

INTERNATIONAL
STANDARD

ISO
5084

Second edition
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**Textiles — Determination of thickness of
textiles and textile products**

Textiles — Détermination de l'épaisseur des textiles et produits textiles



Reference number
ISO 5084:1996(E)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 5084 was prepared by Technical Committee ISO/TC 38, *Textiles*.

This second edition cancels and replaces the first edition (ISO 5084:1977), which has been technically revised.

Annex A forms an integral part of this International Standard. Annex B is for information only.

Textiles — Determination of thickness of textiles and textile products

1 Scope

This International Standard specifies a method for the determination of the thickness of textiles and textile products when under a specified pressure. It is not applicable to textile floor coverings, nonwovens, geotextiles and coated fabrics for which specific International Standards exist (see annex B).

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 139:1973, *Textiles — Standard atmospheres for conditioning and testing*.

ISO 10012-1:1992, *Quality assurance requirements for measuring equipment — Part 1: Metrological confirmation system for measuring equipment*.

3 Definition

For the purposes of this International Standard, the following definition applies.

3.1 thickness of a textile: Perpendicular distance between two reference plates exerting a pressure of 1 kPa or less on the textile.

4 Principle

The thickness of a specimen is measured as the distance between the reference plate on which the specimen rests and a parallel circular presser-foot that exerts a specified pressure on the area of the textile under test.

A test specimen is placed between two reference plates which exert a known pressure on the specimen. The perpendicular distance between the reference plates is measured and recorded after a specified time.

5 Apparatus

5.1 Thickness tester

The confirmation system for the thickness tester shall comply with ISO 10012-1. The thickness tester shall incorporate (or be equipped with) the following elements.

5.1.1 Interchangeable presser-feet, of area appropriate to the type of fabric to be tested.

The recommended presser-foot area for the test is $(2\,000 \pm 20)$ mm², corresponding to a circular presser-foot of diameter $(50,5 \pm 0,2)$ mm (see also annex A). If other test areas have to be used, this shall be agreed by the interested parties and shall be stated in the test report.

5.1.2 Reference plate, with a plane upper surface of diameter at least 50 mm greater than that of the presser-foot (5.1.1).

5.1.3 Means for moving the presser-foot (in a direction normal to the upper surface of the reference plate), so that its bearing surface is maintained horizontal and parallel to the upper surface of the refer-