

Australian Standard<sup>®</sup>

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

**Part 10: Building poles**



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.

---

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 3818.10.

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.

---

### **Keeping Standards up-to-date**

Australian Standards® are living documents that reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued.

Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments that may have been published since the Standard was published.

Detailed information about Australian Standards, drafts, amendments and new projects can be found by visiting [www.standards.org.au](http://www.standards.org.au)

Standards Australia welcomes suggestions for improvements, and encourages readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at [mail@standards.org.au](mailto:mail@standards.org.au), or write to Standards Australia, GPO Box 476, Sydney, NSW 2001.

---

Australian Standard<sup>®</sup>

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

**Part 10: Building poles**

First published as AS 3818.10—2010.

**COPYRIGHT**

© Standards Australia Limited

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher, unless otherwise permitted under the Copyright Act 1968.

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

ISBN 978 0 7337 9713 2

## PREFACE

This Standard was prepared by the Australian members of 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 building poles with requirements for the visual grading of timbers intended for use in structures.

This Standard is Part 10 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
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 (this Standard)
3818.11	Part 11: Utility poles

Appendices have been included to give advice on—

- (a) information required for purchasing orders; and
- (b) differentiating between sapwood and heartwood in softwood species.

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.

## CONTENTS

	<i>Page</i>
SECTION 1 SCOPE AND GENERAL	
1.1 SCOPE .....	4
1.2 APPLICATION .....	4
1.3 NORMATIVE REFERENCES .....	5
1.4 DEFINITIONS .....	5
1.5 SIZE AND FORM OF BUILDING POLE.....	5
1.6 MEASUREMENT OF KNOTS .....	6
1.7 RATINGS—END SPLITS AND BARREL CHECKS .....	6
1.8 SPECIES BRANDING.....	7
1.9 REMOVAL OF BUMPS .....	7
1.10 COMBINATION OF CHARACTERISTICS.....	7
SECTION 2 BUILDING POLES INTENDED FOR USE WITHOUT FULL-LENGTH PRESERVATIVE TREATMENT	
2.1 TIMBER SPECIES AND POLE PREPARATION .....	8
2.2 GRADE REQUIREMENTS .....	8
2.3 CONFIRMATION OF COMPLIANCE.....	10
SECTION 3 HARDWOOD BUILDING POLES INTENDED FOR USE AFTER FULL-LENGTH PRESERVATIVE TREATMENT	
3.1 TIMBER SPECIES AND POLE PREPARATION .....	11
3.2 GRADE REQUIREMENTS .....	11
3.3 CONFIRMATION OF COMPLIANCE.....	13
SECTION 4 SOFTWOOD BUILDING POLES INTENDED FOR USE AFTER FULL-LENGTH PRESERVATIVE TREATMENT	
4.1 TIMBER SPECIES AND POLE PREPARATION .....	14
4.2 GRADE REQUIREMENTS .....	14
4.3 CONFIRMATION OF COMPLIANCE.....	16
SECTION 5 REQUIREMENTS FOR FULL-LENGTH PRESERVATIVE TREATMENT	
5.1 POLES FOR PRESERVATIVE TREATMENT .....	17
5.2 PRESERVATIVE PENETRATION AND RETENTION .....	17
5.3 SURFACE CONDITION.....	17
5.4 CONFIRMATION OF COMPLIANCE.....	17
APPENDICES	
A PURCHASING GUIDELINES.....	18
B PRE-TREATMENT CHEMICAL TEST FOR DIFFERENTIATING BETWEEN SAPWOOD AND HEARTWOOD IN SOFTWOOD POLE TIMBERS (PANDA TEST).....	19
BIBLIOGRAPHY .....	21

**STANDARDS AUSTRALIA****Australian Standard****Timber—Heavy structural products—Visually graded****Part 10: Building poles****SECTION 1 SCOPE AND GENERAL****1.1 SCOPE**

This Standard sets out the minimum requirements for visually graded timber building poles with or without full-length preservative treatment, intended primarily for use in the framework (internal or external) of a building. These minimum requirements apply at the time of grading.

This Standard does not cover requirements for strength and dimensions.

NOTE: Requirements for strength and dimensions should be specified separately.

**1.2 APPLICATION**

This Standard shall be used in conjunction with AS 3818.1 to specify building poles, and as follows:

- (a) Hardwood building poles intended for use without full-length preservative treatment shall comply with the requirements of Sections 1 and 2.
- (b) Hardwood building poles intended for use after full-length preservative treatment shall comply with the requirements of Sections 1 and 3.
- (c) Softwood building poles intended for use after full-length preservative treatment shall comply with the requirements of Sections 1 and 4.
- (d) Any building poles to be supplied after full-length preservative treatment shall also comply with all the relevant requirements of Section 5.

**NOTES:**

- 1 This Standard is intended to have general application throughout Australia but in New South Wales the *Timber Marketing Act 1977* and, in Queensland, the *Timber Utilisation and Marketing Act 1987* require prior approval of a preservative treatment and the registration and application of a brand before timber offered for sale in either of these States can be described as preservative-treated. Detailed information about the requirements of such legislation may be obtained from the State government department concerned.
- 2 This Standard recommends purchasers to nominate some options and allows them to negotiate others. It also includes other guidelines for purchasers obtaining supply according to this document (see Appendix A).
- 3 AS/NZS 4676 provides information on the typical life expectancy for timber species.