

Australian/New Zealand Standard™

**Masonry units, segmental pavers and flags—
Methods of test****Method 13: Determining pitting due to lime
particles**

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 the method of examination for pitting, due to lime particles, of masonry units, segmental pavers and flags.

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
4456.6	Method 6: Determining potential to effloresce
4456.11	Method 11: Determining coefficients of expansion

3 DEFINITIONS

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

4 PRINCIPLE

Units are exposed to a moist environment and then inspected for the presence of pits caused by the expansion of lime particles.

5 APPARATUS

A moist cupboard is required, capable of maintaining a relative humidity exceeding 95% at room temperature.

6 PREPARATION OF TEST SPECIMENS

Where specimens have been tested for coefficient of expansion or for potential to effloresce in accordance with AS/NZS 4456.11 or AS/NZS 4456.6 as appropriate, the 5 specimens so tested shall be examined for signs of pitting due to lime according to the procedure given in Clause 7, immediately after the completion of those tests.

Where a test for efflorescence or for coefficient of expansion has not been carried out, specimens accumulated from continuous sampling shall be deemed to meet the requirements of this method, provided that the number of specimens accumulated is at least five. For assessment of an individual lot, select 5 units in accordance with

AS/NZS 4456.1. The 5 specimens shall be placed in a moist cupboard at room temperature for 48 h.

7 PROCEDURE

The procedure for each specimen shall be to examine all surfaces of the specimen and assess pitting in accordance with Clause 8.

8 INTERPRETATION OF RESULTS

The development of pitting on the intended exposed surfaces of each specimen examined shall be described 'nil', 'moderate' or 'severe' in accordance with the following definitions:

- (a) *Nil*—no visible lime pits.
- (b) *Slight*—not more than 5 lime pits, none exceeding 8 mm in diameter.
- (c) *Moderate*—no pit exceeding 10 mm diameter.
- (d) *Severe*—pit or pits in excess of 10 mm diameter.

The classification of each specimen shall be that of the worst face of the specimen. The classification of the sample shall be that of the worst specimen.

NOTE: The description refers to the inspection and measurement of pits in one face and both ends of a masonry unit or the face of a segmental paver.

9 RECORDING

The following information shall be recorded:

- (a) Reference to this test method, i.e., AS/NZS 4456.13.
- (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) Type of unit.
- (g) Whether the sample was that used in the potential to effloresce test or for the determination of coefficient of expansion, or was separately derived.
- (h) For each specimen, the classification of the specimen and the pitting damage for the intended exposed surfaces.

10 REPORT

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

- (a) Reference to this test method, i.e., AS/NZS 4456.13.
- (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) Type of unit.
- (g) Whether the sample was used for the potential to effloresce test or for the determination of coefficient of expansion, or was separately derived.
- (h) Classification of specimens.