AS 3818.6:2026

Australian STANDARD®

STANDARDS Australia

Timber — Heavy structural products — Visually graded

Part 6: Decking for wharves and bridges



AS 3818.6:2026

This Australian Standard® was prepared by TM-012, Timber Grading and Preservation. It was approved on behalf of Standards Australia's Standards Development and Accreditation Committee on 22 May 2026.

This Standard was published on 5 June 2026.

The following are represented on Committee TM-012:

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

This Standard was issued for comment as DR AS 3818.6:2025

Status of this document

Standards Australia publications are periodically reviewed to ensure their ongoing relevance and accuracy. This document may be withdrawn, revised, or superseded at any time. To verify this document's current status, visit:

www.standards.org.au

ISBN: 978 1 76175 792 1

Australian Standard®

Timber — Heavy structural products — Visually graded

Part 6: Decking for wharves and bridges

Originated as part of AS (E)O54-1942 and Int 361-1952.
Previous edition AS 3818.6:2010.
This document AS 3818.6:2026.

© Standards Australia Limited 2026

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 (Cth).

Users must not use the content in this publication in combination with artificial intelligence (AI) tools for any purpose, unless they have the express prior written consent from Standards Australia.

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 3818.6:2010.

The objective of this document is to provide producers and users of decking for wharves and bridges with requirements for the visual grading, selection of species, and design of timbers.

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.

© Standards Australia Limited 2026

Contents

Page

Preface ..... **v**

Section 1 Scope and general **1**
1.1 Scope 1
1.2 Application 1
1.3 Purpose and context of use 1
1.3.1 Function 1
1.3.2 Action 1
1.4 Normative references 1
1.5 Terms and definitions 2
1.6 Timber species 2

Section 2 Product requirements **3**
2.1 General 3
2.2 Dimensions, sizes, tolerances and squareness 3
2.3 Bow and spring 3
2.4 Twist 3
2.5 Combination of characteristics 3

Section 3 Grade 1 decking **4**
3.1 General 4
3.2 Grade requirements 4

Section 4 Grade 2 decking **5**
4.1 General 5
4.2 Grade requirements 5

Appendix A (informative) **Design properties** **7**

Bibliography **8**

© Standards Australia Limited 2026

Australian Standard®

Timber — Heavy structural products — Visually graded

Part 6: Decking for wharves and bridges

Section 1 Scope and general

1.1 Scope

This document sets out the minimum requirements for visual grading of decking intended for use as decking for wharves and bridges, where the nominal thickness of the decking is 70 mm or greater. These requirements apply at the time of grading.

For commercial, industrial and marine decking of less than nominal 70 mm thickness, refer to AS 2082 or AS 2858.

The requirements for light decking (domestic decking) are set out in the AS 2796 series and the AS 4785 series for hardwood and softwood, respectively.

NOTE 1 This document is intended to cover timbers for commercial, industrial and marine decking subject to vehicular traffic, such as for road bridges and shipping wharves.

NOTE 2 Stress grades applicable to strength groups for decking for wharves and bridges are given in Appendix A.

NOTE 3 In order to maximize the working life of decking for wharves and bridges, timbers should be fixed in position with the heart side down.

1.2 Application

This document shall be read in conjunction with AS 3818.1 to specify timber decking for wharves and bridges.

1.3 Purpose and context of use

1.3.1 Function

Decking forms the trafficable surface of wharves and bridges.

NOTE The top surface of the timber deck is sometimes covered with bitumen or other sacrificial surfacing.

1.3.2 Action

Decking is subjected to —

(a) wear and forces from the action of vehicles travelling and braking, crowds of people or stacking of materials;

(b) forces occurring at connections;

(c) the effects of exposure, such as ultraviolet radiation, temperature and moisture change; and

(d) deterioration of the timber due to insect and fungal attack and moisture ingress around fasteners.

1.4 Normative references

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

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

© Standards Australia Limited 2026