

Australian/New Zealand Standard®

Domestic kitchen assemblies—Methods of test

Method 1: Determination of strength of carcass and underframe

1 SCOPE This Standard sets out the procedure for measuring the strength of carcass and underframe of a kitchen unit.

2 PRINCIPLE The storage parts of the unit to be tested are fully loaded with weights and two forces are applied along the longitudinal and transverse centre-lines to test for carcass strength and ability to resist overturning.

3 PROCEDURE The procedure is as follows:

- (a) Place the unit on the floor with the legs or base on one side against stops.
- (b) Load all parts that can be used for storage purposes with the appropriate mass specified in Table 1.
- (c) Close drawers, flaps and open doors through an angle of 90°.

TABLE 1
LOADS APPLIED TO PARTS OTHER
THAN THE PART BEING TESTED

Part	Load	
	kg/m ²	kg/m ³
Wall unit shelf Floor unit shelf Pantry shelf	66	—
Cutlery drawer	—	330
All other drawers Basket	—	250

NOTES:

- 1 The area of shelves is calculated by including any space between the back of the shelf and the inside face of the back panel or, where no back panel is fitted, the rear edge of the end panel of the unit.
- 2 Where there are part-width shelves, the load applicable to the area between the front of the shelf and the inside surface of the door should be transferred to the same area of the full-width horizontal surface immediately below.
- 3 Internal volume is equal to the area of drawer bottom times the maximum height free of obstruction.

- (d) Apply two forces of 450 N alternately along the longitudinal centre-lines of the unit, 50 mm from the top of the article, or at a maximum of 1600 mm above the floor. If the unit tends to overturn, reduce the horizontal force to just prevent overturning and record the force used.
- (e) Repeat the procedure on the transverse centre-line of the unit.
- (f) A unit or component shall pass if, at the completion of the test, none of the following defects affects the strength or function of the unit or component:
 - (i) Fracturing of any member, joint or component.
 - (ii) Any loosening of joints intended to be rigid.
 - (iii) Deformation or wear of any component.
 - (iv) Loosening of any components fixed to the unit.

4 TEST REPORT The following shall be reported:

- (a) Reference to this Joint Australian/New Zealand Standard (i.e. AS/NZS 4387.1).
- (b) A detailed description of the unit or component tested, including the manufacturer's product reference.
- (c) The method of test and the test level to which the unit or component has been tested.
- (d) Details of any defects observed before the test.
- (e) Details of any defects observed after the test affecting the strength or function of the unit or component, for example—
 - (i) fracturing of any member, joint or component;
 - (ii) permanent loosening of joints intended to be rigid, shown by hand pressure applied to suitable members;
 - (iii) deformation or wear of any component that will essentially affect its function;
 - (iv) loosening of any means of fixing components to the unit;
 - (v) moveable parts that do not open or close freely, or catches that do not operate smoothly; or
 - (vi) any other damage that may cause damage or snag clothing.
- (f) If required, the magnitude of any non-standard forces used.
- (g) Details of any deviation from the test procedure.
- (h) The test result, pass or fail.
- (i) Name of the laboratory or authority which performed the test.
- (j) The date on which the test was carried out.
- (k) Reference to a calibration certificate for the apparatus used, the calibration authority and the expiry date of the certificate.