

Australian Standard™

**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 7 March 2006. This Standard was published on 30 March 2006.

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The following are represented on Committee TM-003:

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CSIRO Manufacturing, and Infrastructure Technology  
Curtin University of Technology  
Forest and Forest Products Employment Skills Company  
Forests NSW  
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## PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee TM-003, Timber Grading. 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 such timbers intended for use in structures.

This Standard includes information drawn from [AS O81—1966](#), *Engineering timbers from eastern and south-eastern Australian hardwoods*, which has already been withdrawn.

This is Part 7 of the AS 3818 series *Timber—Heavy structural products—Visually graded* 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 cross-section sawn hardwood engineering timbers (this Standard)
- 3818.8 Part 8: Stumps and sole plates

It is intended to produce further parts in this series as follows:

- Part 9: Natural round treated hardwood corbels, girders and stringers
- Part 10: Building poles
- Part 11: Poles for overhead lines

The terms ‘normative’ and ‘informative’ have been used in this Standard to define the application of the appendix to which they apply. A ‘normative’ appendix is an integral part of a Standard, whereas 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.

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.

**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. Species suitable for these products are listed in [AS 3818.1](#).

## 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 are given in Appendix B for design (using [AS 1720.1](#)) of timbers graded to this Standard.

**1.3 REFERENCED DOCUMENTS**

The following documents are referred to in this Standard:

**AS**

- [1720](#) Timber structures
- [1720.1](#) Part 1: Design methods
- [3818](#) Timber—Heavy structural products—Visually graded
- [3818.1](#) Part 1: General requirements
- [5604](#) Timber—Natural durability ratings

**AS/NZS**

- [2878](#) Timber—Classification into strength groups
- [4063](#) Timber—Stress-graded—In-grade strength and stiffness evaluation

**1.4 DEFINITIONS**

For the purpose of this Standard, the definitions given in [AS 3818.1](#) apply.