

Australian Standard[®]

**METHODS FOR THE
DETERMINATION OF
DIMENSIONAL CHANGE IN
FABRICS**

PART 2—RELAXATION IN STEAM

METRIC UNITS

The following scientific, industrial and governmental organizations were represented on the committee entrusted with the preparation of this standard:

- Associated Chambers of Manufactures of Australia
- Australian Knitting Industries Council
- Australian and New Zealand Railways Conferences
- Australian Wool Board
- Australian Wool Testing Authority
- Commonwealth Scientific and Industrial Research Organization
- Cotton and Allied Textile Manufacturers Association of Australia
- Cotton and Man-Made Fibres Federation
- Cordage Institute of Australia
- Department of Army
- Department of Supply
- Gordon Institute of Technology
- Society of Dyers and Colourists of Australia
- University of New South Wales
- Wool Textile Manufacturers of Australia

This standard, prepared by Committee TX/1, Physical Testing of Textiles, was approved on behalf of the Council of the Standards Association of Australia on 31 May 1972.

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PREFACE

This standard is the second part of a standard setting out methods and procedures for determining dimensional change in textiles caused by a number of agencies. Part 1 of the standard (in course of preparation) will deal with the general principles for determining dimensional change and include general instructions on selection of test specimens, conditioning and measuring them as well as giving guidelines to problems which may be encountered in carrying out the tests and interpretation of test results.

The method in this Part describes the procedures to be adopted for determining dimensional change through relaxation in steam. It is an appropriate test for dimensional change which takes place in steam pressing encountered during garment make-up.

Other parts of the standard in course of preparation include:

- Part 3 — Relaxation in aqueous solution
- Part 4 — Heat-set fabrics
- Part 5 — Laundering

Attention is drawn to Australian Standard 1128, Preferred Metric Units for Textiles, which gives a number of conversion factors from imperial units to the preferred metric units for use in the textile industry.

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STANDARDS AUSTRALIA

RECONFIRMATION

OF

AS 1287.2—1972

**Methods for the determination of dimensional change in fabrics
Part 2: Relaxation in steam**

RECONFIRMATION NOTICE

Technical Committee TX-020 has reviewed the content of this publication and in accordance with Standards Australia procedures for reconfirmation, it has been determined that the publication is still valid and does not require change.

Certain documents referenced in the publication may have been amended since the original date of publication. Users are advised to ensure that they are using the latest versions of such documents as appropriate, unless advised otherwise in this Reconfirmation Notice.

Approved for reconfirmation in accordance with Standards Australia procedures for reconfirmation on 6 July 2016.

The following are represented on Technical Committee TX-020:

Ag Research
Australian Wool Processors Council
AWTA Textile Testing
Council of Textile and Fashion Industries of Australia
Drycleaning Institute of Australia
National Association of Testing Authorities Australia
RMIT University
The Textile Institute

NOTES

STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard

**METHODS FOR THE DETERMINATION OF
DIMENSIONAL CHANGE IN FABRICS**

PART 2—RELAXATION IN STEAM

1 SCOPE. This standard describes the method for determining dimensional change of woven and knitted fabrics relaxed in steam. The procedures given in this method may also be used for non-woven textiles.

2 PRINCIPLE. Specimens of the fabric are exposed to dry saturated steam at atmospheric pressure and the resultant dimensional changes are measured.

3 APPARATUS AND REAGENTS.

- (i) A jacketed steaming apparatus capable of maintaining a temperature of 100°C in dry saturated steam. (Suitable apparatus is illustrated in Appendix A).
- (ii) Source of steam at about 400 kPa (60 lbf/in²).
- (iii) A suitable graduated stainless scale at least 300 mm long graduated in centimetres and millimetres.
- (iv) A flat glass or transparent plastics plate not less than 300 mm square and approximately 6 mm thick.
- (v) Means for producing the standard atmosphere described in AS L5*, i.e. 20 ± 2°C, 65 ± 2 per cent r.h.

4 TEST SPECIMENS.**4.1 Selection of Test Specimens.**

- (a) Test specimens shall be cut representative of the piece under examination. The test specimens or the sample shall not be cut within 2 m of a lead end or tail end of a piece and not closer to the edge than one-tenth of the width of the piece except that narrow fabrics up to 400 mm wide may be tested the full width of the fabric.
- (b) Where lengthwise specimens are being tested, their long direction shall be parallel to the length of the piece and as far as possible no two specimens shall contain the same warp threads or the same wales.
- (c) Where widthwise specimens are being tested, their long direction shall be parallel to the width of the piece and as far as possible no two specimens shall contain the same weft threads or the same courses.

* AS L5, Conditioning Textile Materials for Test.