

INTERNATIONAL STANDARD

ISO
2759

Third edition
2001-11-15

Board — Determination of bursting strength

Carton — Détermination de la résistance à l'éclatement



Reference number
ISO 2759:2001(E)

© ISO 2001

PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

This document is a preview generated by EVS

© ISO 2001

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.ch
Web www.iso.ch

Printed in Switzerland

Contents

	Page
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Principle	2
5 Apparatus	2
6 Calibration	3
7 Sampling and preparation of test pieces	3
8 Procedure	3
9 Expression of results	4
10 Precision	4
11 Test report	5

Annexes

A Dimensions of the clamping system	6
B Testing the clamps	8
C Clamping pressure	9
D Calibration of pressure-measuring system	10
Bibliography	11

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 3.

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 International Standard may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Standard ISO 2759 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 2759:1983), which has been technically revised.

Annexes A, B, C and D form a normative part of this International Standard.

Introduction

This International Standard is applicable to boards with bursting strengths between 350 kPa (or 250 kPa for the components of combined materials) and 5 500 kPa. All components of solid and corrugated fibreboard, irrespective of bursting strength, should be tested by this International Standard.

For materials with bursting strengths less than 1 400 kPa, an alternative method, based on similar principles, is specified in ISO 2758.

NOTE Due to differences in the specification of the apparatus, tests made on the same material using the procedures of ISO 2758 and this International Standard will not necessarily give the same results.

This document is a preview generated by EVS

This document is a preview generated by EVS

Board — Determination of bursting strength

1 Scope

This International Standard specifies a method for measuring the bursting strength of board submitted to increasing hydraulic pressure. It is applicable to all types of board (including corrugated and solid fibreboard) having bursting strengths within the range 350 kPa to 5 500 kPa. It is also applicable to papers or boards having bursting strengths as low as 250 kPa if the paper or board is to be used to prepare a material of higher bursting strength, such as corrugated board. In such cases, the measurements will not necessarily have the accuracy or precision stated for this method and it is necessary to include a note in the test report stating that the test gave results that were below the minimum value required by the method.

In the absence of any commercial agreement as to which method should be used for materials with bursting strengths between 350 kPa and 1 400 kPa, all materials with bursting strengths below 600 kPa, except components of solid and corrugated fibreboard, should be tested by ISO 2758 and the remainder by this International Standard.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 186:—¹⁾, *Paper and board — Sampling to determine average quality.*

ISO 187:1990, *Paper, board and pulps — Standard atmosphere for conditioning and testing and procedure for monitoring the atmosphere and conditioning of samples.*

ISO 536:1995, *Paper and board — Determination of grammage.*

3 Terms and definitions

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

3.1

bursting strength

maximum pressure developed by the hydraulic system in forcing an elastic diaphragm through a circular area of the board when the pressure is applied in the manner described in the method

NOTE The indicated bursting pressure includes the pressure required to extend the diaphragm during the test.

3.2

burst index

bursting strength of the board divided by the grammage of the board determined in accordance with ISO 536

1) To be published. (Revision of ISO 186:1994)