
INTERNATIONAL STANDARD



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Corrugated fibreboard — Determination of thickness

Carton ondulé — Détermination de l'épaisseur

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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 3034 was drawn up by Technical Committee ISO/TC 6, *Paper, board and pulps*, and circulated to the Member Bodies in January 1973.

It has been approved by the Member Bodies of the following countries :

Belgium	Ireland	Sweden
Canada	Israel	Switzerland
Czechoslovakia	New Zealand	Thailand
Egypt, Arab Rep. of	Norway	Turkey
Finland	Poland	United Kingdom
France	Romania	U.S.A.
Hungary	South Africa, Rep. of	U.S.S.R.
India	Spain	

No Member Body expressed disapproval of the document.

Corrugated fibreboard – Determination of thickness

1 SCOPE

This International Standard specifies a method for determining the thickness of corrugated fibreboard intended for use in the manufacture of packing cases or used inside such packing cases.

2 FIELD OF APPLICATION

This method is applicable to all types of corrugated fibreboard.

3 REFERENCES

ISO/R 186, *Method of sampling paper and board for testing*.

ISO 187, *Paper and board – Conditioning of test samples*.¹⁾

4 PRINCIPLE

Measurement of the thickness of a test piece of the corrugated fibreboard under specified pressure.

5 DEFINITION

For the purposes of this International Standard, the following definition applies.

thickness (of a single sheet of corrugated fibreboard) : The distance between two plane parallel surfaces of a micrometer between which a test piece is subjected to the specified pressure.

6 APPARATUS

Dial gauge micrometer with a plane circular anvil and a concentric plane plunger. The area of contact of the anvil and of the face of the plunger shall be $10 \pm 0,2 \text{ cm}^2$.

The measuring surfaces shall be parallel to within 1 part in 1 000 of their diameter, and the pressure exerted by the plunger shall be $20 \pm 0,5 \text{ kPa}$.

The instrument shall be sufficiently accurate to permit measurement to be made to the nearest 0,05 mm. (See annex.)

7 SAMPLING

Sampling shall be carried out in accordance with ISO/R 186.

8 PREPARATION OF TEST PIECES

Select specimens large enough to permit the cutting of test pieces with an area of 500 cm^2 ($200 \text{ mm} \times 250 \text{ mm}$). Test pieces shall be free from damage or other irregularities and, unless otherwise agreed between the interested parties, free from converting machine marks.

9 CONDITIONING

The test pieces shall be conditioned in accordance with ISO 187.

10 PROCEDURE

Carry out the tests in the standard atmosphere defined in ISO 187.

Make two measurements on each test piece, as follows.

Place the test piece horizontally between the two faces of the instrument in such a manner that the edges of the test piece are at least 50 mm from the nearest point on the circumference of the anvil. Lower the pressure foot gently, slowly²⁾ and very carefully into the test piece so that all punching effect is avoided; ensure that the test piece remains parallel to the measuring surfaces of the micrometer, despite the effect of leverage caused by the mass of the test piece. Furthermore, no stress shall be imposed on the instrument or the test piece by the hand when a reading is being taken. The reading shall be taken when the pointer has ceased to move.

1) At present at the stage of draft. (Revision of ISO/R 187.)

2) At a speed of about 2 to 3 mm/s.