

Australian Standard™

**Components for the protection of
openings in fire-resistant walls**

Part 1: Fire-resistant doorsets



This Australian Standard was prepared by Committee FP-019, Passive Fire Protection. It was approved on behalf of the Council of Standards Australia on 7 July 2005.
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The following are represented on Committee FP-019:

Architectural Hardware Industry Association
Australasian Fire Authorities Council
Australian Building Codes Board
Australian Chamber of Commerce and Industry
Australian Industry Group
Building Research Association of New Zealand
CSIRO Manufacturing and Infrastructure Technology
Fire Protection Association Australia
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Components for the protection of openings in fire-resistant walls

Part 1: Fire-resistant doorsets

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee FP-019, Passive Fire Protection, to supersede AS/NZS 1905.1:1997.

After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian Standard rather than an Australian/New Zealand Standard.

The objective of this Standard is to provide manufacturers, suppliers and installers with minimum requirements for the construction and installation of fire-resistant doorsets designed to protect the openings in walls and elements of construction that are required to resist the passage of fire.

Committee FP-019 is currently developing an additional option for testing door hardware and non-essential door seals, proposing that door hardware be assessed for use on generic types fire-resistant doorsets without the need for reference to proprietary types of doorsets. These changes will allow door hardware approvals to be gained independently of the doorset manufacturer, to facilitate a more cost effective and efficient method of assessment. It is anticipated that these changes will be introduced as an amendment within a year of publication of this Standard.

Requirements for standard configurations and permissible variations that do not require assessment have been moved from this Standard to AS 1530.4, *Methods for fire tests on building materials, components and structures*, Part 4: *Fire resistance test of elements of construction*, in line with the ISO 834, *Fire resistance tests—Elements of building construction* Standards. As such, the Standard is to be used in conjunction with the appropriate clauses of AS 1530.4.

The opportunity has also been taken to further refine this Standard, reduce ambiguity and provide clearer advice.

This Standard will be referenced in the Building Code of Australia (BCA) by way of BCA 2006 to be published by 1 May 2006, thereby superseding AS/NZS 1905.1:1997.

The requirements for maintenance of fire-resistant doorsets are covered in a separate Standard designated for that purpose, although reference is made in Section 6 of this Standard to maintenance record systems.

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

This Standard references documents in clauses of both a normative and informative nature. Normative referenced documents, are listed in Clause 1.3 and informative referenced documents are listed in the bibliography.

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.

This Standard incorporates a Commentary on some clauses. The Commentary directly follows the relevant clause, is designated by 'C' preceding the clause number and is printed in italics in a panel. The Commentary is for information only and does not need to be followed for compliance with the Standard.

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STANDARDS AUSTRALIA**Australian Standard****Components for the protection of openings in fire-resistant walls****Part 1: Fire-resistant doorsets****SECTION 1 SCOPE AND GENERAL****1.1 SCOPE**

This Standard specifies requirements for the construction and installation of fire-resistant doorsets used to protect openings in walls and partitions that are required to resist the passage of fire. It also applies to transom panels over doors, where the panels are contained within the doorframe and form part of the doorset.

This Standard does not apply to lift-landing doors.

NOTES:

- 1 Where it is intended to install the fire-resistant doorset in high-traffic areas, it is recommended that it be tested in accordance with Appendix A prior to fire testing and that it complies with the requirements set out therein.
- 2 Durability designations for locksets and methods for their cycle testing, for minimal, moderate and high frequency usage, are given in AS 4145.2.
- 3 Manufacturers of fire-resistant doorsets are strongly encouraged to implement quality control systems in accordance with AS/NZS ISO 9001. Guidance on the introduction and maintenance of suitable quality systems is given in AS/NZS ISO 9000 and AS/NZS ISO 9004.
- 4 Guidance on information that should be supplied with an enquiry or order is given in Appendix B.
- 5 Requirements governing lift-landing doors are given in AS 1735.11.
- 6 A panel above a doorset, which is not contained within the doorframe, is considered as being part of the wall and is therefore subject to the structural adequacy, integrity and insulation requirements set out in the *Building Code of Australia* (BCA).
- 7 A transom or mullion within a doorframe may be permanently fixed to the side members of the frame or may be removable by means of mechanical fixing.
- 8 A smoke control system (or other external environmental conditions) can impose loads greater than 5 N on the strike. In such circumstances, a substantially greater resistance force may be required of the strike to ensure the door remains in the latched position during a fire emergency.
- 9 This Standard does not include the evaluation of smoke leakage under ambient and medium temperature exposures. Other Standards such as AS/NZS 1530.7 may be used for evaluating the potential for smoke spread.

1.2 APPLICATION

This Standard is intended to complement the fire-protection requirements of the *Building Code of Australia* (BCA) and to be used with the appropriate clauses of AS 1530.4.