

STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

RECONFIRMATION
OF
AS/NZS 1080.2:2006
Timber—Methods of test
Method 2: Slope of grain

RECONFIRMATION NOTICE

Technical Committee TM-012 has reviewed the content of this publication and in accordance with Standards Australia procedures for reconfirmation, it has been determined that the publication is still valid and does not require change.

Certain documents referenced in the publication may have been amended since the original date of publication. Users are advised to ensure that they are using the latest versions of such documents as appropriate, unless advised otherwise in this Reconfirmation Notice.

Approved for reconfirmation in accordance with Standards Australia procedures for reconfirmation on 20 May 2016.

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The following are represented on Technical Committee TM-012:

Australian and New Zealand Timber Preservative Manufacturers Association
Australian Forest Products Association
Australian Pesticides and Veterinary Medicines Authority
Australian Timber Flooring Association
Australian Timber Importers Federation
Building Research Association of New Zealand
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Responsible Care New Zealand
Scion
Tasmanian Timber Promotion Board
Timber Preservers Association of Australia

NOTES

Australian/New Zealand Standard™

Timber—Methods of test

Method 2: Slope of grain

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee TM-003, Timber Grading, to amalgamate and supersede the following Standards:

AS/NZS

1080 *Timber—Methods of test*

1080.2.1:1998 Method 2.1: *Slope of grain by scribe*

1080.2.2:1998 Method 2.2: *Slope of grain by reference to surface checks*

1080.2.3:1998 Method 2.3: *Slope of grain by splintering*

1080.2.4:1998 Method 2.4: *Compound slope of grain*

The objective of this revision is to amalgamate the four methods for determination of slope of grain, as listed above.

METHOD

1 SCOPE

This Standard sets out four test methods for determining the slope of grain in timber articles, as follows:

- (a) The timber articles are either regular or irregular in plan or section, by means of a scribe (Clause 4).
- (b) The timber articles are either regular or irregular in plan or section by reference to checks appearing on the surface (Clause 5).
- (c) The timber articles are either regular or irregular in plan or section by the removal of splinters from the surface (Clause 6).
- (d) The backsawn (flat sawn) and quartersawn surfaces of the timber articles exhibit grain deviation from the axis of symmetry (Clause 7).

NOTE: Where predictable strength of timber is the primary consideration, sloping grain can be an important characteristic. It is often difficult to detect by visual examination of the surface. The importance will be appreciated where it is realized that sloping grain means that a beam with sloping grain has a strength that may be significantly less than the strength of the wood fibre in the beam, e.g., there is a reduction in the strength of beams, from the fibre strength, of approximately 20% for a slope of 1 in 16, 30% for a slope of 1 in 12 and 50% for a slope of 1 in 8. Grading processes identify this reduction in performance.

It is stressed that the test methods herein determine only whether or not a piece of timber has slope of grain and its magnitude. The methods do not set down any criteria for grade specifications.

2 REFERENCED DOCUMENT

The following document is referred to in this Standard:

AS/NZS
4491 Timber—Glossary of terms in timber-related Standards

3 DEFINITIONS

For the purpose of this Standard, the definitions given in AS/NZS 4491 and the one below apply.

3.1 Compound slope of grain

The slope of grain where both face and edge of a piece of timber exhibit grain deviation from the axis of symmetry.

4 SLOPE OF GRAIN BY SCRIBE

4.1 General

The method for determination of slope of grain by scribe is suitable for use on timber articles with dressed surfaces and which do not exhibit checks.

NOTE: Care must be exercised on quartersawn surfaces that exhibit prominent growth rings.

4.2 Principle

A swivel-handled scribe (needle) is placed on the timber surface and pulled in the general direction of the grain. The scribe follows the grain and forms a groove in the surface from which the slope is determined geometrically.

4.3 Apparatus

The following apparatus is required:

- (a) A swivel-handled scribe consisting of a hardened steel needle set at an angle trailing slightly to the vertical in a swivel handle, similar to that shown in Figure 1.

NOTE: A bicycle wheel hub has been found to make a very satisfactory handle.

- (b) A graduated straightedge.
- (c) A try square.

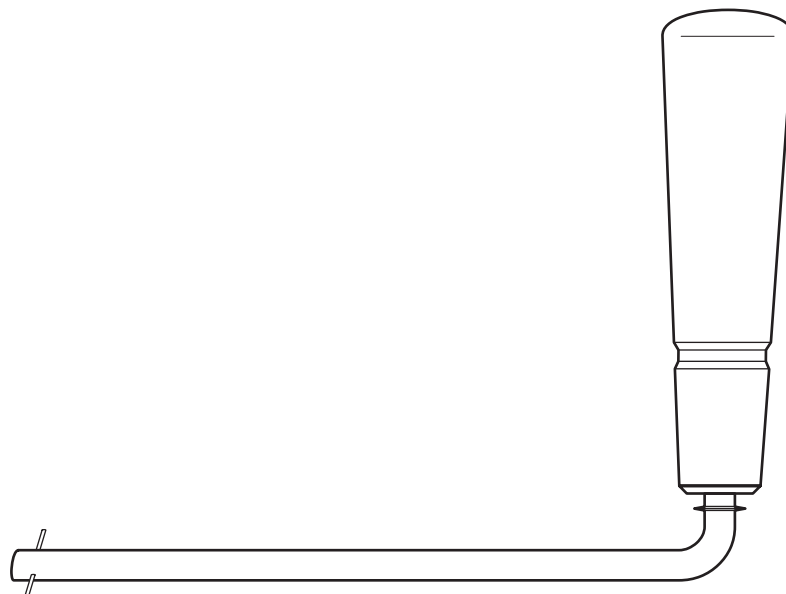


FIGURE 1 SWIVEL-HANDLED SCRIBE FOR DETERMINING SLOPE OF GRAIN