

Australian Standard™

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

Part 8: Stumps and sole plates



This Australian Standard was prepared by Committee TM-003, Timber Grading. It was approved on behalf of the Council of Standards Australia on 1 July 2005. This Standard was published on 24 August 2005.

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Australian Timber Importers Federation
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**Timber—Heavy structural products—
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Part 8: Stumps and sole plates

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee TM-003, Timber Grading, to supersede AS 4219—1994, *Timber—Stumps and sole plates*.

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 stumps and sole plates with requirements for the visual grading and selection of species for such timber products for use in building foundations.

This edition incorporates only minor changes including the following:

- (a) It has been incorporated into the AS 3818 series.
- (b) Style and presentation has been updated.
- (c) General requirements are given in AS 3818.1.

This is Part 8 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
3818.8	Part 8: Stumps and sole plates (this Standard)

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

- Part 7: Large section sawn hardwood engineering timbers
- Part 9: Natural round treated hardwood corbels, girders and stringers
- Part 10: Building poles
- Part 11: Poles for overhead lines (Revision of AS 2209—1994)

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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FOREWORD

This Standard describes grading requirements for timber stumps and sole plates for use as foundations in the construction of timber structures constructed in accordance with the AS 1684 series of Standards (*Residential timber-framed construction*).

Many factors that may influence the in-service performance of these products are outside the scope of this Standard. Therefore, this Standard does not imply that the product described will achieve a particular service life, as building practices and the expected service life of these products vary throughout Australia.

It is not intended that this Standard be used to restrict the use of alternative timber products where appropriate performance can be demonstrated.

The main considerations in the preparation of this Standard have been the strength and durability of the product. When aesthetic requirements exist, different limitations may be agreed upon between the customer and the supplier provided that all requirements for strength are met.

STANDARDS AUSTRALIA

Australian Standard

Timber—Heavy structural products—Visually graded

Part 8: Stumps and sole plates

1 SCOPE

This Standard sets out the grading requirements for sawn and natural round timber stumps and sawn sole plates intended for use in contact with the ground. It applies to softwood and hardwood species and also to treated and untreated timber.

NOTE: Purchasing guidelines are given in Appendix A.

2 APPLICATION

This Standard shall be used in conjunction with [AS 3818.1](#) to specify timber stumps and sole plates.

3 PURPOSE AND CONTEXT OF USE

3.1 Function

Stumps and sole plates are used to form the supporting foundation for buildings, particularly houses. They are normally used to support bearers upon which building frames and floors are based.

The stump is partly buried in a vertical position and sits on the sole plate. Its top end provides support to the building above. The sole plate forms a flat base and bears directly on the earth beneath.

NOTE: Timber species commonly used as stumps and sole plates are given in Appendix B.

3.2 Action

Stumps and sole plates are subjected to—

- (a) loads acting directly on the stump;
- (b) short-term loads transmitted laterally at the top of the stump and at lower positions due to lateral forces on the building such as wind or earthquake load;

NOTE: Lateral forces may be transmitted to stumps at the top of the stump or by bracing connected near the soil surface.

- (c) the effects of exposure to the environment, such as moisture content change (particularly in the soil) and ultraviolet radiation (near the outside edge of a building); and
- (d) deterioration of the timber due to insect and fungal attack and soil borne bio-organisms.

4 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS	
1604	Specification for preservative treatment
1604.1	Part 1: Sawn and round timber