
**Paper and board — Determination of curl
using a single vertically suspended test
piece**

*Papier et carton — Détermination du tuilage au moyen d'une éprouvette
unique suspendue verticalement*



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Published in Switzerland

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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.

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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.

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ISO 11556 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 11556:1998), of which it constitutes a minor revision, and Technical Corrigendum 1, published 2003-04-01, which has been incorporated into this edition.

Introduction

The presence of curl in paper and board may be detrimental to its processing, and therefore there is a need for its measurement. Curl can be inherent in the paper when manufactured, or can be developed in the sheet during its use. This International Standard describes the procedure to be used for determination of curl in a pack of sheets.

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Paper and board — Determination of curl using a single vertically suspended test piece

1 Scope

This International Standard gives a procedure for determining the curl of paper and board using a vertically suspended test piece, and defines the terms used in curl measurement.

This International Standard may be used to measure any curl when

- the curl formed approximates the arc of a circle;
- the curl is stable enough to remain constant during the time required to cut the test pieces and make the measurement. This primarily includes curl in paper or board as received or after exposure to a constant climatic condition, such as a test room or print shop.

NOTE 1 The choice of conditioning climate and conditioning time depends on the purpose of the testing.

NOTE 2 For papers coated on one side or gummed-label papers, a period of at least 24 h, after production, should be allowed to permit the paper to stabilize before any curl tests are done.

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

curl

deviation from a flat surface

NOTE Its measurement has three major components:

- its magnitude;
- the angle of the curl axis in relation to the paper or board's machine direction;
- the side towards which the sheet curls.