Australian Standard™

Timber—Heavy structural products—Visually graded

Part 6: Decking for wharves and bridges

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 10 September 2003 and published on 14 November 2003.

The following are represented on Committee TM-003:

Australian Timber Importers Association

CSIRO, Division of Building Construction and Engineering

Curtin University of Technology

Forest and Forest Products Employment Skills Company

Housing Industry Association

Master Builders Australia

Plantation Timber Association of Australia

Queensland Forestry Research Institute

State Forests of N.S.W.

TRADAC

Timber Promotion Council

University of Technology, Sydney

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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Timber Grading, to supersede AS O80—1963, *Decking timbers from Eastern and South-Eastern Australian hardwoods* (withdrawn 1996). 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 decking for wharves and bridges with requirements for the visual grading, selection of species and design of such timbers.

This is Part 6 of the AS 3818 series *Timber—Heavy structural products—Visually graded* composed of the following parts:

Part 1: General requirements
Part 2: Railway track timbers
Part 3: Piles
Part 4: Cross-arms for overhead lines
Part 5: Mine lift guides
Part 6: Decking for wharves and bridges (this Standard)

Appendices have been included to give:

(a) Guidance on information required for purchasing orders.

(b) Design properties.

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.

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Part 6: Decking for wharves and bridges

1 SCOPE

This Standard 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.

NOTES:

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

2 Purchasing guidelines are given in Appendix A.

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.

4 Commercial, industrial and marine decking of less than nominal 70 mm thickness may be graded to AS 2082 or AS 2858 with additional limitations for open features on the top surface such as knot holes, loose or unsound knots, gum pockets, loose gum veins, shakes, termite galleries, want, wane and untreated sapwood which might otherwise lessen serviceability. For pedestrian traffic, these features are usually not permitted on the top surface.

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

2 APPLICATION

This Standard shall be used in conjunction with AS 3818.1 to specify timber decking for wharves and bridges. Species for decking are listed in AS 3818.1.

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

3 PURPOSE AND CONTEXT OF USE

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.

3.2 Application

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.