
**Paper and board — Determination of
roughness/smoothness (air leak
methods) —**

**Part 4:
Print-surf method**

*Papier et carton — Détermination de la rugosité/du lissé (méthodes du
débit d'air) —*

Partie 4: Méthode Print-surf



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Contents

Page

Foreword.....	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Principle.....	2
5 Apparatus	2
6 Sampling.....	6
7 Conditioning.....	6
8 Preparation of test pieces.....	6
9 Procedure	7
10 Calculation.....	8
11 Precision.....	8
12 Test report	9
Annex A (normative) Calculation of roughness in micrometres.....	10
Annex B (normative) Maintenance of Print-surf roughness testers	12
Annex C (normative) Calibration of variable-area flowmeters	14
Annex D (normative) Calibration of Print-surf instruments against ISO reference standards	16
Annex E (normative) Calibration of an impedance instrument for the purpose of assigning values to ISO reference standards.....	18
Bibliography	22

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 8791-4 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 8791-4:1992), which has been technically revised.

This version of ISO 8791-4 differs from the previous (1992) version as follows:

- a definition of Print-surf compressibility has been added;
- a description of a modified backing holder for testing high-stiffness papers and board has been added;
- Annex D describing the calibration of Print-surf instruments has been revised and expanded;
- some minor editorial changes have been made.

ISO 8791 consists of the following parts, under the general title *Paper and board — Determination of roughness/smoothness (air leak methods)*:

- *Part 1: General method*
- *Part 2: Bendtsen method*
- *Part 3: Sheffield method*
- *Part 4: Print-surf method*

Paper and board — Determination of roughness/smoothness (air leak methods) —

Part 4: Print-surf method

1 Scope

This part of ISO 8791 specifies a method for determining the roughness of paper and board using an apparatus which complies with the Print-surf method, as defined in this part of ISO 8791. It is applicable to all printing papers and boards with which it is possible to form a substantially airtight seal against the guard lands of the measuring head.

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*

ISO 4094, *Paper, board and pulps — International calibration of testing apparatus — Nomination and acceptance of standardizing and authorized laboratories*

3 Terms and definitions

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

3.1

Print-surf roughness

mean gap between a sheet of paper or board and a flat circular land pressed against it under specified conditions

NOTE The mean gap is expressed as the cube root mean cube gap calculated as specified in Annex A. The Print-surf roughness is expressed directly as the average value of roughness, in micrometres.

3.2

Print-surf compressibility

K

percentage decrease in surface roughness when measurements are made consecutively at the two standard clamping pressures specified in this part of ISO 8791