

Australian/New Zealand Standard™

**Garage doors and other large access
doors**

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AS/NZS 4505:2012

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee BD-014, Metal Cladding. It was approved on behalf of the Council of Standards Australia on 19 December 2012 and on behalf of the Council of Standards New Zealand on 23 January 2013.

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The following are represented on Committee BD-014:

Australian Building Codes Board
Australian Garage Door Association
Australian Steel Institute
BRANZ
Building Officials Institute of New Zealand
Consult Australia
Curtin University of Technology
Cyclone Testing Station
Housing Industry Association
New Zealand Metal Roofing Manufacturers
Queensland University of Technology

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This Standard was issued in draft form for comment as DR AS/NZS 4505.

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RECONFIRMATION
OF
AS/NZS 4505:2012
Garage doors and other large access doors

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Technical Committee BD-014 has reviewed the content of this publication and in accordance with Standards Australia procedures for reconfirmation, it has been determined that the publication is still valid and does not require change.

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Australian Steel Association
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Insurance Council of Australia
New Zealand Metal Roofing & Cladding Manufacturers Association
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NOTES

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Australian/New Zealand Standard

Garage doors and other large access doors

Originally in part as AS/NZS 4505:1998 and AS/NZS 4504, Parts 0 to 3 (1998).
Jointly revised, amalgamated and designated as AS/NZS 4505:2012.
Revised incorporating Amendment No. 1 (August 2015).

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee BD-014, Metal Cladding, to supersede AS/NZS 4505:1998, *Domestic garage doors* and AS/NZS 4504, Parts 0 to 3 (1998), *Domestic garage doors—Methods of test*.

This Standard incorporates Amendment No. 1 (August 2015). 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.

A1 | *Amendment No. 1 removes the height limitation on general purpose doors. The types of doors that the Standard is intended to cover are defined in Clause 4.5. Some large, purpose-built doors, such as aircraft hangar doors, may differ to those described in Clause 4.5 and may require an alternative design approach.*

The objective of this Standard is to provide specifications covering the construction and performance criteria of large access doors including garage doors. It addresses minimum performance requirements for structural loads as well as manufacturing and installation issues.

This Standard now incorporates the test methods that previously comprised the AS/NZS 4504 series.

The Standard specifies information to be provided for design of buildings on the loads that the doors apply to the buildings.

This Standard is written with reference to the wind classification systems embodied in AS/NZS 1170.2, *Structural design actions, Part 2: Wind actions*, AS 4055, *Wind loads for housing* and NZS 3604, *Timber framed buildings* and it is bound by the limitations of these Standards, as applicable.

For Class 2 to Class 9 buildings as defined in the NCC, doors are rated according to pressures which enable them to be used with buildings designed using AS/NZS 1170.2.

For Class 1 and Class 10 buildings as defined in the NCC, doors are rated according to wind classifications in AS 4055 and are compatible with buildings designed using either AS 4055 or AS/NZS 1170.2.

In New Zealand, doors are rated according to the wind zones in NZS 3604 and are compatible with buildings designed using NZS 3604 or AS/NZS 1170.2.

The terms ‘normative’ and ‘informative’ have been used in the Standard to define the application of the appendix to which they apply. A ‘normative’ appendix is an integral part of the Standard, whereas an ‘informative’ appendix is only for information and guidance.

<p><i>This document includes commentary on some of the clauses of the Standard. The commentary directly follows the relevant clause, is designated by ‘C’ preceding the clause number and is printed in italics in a box. The commentary is for information and guidance and does not form part of the Standard.</i></p>
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STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

Australian/New Zealand Standard
Garage doors and other large access doors

1 SCOPE

A1 This Standard specifies requirements for the design, construction, and installation of garage doors and other large access doors in external walls of buildings.

This Standard covers domestic doors for openings up to three metres in height and general purpose doors for openings of any height.

This Standard includes provisions to evaluate actions transferred from the door to the supporting structure or building.

The Standard includes the following:

- (a) Door classification.
- (b) Ultimate wind pressure rating.

Where a building design includes a requirement for a wind-borne debris impact rating, Appendix B sets out a procedure for wind debris impact rating for doors.

NOTES:

- 1 For Class 2 to 9 buildings, as defined in the NCC, ultimate wind pressure ratings for doors are compatible with pressures from AS/NZS 1170.2.
- 2 For Class 1 and Class 10 buildings, as defined in the NCC, ultimate wind pressure ratings for doors can be compatible with either AS 4055 or AS/NZS 1170.2.

2 APPLICATION

In order to claim (in any way, be it written, verbal or otherwise) compliance with this Standard, conformance with all the requirements contained herein is mandatory.

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	
4055	Wind loads for housing
AS/NZS	
1170	Structural design actions
1170.2	Part 2: Wind actions
NZS	
360	Timber framed buildings
ABCB	
NCC	National Construction Code