AS 3700 Supp 1—2012

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
- Department of Finance and Services NSW
- Engineers Australia
- Housing Industry Association
- Master Builders Australia
- Masonry Contractors Association of NSW
- Think Brick Australia
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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'.

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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.