STANDARDS AUSTRALIA

RECONFIRMATION

OF

AS 2001.2.34—1990

Methods of test for textiles

Method 2.34: Physical tests—Determination of permeability of fabrics to air

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.

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National Association of Testing Authorities Australia
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Australian Standard®

Methods of test for textiles

Method 2.34: Physical tests— Determination of permeability of fabrics to air

PREFACE

This Standard was prepared by the Standards Australia Committee on Testing of Textiles under the direction of the Textile Standards Board.

This Standard is based on the work of a technical committee of the International Organization for Standardization (ISO/TC 38, Textiles), BS 5636—1978, Method of test for the determination of the permeability of fabrics to air and ASTM D 737—1975, Test method for air permeability of textile fabrics, and has been adapted to suit Australian requirements.

FOREWORD

This Standard allows alternative orifice sizes and pressure drops to be utilized, depending on the test equipment available and its ability to register a result within its capacity.

Comparison of results using different pressure drops is not valid. Interlaboratory trials conducted in Australia* indicate that the coefficient of variation of individual results on a sample is lower for larger orifice sizes. Comparison of results at different orifice sizes may be valid provided the same pressure drop has been used.

Air permeability is an important factor in the performance of fabrics for special purposes, such as industrial filters, tentage, sailcloth, parachutes, raincoat materials, shirtings, primary covers for continental quilts and pillows, acoustical absorbents and coated fabrics. In filtration, for example, air permeability is directly related to efficiency (the pressure difference between the surfaces of a filter in use). Air permeability can also be used to provide an indication of the 'breathability' of weather and rainproof fabrics, or of coated fabrics in general.

Constructional factors and finishing techniques can have an appreciable effect upon air permeability by causing a change in the length of air flow paths through a fabric.

METHOD

1 SCOPE. This Standard sets out a method for measuring the resistance of a fabric to the passage of air through it. It is applicable to most textile fabrics that are permeable to air.

2 REFERENCED DOCUMENTS. The following documents are referred to in this Standard:

AS

Sampling procedures and tables for inspection by attributes

2001 Methods of test for textiles

2001.1 Method 1: Conditioning procedures

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^{*} CSIRO Technical Report No G68 (1990). Copies available on application to CSIRO, Division of Wool Technology, Geelong.