

## Standard on the physical storage of State records

**Table B - Storage environment conditions and housing requirements for long term temporary records & those records identified as State archives**

Record format type	Environmental conditions				Protection		
	Temperature/ Relative Humidity (RH)	Fluctuations	Air quality	Lighting	Housing	Containers	Packaging
<b>Standard archive and museum formats:</b> <ul style="list-style-type: none"> <li>• Files</li> <li>• Cards</li> <li>• Computer print-out</li> <li>• Maps</li> <li>• Plans</li> <li>• Charts</li> <li>• Posters</li> <li>• Bound volumes</li> <li>• Parchment documents</li> <li>• Black &amp; White (silver gelatine) photographic prints</li> <li>• Historic photographic prints</li> <li>• Glass plate negatives</li> <li>• Lantern slides</li> </ul> <b>Miscellaneous:</b> <ul style="list-style-type: none"> <li>• Models</li> <li>• Objects</li> <li>• Mixed media items</li> </ul>	15 – 25°C	Tolerable daily change of 3°C  There is no 'set point', any reading within this range is acceptable	Well ventilated and filtered to exclude dust and other particles, acidic and oxidising gases.	Low UV lighting. Systems to limit exposure e.g. motion sensors, timer-controlled switches.	Powder coated or baked enamel metal shelving or plan cabinets.  Maps, plans and charts to be stored flat, otherwise rolled storage.  Stationary shelving for models, objects or mixed media items.	Archival quality acid-free boxes, folders or containers.  Archival non-buffered containers that have passed the Photographic Activity Test (PAT) Glass plates/lantern slides require additional shock protection.	Archival quality acid-free file covers, folders or enclosures.  All packaging, wrapping and enclosures must have passed the Photographic Activity Test (PAT). Sturdy plan folders should be of archival quality board.  Fragile items should be interleaved with archival quality paper.  Items that cannot be stored flat due to size should be rolled around a core and stored within a larger tube.  Large/heavy items such as models, objects or mixed media items may be stored in wooden crates. The wood should be varnished to seal it and the varnish well-aired before the crate is put into use.
	40 – 60% RH	Tolerable daily change of 10%  There is no 'set point', any reading within this range is acceptable					

<b>Audio-visual and film formats</b> <ul style="list-style-type: none"> <li>• Sheet film (including photographic negatives and slide positives)</li> <li>• Cine film</li> <li>• Colour print material</li> <li>• X-rays</li> <li>• Microforms</li> <li>• Photographic media with vinegar syndrome (<i>requires isolation from other materials</i>)</li> <li>• Gramophone discs</li> </ul> <b>Magnetic media</b> <ul style="list-style-type: none"> <li>• Computer tapes and disks</li> <li>• Video tapes</li> <li>• Audio tapes</li> <li>• Magneto-optical disks (Mini discs)</li> </ul> <b>Optical media</b> <ul style="list-style-type: none"> <li>• CDs, DVDs</li> <li>• Laser Discs</li> </ul>	5 – 10°C	<p>Tolerable daily change of 1°C</p> <p>There is no 'set point', any reading within this range is acceptable</p> <p>Records must be acclimatised when being moved in and out of storage space</p>	<p>Well ventilated and filtered to exclude dust and other particles, acidic and oxidising gases.</p> <p><b><i>If you have acetate or nitrate formats, or colour film, contact MHNSW for further advice on storage conditions<sup>1</sup></i></b></p>	<p>Low UV lighting.</p> <p>Systems to limit exposure e.g. motion sensors, timer-controlled switches.</p>	<p>Powder coated or baked enamel metal shelving or plan cabinets.</p> <p>Glass plates/lantern slides must be on stationary shelving. Require vertical storage.</p> <p>Magnetic media should be stored on non-magnetisable shelving and tapes and disks should be stored vertically.</p> <p>Gramophone discs require stationary shelving and should be stored vertically.</p>	<p>Boxes of inert polypropylene which has passed the Photographic Activity Test (PAT) or archival quality cardboard boxes.</p> <p>Cine film should be stored on polypropylene cores and in film canes that have passed the Photographic Activity Test (PAT).</p> <p>Magnetic media should be stored in non-magnetisable archival quality containers, cassette cases or sleeves.</p>	<p>Archival non-buffered containers, wallets, folders or envelopes that have passed the Photographic Activity Test (PAT).</p> <p>Films should be stored horizontally, stacked no more than 6 cans high for 16mm film and no more than 3 high for 35mm film.</p>
	35 – 45% RH	<p>Tolerable daily change of 5%</p> <p>There is no 'set point', any reading within this range is acceptable</p>					

Source: National Archives of Australia, *Standard for the Physical Storage of Commonwealth Records, Table C – Guidelines for storage of records 30 years of age or over in all climatic regions*, December 2002. *Standard for the storage of archival records (excluding digital records)*, June 2014.

<sup>1</sup> Acetate and nitrate are unstable formats and require cooler temperatures. These formats also pose a health risk. Nitrate is a hazardous material and there are constraints on its storage and transport. Colour film, whilst not a health hazard, can also fade unless stored at cooler temperatures. Contact MHNSW for further advice on storage.