



Masonry in small buildings

Part 2: Construction



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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
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 - Galvanizers Association of Australia
 - Housing Industry Association
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 - Master Builders Australia
 - Think Brick Australia
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-

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Australian Standard®

Masonry in small buildings

Part 2: Construction

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PREFACE

A1 | This Standard was prepared by the Standards Australia Committee BD-004, Masonry Structures, to supersede AS 4773.2—2010.

This Standard incorporates Amendment No. 1 (September 2020). 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 use by builders for the construction of masonry in small buildings, such as houses and garages.

This Standard is intended as a companion document to AS 4773.1, *Masonry in small buildings*, Part 1: *Design*.

The objective of this revision is to provide clarifications and minor corrections.

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

The term ‘informative’ has been used in this Standard to define the application of the appendix to which it applies. An ‘informative’ appendix is only for information and guidance.

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STANDARDS AUSTRALIA

Australian Standard

Masonry in small buildings

Part 2: Construction

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard specifies requirements for construction practices for masonry in buildings of Class 1 and Class 10a, as defined in the National Construction Code (NCC), designed in accordance with AS 4773.1 and to be constructed from clay, concrete, or calcium silicate masonry units and as follows:

- (a) Leaf thicknesses are 90 mm or greater.
- (b) The tops of all walls are laterally supported by a roof or floor structure acting as a diaphragm with the exception of parapets, chimneys and cantilevers in accordance with Clause 14.9 of AS 4773.1:2015 and fin walls in accordance with Table 9.1 of AS 4773.1:2015.
- (c) Walls are supported on concrete slabs, footings or suspended slab complying with NCC.
- (d) The geometric limitations specified in Clause 1.2.2.

The scope of this Standard does not cover the following:

- (i) Acoustics and energy efficiency.
- (ii) Construction or detailing of attachments such as basketball hoops, satellite dishes, shade structures and similar structures.
- (iii) Masonry constructed from autoclaved aerated concrete (AAC) units.
- (iv) Structures required to be designed for earthquake actions in accordance with AS 1170.4.
- (v) External walls constructed from horizontally cored units.

NOTES:

- 1 For acoustic and energy efficiency requirements, see the NCC.
- 2 For applications outside the scope of this Standard, the masonry should be constructed in accordance with AS 3700.
- 3 Guidance on the cleaning of masonry is given in Appendix A.

1.2 GENERAL LIMITATIONS

1.2.1 Loading

Wind category and loads derived from AS 4055 are required for the use of some of the Tables in this Standard.

NOTES:

- 1 For wind loads on structures outside the scope of Clause 1.2.2, AS/NZS 1170.2 should be used in conjunction with AS 3700.
- 2 The loads specified in AS 4055 include the appropriate combinations of permanent and wind actions.

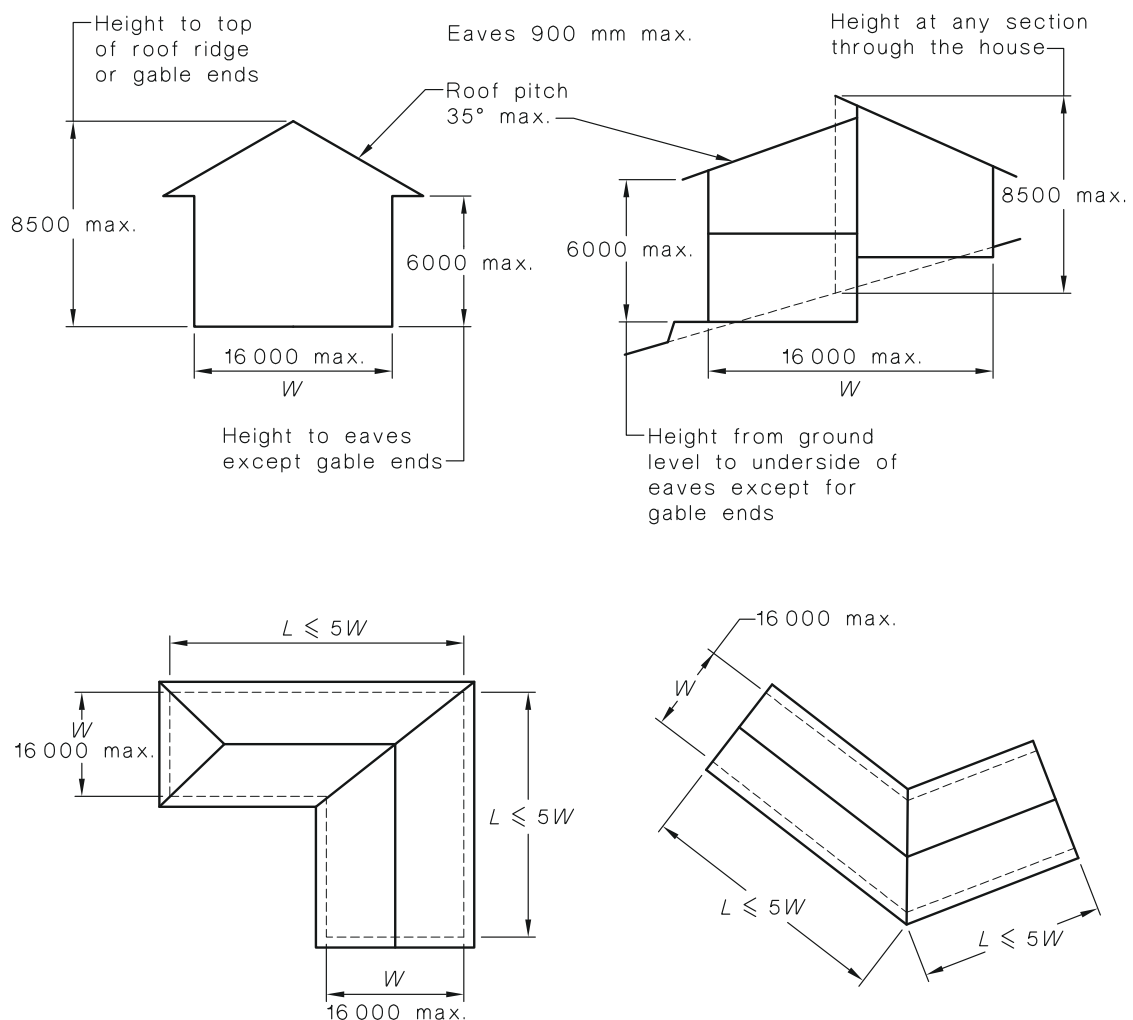
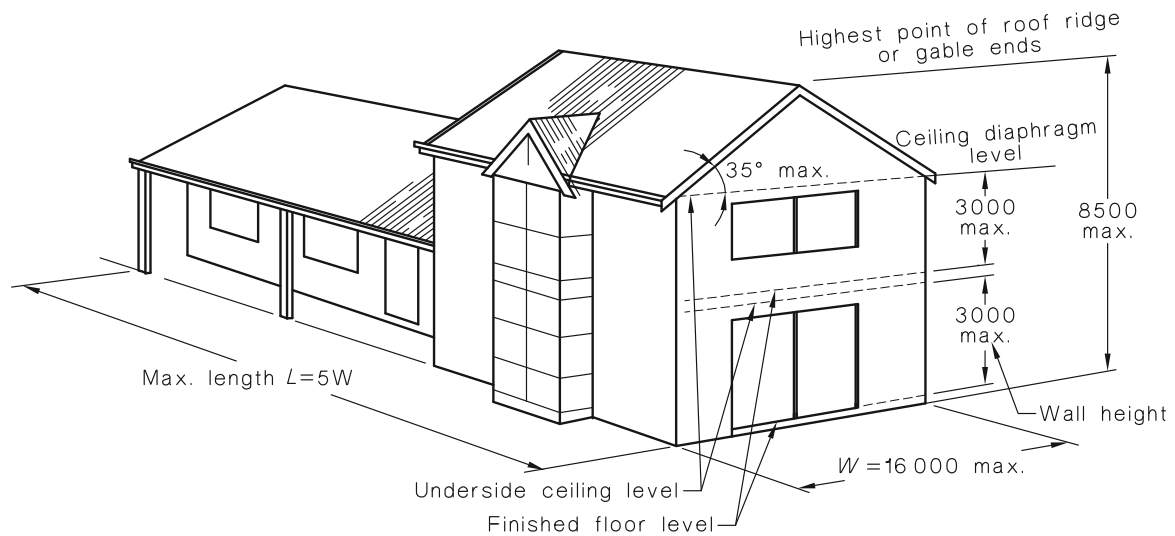
1.2.2 Limitations for building geometry

For the purpose of this Standard, the following conditions apply (see Figure 1.1):

- (a) The distance from ground level to the underside of eaves shall not exceed 6.0 m. The distance from ground level to the highest point of the roof, neglecting chimneys, shall not exceed 8.5 m, and the height of each storey, measured as floor to ceiling at external walls, shall not exceed 3.0 m.
- (b) The width (W), including roofed verandas but excluding eaves, shall not exceed 16.0 m, and the length (L) shall not exceed five times the width.
- (c) The roof pitch shall not exceed 35° .
- (d) Eaves width shall not exceed 900 mm.
- (e) The building shall include a continuous ceiling that acts as a diaphragm.

NOTES:

- 1 Atria exceeding these dimensions are outside the scope of this Standard.
- 2 Where the geometry lies outside the limitations of this Section, the design may be carried out in accordance with AS 3700.



DIMENSIONS IN MILLIMETRES

FIGURE 1.1 BUILDING GEOMETRY

1.3 NORMATIVE REFERENCES

The following are the normative documents referenced in this Standard:

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

AS

1141	Methods for sampling and testing aggregates (series)
1316	Masonry cement
1478	Chemical admixtures for concrete, mortar and grout
1478.2	Part 2: Methods of sampling and testing admixtures for concrete, mortar and grout
1672	Limes and limestones
1672.1	Part 1: Limes for building
1684	Residential timber-framed construction (series)
1720	Timber structures (series)
2870	Residential slabs and footings
3600	Concrete structures
3660	Termite management
3660.1	Part 1: New building work
3700	Masonry structures
3972	General purpose and blended cements
4055	Wind loads for housing
4100	Steel structures
4773	Masonry in small buildings
4773.1	Part 1: Design

AS/NZS

2699	Built-in-components for masonry construction
2699.1	Part 1: Wall ties
2699.3	Part 3: Lintels and shelf angles (durability requirements)
2904	Damp-proof courses and flashings
4455	Masonry units, pavers, flags and segmental retaining wall units
4455.1	Part 1: Masonry units
4600	Cold-formed steel structures
4671	Steel reinforcing materials

EN

12878	Pigments for the colouring of building materials based on cement and/or lime. Specifications and methods of test
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NASH

National Association of Steel Frame Housing
Standard for Residential and Low-rise Steel Framing
Part 1: Design criteria

NCC

National Construction Code