

Australian/New Zealand Standard™

**Masonry units, segmental pavers and flags—
Methods of test****Method 3: Determining dimensions**

This Standard incorporates Amendment No. 1 (August 2004). 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.

1 SCOPE

This Standard sets out methods for measuring the dimensions of masonry units, segmental pavers and flags. The following two methods are described:

- (a) Determination of cumulative dimensions.
- (b) Determination of dimensions of individual units.

NOTE: For quality control purposes, the manufacturer may select the method appropriate to the manufacturing process and the operating quality assurance program.

2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS/NZS

4456 Masonry units, segmental pavers and flags—Methods of test

4456.0 Part 0: General introduction and list of methods

4456.1 Method 1: Sampling for testing

4456.2 Method 2: Assessment of mean and standard deviation

3 DEFINITIONS

For the purpose of this Standard, the definitions given in AS/NZS 4456.0 apply.

4 METHOD A—DETERMINATION OF CUMULATIVE DIMENSIONS**4.1 Apparatus**

A steel tape or other suitable inextensible measuring device, capable of being read to an accuracy of 1 mm and long enough to measure the whole of a test row in one application, shall be used.

4.2 Test specimens

Twenty units, selected in accordance with AS/NZS 4456.1, shall be used.

4.3 Procedure

The procedure shall be as follows:

- (a) Remove any blisters or other small projections, together with any loose particles that might have adhered to the surfaces of the test specimens.

- (b) In turn, assemble the specimens on a plane surface against a straight line in each of the arrangements shown in Figure 1.
- (c) Measure to the nearest millimetre the overall length at the midpoint of the upper surface of each arrangement.
- (d) As an alternative procedure, if for any reason it is found impracticable to measure 20 specimens for length in a single row, it shall be permissible to divide the specimens into two rows each of 10 specimens. Each row shall be measured to the nearest millimetre and the measurements added.
- (e) Calculate the difference between the measured overall length and 20 times the work size.

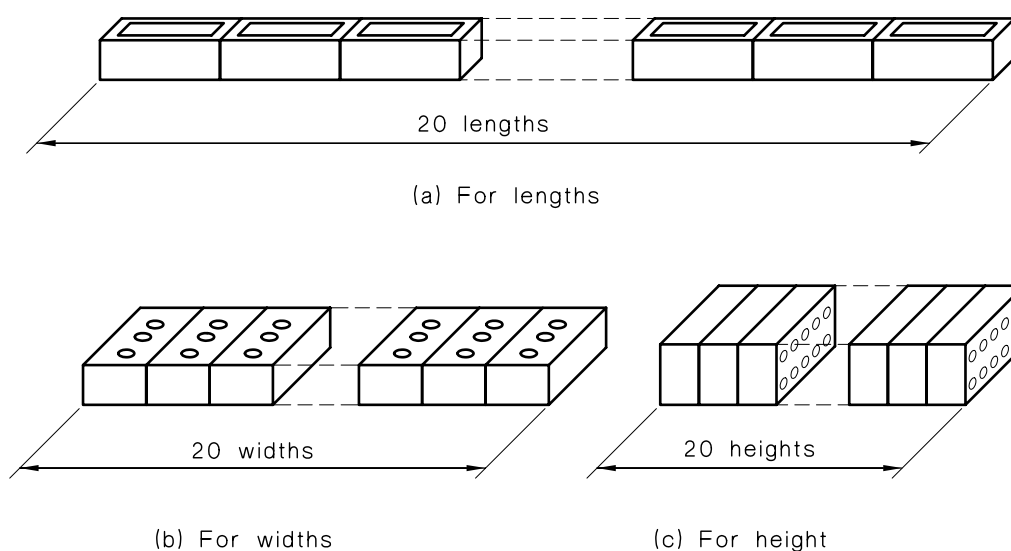


FIGURE 1 ARRANGEMENTS FOR MEASUREMENT OF DIMENSIONS OF UNITS

4.4 Recording

The following information shall be recorded:

- (a) Reference to this test method, i.e., AS/NZS 4456.3.
- (b) Description of the marking, location and identification of the lot.
- (c) Sample and specimen identification.
- (d) Date of sample and test.
- (e) Work sizes for the lot.
- (f) Length of each arrangement of test specimens including, when the alternative procedure for measurement for length has been adopted, the dimensions of each arrangement (to the nearest millimetre).
- (g) The difference between the measured overall length and 20 times the work size (to the nearest millimetre).

4.5 Report

If a report is prepared, it shall include the following information:

- (a) Reference to this test method, i.e., AS/NZS 4456.3.
- (b) Description of marking, location and identification of the lot.

- (c) Sample and specimen identification.
- (d) Date of sample and test.
- (e) Work sizes for the lot.
- (f) 20 times each work size (to the nearest millimetre).
- (g) Length of each arrangement of test specimens including, where the alternative procedure for measurement for length has been adopted, the dimensions of each arrangement (to the nearest millimetre).
- (h) The difference between the measured overall length and 20 times the work size (to the nearest millimetre).

5 METHOD B—DETERMINATION OF MEASUREMENTS OF INDIVIDUAL UNITS

5.1 Apparatus

A gauge, rule or calliper, capable of being read to a precision of 0.5 mm and long enough to measure the complete specimen in one application, shall be used.

5.2 Test specimens

For compliance testing, 20 specimens selected in accordance with AS/NZS 4456.1 shall be used.

5.3 Procedure

The procedure shall be as follows:

- (a) Measure the dimensions corresponding to each of the nominated work sizes, to the nearest 1 mm (see Figure 2).
- (b) Calculate the mean and unbiased standard deviation of the dimensional deviations for each of the nominated work sizes in accordance with AS/NZS 4456.2.

NOTE: When measuring diagonals of square or rectangular pavers, provision shall be made for chipping or roundness of the corners.

5.4 Recording

The following information shall be recorded:

- (a) Reference to this test method, i.e., AS/NZS 4456.3.
- (b) Description of the marking, location and identification of the lot.
- (c) Sample and identification.
- (d) Date of sample and test.
- (e) Work sizes for the lot.
- (f) Individual measurements of each specimen unit.
- (g) Mean and unbiased standard deviation of each dimension for each of the nominated work sizes (see AS/NZS 4456.2).

5.5 Report

If a report is prepared, it shall include the following information:

- (a) Reference to this test method, i.e., AS/NZS 4456.3.
- A1 | (b) Description of marking, location and identification of the lot.
- (c) Sample and specimen identification.
- (d) Date of sample and test.