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# International Standard



# 1766

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## Textile floor coverings — Determination of thickness of pile above the substrate

*Revêtements de sol textiles — Détermination de l'épaisseur du velours au-dessus du soubassement*

Second edition — 1986-11-01

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[ISO 1766:1986](#)

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## 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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 1766 was prepared by Technical Committee ISO/TC 38, *Textiles*.

This second edition cancels and replaces the first edition (ISO 1766-1973), clause 5 of which has been technically revised. <https://standards.iteh.ai/catalog/standards/sist/10ff7ccf-c439-4db2-b2dc-8dba821afa65/iso-1766-1986>

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard implies its latest edition, unless otherwise stated.

# Textile floor coverings — Determination of thickness of pile above the substrate

## 1 Scope and field of application

This International Standard specifies a method for the determination of the thickness of pile above the substrate of a textile floor covering. It is applicable to all textile floor coverings with pile capable of being shorn from the substrate, but not to textile floor coverings of varying pile thickness or density, unless the areas can be measured separately.

The method shall be used in conjunction with ISO 8543, clause 8.

## 2 References

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

ISO 1765, *Machine-made textile floor coverings — Determination of thickness*.

ISO 1957, *Machine-made textile floor coverings — Procedure for sampling and cutting specimens for physical tests*.

ISO 8543, *Textile floor coverings — Methods for determination of mass*.

## 3 Definition

For the purpose of this International Standard, the following definition applies:

**pile thickness:** The difference in the thickness of the textile floor covering before and after the pile above the substrate has been shorn away, measured under a pressure of 2,0 kPa\*.

## 4 Principle

Pile thickness is determined by measuring the thickness of specimens under a pressure of 2,0 kPa before and after removal of the pile above the substrate.

## 5 Apparatus

**5.1 Band-knife machine or hand-held clippers**, capable of shearing the pile close to the substrate.

### NOTES

- 1 The particulars of the shearing machine and details of its operation should be agreed between the interested parties.
- 2 The results from the two types of apparatus may not be identical.

**5.2 Thickness tester**, capable of measuring thickness under a pressure of 2,0 kPa (see ISO 1765).

**5.3 Straightedge**, for example a ruler, for brushing the surface of the specimen.

## 6 Atmosphere for conditioning and testing

The specimens shall be conditioned and the test conducted in one of the standard atmospheres for conditioning and testing defined in ISO 139.

## 7 Specimens

### 7.1 Sampling

Select the specimens according to the standard procedure specified in ISO 1957.

\* 1 kPa = 10<sup>3</sup> N/m<sup>2</sup>

## 7.2 Number and area

Cut four specimens, each at least 200 mm × 200 mm, with the sides parallel with, and at right angles to, the direction of manufacture.

## 7.3 Preparation

Lightly brush the use-surface, first against, then with, the direction of pile lean, using the straightedge.

Lay the specimens out flat, singly and with the use-surface uppermost, in the appropriate standard atmosphere for testing textiles as defined in ISO 139, for a period of at least 24 h.

## 8 Procedure

**8.1** Measure the thickness of each specimen at five approximately equally spaced places, each at least 20 mm from the edges of the specimen, under the standard pressure of 2,0 kPa, using the method specified in ISO 1765.

**8.2** Shear the pile from the specimen, as described in ISO 8543, clause 8.

**8.3** Measure the thickness of each shorn specimen as specified in 8.1.

## 9 Expression of results

**9.1** For each specimen, calculate the mean thickness unshorn and the mean thickness shorn. For each specimen, calculate the thickness of pile as the difference between these figures, in millimetres, to the nearest 0,1 mm.

**9.2** Calculate the mean pile thickness for all specimens, in millimetres, to the nearest 0,1 mm.

## 10 Test report

The test report shall include the following particulars:

- a) that the procedure was conducted in accordance with this International Standard;
- b) the identity (source and type) of the sample from which the specimens were taken;
- c) the standard atmosphere used for conditioning and testing;
- d) the thickness unshorn, the thickness shorn, and the pile thickness, for each specimen, in millimetres to the nearest 0,1 mm;
- e) the average thickness unshorn, the average thickness shorn, and the average pile thickness, in millimetres, to the nearest 0,1 mm;
- f) the type of shearing apparatus used.

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