AS 3818.3:2026

Australian STANDARD®

STANDARDS Australia

Timber — Heavy structural products — Visually graded

Part 3: Piles



AS 3818.3:2026

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Australian Forest Products Association
Australian Timber Flooring Association
Construction Information Systems Limited (NATSPEC)
Engineered Wood Products Association of Australasia
Forest and Wood Products Australia
Glued Laminated Timber Association of Australia
National Centre for Timber Durability and Design Life
Tasmanian Timber Promotion Board
The University of Queensland
Timber Preservers Association of Australia
Timber Queensland

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How to read this Standard

This page explains the meaning of the language and structure of this Standard.

Refer to Standards Australia's Standardisation Guide 006 for more details about drafting rules.

Australian and Australian/New Zealand Standards are voluntary unless they are referenced in legislation or called up in contracts.

Requirements

To conform to a Standard, all requirements in the Standard need to be met.

A requirement is any statement in the Standard which uses the word "shall".

Recommendations, permissions and possibilities

The following words are commonly used in Standards, but statements using them do not have to be followed to conform to the Standard:

(a) "should" means that something is recommended.

(b) "may" means that something is permitted.

(c) "can" means that something is possible.

Structure of Standards

A Standard always has the following parts:

(i) The Preface states who developed the Standard, what the Standard is aiming to do, and how it relates to other documents.

(ii) The Scope states what the Standard is about, what it covers and what it does not cover.

(iii) The Normative references clause lists other documents that are referenced in the Standard as part of requirements.

(iv) The Terms and definitions clause defines important terms to help with understanding the Standard.

A Standard may also include other parts, such as the following:

(1) A normative appendix sets additional requirements that need to be conformed to.

(2) An informative appendix provides additional information or guidance. They usually do not contain requirements. If an informative appendix does contain requirements, the Standard will explain when those requirements apply.

(3) A Bibliography lists documents referenced in the Standard but not as part of requirements.

Many Standards include notes. Notes provide recommendations and/or guidance only. They never contain requirements.

Preface

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee TM-012, Timber Grading and Preservation, to supersede AS 3818.3:2010.

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

The objective of this document is to provide producers and users of piles with requirements for the visual grading and selection of species for timbers intended for use as piling in marine applications (salt or brackish water) or in other than marine applications (land or freshwater).

The major changes in this edition include updated requirements and enhanced consistency and alignment between all Parts.

A list of all Parts in the AS 3818 series can be found in the Standards Australia online catalogue.

The terms “normative” and “informative” have been used in this document 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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Part 3: Piles

1 Scope and general

1.1 Scope

This document sets out the minimum requirements for visually graded timber piles. These minimum requirements apply at the time of grading.

NOTE 1 Purchasing guidelines are given in Appendix A.

NOTE 2 Information on preservative treatment is given in Appendix B.

NOTE 3 The stress grades applicable to the strength groups are given in Appendix C.

NOTE 4 The design requirements for piling are given in AS 2159 and the timber properties in general are given in AS 1720.1.

1.2 Application

This document shall be used in conjunction with AS 3818.1 to specify hardwood piles or softwood piles.

NOTE Appendix B provides information on factors that affect choice of species, durability, and the necessity for treatment (e.g. whether driving into soil, fresh water or salt water).

1.3 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document.

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

AS 3818.1, *Timber — Heavy structural products — Visually graded, Part 1: General requirements*

AS/NZS 1604.1, *Preservative-treated wood-based products, Part 1: Products and treatment*

1.4 Terms and definitions

For the purposes of this document, the terms and definitions given in AS 3818.1 apply.

1.5 Measurements

Where the size of a characteristic is measured against the diameter or circumference of a pile, that diameter or circumference shall be measured where the characteristic occurs.

1.6 Measurement of knots

The size of a knot shall be measured as the distance between two lines parallel to the longitudinal axis of the pile and enclosing the knot or cluster of knots.

The diameter of an encased knot shall be measured to the sound wood of the pile on either side of the knot.

Where the surface (of the pile) adjacent to the knot has been shaved or trimmed, the shaved or trimmed area of the surface shall not be included in the measurement of the knot.

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