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 28 July 2015. This Standard was published on 25 August 2015.

The following are represented on Committee FP-019:

- Architectural Door Hardware Association
- Australasian Fire and Emergency Service Authorities Council
- Australian Building Codes Board
- Australian Industry Group
- Australian Security Industry Association
- Building Research Association of New Zealand (BRANZ)
- CSIRO Materials Science and Engineering
- Engineers Australia
- Fire Protection Association Australia
- Fire Protection Association New Zealand
- Insurance Council of Australia

This Standard was issued in draft form for comment as DR AS 1905.1:2014.

Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through the public comment period.

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Part 1: Fire-resistant doorsets

First published in Australia as AS CA57.1—1972.
Revised and redesignated AS 1905.1—1976.
First published in New Zealand as part of NZS 1188:1954.
Revised and redesignated in part as NZS 4232.1:1988.
Reissued incorporating Amendment No. 1 (July 2016).
PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee FP-019, Passive Fire Protection, to supersede AS 1905.1—2005.

This Standard incorporates Amendment No. 1 (July 2016). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.

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.

The objective of the revision of AS 1905.1—2005 is to address inconsistencies in the Standard, to meet the Australian Building Codes Board and Standards Australia protocols for National Construction Code (NCC) referenced documents and clarify the requirements for testing, assessments, installation, marking and documentation.

This revision includes following changes:

(a) Compliance with the ABCB protocol for the development of NCC referenced documents.

(b) Clarification of requirements for testing, assessments, installation marking and documentation.

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

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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Section 1: Scope and General

1.1 Scope

This Standard specifies requirements for the construction and installation of fire-resistant doorsets that are used to protect openings in walls, and for 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.

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.
2. Durability designations for locksets, including methods for their cycle testing for minimal, moderate and high frequency usage, are given in AS 4145.2.
3. Durability designations and closing forces for door closing devices, including methods for their cycle testing for minimal, moderate and high frequency usage, are given in AS 4145.5.
4. Permissible variations that do not require assessment are specified in AS 1530.4.
5. The requirements for maintenance of fire-resistant doorsets are covered in AS 1851.
6. This Standard does not apply to lift-landing doors. The requirements governing lift-landing doors are given in AS 1735.11.
7. 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.
8. For information to be supplied with enquiries and orders, see Appendix B.

1.2 Application

This Standard is intended to complement the fire-protection requirements of the National Construction Code (NCC) and to be used with the appropriate clauses of AS 1530.4.

1.3 Normative References

The following are the normative documents referenced in this Standard.

Note: Documents referenced for informative purposes are listed in the Bibliography.

AS
1530 Methods for fire tests on building materials, components and structures
1530.1 Method 1: Combustibility test for materials
1530.4 Method 4 Fire resistance test for elements of construction
3600 Concrete structures

AS
3700 Masonry structures
5007 Powered doors for pedestrian access and egress

NCC National Construction Code