

Australian Standard<sup>®</sup>

**Timber—Heavy structural products—  
Visually graded**

**Part 7: Large cross-section sawn  
hardwood engineering timbers**



This Australian Standard® was prepared by Committee TM-003, Timber Grading. It was approved on behalf of the Council of Standards Australia on 27 October 2010. This Standard was published on 15 November 2010.

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The following are represented on Committee TM-003:

- A3P
- Australian Timber Flooring Association
- BRANZ
- CSIRO Manufacturing, and Infrastructure Technology
- Forest and Wood Products Australia
- Forests New South Wales
- Frame and Truss Manufacturers Association Australia
- Master Builders Australia
- New Zealand Timber Industry Federation
- Tasmanian Timber Promotion Board
- Timber and Building Materials Association (NSW)
- Timber Queensland
- University of Technology, Sydney
- Wood Processors Association

Additional Interests:

- Dr Geoff Boughton
- 

This Standard was issued in draft form for comment as DR AS 3818.7.

Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through the public comment period.

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Originated as AS 3818.7—2006.  
Second edition 2010.

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Published by SAI Global Limited under licence from Standards Australia Limited, GPO Box 476, Sydney, NSW 2001, Australia

ISBN 978 0 7337 9710 1

## PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee TM-003, Timber Grading, to supersede AS 3818.7—2006.

After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian Standard rather than an Australian/New Zealand Standard.

The objective of this Standard is to provide producers and users of large cross-section sawn hardwood engineering timbers with requirements for the visual grading and selection of species for timbers intended for use in structures.

The objective of this revision is to complete an overview of the AS 3818 series, with regard to consistency and alignment between all Parts.

This Standard is Part 7 of the AS 3818 series, *Timber—Heavy structural products—Visually graded*, which is composed of the following parts:

## AS

3818	Timber—Heavy structural products—Visually graded
3818.1	Part 1: General requirements
3818.2	Part 2: Railway track timbers
3818.3	Part 3: Piles
3818.4	Part 4: Cross-arms for overhead lines
3818.5	Part 5: Mine lift guides
3818.6	Part 6: Decking for wharves and bridges
3818.7	Part 7: Large section sawn hardwood engineering timbers (this Standard)
3818.8	Part 8: Stumps and sole plates
3818.9	Part 9: Natural round treated hardwood corbels, girders and stringers
3818.10	Part 10: Building poles
3818.11	Part 11: Utility poles

Appendices have been included to give advice on—

- (a) information required for purchasing orders; and
- (b) design properties.

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

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## STANDARDS AUSTRALIA

## Australian Standard

## Timber—Heavy structural products—Visually graded

## Part 7: Large cross-section sawn hardwood engineering timbers

## SECTION 1 SCOPE AND GENERAL

**1.1 SCOPE**

This Standard sets out the minimum requirements for visually graded large cross-section sawn hardwood engineering timbers greater than 0.016 m<sup>2</sup> in cross-section. These minimum requirements apply at the time of grading.

For structures using large section timber members, the sizes of members are calculated from the known or assumed loads on the members and dimensional requirements specified in the order.

## NOTES:

- 1 A cross-section 200 mm × 80 mm has an area of 0.016 m<sup>2</sup>.
- 2 Purchasing guidelines are given in Appendix A.
- 3 Stress grades for design (using AS 1720.1) of timbers graded to this Standard are given in Appendix B.

**1.2 APPLICATION**

This Standard shall be used in conjunction with AS 3818.1 to specify sawn hardwood engineering timbers greater than 0.016 m<sup>2</sup> in cross-section.

**1.3 NORMATIVE REFERENCE**

The following is the normative document referenced in this Standard:

NOTE: Documents referenced for informative purposes are listed in the Bibliography.

## AS

3818 Timber—Heavy structural products—Visually graded

3818.1 Part 1: General requirements

**1.4 DEFINITIONS**

For the purpose of this Standard, the definitions given in AS 3818.1 apply.

**1.5 TIMBER SPECIES****1.5.1 General**

Species suitable for sawn hardwood engineering timbers greater than 0.016 m<sup>2</sup> in cross-section are listed in AS 3818.1.

## NOTES:

- 1 Species, other than those listed in AS 3818.1 for sawn hardwood engineering timbers greater than 0.016 m<sup>2</sup> in cross-section may be graded to this Standard subject to agreement between the purchaser and supplier.
- 2 Care should be taken to determine the correct strength group and durability rating when the species is not listed in AS 3818.1.