

Australian/New Zealand Standard™

Reconstituted wood-based panels— Specifications

Part 3: Decorative overlaid wood panels



AS/NZS 1859.3:2017

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee TM-011, Engineered Timber Products. It was approved on behalf of the Council of Standards Australia on 29 August 2017 and by the New Zealand Standards Approval Board on 6 September 2017. This Standard was published on 27 October 2017.

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Australian Forest Products Association
Australian Timber Importers Federation
Australian Wood Panels Association
Building Research Association of New Zealand
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Forest and Wood Products Australia
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Reconstituted wood-based panels— Specifications

Part 3: Decorative overlaid wood panels

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee TM-011, Engineered Timber Products, to supersede AS/NZS 1859.3:2005.

The objective of this Standard is to provide performance requirements and specifications for the manufacture and application of decorative overlaid wood panels. This Standard includes four types of decorative overlay applied to wood panel substrate.

This Standard is Part 3 of the AS/NZS 1859 series, dealing with reconstituted wood-based panel products, as follows:

AS/NZS

- 1859 Reconstituted wood-based panels—Specifications
- 1859.1 Part 1: Particleboard
- 1859.2 Part 2: Dry process fibreboard
- 1859.3 Part 3: Decorative overlaid wood panels (this Standard)
- 1859.4 Part 4: Wet process fibreboard

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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STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

Australian/New Zealand Standard
Reconstituted wood-based panels—Specifications

Part 3: Decorative overlaid wood panels

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard specifies requirements for decorative overlaid wood panels. It includes four types of decorative overlay applied to wood panel substrate.

NOTES:

- 1 Appendix A lists information that should be supplied by the purchaser at the time of inquiry or order.
- 2 Appendix B describes recommended practices for the storage and handling of decorative overlaid wood panel.
- 3 Appendix C describes recommended practices for selection and application of screw fasteners.

1.2 APPLICATION

Decorative overlaid wood panels shall comply with Section 2 and the following sections, as applicable to type:

- (a) Direct-surfaced with thermosetting resins
(termed low pressure melamine) Section 3.
- (b) PVC film Section 4.
- (c) Paper foils Section 5.
- (d) Wood veneers Section 6.

NOTE: This Standard is one of the series relating to particleboard and wet and dry process fibreboard. Decorative finishes may also apply to plywood (decorative wood veneers in particular) but this application is not covered by this Standard.

1.3 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS/NZS

- | | |
|--------|--|
| 1859 | Reconstituted wood-based panels—Specifications |
| 1859.1 | Part 1: Particleboard |
| 1859.2 | Part 2: Dry process fibreboard |
| 1859.4 | Part 4: Wet process fibreboard |
| 2924 | High pressure decorative laminates—Sheets made from thermosetting resins |
| 2924.1 | Part 1: Classification and specifications |
| 4266 | Reconstituted wood-based panels—Methods of testing |
| 4266.1 | Part 1: Base panels |
| 4266.2 | Part 2: Decorative overlaid panels |

1.4 DEFINITIONS

For the purpose of this Standard, the definitions below apply.

1.4.1 Layon

Sheet of material to be applied as an overlay.

1.4.2 Overtrim margin

The difference between the nominal dimensions of the sheet of particleboard or MDF and the actual dimensions.

1.4.3 Substrate

Base panel onto which lay-ons are applied.

1.5 CLASSIFICATION

Decorative overlaid wood panels shall be classified as follows:

- (a) *Low pressure melamine (LPM)* Manufactured by directly applying partially uncured amyloplast resin impregnated papers to one or both faces of wood panel substrates and achieving bonding and curing in the same process using heat and pressure but without the use of an adhesive.
- (b) *PVC film* Manufactured by roll laminating PVC film to one or both faces of wood panel substrates using an adhesive to bond the PVC film to the substrate.
- (c) *Paper foils* Manufactured by laminating paper foils to one or both faces of wood panel substrates using an adhesive to bond the foil to the substrate.
- (d) *Wood veneer* Manufactured by gluing wood veneers to both faces of wood panel substrates, using a suitable adhesive to match the performance of the substrate as specified in Section 6.

SECTION 2 GENERAL REQUIREMENTS

2.1 DIMENSIONAL TOLERANCES

When determined in accordance with AS/NZS 4266.1, the actual dimensions of substrate panels shall comply with the requirements of AS/NZS 1859, Parts 1, 2 and 4, as applicable.

NOTES:

- 1 Flatness requirements are only applicable to decorative overlaid panels at time of delivery from manufacturer. Numerous factors, including changes in temperature and relative humidity in storage and fabrication areas at building sites, may cause boards and panels to bow or twist irreversibly.
- 2 Care should be taken in specifying unbalanced overlaid panels, that is, panels laminated on one side only, or with significantly different overlays on each side. Supply of panels laminated on one side with PVC film, paper foils, or melamine should be agreed between buyer and supplier.

2.2 APPEARANCE

2.2.1 Defects

When inspected according to AS/NZS 4266.2, the surface layer of panels shall appear to be continuous. The following defects are permitted:

- (a) *Spots, dirt and similar surface defects* The admissible size of such defects is based on a maximum area equivalent to $1.0 \text{ mm}^2/\text{m}^2$ of panel and is proportional to the panel size under inspection. The total admissible area of contamination may be concentrated in one spot or dispersed over an unlimited area of smaller defects provided Item (c) below is complied with.
- (b) *Fibres, hairs, scratches* The admissible area of defects is based on a maximum contaminated length equivalent to $10 \text{ mm}^2/\text{m}^2$ of panel and is proportional to the panel size under inspection. The total admissible area of contamination may be concentrated in one spot or dispersed over an unlimited area of smaller defects provided Item (c) below is complied with.
- (c) *Combination of surface defects* When defect types described in Items (a) and (b) above occur in the same panel, then the maximum level for each of the two types of defect shall not exceed half of the level prescribed in Items (a) and (b) above.

NOTE: These permitted surface defects are consistent with requirements for high pressure decorative laminate according to AS/NZS 2924.1.

2.2.2 Faults

Faults not permitted include faults showing through from the substrate to the surface and air bubbles, blisters, craters or faults in the decorative layer.

2.2.3 Imperfections

Imperfections and sawing defects are permitted within the overtrim margin.

2.2.4 Colour, pattern and surface finish

If colour, pattern and surface finish are assessed against other standards or customer colour samples, assessment shall be made under the same conditions specified in Clause 2.2.1.