

AS 3700 Supplement 1—2012

**Masonry structures—Commentary
(Supplement 1 to AS 3700—2011)**



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 - Australian Institute of Building Surveyors
 - Building Designers Association of Australia
 - Cement Concrete and Aggregates Australia—Cement
 - Concrete Masonry Association of Australia Limited
 - Consult Australia
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 - Engineers Australia
 - Housing Industry Association
 - Master Builders Australia
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-

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Masonry structures—Commentary (Supplement 1 to AS 3700—2011)

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PREFACE

This Commentary was prepared by the Standards Australia Committee BD-004, Masonry Structures, to supersede AS 3700 Supp 1—2004.

The objective of the Commentary is to assist in the interpretation and correct application of the provisions of AS 3700, *Masonry structures*, by outlining the background to various requirements of the Standard.

The Commentary does not aim to give a comprehensive textbook treatment of the requirements of the Standard. In particular, the Commentary seeks to avoid repeating technical content that is already covered in detail in the following publications:

- (a) ‘Australian Masonry Manual’ published in 1991 by a joint committee of the Public Works Department, N.S.W. and the Association of Consulting Structural Engineers, N.S.W.
- (b) Current technical literature produced by—
 - (i) Think Brick Australia; and
 - (ii) Concrete Masonry Association of Australia.

The Clause numbers and titles used in the Commentary are the same as those in AS 3700 except that they are prefixed by the letter C. To avoid possible confusion between Commentary and Standard clauses cross-referenced within the text, Commentary clauses are referred to as ‘Paragraph CX.X’ in accordance with Standards Australia policy. A Bibliography is included as the last item of the Section or Appendix to which it applies.

Figures and Tables herein are prefixed by the letter ‘C’.

CONTENTS

	<i>Page</i>
SECTION C1 SCOPE AND GENERAL	
C1.1 SCOPE	6
C1.2 NORMATIVE REFERENCES	6
C1.3 USE OF ALTERNATIVE MATERIALS OR METHODS	6
C1.4 INFORMATION TO BE PROVIDED ON DOCUMENTS	7
C1.5 DEFINITIONS	7
C1.6 NOTATION	7
C1.7 EXISTING STRUCTURES	7
SECTION C2 REQUIREMENTS FOR DESIGN	
C2.1 SCOPE OF SECTION	8
C2.2 AIM	8
C2.3 GENERAL REQUIREMENTS	8
C2.4 DESIGN REQUIREMENTS	8
C2.5 SERVICEABILITY, STRENGTH AND STABILITY	8
C2.6 LOADS AND LOAD COMBINATIONS	9
C2.7 LATERAL SUPPORT	10
C2.8 OTHER DESIGN REQUIREMENTS	10
C2.9 THERMAL PERFORMANCE	11
C2.10 ACOUSTIC INSULATION	11
SECTION C3 DESIGN PROPERTIES	
C3.1 SCOPE OF SECTION	12
C3.2 MASONRY UNITS	12
C3.3 MASONRY	12
C3.4 TIES AND ACCESSORIES	15
C3.5 GROUT	15
C3.6 REINFORCEMENT	15
C3.7 TENDONS	15
SECTION C4 GENERAL DESIGN ASPECTS	
C4.1 SCOPE OF SECTION	17
C4.2 MEMBERS OF MIXED CONSTRUCTION	17
C4.3 CHASES, HOLES AND RECESSES	17
C4.4 CAPACITY REDUCTION FACTORS	17
C4.5 CROSS-SECTION PROPERTIES	18
C4.6 DESIGN FOR ROBUSTNESS	19
C4.7 PREVENTION OF MOISTURE PENETRATION	19
C4.8 CONTROL JOINTS	20
C4.9 MORTAR JOINTS	21
C4.10 WALL TIES	22
C4.11 BONDING, TYING AND SUPPORTING	22
C4.12 ARCHES AND LINTELS	23
C4.13 INTERACTION BETWEEN MASONRY MEMBERS AND SLABS, BEAMS OR COLUMNS	23
C4.14 CORBELLING	23
C4.15 ATTACHMENT TO FACE OF WALLS	23

SECTION C5 DESIGN FOR DURABILITY	
C5.1	SCOPE OF SECTION 24
C5.2	GENERAL 24
C5.3	EXPOSURE ENVIRONMENTS 24
C5.4	LOCATIONS 24
C5.5	MASONRY UNITS 24
C5.6	MORTAR 25
C5.7	BUILT-IN COMPONENTS 25
C5.8	GROUT 25
C5.9	REINFORCEMENT AND TENDONS 25
SECTION C6 DESIGN FOR FIRE RESISTANCE	
C6.1	GENERAL 26
C6.2	FIRE-RESISTANCE LEVELS 26
C6.3	STRUCTURAL ADEQUACY 27
C6.4	INTEGRITY 30
C6.5	INSULATION 30
C6.6	RECESSES FOR SERVICES 31
C6.7	CHASES 31
C6.8	PROTECTION OF STRUCTURAL STEELWORK 32
SECTION C7 STRUCTURAL DESIGN OF UNREINFORCED MASONRY	
C7.1	GENERAL 33
C7.2	GENERAL BASIS OF DESIGN 33
C7.3	DESIGN FOR MEMBERS IN COMPRESSION 33
C7.4	DESIGN FOR MEMBERS IN BENDING 38
C7.5	DESIGN FOR MEMBERS IN SHEAR 42
C7.6	DESIGN OF MASONRY VENEER WALLS 44
C7.7	DESIGN OF CAVITY WALLS 45
C7.8	DESIGN OF DIAPHRAGM WALLS 45
SECTION C8 STRUCTURAL DESIGN OF REINFORCED MASONRY	
C8.1	SCOPE OF SECTION 48
C8.2	EXCLUSIONS 48
C8.3	GENERAL BASIS OF DESIGN 48
C8.4	GENERAL REINFORCEMENT REQUIREMENT 49
C8.5	DESIGN OF MEMBERS IN COMPRESSION 50
C8.6	DESIGN OF MEMBERS IN BENDING 50
C8.7	DESIGN OF WALLS FOR IN-PLANE SHEAR 51
C8.8	DESIGN OF WALLS FOR OUT-OF-PLANE SHEAR 52
C8.9	DESIGN OF BEAMS IN SHEAR 52
C8.10	DESIGN OF MEMBERS IN TENSION 54
C8.11	DESIGN FOR COMBINED LOADING 54
SECTION C9 STRUCTURAL DESIGN OF PRESTRESSED MASONRY	
C9.1	SCOPE OF SECTION 56
C9.2	GENERAL BASIS OF DESIGN 56
C9.3	DESIGN CRITERIA FOR PRESTRESSING TENDONS 56
C9.4	DESIGN OF MEMBERS IN COMPRESSION 57
C9.5	DESIGN OF MEMBERS IN BENDING 57
C9.6	DESIGN OF MEMBERS IN SHEAR 58
C9.7	DESIGN OF MEMBERS IN TENSION 58
C9.8	DESIGN FOR COMBINED LOADING 58

	<i>Page</i>
C9.9 DESIGN OF ANCHORAGE ZONES	58
SECTION C10 DESIGN FOR EARTHQUAKE ACTIONS	
C10.1 SCOPE OF SECTION	59
C10.2 GENERAL DESIGN CRITERIA	59
C10.3 DETAILING MASONRY STRUCTURES FOR EARTHQUAKE LOADS.....	59
C10.4 RESTRICTIONS ON THE USE OF LOADBEARING UNREINFORCED MASONRY	60
SECTION C11 MATERIALS	
C11.1 SCOPE OF SECTION	61
C11.2 MASONRY	61
C11.3 MASONRY UNITS	61
C11.4 MORTAR.....	61
C11.5 WALL TIES, CONNECTORS, ACCESSORIES AND LINTELS	63
C11.6 DAMP-PROOF COURSES (DPCs), FLASHINGS AND WEATHERINGS.....	63
C11.7 GROUT	63
C11.8 REINFORCEMENT AND TENDONS	63
SECTION C12 CONSTRUCTION	
C12.1 SCOPE OF SECTION	65
C12.2 GENERAL	65
C12.3 MATERIALS	65
C12.4 WORKMANSHIP	67
C12.5 TOLERANCES IN MASONRY	69
C12.6 SITE CONTROL	69
C12.7 ADDITIONAL SITE CONTROL OF SPECIAL MASONRY	70
C12.8 GROUTED MASONRY	71
C12.9 MASONRY UNDER CONSTRUCTION.....	71
C12.10 CLEANING	72
C12.11 TESTING OF IN SITU MASONRY	72
APPENDICES	
CA ASSESSMENT OF STRENGTH VALUES FROM TEST RESULTS	73
CB DETERMINATION OF CHARACTERISTIC VALUE	74
CC METHOD OF TEST FOR COMPRESSIVE STRENGTH	75
CD METHOD OF TEST FOR FLEXURAL STRENGTH.....	77
CE DURABILITY TESTING	79
CF METHOD OF MEASUREMENT OF BOW	81
CG STRENGTH TESTING OF IN SITU MASONRY	82
CH GUIDANCE ON THE USE OF MASONRY IN RESTORATION WORK AND MASONRY CONSTRUCTED USING SQUARE-DRESSED NATURAL STONE	83

STANDARDS AUSTRALIA

Australian Standard**Masonry structures—Commentary
(Supplement 1 to AS 3700—2011)**

SECTION C1 SCOPE AND GENERAL

C1.1 SCOPE

The scope of this Standard is intended to cover all masonry structures, including masonry retaining walls, masonry water-retaining structures and masonry in bridge structures.

The clauses in the Standard are written with the expectation that their application is to masonry members in the form of walls, beam and piers whose bed joints are horizontal. Further, they have been written with the expectation that those applying and using the provisions of this Standard will be adequately qualified and experienced in their areas of responsibility. It is expected that, in their hands, careful and experienced application of these provisions will result in safe, serviceable and economical masonry construction.

No specific guidance is given on autoclaved aerated concrete (AAC) laid in other than thin-bed mortar, prefabricated masonry or composite action of masonry with other materials. However, the Standard is not intended to prevent the use of these forms of construction.

C1.2 NORMATIVE REFERENCES

All documents referenced within the clauses of the Standard are included in this list and form part of the requirements of the Standard.

C1.3 USE OF ALTERNATIVE MATERIALS OR METHODS**Purpose of Clause**

The purpose of this Clause is to spell out that the Standard is not to be used to prevent innovation or the use of new design procedures or construction techniques; however, these would generally mean that the designer will have to find alternative means to demonstrate compliance with the relevant requirements. The soundness of any innovation, or of any departures from the requirements of the Standard, will have to be adequately demonstrated. It will be necessary to obtain the approval of the relevant authority for the use of alternative materials or methods.

Existing structures

Although this Clause provides guidance on the use of the Standard for the evaluation of strength or serviceability of existing structures, the determination of whether or not an existing structure is to be demolished is not covered by the Standard. Such a decision can only be made giving regard to the degree of deviation from the requirements of the Standard, the resulting level of safety, the consequence of failure in terms of injury and cost, and the cost of demolition and reconstruction.