclosures should be used as they allow greater airflow, thus preventing the creation of microclimates within storage enclosures. Material that may potentially off-gas harmful acidic by products (e.g. cellulose acetate and nitrate film) should also be housed in paper enclosures, as it allows air exchange thus minimising detrimental build up of acids. Use the table above to help make the right selection.

Always make sure the method of storage selected is reversible so that you can safely remove your collections without damaging them if you notice any problems.

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

### Need further information? please contact:

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