

AS/NZS 2271:2004
(Incorporating Amendment No. 1)
Reconfirmed 2016

AS/NZS 2271:2004

Australian/New Zealand Standard™

**Plywood and blockboard for exterior
use**



AS/NZS 2271:2004

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee TM-008, Plywood timber products. It was approved on behalf of the Council of Standards Australia on 22 January 2004 and on behalf of the Council of Standards New Zealand on 23 December 2003.
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The following are represented on Committee TM-008:

Australian Building Codes Board
CSIRO Forestry and Forest Products
Engineers Australia Association
Housing Industry New Zealand Forest Research
New Zealand Plywood Manufacturers Association
Plywood Association of Australasia
State Forests of New South Wales
Timber Development Association (NSW)

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This Standard was issued in draft form for comment as DR 03191.

STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

RECONFIRMATION
OF
AS/NZS 2271:2004
Plywood and blockboard for exterior use

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Technical Committee TM-011 has reviewed the content of this publication and in accordance with Standards Australia procedures for reconfirmation, it has been determined that the publication is still valid and does not require change.

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Australian Forest Products Association
Australian Timber Importers Federation
Australian Wood Panels Association
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Monash University
New Zealand Plywood Manufacturers Association
New Zealand Timber Industry Federation
Timber Design Society
Wood Processors & Manufacturers Association of New Zealand

NOTES

Australian/New Zealand Standard™

Plywood and blockboard for exterior use

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee TM-008, Plywood Timber Products, to supersede AS/NZS 2271:1999.

This Standard incorporates Amendment No. 1 (March 2006). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure, or part thereof affected.

The objective of this Standard is to provide minimum performance requirements and specifications for the appearance grade of plywood and blockboard acceptable to use where it is exposed to the weather or in wet or damp applications in Australia and New Zealand.

This Standard covers the basic exterior plywood and blockboard product. Particular end uses and exposures may require additional processing, immunization, surface finishing or preservative treatment.

This revision updates the referenced documents and the following information:

- (a) Exterior plywood that is exposed long term to wet or damp conditions or full weather exposure must be preservative-treated in accordance with AS/NZS 1604.3.
- (b) Exterior plywood and blockboard, manufactured to this Standard is a non-structural product and does not have assigned standardized stress grades or characteristic strength and stiffness values. When standardized structural characteristics are required plywood should be specified to AS/NZS 2269.
- (c) Amended requirements for—
 - (i) grades (see Clause 1.5 and Table 1.1);
 - (ii) quality C veneers (see Clause 2.5.1); and
 - (iii) edge joints (see Clause 3.1.2).

The plywood may be of hardwood and/or softwood veneer. The quality of veneer is judged in the finished panel.

Two bond types are specified in this Standard, i.e., types A and B, which are suitable for damp and exposed conditions as defined in AS 2754.1.

Five veneer qualities, i.e., A, S, B, C and D are prescribed. Veneer qualities A, S and B are suitable for use as plywood and blockboard face veneers and veneer qualities C and D for back veneers, as follows:

- (A) Face veneer qualities:
 - (1) *Quality A*—a high quality appearance grade, suitable for clear finishing.
 - (2) *Quality S*—an appearance grade that permits natural characteristics as a decorative feature.
 - (3) *Quality B*—an appearance grade suitable for high quality paint finishing.
- (B) Back veneer qualities:
 - (1) *Quality C*—a non-appearance grade with a solid surface.
 - (2) *Quality D*—a non-appearance grade with permitted open imperfections.

The grade of the plywood is determined by the quality of the face and back veneers.

A1 | Four formaldehyde emission classes, E0, E1, E2, and E3, are included.

The term 'informative' has been used in this Standard to define the application of the appendix to which they apply. An 'informative' appendix is only for information and guidance.

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SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard specifies the requirements for the manufacture, grading, finishing and branding of an appearance grade of non-structural plywood and non-structural blockboard bonded with adhesives of suitable durability for use in applications where the product is exposed to the weather or wet or damp conditions. It does not cover preservative treatment, which is specified in AS/NZS 1604.3.

The Standard specifies veneer and core strip qualities, bond quality, jointing requirements, panel construction, dimensional tolerances, moisture content, finishing and bonding.

Two bond types are specified, i.e., types A and B, which are suitable for exterior applications.

NOTES:

- 1 Exposure conditions in regard to bond durability are defined in AS 2754.1.
- 2 Exposure conditions in regard to plywood durability are defined in AS/NZS 1604.3.
- 3 Appendix A provides the information to be supplied with inquiries and orders.
- 4 Appendix B gives suggestions for the storage and handling of exterior plywood.

1.2 APPLICATION

The specification for any grade of plywood or blockboard for exterior use shall consist of the general requirements given in this Section, together with the relevant veneer requirements of Section 2 and the general manufacturing requirements of Section 3.

1.3 REFERENCED DOCUMENTS

AS

- | | |
|--------|---|
| 2754 | Adhesives for timber and timber products |
| 2754.1 | Part 1: Adhesives for plywood manufacture |
| 1604 | Specification for preservative treatment |
| 1604.1 | Part 1: Sawn and round timber |

AS/NZS

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|---------|--|
| 1080 | Timber—Methods of test |
| 1080.1 | Method 1: Moisture content |
| 1604 | Specification for preservative treatment |
| 1604.3 | Part 3: Plywood |
| 2098 | Methods of test for veneer and plywood |
| 2098.1 | Method 1: Moisture content of veneer and plywood |
| 2098.2 | Method 2: Bond quality of plywood (chisel test) |
| 2098.3 | Method 3: Bond quality and strength of scarf joints in plywood |
| 2098.4 | Method 4: Measurement of dimensions of sheets for veneer and plywood |
| 2098.11 | Method 11: Determination of formaldehyde emissions for plywood |