

Australian/New Zealand Standard™

AS/NZS 4266.5

Reconstituted wood-based panels— Methods of test

Method 5: Modulus of elasticity in bending and bending strength

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee TM-005, Reconstituted Timber Panel Products, to supersede AS/NZS 4266.5(Int):2001.

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 equivalent to the industrial Standard harmonized between the wood panel industries in Australia, Japan and New Zealand, known as JANS 6.

METHOD

1 SCOPE

This Standard specifies a method of determining the apparent modulus of elasticity and bending strength (modulus of rupture) of reconstituted wood-based panels in flat-wise bending.

2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS/NZS

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| 4266 | Reconstituted wood-based panels—Methods of test |
| 4266.1 | Method 1: Sampling, cutting, and conditioning of test pieces |
| 4266.35 | Method 35: Dimensions 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 modulus of elasticity in bending and bending strength are determined by applying a load to the centre of a test piece supported at two points. The modulus of elasticity is calculated by using the slope of the linear region of the load-deflection curve; the value calculated is the apparent modulus, not the true modulus, because the test method includes shear as well as bending. The bending strength of each test piece is calculated by determining the ratio of the bending moment (M), at the maximum load (F_{max}), to the moment of its full cross-section.