

Guide to Paper Selection for Permanent and Temporary Retention Public Records

1. Purpose

The objective of this *Advice* is to recommend appropriate types of paper for permanent and temporary public records. Temporary records for the purpose of this *Preservation Advice* are defined as records retained short-term (retention period of less than 30 years) or long-term (retention period 30 years or more). Permanent records are retained indefinitely.

2. Scope

This *Advice* applies to all Queensland public authorities. It alerts agencies to their obligations under the *Public Records Act 2002* and outlines key issues which need to be considered to ensure the preservation of paper-based public records.

3. What is paper?

Paper is a thin medium made from the compression of fibrous material, usually composed of cellulose from wood pulp. Sometimes paper is made from cotton, linen, hemp and various other vegetable fibres.

The physical strength of paper depends on the type and length of the paper fibre. Paper composed of longer fibres is stronger than paper made of short fibres. Recycled paper typically is composed of short fibres, which become increasingly shorter with each recycling.

4. Types of Paper

Many types of paper are used in government offices today. Most of these are used for general printing purposes such as photocopying, fax machines, laser and inkjet printers. Paper types include recycled paper, thermal paper and permanent paper.

4.1 Recycled Paper

Recycled paper is produced from recovered paper materials that have been de-inked and repulped. The recycled content is measured as a percentage of the paper's weight. The percentage of recycled fibres may not be detailed on the product label, making it difficult to determine durability and likely longevity.

Generally, good quality paper including recycled paper may be used for any application not requiring the use of permanent paper, (e.g. records of short-term retention value, note/message pads and other casual office applications and draft documents).

4.2 Thermal Paper

Thermal paper is unstable and its use is not recommended. The text can fade within months and may not last longer than five years. Public records created on thermal paper should be copied to an alternative paper type.

4.3 Permanent Paper

Some paper advertised as lasting 100 years may not be considered 'archival' or 'permanent'.

Longevity depends on whether the paper can meet certain standards and specifications governing paper durability and how it is stored.

5. Standards relating to Paper

Archival and permanent paper is defined in the *Australian Standard for Permanent Paper* (AS 4003-1996) as paper “which during long term storage in libraries, archives and other protected environments will undergo little or no change in properties that affect its use”.

The Australian Standard is based on International Standard ISO 9706:1994 *Information and documentation - Paper for documents – Requirements for permanence* but adapted to suit Australian conditions.

AS 4003-1996 applies to paper stored in a climate-controlled environment, but even these optimal storage conditions do not guarantee the continued strength of paper.

To ensure the preservation of permanent records and temporary records having a retention period of 30 years or more, the paper is required to meet the National Archives of Australia’s (NAA) Technical Specification for archival paper. These specifications require the paper to have increased pH levels and lignin free content. (See Section 11 – References).

Queensland State Archives endorses NAA’s Technical specification for archival paper, file board and corrugated card (See *Preservation Services Advice PSA – 3*).

6. Storage Conditions


‘Appropriate conditions’ and ‘library and archival conditions’, are regularly referred to in the various paper standards, specifications and marketing information. These are terms used to define a set of recognised environmental conditions that are conducive to preservation.

Appropriate storage conditions for long-term temporary and permanent records must be maintained on a 24/7 basis:

- Temperature = 20° ± 2°C
- Humidity = 50% ± 5%
- Limited exposure to light
- Filtration of atmospheric pollutants.

If these conditions cannot be met, then papers stored in less favourable conditions may not last as long as the manufacturer may claim.

7. Best practice

For long-term temporary and permanent retention records: Select paper that meets NAA’s technical specifications. Not all paper advertised as ‘archival’ or ‘permanent’ complies with this specification. Paper that is compliant has an the following NAA registered watermark denoting permanence. 

For short-term temporary records, select good quality paper, including recycled paper, from a reputable manufacturer that meets ISO 9706.

8. Acceptable Alternatives

Alternative papers to the 'Best Practice' option are suitable *only* if paper is stored and used under 'library and archival' conditions (Section 6 Storage Conditions).

If you can meet library and archival storage conditions select from papers that meet the following standards/ technical specification:

Acceptability	Standard met
Best Practice	NAA technical specification
Acceptable option	AS 4003 – 1996 or ISO 11108- 1996
Minimal requirement	ISO 9706-1994

If you cannot meet the recommended library and archival storage conditions use 'watermarked 500 Year' papers meeting the NAA specification.

9. Recommendations – Which paper to choose?

<i>Types of paper</i>	<i>Standard achieved</i>	<i>Recommended for</i>
Office paper (No- recycled content)	ISO 9706	Short-term temporary records
Office paper (Recycled content)	ISO 9706	Short-term temporary records
Permanent paper	ISO 9706 / AS 4003	Permanent records* Long-term temporary records*
	NAA approved	Permanent records Long-term temporary records Records subject to frequent use and handling
Thermal paper	Nil	Not recommended Copy to a suitable alternative paper type

**Note: If records are not stored in 'library and archival' conditions, select papers advertised as and watermarked with a registered symbol denoting permanence.*



10. Suppliers

Suppliers of papers that meet the NAA specification are included in *Preservation Services Advice PSA – 2 Suppliers List*. Papers that meet ISO 9706 / AS 4003 are available from most stationery suppliers. For further advice and alternative sources of supply contact the Preservation Services Unit of Queensland State Archives.

Please note: QSA does not recommend or endorse any one supplier. It is the responsibility of the individual to discuss their requirements with any intended supplier.

11. References

- AS 4003-1996 *Permanent Paper* Standards Australia, 1996 <http://www.saiglobal.com/>
- AS/NZS ISO 11798:2004 Australian/New Zealand Standard™ Information and documentation – Permanence and durability of writing, printing and copying on paper – Requirements and test methods <http://www.saiglobal.com/>
- ISO 9706:1994 Information and documentation – Paper for documents – Requirements for permanence and durability <http://www.saiglobal.com/>
- ISO 11108:1996 Information and documentation – Archival Paper – Requirements for permanence and durability (1996) <http://www.saiglobal.com/>
- National Archives of Australia *Rules for use of 'Archival Quality' certification trademark 2001* includes the *Technical Specifications for Archival Paper* in section 3 – http://www.naa.gov.au/images/archival%20quality%20trademark%20rules%20of%20use%5B1%5D_tcm2-5256.pdf

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