

Australian/New Zealand Standard™

AS/NZS 4266.33

Reconstituted wood-based panels—Methods of test

Method 33: Veneer bond durability

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee TM-005, Reconstituted Timber Panel Products.

This Standard incorporates Amendment No. 1 (February 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.

This Standard is a revision of [AS/NZS 4266.33:1996](#), with updated referenced document information.

METHOD

1 SCOPE

This Standard sets out a method for determining durability of veneer bonds. It is applicable to reconstituted wood-based panels overlaid with natural or reconstituted wood veneers.

2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

[AS/NZS](#)

[4266](#) Reconstituted wood-based panels—Methods of test

[4266.1](#) Method 1: Sampling, cutting, and conditioning of test pieces

[4491](#) Timber—Glossary of terms in timber related Standards

3 DEFINITIONS

For the purpose of this Standard, the definitions in [AS/NZS 4491](#) and [AS/NZS 4266.1](#) apply.

4 PRINCIPLE

The test pieces are immersed in water under specified conditions to accelerate the breakdown of the adhesive bond between the veneer and the substrate. The bond durability is confirmed by visual examination.

5 APPARATUS

The following apparatus is required:

- (a) *Sharp knife.*
- (b) *Straightedge.*
- (c) *Thermostatically controlled water baths*—capable of maintaining temperatures between $20 \pm 1^\circ\text{C}$ and $70 \pm 2^\circ\text{C}$.

6 TEST PIECES

The test pieces, 100 mm × 100 mm, shall be prepared from each sample sheet.

7 PROCEDURE

The procedure shall be as follows:

- (a) Using a sharp knife and a straightedge, score both faces of the veneer in the form of a cross. The score marks shall be parallel to the edges of the test piece in the direction of the cut and centrally located on the face. Each score mark shall be 80 mm long and the depth of the cut shall be such so as to ensure that the veneer is cut through completely.
- (b) The test pieces, well separated from each other as well as from the bottom and sides of the water bath, shall be immersed vertically in clean, still water, having a pH value of 7 ± 1 at the beginning of every new test. The temperature of the water shall be maintained at the specified value throughout the test. The upper edges of the test pieces shall be covered by 25 ± 5 mm of water.

The immersion times shall be in accordance with the following classifications:

- (i) Standard..... 24 h at $20 \pm 1^\circ\text{C}$.
- (ii) High moisture resistant..... 3 h at $70 \pm 2^\circ\text{C}$.
- (c) After the immersion period, the test pieces shall be withdrawn from the water and wiped with a damp absorbent cloth.
- (d) The test pieces shall be examined visually to determine whether there is any separation of the veneer from the substrate. Separation shall be deemed to have taken place if failure has occurred completely in the glue-line and not in the substrate or veneer. Failure is deemed to occur when any separation has been observed.

8 TEST REPORT

The test report shall contain the following:

- (a) Name and address of the testing laboratory.
- (b) Sampling report according to [AS/NZS 4266.1](#).
- (c) Date of the test report.
- (d) Reference to this Standard, i.e., [AS/NZS 4266.33](#).
- (e) Panel type and thickness.
- (f) Relevant product specification.
- (g) Surface treatment, if relevant.
- (h) Specific apparatus used, in case of different possibilities allowed in the Standard.
- (i) The results as specified in Clause 7(d).
- (j) All deviations from this Standard.

AMENDMENT CONTROL SHEET**AS/NZS 4266.33:2004**

Amendment No. 1 (2006)

REVISED TEXT

SUMMARY: This Amendment applies to Clause 4.

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