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**INTERNATIONAL STANDARD**



**1766**

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INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

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**Carpets — Determination of thickness of pile above the backing**

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[ISO 1766:1973](https://standards.iteh.ai/catalog/standards/sist/eb872a49-06ab-42f9-8da7-7be899ad2306/iso-1766-1973)

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**Descriptors** : textiles, floor coverings, carpets, dimensional measurement, thickness.

## FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO Member Bodies). The work of developing International Standards is carried out through ISO Technical Committees. Every Member Body interested in a subject for which a Technical Committee has been set up 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.

Prior to 1972, the results of the work of the Technical Committees were published as ISO Recommendations; these documents are now in the process of being transformed into International Standards. As part of this process, International Standard ISO 1766 replaces ISO Recommendation R 1766-1970 drawn up by Technical Committee ISO/TC 38, *Textiles*.

### ISO 1766:1973

The Member Bodies of the following countries approved the Recommendation [72:49-06ab-42f9-8da7-7be899ad2306/iso-1766-1973](#)

Australia	Hungary	Portugal
Austria	India	Romania
Belgium	Israel	South Africa, Rep. of
Brazil	Italy	Spain
Canada	Japan	Sweden
Denmark	Netherlands	Switzerland
Egypt, Arab Rep. of	New Zealand	Turkey
France	Norway	United Kingdom
Germany	Peru	U.S.A.
Greece	Poland	U.S.S.R.

No Member Body expressed disapproval of the Recommendation.

# Carpets — Determination of thickness of pile above the backing

## 1 SCOPE AND FIELD OF APPLICATION

This International Standard specifies a method for the determination of thickness of pile above the backing of a carpet and is applicable to all carpets with pile capable of being shorn from the backing.

## 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.*

## 3 DEFINITION

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

**pile thickness** : The difference in the thickness of the carpet before and after the pile above the backing has been shorn away, measured under the standard pressure.

## 4 PRINCIPLE

Pile thickness is determined by measuring the thickness of specimens under the standard pressure of  $2,0 \times 10^{-3}$  N/mm<sup>2</sup> before and after the removal of the pile above the backing.

## 5 APPARATUS

**5.1 Carpet shearing machine.** Any machine capable of shearing the pile close to the backing may be used. The particulars of the shearing machines and details of its operation shall be agreed between the parties interested in the test results.

**5.2 Carpet thickness tester,** capable of measuring thickness under a pressure of  $2,0 \times 10^{-3}$  N/mm<sup>2</sup>.

## 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 textiles defined in ISO 139.

## 7 TEST SPECIMENS

### 7.1 Sampling

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

### 7.2 Number and area

Cut not fewer than three test specimens, each at least 200 mm × 200 mm.

### 7.3 Preparation

Allow the specimens to condition in the appropriate standard atmosphere for testing textiles until they are in equilibrium with this atmosphere; alternatively, allow the specimens to remain in this atmosphere for 24 h.

## 8 PROCEDURE

8.1 Measure the thickness of each specimen at five places each at least 20 mm from the edges of the specimen, under the standard pressure using the method specified in ISO 1765.

8.2 Shear the pile from the specimen, using forward strokes with the clipper in all directions. Shear as close as possible to the backing by running the points of the comb and cutter along the backing without digging in. Avoid plucking any tufts or damaging backing yarns.

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

## 9 CALCULATION AND 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 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 standard atmosphere used for conditioning and testing;
- c) the type of carpet shearing machine used;
- d) the pile thickness for each specimen and the mean pile thickness to the nearest 0,1 mm.

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