
**Corrugated fibreboard — Determination
of grammage of the component papers
after separation**

*Carton ondulé — Détermination du grammage des papiers composants
après leur séparation*



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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established 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. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 3039 was prepared by Technical Committee ISO/TC 6, *Paper, board and pulps*, Subcommittee SC 2, *Test methods and quality specifications for paper and board*.

This second edition cancels and replaces the first edition (ISO 3039:1975), which has been technically revised to include precision data.

Introduction

This International Standard describes a procedure where the separated component layers are allowed to dry freely, i.e. unrestrained. In 2008, an international round-robin was performed to compare precision data between the two drying procedures: free drying (which can involve shrinkage) and restraint drying (where the layers are prevented from shrinking). As no statistical provable difference in the repeatability and the reproducibility between the two drying procedures was observed, the faster and simpler procedure, i.e. the free drying method, was chosen for this International Standard. Precision data for free drying are given in Annex A.

There is an indication from test results that some of the adhesive enters and stays in the papers it comes in contact with, and is not or cannot be removed by the method we use. Thus, the results for layers will generally be greater than the initial values.

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Corrugated fibreboard — Determination of grammage of the component papers after separation

1 Scope

This International Standard specifies a method for determining the grammage of the component layers from which corrugated fibreboard has been made.

This International Standard is applicable to all types of corrugated fibreboard.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 186, *Paper and board — Sampling to determine average quality*

ISO 187, *Paper, board and pulps — Standard atmosphere for conditioning and testing and procedure for monitoring the atmosphere and conditioning of samples*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

grammage

mass per unit area

mass of a unit area of paper or board determined by a specific method of test

NOTE Grammage is expressed in grams per square metre.

[ISO 536:1995^[1], definition 3.1]

3.2

corrugated fibreboard

board consisting of one or more sheets of fluted paper glued to a flat sheet of board or between several sheets

[ISO 4046-4:2002^[2], definition 4.49]

3.3

layer

component that is a part of corrugated fibreboard, which normally comprises a fluted layer (fluting) and a flat layer (liner) on each side