



Australian Government



NATIONAL
ARCHIVES
OF AUSTRALIA

Rules for use of ‘Archival Quality’ certification trademark

National Archives of Australia

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1. INTRODUCTION

The following rules are established to control the use of the 'Archival Quality' certification trademark. Use of the trademark is governed by the National Archives of Australia.

The trademark is intended to signify that certain products have qualities that make them suitable to use for the creation and storage of archival records of enduring value. In order to satisfy this need, the products must demonstrate specific qualities of chemical stability and physical durability that will be sustained over long periods of time.

2. THE RULES: GENERAL

2.1 Address for applications

Applications can be made directly to the National Archives of Australia for use of the trademark. Applicants should address written submissions to:

The Director of Preservation
National Archives of Australia
PO Box 7425
Canberra Mail Centre
Canberra ACT 2601

2.2 Product types covered by the rules

The trademark may be applied to paper, file board and corrugated board, manufactured as described within these rules. It may also be applied to products fabricated from these materials, such as boxes, folders, wallets etc where the fabrication process does not diminish the quality of the stock material as described in section 3 of the rules.

2.3 The trademark - description

The trademark is a graphic device in the form of the letter 'Q' and an infinity symbol (see Figure 1).

2.4 Where the trademark can be used

The trademark can only be applied to approved products.

2.5 Royalties for use of the trademark

The National Archives shall commence charging a royalty of 2.5% on the value of sales of products bearing the mark commencing on 5 January 2002.

2.6 Manner of application

Once approval has been given, the trademark can be applied to the approved product(s) in a number of ways:

- as a watermark (applied randomly to paper)
- printed directly on a fabricated product
- printed on the packaging of a product
- in advertising or promotional material related to the product

When applied as a watermark the entire trademark shall be no smaller than 50 mm high, or the capital 'Q' will be no smaller than 106 point, it should not be scaled independently in the horizontal or vertical dimensions and should have a minimum bit resolution of 300 dpi.

When applied in printed form, the trademark also should not be scaled independently in the horizontal or vertical dimensions and should have a minimum bit resolution of 300 dpi. It may be applied in conjunction with the words 'Archival Quality' although these words do not constitute part of the trademark.

The archival paper must bear an impressed watermark image of the trademark. This watermark may be applied randomly, but must be of such frequency that each A4 cut sheet shall have at least part of the watermark visible.

2.7 Testing for compliance

In order to attain approval to use the trademark, products need to demonstrate accordance with the quality specifications set out in these rules. Testing for compliance must be carried out by a reputable testing authority, such as one accredited by National Association of Testing Authorities (NATA).

The National Archives of Australia is a NATA approved testing authority and will undertake to test compliance of any product submitted for approval free of charge. Furthermore the National Archives reserves the right to perform any of the tests set forth in these rules, where such tests are deemed necessary to assure the compliance of any product.

The National Archives of Australia must be satisfied that the material has met the requirements of the rules before giving approval to use the trademark.

The National Archives of Australia reserves the right to request further samples of approved products at any time, to ensure that quality control is being maintained.

The above testing and sampling requirements apply to all entities which apply to use the mark, whether manufacturers, wholesalers or retailers.

2.8 Testing standards

The requirements for paper and board quality and characteristics shall be tested for in accordance with specified test methods of the American Society for Testing and Materials (ASTM), the Technical Association of the Pulp and Paper Industry (TAPPI), Standards Australia (AS) and the American National Standards Institute (ANSI).

2.9 Approval procedure - paper

2.9.1. Initial submission of sample

All manufacturers and suppliers of suitable papers are encouraged to submit samples for approval. Submission must include the following information:

- the name of the paper
- the name and address of the manufacturer or supplier
- contact information for a suitable representative of the manufacturer or supplier

The submission should also include a sample of sufficient size for testing - a minimum of 20 x A4 sheets.

Immediately on receipt, the sample will be logged into the register of products submitted for trademark approval and given an identification number. Testing of the paper will commence as soon as possible after receipt.

2.9.2 Quality testing

The series of tests as set out in sections 3.2.1.2 - 3.2.1.7 of these rules will then be carried out on the paper. A NATA endorsed testing report will be produced at the conclusion of testing.

2.9.3 Informing the manufacturer/supplier

If the submitted paper meets the quality requirements as set out in sections 3.2.1.2 - 3.2.1.7 of these rules, the manufacturer/supplier will be informed. In order to gain final approval to utilise the trademark, the manufacturer must get the paper watermarked as described in section 3.2.1.1 of these rules.

2.9.4. Final approval

Once the manufacturer or supplier has demonstrated that their paper has been appropriately watermarked, the National Archives will issue a final letter of approval for use of the trademark.

2.10 Approval procedure - products other than paper

2.10.1. Initial submission of sample

All manufacturers and suppliers of suitable products are encouraged to submit samples for approval. Submission must include the following information:

- the name of the product
- the name and address of the manufacturer or supplier
- contact information for a suitable representative of the manufacturer or supplier

The submission should also include a sample suitable for testing. In the case of folder board, a minimum of two square metres. In the case of corrugated board, samples of both the liner medium and the fabricated board are required for the full range of testing. Again, two square metres of both the liner medium and the fabricated board would suffice for this.

Immediately on receipt, the sample will be logged into the register of products submitted for trademark approval and given an identification number. Testing of the product will commence as soon as possible after receipt.

2.10.2 Quality testing

The series of tests as set out in either section 3.2.2 or section 3.2.3 of these rules will then be carried out on the product. An approved testing report will be produced at the conclusion of testing.

2.10.3 Approval to use the trademark

If the submitted product meets the quality requirements set out in either section 3.2.2 or section 3.2.3 of these rules a letter will be sent to the submitting body giving approval to utilise the trademark as set out in these rules at sections 2.4 and 2.5.

2.11 Form of approval

Approval for use of the trademark will be given in writing by the Assistant Director, Preservation on behalf of the National Archives of Australia. Approval will apply only to specified products.

2.12 Retesting

The National Archives will retest all products approved to utilise the trademark at 12-month intervals from the date of final approval. After each set of tests, a new letter of approval will be supplied for a specified 12-month period.

2.13 Refusal procedure

Refusal to approve the use of the trademark will be only on the basis of a failure to meet the requirements set out in the rules. Withdrawal of approval may occur on similar grounds. In either case, a statement of reasons will accompany the notification. The applicant may then seek to rectify the problem and resubmit the product for approval.

2.14 Appeal procedure

Should an applicant wish to appeal a decision made by the Archives the appeal will be handled by an independent arbitrator mutually agreed to by the Archives and the aggrieved party. The Australian Competition and Consumer Commission and IP Australia are not considered appropriate bodies for the purposes of such appeals.

Figure 1 The trademark



3. TECHNICAL SPECIFICATIONS

3.1 Introduction

The following specifications cover the physical and chemical requirements for archival paper, file board and corrugated board. The specifications define products that will remain chemically stable for long periods, will have no adverse effects on material stored adjacent and will withstand continued use without significant strength loss over long periods.

It is understood that there are many other qualities, not covered here, which a paper or board product is required to possess in order to fulfil its intended function. They are not included here because they do not relate to permanence and are thus left to the discretion of the manufacturer. An example of such a property is the need for a copy paper to be suitable for use in high speed copiers.

3.2 Composition and physical qualities of the product types

To qualify for use of the trademark a product must possess a range of qualities. These vary somewhat between the three product types: paper, folder board and corrugated board. Each is therefore discussed separately below.

3.2.1 Copy paper

3.2.1.1 *Watermark*

So that the paper is readily identifiable as archival throughout its life it is necessary that it be watermarked. The watermark is to consist of an image of the trademark. It may be applied randomly, but must be of such frequency that each A4 cut sheet shall have at least part of the watermark visible.

3.2.1.2 *Fibre furnish*

The paper shall be made only from fully bleached chemical wood, cotton or linen pulp, or a mixture of these. This shall be confirmed through the Phloroglucinol test for lignin as per TAPPI standard T401 om-93, 'Fiber analysis of paper and paperboard', Appendix F: Spot stains for groundwood. The test shall reveal that no lignin is present.

The cotton and linen used may consist of textile industry waste. The fibre furnish shall also be free of particles of metal, waxes, plasticisers (ie wet strength additives) and plastics.

3.2.1.3 *Sizing*

The paper shall be sized so that it will be suitable for accepting writing, duplicating and printing inks. The paper shall be sized with neutral or alkaline, natural or synthetic sizing material such as ketene dimer. The paper shall be alum/rosin free as determined using TAPPI method T 408 cm-97, 'Rosin in paper and paperboard', Sections 12.4.2 and 12.5.2, 'Raspail test'.

3.2.1.4 *Colouring*

The paper should be a 'natural' colour and shall not be dyed or coloured.

3.2.1.5 *Alkali reserve*

The paper shall contain an alkaline reserve of calcium carbonate or magnesium carbonate which shall be evenly distributed throughout the product. The minimum of alkaline reserve shall be 2% calcium or magnesium carbonate, based on the conditioned weight of the finished product. The determination of carbonate filler shall be as per ASTM D4988 - 96, 'Determination of alkalinity of paper as calcium carbonate'.

3.2.1.6 *Alkalinity*

The product shall have a pH of 8.0-10.0 determined by the cold extraction method as per AS 1301 421s:1998, 'Determination of the pH value of aqueous extracts of paper, board and pulp-cold extraction method'.

3.2.1.7 Photographic activity test

To ensure its suitability for the storage of photographic materials, the paper must pass the Photographic Activity Test ISO 14523:1999(E).

3.2.1.8 Tear strength

The tear index of the paper shall be determined as per AS 1301 P400 s-91, 'Internal tearing resistance of paper'. The average tear index for all weights of product, in any direction shall be not less than 6.0 mN m²/g.

When artificially aged as per TAPPI standard T453 om-89 Effect of dry heat on properties of paper for 15 days at 105C (ie 125 year equivalent) the paper shall lose no more than 12.5% of its initial tear strength.

3.2.2 Folder board

3.2.2.1 Fibre furnish

The board shall be made only from fully bleached chemical wood, cotton or linen pulp, or a mixture of these. This shall be confirmed through the Phloroglucinol test for lignin as per TAPPI standard T401 om-93, 'Fiber analysis of paper and paperboard', Appendix F: Spot stains for groundwood. The test shall reveal that no lignin is present.

The cotton and linen used may consist of textile industry waste. The fibre furnish shall also be free of particles of metal, waxes, plasticisers (ie wet strength additives) and plastics.

3.2.2.2 Sizing

The board shall be sized so that it will be suitable for accepting writing, duplicating and printing inks. The paper shall be sized with neutral or alkaline, natural or synthetic sizing material such as ketene dimer. The paper shall be alum/rosin free as determined using TAPPI method T 408 cm-97, 'Rosin in paper and paperboard', Sections 12.4.2 and 12.5.2: 'Raspail test'.

3.2.2.3 Colouring

Archival file board may be dyed. The dye shall be added only at the pulp stage. Dyes used shall be non-bleeding and must not affect chemical stability properties of the product.

3.2.2.4 Alkali reserve

The product shall contain an alkaline reserve of calcium carbonate or magnesium carbonate which shall be evenly distributed throughout the product. The minimum of alkaline reserve shall be 2% calcium or magnesium carbonate, based on the conditioned weight of the finished product. The determination of carbonate filler shall be as per ASTM D4988 - 96, 'Determination of alkalinity of paper as calcium carbonate'.

3.2.2.5 Alkalinity

The product shall have a pH of 8.0-10.0 determined by the cold extraction method as per AS 1301 421s:1998, 'Determination of the pH value of aqueous extracts of paper, board and pulp-cold extraction method'.

3.2.2.6 Photographic activity test

To ensure its suitability for the storage of photographic materials, the product must pass the Photographic Activity Test ISO 14523:1999(E).

3.2.2.7 Tear strength

The tear index of the board shall be determined as per AS 1301 P400 s-91, 'Internal tearing resistance of paper'. The average tear index for all weights of product, in any direction shall be not less than 6.0 mN m²/g.

When artificially aged as per TAPPI standard T453 om-89, 'Effect of dry heat on properties of paper' for 15 days at 105C (ie 125 year equivalent) the paper shall retain at least 12.5% of its initial tear strength.

3.2.3 Corrugated board

3.2.3.1 Fibre furnish

The board shall be made only from fully bleached chemical wood, cotton or linen pulp, or a mixture of these. This shall be confirmed through the Phloroglucinol test for lignin as per TAPPI standard T401 om-93, 'Fiber analysis of paper and paperboard', Appendix F: Spot stains for groundwood. The test shall reveal that no lignin is present.

The cotton and linen used may consist of textile industry waste. The fibre furnish shall also be free of particles of metal, waxes, plasticisers (ie wet strength additives) and plastics.

3.2.3.2 Sizing

The board shall be sized so that it will be suitable for accepting writing, duplicating and printing inks. The paper shall be sized with neutral or alkaline, natural or synthetic sizing material such as ketene dimer. The paper shall be alum/rosin free as determined using TAPPI method T 408 cm-97 Rosin in paper and paperboard Sections 12.4.2 and 12.5.2: 'Raspail test'.

3.2.3.3 Colouring

The board may be dyed. The dye shall be added only at the pulp stage. Dyes used shall be non-bleeding and must not affect chemical stability properties of the product. Optical brighteners are not proscribed, however their use is discouraged.

3.2.3.4 Alkali reserve

The product shall contain an alkaline reserve of calcium carbonate or magnesium carbonate which shall be evenly distributed throughout the product. The minimum of alkaline reserve shall be 2% calcium or magnesium carbonate, based on the conditioned weight of the finished product. The determination of carbonate filler shall be as per ASTM D4988 - 96, 'Determination of alkalinity of paper as calcium carbonate'.

3.2.3.5 Alkalinity

The board shall have a pH of 8.0-10.0 determined by the cold extraction method as per AS 1301 421s:1998, 'Determination of the pH value of aqueous extracts of paper, board and pulp-cold extraction method'.

3.2.3.6 Photographic activity test

To ensure its suitability for the storage of photographic materials, the board must pass the Photographic Activity Test ISO 14523:1999(E).

3.2.3.7 Tear strength

The tear index of the liner medium shall be determined as per AS 1301 P400 s-91 Internal tearing resistance of paper. The average tear index for all weights of product, in any direction shall be not less than 6.0 mN m²/g.

When artificially aged as per TAPPI standard T453 om-89, 'Effect of dry heat on properties of paper' for 15 days at 105C (ie 125 year equivalent) the paper shall retain at least 12.5% of its initial tear strength.

3.2.3.7 The adhesive

A high-quality water resistant adhesive shall be used when adhering layers together. The properties of the adhesive shall not detract from the properties of the liner medium (ie reduce the alkaline reserve, decrease the pH, or decrease the stiffness). The adhesive as applied shall not be visible through or alter the colour of the liner sheets. If it is necessary to buffer the adhesive, the same buffer as in the paper stock (ie calcium carbonate, magnesium carbonate, or a combination of both) shall be used.

3.2.3.8 Finish

The liner sheet shall be plate finished (calendered) on both sides.