

Australian/New Zealand Standard®

Safes and strongrooms—Methods of test

Method 2: Test for anchoring strength

1 SCOPE This Standard sets out the method to be applied when measuring the leverage resistance of any anchoring bolt-down facility recommended by the manufacturer of the secure storage unit.

2 REFERENCED DOCUMENT The following document is referred to in this Standard.

AS/NZS

3809 Safes and strongrooms

3 PRINCIPLE The strength of the anchoring system for freestanding safes is assessed by applying a load as shown in Figure 1.

4 TEST SPECIMEN A sample unit of the model (including anchoring device) to be classified shall be supplied to the testing facility of the approving authority. Included shall be drawings and dimensions, and a request as to the protection class being applied for (refer to AS/NZS 3809).

5 APPARATUS The following apparatus is required:

- (a) Tensile test equipment having a capacity of at least 100 kN (see Figure 1).

NOTE: Enerpak type RCH-202 hollow cylinder or equivalent would satisfy this requirement.

- (b) Calibrated monitoring equipment which will record the constant pressure applied to the jack. Measurement of applied load shall be made with an accuracy of within $\pm 5\%$ of the applied load.
- (c) A calibrated stopwatch.

6 PROCEDURE The test procedure shall be as follows:

- (a) Attach the specimen for freestanding safes to the loading equipment by an anchoring assembly through one of the anchoring holes according to the installation instructions. (See Figure 1 and AS/NZS 3809, Clause 10(h).)
- (b) The required force shall be applied in a direction which attempts to pull the assembly through the safes wall or base. Apply the load smoothly up to the force required within 2 to 3 minutes.
- (c) Hold at the required load for 1 minute.
- (d) Release the load.

NOTE: During this test it is important to have the equipment guarded to ensure the safety of testing staff.

7 TEST REPORT

7.1 Information to be supplied The following shall be reported:

- (a) If the test sample withstood the applied load for the time specified without failure, a pass shall be reported. If the anchoring device was pulled through the test sample intact a fail shall be reported.
- (b) Details of anchoring device used.
- (c) Load applied to the anchoring device.
- (d) A description of any deformation or failure in the wall or base of the secure storage unit (if applicable).
- (e) Identify the test unit concerned.
- (f) Name of laboratory or authority which performed the test.
- (g) Date on which the test was carried out.
- (h) Reference to this Joint Australian/New Zealand Standard (i.e. AS/NZS 3810.2).
- (i) Reference to a calibration certificate for the apparatus used, the calibration authority and the expiry date of the certificate.

7.2 Supplementary information The following supplementary information should be provided:

- (a) A brief description of test equipment (e.g. type, make and model).
- (b) Whether calibration procedures were carried out on the apparatus or test method, and identification of any reference material or apparatus used in the calibration.