Australian Standard™

Methods of sampling and testing mortar for masonry construction

Standards Australia

This Australian Standard was prepared by Committee BD-004, Masonry Structures. It was approved on behalf of the Council of Standards Australia on 20 October 2000 and published on 25 January 2001.

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Building Designers Association of Australia

Calcium Silicate Brick Manufacturers

Cement and Concrete Association of Australia

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PREFACE

This Standard was prepared by the Standards Australia Committee BD-004, Masonry Structures, to supersede all parts of test methods AS 2701, *Methods of sampling and testing mortar for masonry construction,* excluding AS 2701.4—1984, AS 2701.5—1984 and AS 2701.9—1984 which are to be withdrawn.

This Standard covers tests that can be used for masonry mortar.

The objective of this Standard is to provide laboratory staff with test methods for the testing of mortar that may be required for specific purposes.

It is considered that compression testing is inappropriate in the Standard but is being considered by Committee BD/33, Chemical Admixtures for Concrete, for inclusion in the newly proposed for the AS 1478 series. A method of test for compressive strength of masonry (the combination of mortar with masonry units) is contained in AS 3700–1998, *Masonry structures*.

Statements expressed in mandatory terms in notes to tables are deemed to be requirements of this Standard.

The term ‘normative’ has been used in this Standard to define the application of the Appendix to which it applies. A ‘normative’ appendix is an integral part of a Standard.

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SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard sets out a range of methods for testing mortar used or being investigated for use in the construction of masonry in accordance with AS 3700 excluding mortars intended to be used in thin bed construction. Each method provides a method for obtaining a single sample. The way in which it is applied would depend on the particular circumstance of the investigation and should be specified accordingly.

NOTE: Information on the selection of mortar type, the use of mortar in masonry construction, and tests for the determination of flexural strength and compressive strength of masonry units bonded with mortar are given in AS 3700.

1.2 OTHER METHODS

These methods shall not be interpreted as preventing the use of methods that are not specifically referred to herein.

1.3 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS	
1141	Methods for sampling and testing aggregates
1141.1	Method 1: Definitions
1141.3	Method 3: Sampling
1141.3.1	Method 3.1: Sampling—Aggregates
1141.5	Method 5: Particle density and water absorption of fine aggregate
1152	Specification for test sieves
1316	Masonry cement
2162	Verification and use of volumetric apparatus
2162.1	Part 1: General—Volumetric glassware
3700	Masonry structures
3972	Portland and blended cements
ASTM	
C 91	Standard Specification for Masonry Cement
C 230	Flow Tables for Use in Tests of Hydraulic Cement

1.4 DEFINITIONS

For the purposes of this Standard, the definitions below apply.

1.4.1 Cement

Cement as defined in AS 3972 and AS 1316, as appropriate.