
International Standard



6444

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

Door leaves — Test of behaviour under humidity variations (successive uniform climates)

Vantaux de portes — Essai de comportement aux variations d'humidité (climats uniformes successifs)

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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 6444 was developed by Technical Committee ISO/TC 162, *Doors and windows*, and was circulated to the member bodies in October 1978.

It has been approved by the member bodies of the following countries :

Australia	Germany, F.R.	Norway
Austria	India	Poland
Belgium	Ireland	Portugal
Canada	Italy	Romania
Czechoslovakia	Japan	South Africa, Rep. of
Denmark	Korea, Rep. of	Spain
Finland	Mexico	Sweden
France	Netherlands	United Kingdom

The member body of the following country expressed disapproval of the document on technical grounds :

USA

Door leaves — test of behaviour under humidity variations (successive uniform climates)

1 Scope

This International Standard specifies a method for testing the behaviour under humidity variations of door leaves placed in successive uniform climates.

2 Field of application

This International Standard applies to all doors which are nominally flat and rigid, and which contain a sufficient quantity of hygroscopic materials that might influence the behaviour of a door leaf during this test.

3 Reference

ISO 6442, *Door leaves — Measurement of defects of general flatness*.

4 Principle

The test consists in placing the door leaves in successive given climates for a given time and measuring any changes in general flatness and noting degradations which result.

5 Procedure

5.1 After storage in non-harmful conditions (relative humidity $50 \pm 5\%$, temperature $23 \pm 2\text{ }^{\circ}\text{C}$ ¹⁾), measure the defects in general flatness of the door leaf in accordance with ISO 6442 and then place it first in a climate defined by :

	Nominal value	Tolerance
Temperature	23 °C	$\pm 2\text{ }^{\circ}\text{C}$
Relative humidity	85 %	$\pm 5\%$

5.2 Remeasure the defects in general flatness.

5.3 Then place the door leaf in a climate defined by :

	Nominal value	Tolerance
Temperature	23 °C	$\pm 2\text{ }^{\circ}\text{C}$
Relative humidity	30 %	$\pm 5\%$

5.4 Remeasure the defects in general flatness once more.

5.5 The average values of temperature and relative humidity shall be maintained as close as possible to the nominal values, the tolerances being allowed for control purposes only.

5.6 The duration of exposure in each of the two climates shall be 7 days for unfinished doors and 21 days for all other doors.

If the laboratory considers that the test can be stopped after a shorter time the decision must be justified.

6 Calculation and expression of results

The results shall be expressed to the nearest millimetre, 0,5 mm being rounded down.

7 Test report

The following information and results shall be recorded in the test report :

- type, dimensions, shape and construction details of the door leaf, which shall include any machining to receive accessories (mortises);
- any finish applied;
- duration of the preliminary storage in non-harmful conditions and the characteristics of these conditions;
- justification for the duration of exposure in the two climates;
- the successive measurements of defects in general flatness;
- the changes that have occurred in the measured values between 5.2 and 5.4;
- all degradations which have occurred during the test.

1) If the non-harmful climate is different, it shall be mentioned in the test report.