

This is a preview of "ISO 2493-1:2010". [Click here to purchase the full version from the ANSI store.](#)

First edition
2010-11-15

Paper and board — Determination of bending resistance —

Part 1:

Constant rate of deflection

Papier et carton — Détermination de la résistance à la flexion —

Partie 1: Valeur à gradient de déflexion constant



Reference number
ISO 2493-1:2010(E)

© ISO 2010

This is a preview of "ISO 2493-1:2010". [Click here to purchase the full version from the ANSI store.](#)

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.



COPYRIGHT PROTECTED DOCUMENT

© ISO 2010

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.org
Web www.iso.org

Published in Switzerland

This is a preview of "ISO 2493-1:2010". [Click here to purchase the full version from the ANSI store.](#)

Contents

Page

Foreword	iv
Introduction.....	v
1 Scope.....	1
2 Normative references.....	1
3 Terms and definitions	2
4 Principle	2
5 Apparatus.....	2
6 Calibration.....	3
7 Sampling	3
8 Conditioning	3
9 Preparation of test pieces.....	4
10 Procedure.....	4
11 Calculation and expression of results	5
12 Test report.....	5
Annex A (informative) Precision.....	6
Bibliography.....	8

This is a preview of "ISO 2493-1:2010". [Click here to purchase the full version from the ANSI store.](#)

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 2493-1 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 first edition, together with ISO 2493-2, cancels and replaces ISO 2493:1992, which has been technically revised. In the revision, ISO 2493:1992 was divided into two parts due to different measuring principles. This part of ISO 2493 describes the constant rate of deflection and ISO 2493-2 describes the Taber-type tester. This part also gives the possibility to use a smaller bending length and a lower bending angle if needed. Optional calculation in index form has been added. A precision statement has been added in informative Annex A.

ISO 2493 consists of the following parts, under the general title *Paper and board — Determination of bending resistance*:

- *Part 1: Constant rate of deflection*
- *Part 2: Taber-type tester*

This is a preview of "ISO 2493-1:2010". [Click here to purchase the full version from the ANSI store.](#)

Introduction

In ISO 2493:1992, two principles for determining the bending resistance were incorporated in the same standard, although the two principles were very different.

One principle involved the deflection of an equal number of test pieces with opposing surfaces towards the direction of deflection; this principle is described in this part of ISO 2493.

The other principle used a Taber-type tester, where the test piece was inserted and deflected to the top side and then, without changing the test piece, it was deflected in the opposite direction. This principle is described in ISO 2493-2. The method is based on TAPPI Test Method T 489 om-04^[4].