AS 3700—2001
(Incorporating Amendment Nos 1, 2 and 3)

AS 3700—2001

Australian Standard®

Masonry structures

This Australian Standard® was prepared by Committee BD-004, Masonry Structures. It was approved on behalf of the Council of Standards Australia on 12 October 2001.
This Standard was published on 27 November 2001.

The following are represented on Committee BD-004:

- Australian Building Codes Board
- Australian Chamber of Commerce and Industry
- Building Designers Association of Australia
- Calcium Silicate Brick Manufacturers
- Cement and Concrete Association of Australia
- Clay Brick and Paver Institute
- Concrete Masonry Association of Australia Limited
- CSIRO, Building, Construction and Engineering
- Housing Industry Association
- Masonry Contractors Association
- Master Builders Australia
- NSW Department of Public Works and Services
- The Association of Consulting Engineers Australia
- University of Newcastle

A2

This Standard was issued in draft form for comment as DR 00381.

Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through the public comment period.

Keeping Standards up-to-date

Australian Standards® are living documents that reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued.

Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments that may have been published since the Standard was published.

Detailed information about Australian Standards, drafts, amendments and new projects can be found by visiting **www.standards.org.au**

Standards Australia welcomes suggestions for improvements, and encourages readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at **mail@standards.org.au**, or write to Standards Australia, GPO Box 476, Sydney, NSW 2001.

Australian Standard®

Masonry structures

Originally in part as AS CA32—1963.
Previous edition AS 3700—1998.
Third edition 2001.
Reissued incorporating Amendment No. 1 (May 2002).
Reissued incorporating Amendment No. 2 (December 2003).
Reissued incorporating Amendment No. 3 (August 2007).

Published by Standards Australia GPO Box 476, Sydney, NSW 2001, Australia

ISBN 0 7337 4173 8

PREFACE

This Standard was prepared by the Standards Australia Committee BD-004, Masonry Structures, to supersede AS 3700—1998, *Masonry structures*.

This Standard incorporates Amendment No. 1 (May 2002), Amendment No. 2 (December 2003) and Amendment No. 3 (August 2007). 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.

The objective of this Standard is to provide minimum requirements for the design and construction of unreinforced, reinforced and prestressed masonry, including built-in components, for use in masonry applications.

The Standard is the result of a consensus among representatives on the Joint Committee that it be produced as an Australian Standard.

In the preparation of this Standard valuable assistance was given by organizations and individuals experienced in various aspects of the design and construction of masonry, and the Committee acknowledges their help.

Acknowledgment is also made of the assistance gained from the following documents and publications:

(a) *Australian Masonry Manual*, published by a joint committee of the Public Works Department, N.S.W. and the Association of Consulting Structural Engineers, N.S.W.

(b) Publications of the Clay Brick and Paver Institute, the Concrete Masonry Association of Australia Co-op Limited; the CSIRO Division of Building, Construction and Engineering; and the Department of Civil, Surveying and Environmental Engineering of the University of Newcastle.

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

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.

CONTENTS

Page

Page

Page

STANDARDS AUSTRALIA

Australian Standard
Masonry structures

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE AND APPLICATION

1.1.1 Scope

This Standard sets out minimum requirements for the design and construction of masonry, including unreinforced, reinforced and prestressed, using manufactured units of clay, calcium silicate and concrete laid in mortar, autoclaved aerated concrete (AAC) laid in thin-bed mortar, and square-dressed natural stone laid in mortar.

The Standard does not give values or material properties for the design and construction of square-dressed natural stone.

NOTES:

1 This Standard assumes that the structural design of masonry is entrusted to experienced structural engineers or similar appropriately qualified persons, and that the execution of such work is carried out under the direction of appropriately qualified persons who are experienced in masonry construction and who understand the structural requirements.

2 The Standard does not give specific requirements for prefabricated masonry panels or masonry in composite action with steel or concrete structural members. The principles of this Standard should be followed, as far as they are applicable, for such types of construction.

3 The provisions of this Standard do not include specification for design and construction of AAC laid in other than thin-bed mortar. However, for masonry so constructed the general principles of this Standard may be used.

1.1.2 Application

This Standard will be referenced in the Building Code of Australia by way of BCA Amendment 10 to be published by 1 January 2002, thereby superseding the previous edition, AS 3700—1998, which will be withdrawn 12 months from the date of the publication of this edition.

1.2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

1141 Methods of sampling and testing aggregates

1170 Minimum design loads on structures
1170.1 Part 1: Dead and live loads and load combinations
1170.2 Part 2: Wind loads
1170.3 Part 3: Snow loads
1170.4 Part 4: Earthquake loads

A2

Not applicable

1310 Steel wire for tendons in prestressed concrete

1311 Steel tendons for prestressed concrete—7-wire stress-relieved steel strand for tendons in prestressed concrete