

Australian Standard™

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

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

STANDARDS
Australia



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[AS O81—1966](#), *Engineering timbers from eastern and south-eastern Australian hardwoods*, which has already been withdrawn.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

CONTENTS

	<i>Page</i>
SECTION 1 SCOPE AND GENERAL	
1.1 SCOPE	4
1.2 APPLICATION	4
1.3 REFERENCED DOCUMENTS	4
1.4 DEFINITIONS	4
1.5 TIMBER SPECIES.....	5
1.6 DESIGN	5
SECTION 2 PRODUCT REQUIREMENTS	
2.1 GENERAL	6
2.2 DIMENSIONS, SIZES, TOLERANCES AND SQUARENESS.....	6
2.3 BOW AND SPRING	6
2.4 COMBINATION OF CHARACTERISTICS.....	6
SECTION 3 SELECT GRADE—GRADE DESCRIPTION	
3.1 GENERAL	7
3.2 GRADE DESCRIPTION.....	7
SECTION 4 STANDARD GRADE—GRADE DESCRIPTION	
4.1 GENERAL	9
4.2 GRADE DESCRIPTION.....	9
APPENDICES	
A GUIDANCE FOR PURCHASERS.....	12
B DESIGN PROPERTIES	13

STANDARDS AUSTRALIA

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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 m² 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 m² 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 m².
- 2 Purchasing guidelines are given in Appendix A.
- 3 Stress grades are given in Appendix E 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

2778 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.