

Paper and board - Determination of thickness, density and specific volume

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 534:2005 sisaldab Euroopa standardi EN ISO 534:2005 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 28.04.2005 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 534:2005 consists of the English text of the European standard EN ISO 534:2005.</p> <p>This document is endorsed on 28.04.2005 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala:</p> <p>This International Standard specifies two methods for measuring the thickness of paper and board: a) the measurement of a single sheet of paper or board as a single sheet thickness; b) the measurement of a pack of sheets of paper as a bulking thickness. It also specifies calculation methods - for the apparent sheet density and for the apparent bulk density, and - for the apparent specific sheet volume and for the apparent specific bulk volume from the thickness determinations.</p>	<p>Scope:</p> <p>This International Standard specifies two methods for measuring the thickness of paper and board: a) the measurement of a single sheet of paper or board as a single sheet thickness; b) the measurement of a pack of sheets of paper as a bulking thickness. It also specifies calculation methods - for the apparent sheet density and for the apparent bulk density, and - for the apparent specific sheet volume and for the apparent specific bulk volume from the thickness determinations.</p>
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ICS 85.060

Võtmesõnad:

English version

Paper and board - Determination of thickness, density and
specific volume (ISO 534:2005)

Papier et carton - Détermination de l'épaisseur, de la
masse volumique et du volume spécifique (ISO 534:2005)

Papier und Pappe - Bestimmung der Dicke, der Dichte und
des spezifischen Volumens (ISO 534:2005)

This European Standard was approved by CEN on 17 January 2005.

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

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Foreword

This document (EN ISO 534:2005) has been prepared by Technical Committee ISO/TC 6 "Paper, board and pulps" in collaboration with Technical Committee CEN/TC 172 "Pulp, paper and board", the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by August 2005, and conflicting national standards shall be withdrawn at the latest by August 2005.

This document supersedes EN 20534:1993.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

Endorsement notice

The text of ISO 534:2005 has been approved by CEN as EN ISO 534:2005 without any modifications.

**Paper and board — Determination of
thickness, density and specific volume**

*Papier et carton — Détermination de l'épaisseur, de la masse
volumique et du volume spécifique*



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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 534 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 third edition cancels and replaces the second edition (ISO 534:1988), which has been technically revised and where the major revision is the introduction of the concept of specific volume.

Paper and board — Determination of thickness, density and specific volume

1 Scope

This International Standard specifies two methods for measuring the thickness of paper and board:

- a) the measurement of a single sheet of paper or board as a single sheet thickness;
- b) the measurement of a pack of sheets of paper as a bulking thickness.

It also specifies calculation methods

- for the apparent sheet density and for the apparent bulk density, and
- for the apparent specific sheet volume and for the apparent specific bulk volume

from the thickness determinations.

This International Standard is not applicable to corrugated fibreboard. In addition, method a) is not suitable for materials with a grammage higher than 225 g/m².

NOTE 1 The two methods generally lead to different results.

NOTE 2 For tissue paper and tissue products, ISO 12625-3 should be used.

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 536, *Paper and board — Determination of grammage*