
INTERNATIONAL STANDARD



5635

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

Paper — Measurement of dimensional change after immersion in water

Papier — Mesurage des variations dimensionnelles après immersion dans l'eau

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Descriptors : papers, tests, water absorption tests, dimensional stability tests.

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 5635 was developed by Technical Committee ISO/TC 6, *Paper, board and pulps*, and was circulated to the member bodies in December 1976.

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

Australia	Finland	Mexico
Austria	France	New Zealand
Belgium	Germany	Norway
Brazil	Hungary	Romania
Bulgaria	India	South Africa, Rep. of
Canada	Iran	Sweden
Chile	Ireland	Switzerland
Czechoslovakia	Israel	Turkey
Egypt, Arab Rep. of	Italy	United Kingdom

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

U.S.A.

Paper — Measurement of dimensional change after immersion in water

1 SCOPE

This International Standard specifies a method of measuring the dimensional change of paper after immersion in water. This property should not be confused with hygro-expansivity.¹⁾

2 FIELD OF APPLICATION

The method described in this International Standard is suitable for use with most kinds of paper. However, it may not be suitable for some papers, which soaking makes extremely fragile or causes to curl excessively.

3 REFERENCES

ISO 186, *Paper and board — Sampling for testing.*

ISO 187, *Paper and board — Conditioning of test samples.*

4 DEFINITION

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

dimensional change : The change in length, in the machine or cross direction, resulting from the immersion in water of paper previously conditioned in a standard atmosphere,

relative to the length measured in the conditioned state. It is normally expressed as a percentage.

5 PRINCIPLE

Soaking of a strip of paper in water until no further change in length occurs and measurement of the change in length.

An essential requirement of the test is that the paper should not be under any load while wet; most papers are very weak when wet and an extremely small load is sufficient to stretch them.

6 APPARATUS

6.1 Test piece marker, consisting of a rigid bar of a material that is stable under the conditions of test and measuring approximately 250 mm × 40 mm × 5 mm, having two metal pins, filed so that the tips are chisel-shaped, set into one of the narrow edges 200 ± 2 mm apart (see the figure).

6.2 Magnifying lens.

6.3 Accurate graticule for measurement. The graticule should be graduated to 0,2 mm.

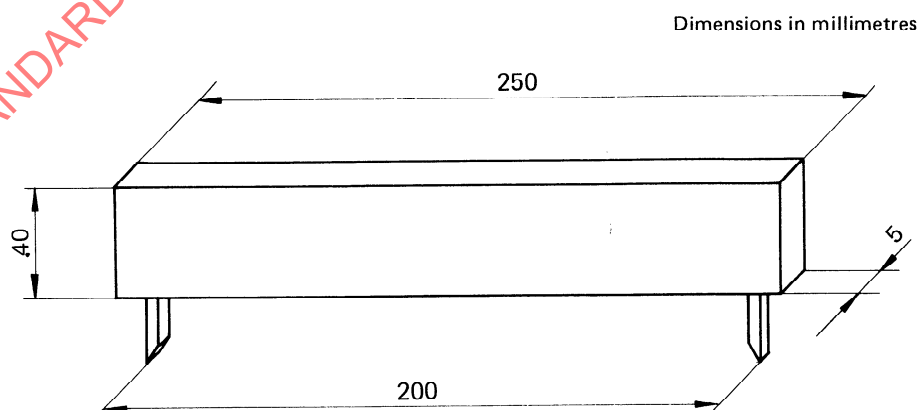


FIGURE — Test piece marker

1) An International Standard concerning hygro-expansivity is in preparation.