

Australian/New Zealand Standard™

**Methods of test for pulp and paper**

**Method 800s: Compression resistance  
of fibreboard boxes (cases)**



## **AS/NZS 1301.800s:2006**

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 22 December 2005 and on behalf of the Council of Standards New Zealand on 20 January 2006.  
This Standard was published on 15 February 2006.

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The following are represented on Committee PK-019:

Australian Plantation Products and Paper Industry Council (A3P)  
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Ensis Papro, SCION  
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*This Standard was issued in draft form for comment as DR 05104.*

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# Australian/New Zealand Standard™

## Methods of test for pulp and paper

### Method 800s: Compression resistance of fibreboard boxes (cases)

Originated in Australia as AS 1301.800s—1978.  
Previous edition 1987.  
Jointly revised and designated as AS/NZS 1301.800s:2006.

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Jointly published by Standards Australia, GPO Box 476, Sydney, NSW 2001 and Standards New Zealand, Private Bag 2439, Wellington 6020

ISBN 0 7337 7248 X

## Preface

This Standard was prepared by Joint Technical Committee PK-019, Methods of Test for Pulp and Paper, as part of AS/NZS 1301, *Methods of test for pulp and paper*.

This edition cancels and replaces AS 1301.800s—1987.

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# Compression resistance of fibreboard boxes (cases)

## 1 Scope

This Standard prescribes the apparatus and test procedure to be followed when assessing the compression resistance of unfilled fibreboard boxes in any desired direction. The testing of filled boxes is prescribed in AS 2582.3—2003.

NOTE 1 — In New Zealand the term ‘case’ is used instead of ‘box’.

## 2 Normative references

The following standards contain provisions which, through reference in this test, constitute provisions of AS/NZS 1301.800s. At the time of publication, the editions indicated were valid. All standards are subject to revisions, and parties to agreements based on AS/NZS 1301.800s are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below.

AS	
1048	International fibreboard box code
AS/NZS	
1301.414m	Conditioning of paper for testing
1301.415s	Standard atmosphere for testing paper and board and procedure for monitoring the atmosphere

## 3 Principle

The principle of the method is that the box to be tested, with internal fitments as specified, is placed between the platens of a compression tester and is subjected to compressive force until a specified value for load or deformation is obtained, or until failure occurs, whichever is required.

## 4 Apparatus

**4.1 Compression tester**—A motor-driven, mechanical or hydraulic, platen type compression tester equipped with zero setting adjustment.

The bearing surfaces of the platens shall be flat and of greater length and width than the box to be tested. They shall be sufficiently rigid to withstand the testing stress without perceptible displacement. The lower platen shall be permanently marked with a suitable geometric pattern to facilitate central positioning of the boxes, thus avoiding eccentric loading. One platen shall be rigidly mounted (restrained from tilting) in the horizontal plane at right angles to the direction of loading with an accuracy of 1 part in 1000 for surface areas  $<1 \text{ m}^2$ .

For surface areas  $>1 \text{ m}^2$ , each platen shall be such that when placed horizontally, the difference in height between the lowest and highest points of the platen does not exceed 1 mm. The other platen shall be either rigidly mounted so that the two remain parallel within 2 parts per 1000 at all times during the test, or be held by a universal joint at its centre and so be free to tilt in any direction.

Load shall be applied through uniform movement of one or both platens at a relative speed of  $10 \pm 3 \text{ mm/min}$ .

NOTE 2 — Tests may be carried out without a displacement measuring system if the purpose of the test is to determine only the maximum load before failure, but such tests do not comply with this Standard.