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# INTERNATIONAL STANDARD



# 2551

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

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## Machine-made textile floor coverings — Determination of dimensional changes in varying moisture conditions

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## 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.

International Standard ISO 2551 was drawn up by Technical Committee ISO/TC 38, *Textiles*.

It was approved in February 1972 by the Member Bodies of the following countries :

|                     |                       |                |
|---------------------|-----------------------|----------------|
| Canada              | Israel                | Sweden         |
| Czechoslovakia      | Japan                 | Switzerland    |
| Denmark             | Netherlands           | Thailand       |
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| Finland             | Norway                | United Kingdom |
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The Member Bodies of the following countries expressed disapproval of the document on technical grounds :

Belgium  
Germany

# Machine-made textile floor coverings — Determination of dimensional changes in varying moisture conditions

## 1 SCOPE AND FIELD OF APPLICATION

This International Standard specifies a procedure for the determination of the dimensional changes that take place when machine-made textile floor coverings are placed in varying moisture conditions. This method is applicable to all machine-made textile floor coverings.

## 2 REFERENCE

ISO/R 1957, *Machine-made textile floor coverings — Sampling and cutting specimens for physical tests.*

## 3 PRINCIPLE

Comparison is made between dimensions of a test specimen after conditioning in the standard atmosphere for testing textiles and then after being subjected to specified humidity conditions.

## 4 APPARATUS

**4.1 Instrument capable of measuring length** to the nearest 0,05 mm; for example, optical bench or mechanical device with gauge.

**4.2 Plate glass sheet**, marginally smaller than the test specimen, or other means of keeping the specimen flat while measurements are made. This will not be required if the instrument in 4.1 incorporates such a glass or metal plate.

**4.3 Ventilated drying oven** capable of being controlled at  $60 \pm 2^\circ\text{C}$ , with perforated and lacquered shelves that can be placed in the oven.

**4.4 Steel pins**, or other appropriate means of indicating the reference points on the test specimen, if necessary.

**4.5 Enclosure** to provide the standard atmosphere for testing textiles.

**4.6 Container**, to hold water at  $20 \pm 2^\circ\text{C}$ , of dimensions at least 20 mm greater than the test specimen and deep enough to accommodate the submerged test specimen.

## 5 TEST SPECIMEN

### 5.1 Sampling

Select the specimens according to the directions in ISO/R 1957.

### 5.2 Number and dimensions

Take at least three test specimens each measuring not less than 250 mm  $\times$  250 mm, noting the direction of manufacture.

### 5.3 Preparation

Condition the test specimens until they are in equilibrium with the standard atmosphere for testing textiles.

## 6 TEST PROCEDURE

### 6.1 Initial measurement of the specimen

Make all measurements on the conditioned specimen when it is completely flat; this can be achieved by use of the glass plate or other means.

On the conditioned specimen measure the distance between the edges parallel to the direction of manufacture and between the edges at right angles to the direction of manufacture, each at two locations approximately 200 mm apart. If required by the method of measuring adopted, mark the pair of reference points, for example by the use of steel pins, approximately 200 mm apart on the edge parallel to the direction of manufacture and also on the edge at right angles to the direction of manufacture. Make all measurements on the back of the specimen to the nearest 0,05 mm.

NOTE — Products made of discrete layers, for example foam-backed constructions, shall be measured on both the backing and use-surface, and the results of both measurements given in the report.

### 6.2 Subsequent procedure

Place the test specimen, lying freely on the perforated and lacquered shelves, in the drying oven at  $60 \pm 2^\circ\text{C}$ . Keep the specimen in the drying oven for 2 h, then remove it and measure the distance between the two parallel edges or the two sets of marks to the nearest 0,05 mm, within 2 min of removing the specimen from the oven.