

Australian/New Zealand Standard[®]

Safety glazing materials in buildings

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The following interests are represented on Committee BD/7:

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Architectural Aluminium Fabricators Association, Australia
Australian Association of Certification Bodies
Australian Building Codes Board
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Australian/New Zealand Standard®

Safety glazing materials in buildings

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PREFACE

This Joint Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee BD/7 on Glazing and Fixing of Glass to supersede AS 2208—1978, *Safety glazing materials for use in buildings (human impact considerations)*.

This Standard covers tests to be carried out for the different types of safety glazing material such as laminated, toughened, heat strengthened, toughened laminated, liquid laminated, safety wired, organic-coated, plastic and organic-backed safety mirrors.

This edition incorporates the following major changes from the previous edition:

- (a) The methods of test that were in Appendices B to H have been replaced by Appendices C to I.
- (b) Sampling and acceptance procedures that were in Appendices J and K and compliance verification given in Appendix P have been deleted and replaced by Appendix A.
- (c) Additional impact levels have been added to the impact test.

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.

Statements expressed in mandatory terms in notes to tables and figures are deemed to be requirements of this Standard.

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FOREWORD

Where glazing material is so situated that accidental breakage is reasonably foreseeable, the glazing materials and thicknesses required for wind loading may not be adequate. While the accident rate through breakage of glazing material glazed at low level is significant among most age groups, it is particularly high in the age groups up to 19 years. Research in the United Kingdom, New Zealand and Australia has shown that a high proportion of all reported accidents with glazing material involve glazed doors and side panels in all types of buildings. In certain specialized rooms, such as gymnasiums, breakage of glazing material located at high level is also a potential danger. In these and other similar danger areas, safety glazing materials meeting the requirements of this specification will reduce the risk of injury.

Although these safety glazing materials will break under sufficient impact their fracture characteristics are such that if broken the likelihood of cutting and piercing injuries will be minimized.

The aim of the impact test is to assess the fracture characteristics of a safety glazing material which has been broken at some predetermined minimum impact energy level dependent upon the intended application of the material. If the safety glazing material does not fracture at this minimum energy level, it must again be tested at higher energy levels until it is fractured, in order that the fracture characteristics can be assessed.

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SECTION 1 SCOPE AND GENERAL

1.1 SCOPE This Standard sets out test requirements for classification of safety glazing materials for use in buildings. The test requirements for the different glazing materials are designed to promote safety and to reduce or minimize the likelihood of cutting and piercing injuries from human impact.

NOTES:

- 1 Alternative methods for determining compliance with this Standard are given in Appendix A.
- 2 This Standard is not intended to restrict the use of materials or methods of test not specified herein where such materials or methods of test can be demonstrated to be the equal of, or superior to, those specified.
- 3 Notes on safe performance criteria and human dynamics data are given in Appendix B.
- 4 This Standard identifies safety glazing marking requirements.

1.2 APPLICATION This Standard applies to all safety glazing materials for use as required by AS 1288.

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

AS

1199	Sampling procedures and tables for inspection by attributes*
1288	Glass in buildings—Selection and installation
1399	Guide to AS 1199—Sampling procedures and tables for inspection by attributes*
1599	Pressure sensitive adhesive packaging tapes
2193	Methods for calibrating and grading of force-measuring systems of testing machines

AS/NZS

ISO 9000	Quality management and quality assurance standards
ISO 9000.1	Part 1: Guidelines for selection and use
ISO 9004	Quality management and quality system elements
ISO 9004.1	Part 1: Guidelines

SAA/SANZ

HB18	Guidelines for third-party certification and accreditation
HB18.28	Guide 28—General rules for a model third-party certification scheme for products

* Standard endorsed by Standards New Zealand as suitable for use in New Zealand.

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