



Reinforced Autoclaved Aerated Concrete

Part 1: Structures



This Australian Standard® was prepared by Committee BD-106, Autoclaved Aerated Concrete. It was approved on behalf of the Council of Standards Australia on 23 November 2015.

This Standard was published on 23 December 2015.

The following are represented on Committee BD-106:

- Association of Consulting Structural Engineers of NSW
 - Australian Building Codes Board
 - Australian Institute of Building
 - Building Designers Association of Australia
 - Consult Australia
 - CSIRO
 - Engineers Australia
 - Housing Industry Association
 - Master Builders Australia
 - National Precast Concrete Association Australia
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This Standard was issued in draft form for comment as DR AS 5146.1:2015.

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.

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Australian Standard®

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First published as AS 5146.1:2015.
Reissued incorporating Amendment No. 1 (November 2018).

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Published by SAI Global Limited under licence from Standards Australia Limited, GPO Box 476, Sydney, NSW 2001, Australia

ISBN 978 1 76035 353 7

PREFACE

This Standard was prepared by the Standards Australia Committee BD-106, Autoclaved Aerated Concrete.

This Standard incorporates Amendment No. 1 (November 2018). 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 structures incorporating Reinforced Autoclaved Aerated Concrete (Reinforced AAC) members, including built-in components, for use by architects, engineers and builders.

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

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STANDARDS AUSTRALIA

Australian Standard

Reinforced Autoclaved Aerated Concrete

Part 1: Structures

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard specifies minimum requirements for the design and construction of structures incorporating Reinforced Autoclaved Aerated Concrete (Reinforced AAC) members.

Reinforced AAC structures and Reinforced AAC members designed and constructed in accordance with AS 5146.2 comply with this Standard for the applications defined therein.

Reinforced AAC structures and Reinforced AAC members designed and constructed in accordance with AS 5146.3 comply with this Standard for the applications defined therein.

NOTES:

- 1 This Standard uses the term 'AAC' to refer to autoclaved aerated concrete material and 'Reinforced AAC' to refer to members made of the AAC material into which steel reinforcement has been cast.
- 2 This Standard does not cover the design or construction of structures consisting of unreinforced autoclaved aerated concrete blocks.
- 3 This Standard applies only to cases where the design has been performed by an experienced structural engineer and design actions, material properties, section properties, bending moments, shears and deflections have been determined in accordance with the provisions of this Standard and AS 5146.2.
- 4 This Standard should not be interpreted in a way that prevents the design and construction of structures that use alternative materials or methods of design or construction not specifically referred to herein. However, the design and construction of such structures are outside the scope of this Standard.

1.2 NORMATIVE REFERENCES

The following are the normative documents referenced in this Standard.

- A1 | All references in the body of this Standard to the deleted undated normative references shall be replaced by the corresponding dated Australian Standard references.

NOTE: Documents referenced for informative purposes are listed in the Bibliography.

AS

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|------------------|---|
| 1170 | Structural design actions |
| 1170.4 | Part 4: Earthquake actions in Australia |
| 1530 | Methods for fire tests on building materials, components and structures |
| 1530.4 | Part 4: Fire-resistance test of elements of construction |
| 4055 | Wind loads for housing |
| 5146 | Reinforced autoclaved aerated concrete |
| A1 5146.2:2018 | Part 2: Design |
| 5146.3:2018 | Part 3: Construction |