

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

Record format type	Environmental conditions				Protection		
	Temperature / Relative Humidity (RH)	Fluctuations	Air quality	Lighting	Housing	Containers	Packaging
Paper records: <ul style="list-style-type: none"> Files Cards Computer print-out Maps Plans Charts Posters 	16 – 25°C	<ul style="list-style-type: none"> tolerable daily change of 3°C there is no 'set point', any reading within this range is acceptable continuous control required 	Well ventilated and filtered to exclude dust and other particles, acidic and oxidising gases	UV filtered fluorescent lighting Timer controlled switches	Powder coated or baked enamel metal shelving or plan cabinets. Maps, plans and charts to be stored flat, otherwise rolled storage.	Archival quality acid-free boxes, folders or containers	Archival quality acid-free file covers, folders or envelopes, sleeves, enclosures. Sturdy plan folders 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
	30 – 60% RH	<ul style="list-style-type: none"> tolerable daily change of 10% there is no 'set point', any reading within this range is acceptable continuous control required 					
Composite and sensitive materials: <ul style="list-style-type: none"> Bound volumes Parchment documents 	17 – 23°C	<ul style="list-style-type: none"> tolerable daily change of 3°C there is no 'set point', any reading within this range is acceptable continuous control required 	Well ventilated and filtered to exclude dust and other particles, acidic and oxidising gases	UV filtered fluorescent lighting Timer controlled switches	Powder coated or baked enamel metal shelving	Archival quality acid-free boxes, containers	Archival quality acid-free file covers, folders or envelopes. Small volumes can be stored vertically. Large volumes should be stored horizontally, no more than 2 high. If volumes are damaged, they should be stored in tailor-made boxes or slipcases of archival quality board.
	40 – 50% RH	<ul style="list-style-type: none"> tolerable daily change of 5% there is no 'set point', any 					

		<p>reading within this range is acceptable</p> <ul style="list-style-type: none"> • continuous control required 					
Black & White (silver gelatine) photographic prints	17 – 23°C	<ul style="list-style-type: none"> • tolerable daily change of 3°C • there is no 'set point', any reading within this range is acceptable • continuous control required 	<p>Well ventilated and filtered to exclude dust and other particles, acidic and oxidising gases</p>	<p>UV filtered fluorescent lighting Timer controlled switches</p>	<p>Powder coated or baked enamel metal shelving</p>	<p>Archival non-buffered containers that have passed the Photographic Activity Test (PAT)</p>	<p>Archival non-buffered enclosures that have passed the Photographic Activity Test (PAT)</p>
	40 – 50% RH	<ul style="list-style-type: none"> • tolerable daily change of 5% • there is no 'set point', any reading within this range is acceptable • continuous control required 					
Photographic media: <ul style="list-style-type: none"> • Sheet film • Cine film • Colour print material • Historic photographic prints • X-rays • Microforms • Glass plate negatives • Lantern slides • Photographic media with vinegar syndrome (requires 	3 – 5°C	<ul style="list-style-type: none"> • tolerable daily change of 1°C • there is no 'set point', any reading within this range is acceptable • continuous control required • records must be acclimatised when being moved in and out of storage space 	<p>Well ventilated and filtered to exclude dust and other particles, acidic and oxidising gases</p> <p><i>Vinegar syndrome and nitrate films must be isolated from other materials</i></p>	<p>UV filtered fluorescent lighting Timer controlled switches</p>	<p>Powder coated or baked enamel metal shelving. Glass plates/lantern slides must be on stationery shelving. Require vertical storage.</p>	<p>Boxes of inert polypropylene which has passed the Photographic Activity Test (PAT) or archival quality cardboard boxes Glass plates/lantern slides require additional shock protection. All products used for this purpose should have passed the Photographic Activity Test</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	<ul style="list-style-type: none"> • tolerable daily change of 5% • there is no 'set point', any reading within 					

isolation from other materials)		<p>this range is acceptable</p> <ul style="list-style-type: none"> continuous control required 				(PAT) Cine film should be stored on polypropylene cores and in film canes that have passed the Photographic Activity Test (PAT).	
Magnetic media <ul style="list-style-type: none"> Computer tapes and disks Video tapes Audio tapes Magneto-optical disks (Mini discs) 	7 – 9°C	<ul style="list-style-type: none"> tolerable daily change of 1°C there is no 'set point', any reading within this range is acceptable continuous control required records must be acclimatised when being moved in and out of storage space 	Well ventilated and filtered to exclude dust and other particles, acidic and oxidising gases	UV filtered fluorescent lighting Timer controlled switches	Non-magnetisable shelving	Non-magnetisable, archival quality containers, cassette cases or sleeves Boxes of inert polypropylene which has passed the Photographic Activity Test (PAT) or archival quality cardboard boxes	Archival non-buffered containers, wallets, folders or envelopes that have passed the Photographic Activity Test (PAT)
	35 – 45% RH	<ul style="list-style-type: none"> tolerable daily change of 5% there is no 'set point', any reading within this range is acceptable continuous control required records must be acclimatised when being moved in and out of storage space 					
Optical media: <ul style="list-style-type: none"> CDs, DVDs Laser discs 	3 – 5°C	<ul style="list-style-type: none"> tolerable daily change of 1°C there is no 'set point', any 	Well ventilated and filtered to exclude dust and other	UV filtered fluorescent lighting Timer	Powder coated or baked enamel metal shelving or plan cabinets.	Boxes of inert polypropylene which has passed the	Archival non-buffered containers, wallets, folders or envelopes that have passed the

		<p>reading within this range is acceptable</p> <ul style="list-style-type: none"> • continuous control required • records must be acclimatised when being moved in and out of storage space 	particles, acidic and oxidising gases	controlled switches		Photographic Activity Test (PAT) or archival quality cardboard boxes	Photographic Activity Test (PAT)
	35 – 45% RH	<ul style="list-style-type: none"> • tolerable daily change of 5% • there is no 'set point', any reading within this range is acceptable • continuous control required 					
Gramophone discs	3 – 5°C	<ul style="list-style-type: none"> • tolerable daily change of 1°C • there is no 'set point', any reading within this range is acceptable • continuous control required • records must be acclimatised when being moved in and out of storage space 	Well ventilated and filtered to exclude dust and other particles, acidic and oxidising gases	UV filtered fluorescent lighting Timer controlled switches	Powder coated or baked enamel metal shelving Stationary shelving Gramophone disks require vertical storage	Boxes of inert polypropylene which has passed the Photographic Activity Test (PAT) or archival quality cardboard boxes	Archival non-buffered containers, wallets, folders or envelopes that have passed the Photographic Activity Test (PAT)
	35 – 45% RH	<ul style="list-style-type: none"> • tolerable daily change of 5% • there is no 'set point', any reading within this range is acceptable • continuous control required 					

Miscellaneous: <ul style="list-style-type: none"> • Models • Objects • Mixed media items 	17 – 23°C	<ul style="list-style-type: none"> • tolerable daily change of 3°C • there is no 'set point', any reading within this range is acceptable • continuous control required 	Well ventilated and filtered to exclude dust and other particles, acidic and oxidising gases	UV filtered fluorescent lighting Timer controlled switches	Powder coated or baked enamel metal shelving Stationary shelving	Archival quality acid-free containers or boxes	Archival quality acid-free enclosures or wrapping All packaging and wrapping materials should have passed the Photographic Activity Test (PAT). Large/heavy items may be in wooden crates. The wood should be varnished to seal it and the varnish well-aired before the crate is put into use.
	40 – 50% RH	<ul style="list-style-type: none"> • tolerable daily change of 5% • there is no 'set point', any reading within this range is acceptable • continuous control required 					
Preservation master film material: <ul style="list-style-type: none"> • Sheet film • Cine film 	-20°C - 10°C	<ul style="list-style-type: none"> • tolerable daily change of 3°C • there is no 'set point', any reading within this range is acceptable • continuous control required • records must be acclimatised when being moved in and out of storage space 	Well ventilated and filtered to exclude dust and other particles, acidic and oxidising gases Vinegar syndrome and nitrate films must be isolated from other materials	UV filtered fluorescent lighting Timer controlled switches	Powder coated or baked enamel metal shelving or plan cabinets.	Cine film should be stored on polypropylene cores and in film canes that have passed the Photographic Activity Test (PAT).	Archival non-buffered enclosures that have passed the Photographic Activity Test (PAT) Films should be stored horizontally, stacked no more than 6 cans high for 16mm film and no more than 3 high for 35mm film.
	35 – 45% RH	<ul style="list-style-type: none"> • tolerable daily change of 5% • there is no 'set point', any reading within this range is acceptable • continuous control required • records must be 					

		acclimatised when being moved in and out of storage space					
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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. Ted Ling, *Solid, Safe, Secure: Building Archives Repositories in Australia*, 1998. National Archives of Australia, *Standard for the storage of archival records*, June 2014.