

RECOMMENDED RECORD STORAGE HOUSING AND ENVIRONMENTAL CONDITIONS

Queensland State Archives

Security classification: Public

Permanent archival storage and/or retention

Record formal type	Thermal range	Daily tolerance	RH range	Daily tolerance	Shelving	Containers/wrappings/other
Paper-based Files Cards Maps Plans/drawings Charts Posters Letters and documents	18°C–22°C	+/- 2°C	45%–55%	+/- 5%	Plan cabinets for larger formats (maps and plans etc.)	Type 1 design (or format-specific variations) boxes Paper or cardboard covers, wallets, folders or envelopes Interleave if in drawers or fragile–polyester encapsulate Larger formats (maps, plans etc.)–use rigid folders or boards for flat–or roll around a core and wrap
Composite records and objects Bound volumes and registers	16°C–20°C	+/- 2°C	40%–50%	+/- 5%	Store small volumes vertically Larger volumes can be stored horizontally–up	Fragile bound volumes require tailor-made boxes or slipcases–no boxing or wrapping required if in good condition Treat parchment as per paper-based

Recommended record storage housing and environmental conditions

Record formal type	Thermal range	Daily tolerance	RH range	Daily tolerance	Shelving	Containers/wrappings/other
Parchment Architectural models Scrolls					to 2 high Deep shelving or even pallet racking may be used for oversized and heavy objects	but use only non-buffered material in contact Objects can be housed in standard archival boxes (tailor-made if outsized e.g. scrolls) Heavy objects in crates or on pallets (wood varnished, properly cured and ventilated prior to use to seal against off-gassing) Cover or wrap architectural models to protect from light, dust, pests and scratching (especially if Perspex cover/case)
Photographic prints (B&W)	16°C–20°C	+/- 2°C	40%–50%	+/- 5%		Non-buffered archival wallets, folders, envelopes boxes, or polypropylene sleeves/albums
Optical media DVDs, CDs and Blu-ray discs Laser discs	16°C–20°C	+/- 2°C	40%–50%	+/- 5%	Store vertically Do not stack or package in groups	Rigid plastic jewel / polypropylene cases Remove all paper/cardboard Water-base felt tip permanent marker for labelling if necessary.
Photographic prints (Colour)	8°C–12°C	+/- 2°C	30%–40%	+/- 5%		Non-buffered archival wallets, folders, envelopes boxes, or polypropylene sleeves/albums
Photographic other Glass plate negatives Lantern slides	8°C–12°C	+/- 2°C	30%–40%	+/- 5%	Fixed (i.e. stationary, not mobile) shelving	Individually housed in non-buffered archival folders, wallets and containers Additional shock protection when interleaving (that also meets PAT) and within archival boxes

Record formal type	Thermal range	Daily tolerance	RH range	Daily tolerance	Shelving	Containers/wrappings/other
Magnetic media Audio tapes Video tapes Computer tapes Floppy disks Magneto-optical discs	8°C–12°C	+/- 2°C	30%–40%	+/- 5%	Non-magnetisable shelving and cabinets Store vertically Metal shelves should be earthed	Rigid and inert plastic (polypropylene) cases are preferred for tapes and discs Use non-magnetic material Do not use paper or cardboard Anti-static bags for media not part of networked storage Disks should remain powered and power variations remain constant. Cases should have fittings to hold the tapes in position
Film (stable) Microfilm (rolls, sheet) Motion picture/cine Negatives (rolls, sheet) X-rays Slides Overhead transparencies	8°C–12°C	+/- 2°C	30%–40%	+/- 5%	Cine films store horizontally–16mm up to 6 cans high, 35mm up to 3 cans high Store all others vertically	Rolled films on polypropylene cores and in PAT containers Sheet film in inert/PAT plastic sleeves, albums, wallets and boxes
Film (unstable) Cellulose acetate	1°C–5°C	+/- 1°C	30%–40%	+/- 5%	Cine films store horizontally–16mm up to 6 cans high, 35mm	No paper-based containers or other housings

Record formal type	Thermal range	Daily tolerance	RH range	Daily tolerance	Shelving	Containers/wrappings/other
based media affected by 'vinegar syndrome' Motion picture film Microfilm Photographic negatives Sheet film					up to 3 high Store all others vertically	Rolled films on polypropylene cores and in PAT containers Sheet film in inert/PAT plastic sleeves, albums, wallets and boxes
Solid state media	16°C–20°C	+/- 2°C	35%–45%	+/- 5%	Metal shelving must be earthed.	Anti-static bags Power variations must remain constant Do not store below 10°C

Long term temporary storage and/or retention

Record formal type	Thermal range	Daily tolerance	RH range	Daily tolerance	Shelving	Containers/wrappings
Stable material types Paper-based Composites and objects Film–stable	15°C–25°C	+/- 2°C	40%–60%	+/- 5%	See above for corresponding individual format types—archival materials are preferred but not essential	See above for corresponding individual format types—archival materials are preferred but not essential

Record formal type	Thermal range	Daily tolerance	RH range	Daily tolerance	Shelving	Containers/wrappings
Susceptible and at-risk material Photographic Magnetic media Optical Media Film–unstable	15°C–20°C	+/- 2°C	40%–50%	+/- 5%	See above for corresponding individual format types—archival materials are preferred but not essential	See above for corresponding individual format types—archival materials are preferred but not essential

Short term exposure and temporary retention

Record formal type	Thermal range	Daily tolerance	RH range	Daily tolerance	Shelving	Containers/wrappings
All material types	15°C–25°C	+/- 4°C	40%–60%	+/- 5%	Storage containers are recommended and archival quality materials are preferred but not essential	Storage containers are recommended and archival quality materials are preferred but not essential