

Australian/New Zealand Standard™

**Masonry units, segmental pavers and flags—
Methods of test****Method 15: Determining lateral modulus of
rupture**

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 for determining the lateral modulus of rupture of masonry units.

2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

2193 Calibration and classification of force-measuring systems

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 PRINCIPLE

A test specimen with length to depth ratio of at least 5:1 is placed with its ends on bars and with the bedding faces vertical. A load is applied through two bars at approximately the third points of the span, until the specimen fails. The maximum bending moment is used to calculate the lateral modulus of rupture.

5 APPARATUS

The following is required:

- (a) A testing machine that complies, as regards accuracy, with the provisions for Grade A or Grade B machines given in AS 2193.

The machine shall be fitted with support bars and loading bars that will permit the loading of test specimens as simple beams, as shown diagrammatically in Figure 1. The support bars and loading bars shall be not less than 25 mm and not more than 40 mm diameter, parallel, and normal to the long axis of the specimen. Both loading bars and one of the support bars shall be self-aligning. For specimens made from multiple units, the loading bars shall be symmetrically located on the central unit of