

Australian/New Zealand Standard™

Insulating glass units



Standards Australia



**STANDARDS
NEW ZEALAND**
Whenua Aotearoa

AS/NZS 4666:2000

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The following interests are represented on Committee BD/7:

Architectural Aluminium Fabricators Association
Australian Association of Certification Bodies
Australian Building Codes Board
Australian Chamber of Commerce and Industry
Australian Glass and Glazing Association
Australian Window Association
Australian Industry Group
Australian Institute of Building Surveyors
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CSIRO—Building, Construction and Engineering
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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee BD/7, Glazing and Fixing of Glass.

This Standard is a new Standard for Australia, but in New Zealand supersedes Part 2, *The selection and installation of manufactured sealed insulating glass units*, of NZS 4223:1985, *Code of practice for glazing in buildings*.

The objective of this Standard is to provide manufacturers, suppliers and installers of insulating glass units with requirements and guidelines for the selection and installation of insulating glass units in buildings.

Insulating glass units are fundamentally different from single glass units, in that most units have an organic edge seal. However well they are glazed, these units cannot be expected to have the same life expectancy as single glass units and reference should be made to the manufacturer's warranty.

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/STANDARDS NEW ZEALAND

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SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard sets out requirements and guidelines for the selection and installation of insulating glass units (IGUs) in buildings.

NOTE: 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 herein.

1.2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS	
1170	Minimum design loads on structures (known as the SAA Loading Code)
1170.2	Part 2: Wind loads
1288	Glass in buildings—Selection and installation
2047	Windows in buildings—Selection and installation
4055	Wind loads for housing
AS/NZS	
2343	Bullet-resistant panels and elements
BS	
5713	Specification for Hermetically Sealed Flat Double Glazing Units
ASTM	
E774	Standard Specification for the Classification of the Durability of Sealed Insulating Glass Units
CAN/CGSB	
12.8-M90	Insulating glass units
NZS	
4203	Code of practice for general structural design and design loadings for buildings
4211	Specification for performance of windows
4223	Code of practice for glazing in buildings

1.3 DEFINITIONS

For the purpose of this Standard, the definitions below apply.

1.3.1 Air gap

The space between the panes of glass in an insulating glass unit. Also known as cavity, airspace or spacer width, even when gas is used in the cavity instead of air.

1.3.2 Beads

A component of the frame, which is capable of restraining the glass under all design loading conditions.