

Australian/New Zealand Standard™

**Masonry units, pavers, flags and
segmental retaining wall units**

Part 3: Segmental retaining wall units



AS/NZS 4455.3:2008

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee BD-026, Masonry Units, Pavers, Flags and Segmental Retaining Wall Units. It was approved on behalf of the Council of Standards Australia on 21 May 2008 and on behalf of the Council of Standards New Zealand on 18 June 2008. This Standard was published on 30 June 2008.

The following are represented on Committee BD-026:

Association of Consulting Engineers Australia
Australian Institute of Building Surveyors
CSIRO, Manufacturing and Materials Technology
Clay Brick and Paver Institute
Concrete Masonry Association of Australia
Engineering and Consultation Laboratories Association
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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee BD-026, Masonry Units, Pavers, Flags and Segmental Retaining Wall Units, to supersede, in part, AS/NZS 4455:1997, *Masonry units and segmental pavers*.

The objective of this Standard is to provide a specification for segmental retaining wall units, to facilitate design and purchasing.

This Standard addresses—

- (a) the need for a basic Standard that specifies the essential properties of dimensional tolerance, integrity and durability, common to all units covered by the scope of the Standard;
- (b) more stringent requirements that might need to be complied with, that would best be specified by the prospective purchaser as needed; and
- (c) test methods consistent with Items (a) and (b).

This Standard is intended to provide the minimum requirements for segmental retaining wall units covered by the scope. More stringent requirements may be imposed as contractual requirements.

The terms ‘normative’ and ‘informative’ have been used in this Standard to define the application of the appendix to which they apply. A ‘normative’ appendix is an integral part of a Standard, whereas an ‘informative’ appendix is only for information and guidance.

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SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard specifies requirements for units for use in segmental retaining walls, including units for walls built in accordance with AS 4678.

NOTE: Masonry units for retaining walls that are designed in accordance with AS 3700 or NZS 4230 and constructed with mortared joints are covered by AS/NZS 4455.1.

Segmental retaining wall units covered by this Standard include those made of the following materials:

- (a) Concrete.
- (b) Dimension stone (cut or dressed).
- (c) Fired clay (with or without shale).

NOTE: Dimension stone has a wide variety of characteristics that are not fully covered by the requirements of this Standard. Test methods different from those specified in this Standard may be required for dimension stone.

Means for demonstrating compliance with the requirements for strength are given in Appendix A.

NOTES:

- 1 Guidance on means for demonstrating compliance with this Standard is given in Appendix B.
- 2 Guidance on determination of characteristic value is given in Appendix C.
- 3 Guidance on the content of a purchasing agreement is given in Appendix D.
- 4 Guidance on optional testing is given in Appendix E.

1.2 APPLICATION

Testing to Section 2, which references AS/NZS 4456.3, AS/NZS 4456.4 and AS/NZS 4456.10, is required for compliance with this Standard.

1.3 NORMATIVE REFERENCES

The following documents are indispensable to the application of this Standard:

NOTE: Documents referenced for 'informative' purposes are listed in the Bibliography.

AS

3942 Quality control—Variables charts—Guide

4678 Earth-retaining structures

AS/NZS

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

4456.2 Method 2: Assessment of mean and standard deviation

4456.3 Method 3: Determining dimensions