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Glass in buildings — Selection and installation

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Glass in buildings — Selection and installation

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Preface

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee BD-007, Glazing and Fixing of Glass, to supersede AS 1288—2006.

The objective of this document is to provide uniform direction for the use and installation of glazing throughout Australia to allow its use in legislation, and to clarify technical definitions.

This document will be referenced in the Building Code of Australia 2022; thereby superseding AS 1288—2006.

The most significant changes of this revision include the following:

- (a) Update [Section 1](#) to reflect introduction of new material.
- (b) Expand [Section 6](#) provisions to include three-sided support.
- (c) Include new charts and tables for [Section 6](#) to assist interpretation for users.
- (d) Assess/resolve loading requirements for glass balustrades and overhead glazing.
- (e) Inclusion of informative information in respect to post-breakage performance of materials involved.
- (f) Resolve ambiguity and clarify requirements for loading requirements to interlinking handrails in glass balustrades.
- (g) New test method for glass barriers in [Appendix H](#) and [Appendix I](#).
- (h) New imposed load table in [Appendix J](#).
- (i) Update changed sections to adhere to NCC drafting protocols (i.e. [Sections 1, 6](#) and [7](#) only).

This document makes recommendations for design and installation practice based on proven techniques.

Notes to the text contain information and guidance. They are not an integral part of the Standard.

The terms “normative” and “informative” are used in Standards 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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Australian Standard[®]

Glass in buildings — Selection and installation

Section 1 Scope and general

1.1 Scope

This document sets out procedures for the selection and installation of glass in buildings, subject to wind loading, human impact, and special applications, such as overhead glazing, barriers and glass assemblies.

Glass strength requirements are given for glazing, based on the tensile stresses developed on the surface of the glass.

This document does not cover the following:

- (a) Glazing in lift cars and lift wells.
- (b) Furniture glass, cabinet glass, vanities, glass basins, refrigeration units, internal glass fittings and internal wall mirrors not specifically covered by [Section 5](#).
- (c) Buildings and structures with no public access intended for horticultural or agricultural use.

NOTE 1 The traditional use of these buildings suggests their current construction and glazing practices are acceptable. However, consideration should always be given to the brittle nature of glass and the consequences of its breakage.

- (d) Windows and doors in heritage buildings as defined by the relevant State or Territorial authority.
- (e) Restoration and or repairs to existing leadlights.
- (f) Special glazing applications which might fail due to the stresses other than tensile stresses, such as shear stresses.
- (g) Glass blocks, bricks or pavement.

NOTE 2 In Australia, legislation requires products to be “fit for purpose”. Where glazing is replaced because of breakage or any other reason, it is recommended that the replacement glass conform to the requirements of the relevant sections of this document unless otherwise permitted by the relevant legislation.

1.2 Application

The criteria for the selection of thickness and type of glass for particular applications shall be as specified in separate sections of this document as follows:

- (a) For installations subject to wind loading, glass to be selected using either first principles as set out in [Section 3](#), or using the simplified design as set out in [Section 4](#).

NOTE 1 [Section 4](#) may give a more conservative design solution.

- (b) For human impact considerations, glass to be selected according to [Section 5](#).
- (c) For overhead glazing, glass to be selected according to [Section 6](#).
- (d) For barriers, glass to be selected according to [Section 7](#).
- (e) For framed, unframed, and partly framed glass assemblies glass to be selected in accordance with [Section 9](#).

Glass shall be installed in accordance with [Section 8](#).