

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:

- A2 |
- 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
-

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Standards may also be withdrawn.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.

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

Australian Standard[®]

Masonry structures

Originated 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).

COPYRIGHT

© Standards Australia

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher.

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

	<i>Page</i>
SECTION 1 SCOPE AND GENERAL	
1.1 SCOPE AND APPLICATION.....	6
1.2 REFERENCED DOCUMENTS	6
1.3 USE OF ALTERNATIVE MATERIALS OR METHODS	8
1.4 INFORMATION TO BE PROVIDED ON DOCUMENTS	8
1.5 DEFINITIONS	9
1.6 NOTATION	16
SECTION 2 PERFORMANCE REQUIREMENTS FOR DESIGN	
2.1 SCOPE OF SECTION	24
2.2 AIM	24
2.3 PERFORMANCE REQUIREMENTS	24
2.4 DESIGN REQUIREMENTS	24
2.5 SERVICEABILITY, STRENGTH AND STABILITY	25
2.6 LOADS AND LOAD COMBINATIONS	26
2.7 OTHER DESIGN REQUIREMENTS	27
2.8 THERMAL INSULATION	28
2.9 SOUND INSULATION	28
SECTION 3 DESIGN PROPERTIES	
3.1 SCOPE OF SECTION	29
3.2 MASONRY UNITS.....	29
3.3 MASONRY	29
3.4 TIES AND ACCESSORIES	32
3.5 GROUT	33
3.6 REINFORCEMENT	33
3.7 TENDONS	34
SECTION 4 GENERAL DESIGN ASPECTS	
4.1 SCOPE OF SECTION	35
4.2 MEMBERS OF MIXED CONSTRUCTION	35
4.3 CHASES, HOLES AND RECESSES	35
4.4 CAPACITY REDUCTION FACTORS	35
4.5 CROSS-SECTION PROPERTIES	36
4.6 DESIGN FOR ROBUSTNESS	37
4.7 PREVENTION OF MOISTURE PENETRATION.....	39
4.8 CONTROL JOINTS	41
4.9 MORTAR JOINTS	41
4.10 WALL TIES	41
4.11 BONDING, TYING AND SUPPORTING	42
4.12 ARCHES AND LINTELS	43
4.13 INTERACTION BETWEEN MASONRY MEMBERS AND SLABS, BEAMS OR COLUMNS	43
4.14 CORBELLING	43
4.15 ATTACHMENT TO FACE OF WALLS.....	44

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

-
- Looking for additional Standards? Visit Intertek Inform Infostore
 - Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation
-