Australian Standard™

Glass in buildings— Selection and installation



This Australian Standard was prepared by Committee BD/7, Glazing and Fixing of Glass. It was approved on behalf of the Council of Standards Australia on 29 August 1994 and published on 17 October 1994.

The following interests are represented on Committee BD/7:

Architectural Aluminium Association of New Zealand

Australian Aluminium Fabricators Association

Australian Building Codes Board

Australian Chamber of Commerce and Industry

Australian Chamber of Manufactures

Building Research Association of New Zealand

CSIRO Division of Building Construction and Engineering, Australia

Flat Glass Council of Australia

Housing Industry Association, Australia

Housing Industry Association, Australia

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(Incorporating Amendment Nos 1 and 2)

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee BD/7 on Glazing and Fixing of Glass as an Australian Standard, and is the result of a consensus among the Australian and New Zealand representatives on the Joint Committee to produce it as an Australian Standard.

This Standard incorporates Amendment 1 (September 1997) and Amendment 2 (December 2000). The changes arising from the Amendments are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure, or part thereof affected.

This Standard is a new edition of AS 1288—1989 and incorporates Amendment No. 1 of that Standard as well as further amendments, specifically to Clauses 1.4.33, 2.2.2, 3.2.1, 3.7, 4.3.1, 5.1, 5.3, 5.9.1, 5.9.3, 5.10, 5.12, 5.13.3.1, 5.15, 5.16, 5.18, Figures F1, F4 and F8, Table F7 and Appendix I.

This Standard incorporates the following significant changes from the previous edition:

- (a) Addition of the definition of a chair rail.
- (b) Change in allowable deflection of frames under an appropriate design load to reflect the values in the relevant window frame Standards.
- (c) Additional information on defining unimpeded path of travel.
- (d) Addition of requirements for louvres in side panels allowing 5 mm toughened safety glass under specific circumstances.
- (e) Changes in the definition of 'associated' windows for bathrooms and other refinements.
- (f) Addition of expanded flow charts.

The objectives of the Standard are to provide uniform direction for the use and installation of glazing throughout Australia, to allow this Standard's use in legislation, and to clarify technical definitions.

The Committee considers that this Standard represents the best compromise which can be presented at this time. It makes recommendations for design and installation practice based upon proven techniques yet does not restrict the adoption of materials or methods of design which can be shown to the satisfaction of the responsible authority to provide no lesser standard of materials, designs or constructions than obtained by using the procedures specified herein.

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

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STANDARDS AUSTRALIA

Australian Standard

Glass in buildings—Selection and installation

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE This Standard sets out procedures for the selection and installation of glass in buildings, according to the type of material and the minimum thickness allowable for a given area (or maximum area allowable for a given thickness) for a single panel not exceeding 15 m² glazed area and for unidirectional glazing spans not exceeding 4 m.

For materials other than glass and for the construction and installation of windows, sliding doors, adjustable louvres, shopfronts and window walls with one-piece framing elements, refer to AS 2047.

NOTES:

- 1 This Standard does not preclude the use of materials or methods of design and installation where such materials or methods of design can be demonstrated to be equal to or superior to those specified in this Standard.
- 2 This Standard will be referenced in the Building Code of Australia by way of BCA Amendment 7 intended for publication in November 1994, thereby superseding the previous edition, AS 1288—1989, which will be withdrawn 6 months from the date of issuance of BCA Amendment 7. Users are advised that when BCA Amendment 7 is issued, it will not necessarily be gazetted in each State/Territory at the time of printing.
- **1.2 APPLICATION** The thickness of glass (see Clause 3.1.1) required for a given area (or the area of glass for a given thickness) shall be determined on the basis of the criteria given in Sections 3, 4, 5 and 6 as follows:
- (a) For installations subject to wind loading, the thickness or area shall be determined according to Section 4.
- (b) For special situations other than those covered in Sections 3, 4 and 5, the thickness or area shall be determined according to Section 6.
- (c) For human impact considerations, the thickness or area shall be determined according to Section 5.

Glass shall be installed in accordance with Section 7.

Unframed toughened glass assemblies shall be designed and glazed in accordance with Section 8.

1.3 REFERENCED DOCUMENTS The following documents are referred to in this Standard:

AS

- 1170 Minimum design loads on structures (known as the SAA Loading Code)
- 1170.1 Part 1: Dead and live loads and load combinations
- 1170.2 Part 2: Wind loads
- 1527 Two-part polysulphide-based sealing compounds for the building industry
- Methods for fire tests on building materials, components and structures
- 1530.4 Part 4: Fire resistance tests of elements of building construction
- The design and installation of corrugated fibre-reinforced cement roofing and wall cladding

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