

INTERNATIONAL  
STANDARD

**ISO**  
**5627**

Second edition  
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**Paper and board — Determination  
of smoothness (Bekk method)**

*Papier et carton — Détermination du lissé (Méthode Bekk)*



Reference number  
ISO 5627:1995(E)

## 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.

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.

International Standard ISO 5627 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 5627:1984), which has been technically revised.

Annex A forms an integral part of this International Standard.

## Introduction

In the present state of knowledge it is not possible to recommend a single method for measuring the smoothness or roughness of paper or board, and there is no exact correlation among the various methods used for determining these properties. Instruments of the air-flow type are designed to obtain a numerical value indicative of the smoothness or roughness of the paper or board; it is necessary to refer to the results of these tests in terms of the specific type of instrument used, such as Bendtsen roughness, Sheffield roughness, Bekk smoothness, etc.

Bekk smoothness is dependent on the shape, total volume and distribution of the hollow spaces between the surface of the test piece and a theoretically ideal plane under the specified conditions of contact. The greater the Bekk smoothness number, the smoother the sample.

The air permeability of the sample being tested can also affect the results.