

Australian/New Zealand Standard™

Methods of test for pulp and paper

**Method 453: Determination of bending
resistance—Constant rate of deflection**



AS/NZS 1301.453:2016

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee PK-019, Methods of Test for Pulp and Paper. It was approved on behalf of the Council of Standards Australia on 19 September 2016 and by the New Zealand Standards Approval Board on 17 August 2016.
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The following are represented on Committee PK-019:

Appita
Australian Forest Products Association
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This Standard was issued in draft form for comment as DR AS/NZS 1301.453:2015.

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Method 453: Determination of bending resistance—Constant rate of deflection

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee PK-019, Methods of Test for Pulp and Paper, to supersede AS/NZS 1301.453s:1998, *Methods of test for pulp and paper*, Method 453s: Bending *resistance of paper and board—Constant rate of deflection*, (reconfirmed 2013).

The objective of this Standard is to provide a method for determining the resistance to bending of paper and board at a constant rate of deflection.

This Standard is identical with, and has been reproduced from ISO 2493-1:2010, *Paper and board—Determination of bending resistance*, Part 1: *Constant rate of deflection*.

As this Standard is reproduced from an International Standard, the following applies:

- (a) In the source text ‘this part of ISO 2493’ should read ‘this Australian/New Zealand Standard’.
- (b) A full point substitutes for a comma when referring to a decimal marker.

References to International Standards should be replaced by references to Australian or Australian/New Zealand Standards, as follows:

<i>Reference to International Standard</i>		<i>Australian/New Zealand Standard</i>	
ISO		AS/NZS	
186	Paper and board—Sampling to determine average quality	1301	Method of test for pulp and paper
		1301.417s	Method 417s: Sampling to determine average quality
536	Paper and board—Determination of grammage	1301.405s	Part 405s: Grammage of non-creped paper and board

The normative reference ISO 187 has not been adopted as an Australian/New Zealand Standard.

In Australia and New Zealand the following standards are generally used:

AS/NZS 1301.414s:2006, *Methods of test for pulp and paper*, Methods 414s: *Conditioning of paper for testing*.

AS/NZS 1301.415s:2008, *Methods of test for pulp and paper*, Methods 415s: *Standard atmosphere for testing paper and board and procedure for monitoring the atmosphere*.

The term ‘informative’ has been used in this Standard to define the application of the annex to which it applies. An ‘informative’ annex is only for information and guidance.

CONTENTS

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

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].