

AS 4055:2021
(Incorporating Amendment No. 1)



STANDARDS
Australia



Wind loads for housing



AS 4055:2021

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The following are represented on Committee BD-099:

- Australian Building Codes Board
- Australian Glass and Window Association
- Australian Institute of Building Surveyors
- Australian Roofing Tile Association
- Concrete Masonry Association of Australia
- Cyclone Testing Station
- Forest and Wood Products Australia
- Housing Industry Association
- Master Builders Australia
- Think Brick Australia

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Wind loads for housing

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Preface

This Standard was prepared by the Standards Australia Committee BD-099, Wind loads for housing, to supersede AS 4055:2012.

EN This Standard incorporates Amendment No. 1 (June 2024). The start and end of changes introduced by the Amendment are indicated in the text by tags including the Amendment number 1. **EN**

The objective of this document is to provide designers, builders and manufacturers of building products that are affected by wind loading with a range of wind speed classes that can be used to design and specify such products for use in housing that are within the limits of this document.

This revision aims to improve modelling of topographic effects and also to harmonize with recent changes to AS/NZS 1170.2.

The major changes in this edition are as follows:

- (a) The scope has been revised to include the limitation to NCC Class 1 and 10a buildings. This has always been the intention of this document as reflected in the definition of *house* (1.4.4), but the limitation is more obvious when presented in the Scope.
- (b) The wind speeds for each wind classification remain unchanged.
- (c) [Table 2.2](#) has been updated to include revision to AS/NZS 1170.2 which allows interpolation of wind speed between the boundaries of cyclonic regions C and D.
- (d) [Figure 1.2](#) has been modified to clarify definition of height of house when house site has batters (e.g. retaining walls) adjacent to the house.
- (e) Definitions for terrain categories (see [Clause 2.3](#)) have been revised to align with those in AS/NZS 1170.2 and to clarify the differences between the categories.
- (f) The calculation of topographic class (see [Clause 2.4](#)) had previously used the maximum slope of the topographic feature. The revision has been made to explicitly use the derived maximum slope that runs through the house site. The diagram of the cross-section of a hill better shows the measurements required to assess topographic class.
- (g) The example of topographic classes in [Appendix B](#) has been changed to reflect the definition of topographic classes.
- (h) The example of terrain categories and shielding in [Appendix C](#) has been changed to reflect the definition of terrain categories and shielding.
- (i) Nomenclature of “r” and “w” has been added to the wind classifications (see [Clause 2.6](#)) which is used to evaluate roof and wall pressures, including elements on openings such as windows and doors. No change has been made to the pressures used for each classification.
- (j) [Tables 5.2\(B\)](#) to [5.2\(M\)](#) have been amended to address minor discrepancies between values in the previous edition and those calculated from the formulae in [Appendix A](#).

The figures in [Appendix A](#) have been reproduced with permission from Department of Resources, Queensland © State of Queensland 2021.

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.

Notes to the text contain information and guidance only and are not an integral part of the document.

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