

# Australian/New Zealand Standard™

## Reconstituted wood-based panels—Methods of test

### Method 26: Resistance to dry heat

AS/NZS 4266.26

#### PREFACE

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

This Standard is a revision of AS/NZS 4266.26:1996, with updated referenced document information.

#### METHOD

##### 1 SCOPE

This Standard sets out a method for determining the resistance of laminated panels to dry heat. It is intended to determine the suitability of decorative laminated sheets for use in kitchens where contact with moderate hot cooking utensils is to be expected.

##### 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

A test piece is taken from the sheet under test, then subjected to dry heat by contact with a vessel of defined heat capacity, initially at 180°C but cooling during 20 min of contact. Resistance to test conditions is assessed by visual examination.

##### 5 MATERIAL

Fresh glycerol tri-stearate shall be used if it is heated to above 200°C.

NOTE: It is not recommended to use the same material more than 20 times.

## 6 APPARATUS

The following apparatus is required:

- (a) *Cast cylindrical aluminium alloy vessel*—without a lid. The bottom of the vessel shall be machined flat. It shall have an external diameter of  $100 \pm 1.5$  mm, and an overall height of  $70 \pm 1.5$  mm. The wall thickness shall be  $2.5 \pm 0.5$  mm and the base thickness shall be  $2.5 + 0.5, -0$  mm.
- (b) *Heat source*—for heating the vessel uniformly.
- (c) *Inorganic heat-insulating board*—150 mm square and with a thickness of approximately 25 mm. Asbestos cement shall not be used.
- (d) *Thermometer*—with a range of  $-5^{\circ}\text{C}$  to  $250^{\circ}\text{C}$ .
- (e) *Stirrer*.

## 7 TEST PIECES

One test piece of  $250 \pm 5$  mm square shall be tested. The test piece shall be pre-conditioned for at least 7 days at  $23 \pm 2^{\circ}\text{C}$  and  $50 \pm 5\%$  relative humidity before being tested.

## 8 PROCEDURE

The procedure shall be as follows:

- (a) Place  $400 \pm 10$  g of the glycerol tri-stearate in the vessel. Fix the thermometer centrally in the vessel with its bulb about 6 mm from the bottom.
- (b) Raise the temperature of the glycerol tri-stearate to approximately  $185^{\circ}\text{C}$ , stirring from time to time. Transfer the vessel to the heat-insulating board and allow the temperature to fall to  $180 \pm 1^{\circ}\text{C}$ , stirring continuously.
- (c) Immediately place the vessel of hot glycerol tri-stearate on the surface of the test piece and allow standing for 20 min without further stirring.
- (d) At the end of this period, remove the vessel and allow the test piece to cool for a period of  $45 + 1, -0$  min. Examine the test piece for surface disturbance, for example blistering, crazing, discolouration or loss in gloss visible to the naked eye, allowing light to fall on the test piece at various angles of incidence.

## 9 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 4266.26.
- (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) Test results as specified in Clause 8(d).
- (j) All deviations from this Standard.