

Australian Standard™

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

Part 2: Fire-resistant roller shutters



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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Part 2: Fire-resistant roller shutters

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PREFACE

This Standard was prepared by the Standards Australia Committee FP-019, Passive Fire Protection, to supersede AS 1905.2—1989.

The objective of this Standard is to provide manufacturers, suppliers and installers of roller shutters with minimum requirements for the design, installation and operation of roller shutters for use in walls and elements of construction required to provide fire resistance.

Experience with uninsulated fire-resistant roller shutters, (i.e., with curtains manufactured from steel) in actual fires has demonstrated their ability to impede the passage of flame and hot gases; however, they become extremely hot and can represent a significant heat radiation hazard. Accordingly, such fire-resistant roller shutters are recorded with a 'zero' or 'not applicable' rating for insulation in the Fire Resistance Level. The Building Code of Australia may not permit the use of such roller shutters in situations where insulation is required. Where fire shutters are the only product option and insulation is critical, an alternative is to use them in conjunction with water drenchers. This option requires a formal opinion from the registered testing authority.

Fire-resistant roller shutters need to be inspected on a regular basis and re-certified as operable. The timing of these inspections would appropriately be considered in consultation with the regulatory authority. The requirements for maintenance of fire-resistant roller shutters are not covered in 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.

In this edition of the Standard, emphasis is placed on performance-based products demonstrated through the fire resistance test and, as such, the Standard is to be used in conjunction with the appropriate sections of AS 1530.4.

The 1989 edition allowed suppliers to manufacture and install fire shutters to a specification that was set out in an informative Appendix. The Appendix has been removed, with the view to providing incentive for research and development of lower cost production options. This edition also provides greater guidance for users of the Standard in relation to product options and variations.

The opportunity has also been taken to further refine the Standard and reduce ambiguity and to 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 the previous edition, AS 1905.2—1989.

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STANDARDS AUSTRALIA

Australian Standard

Components for the protection of openings in fire-resistant walls

Part 2: Fire-resistant roller shutters

1 SCOPE AND GENERAL**1.1 Scope**

This Standard sets out minimum requirements for the design, installation and operation of vertically operating fire-resistant roller shutters used to protect openings in walls required to resist the passage of fire.

NOTES:

- 1 Fire resistance test requirements for roller shutters are specified in AS 1530.4.
- 2 This Standard does not address smoke leakage through shutter assemblies. 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.

1.3 Normative references

The following referenced documents are indispensable for the application of this Standard. The latest edition of the referenced document (including any amendments) applies.

AS

- | | |
|--------|---|
| 1530 | Methods for fire tests on building materials, components and structures |
| 1530.1 | Part 1: Combustibility test for materials |
| 1530.4 | Part 4: Fire resistance tests for elements of building construction |

NOTE: The informative document referred to in this Standard is listed in the Bibliography at the end of the document.

ABCB

BCA Building Code of Australia

1.4 Definitions

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

1.4.1 Automatic

Where applied to a fire-resistant roller shutter, a shutter designed to close when activated by a sensing device in accordance with Clause 2.4.

1.4.2 Certifier

A person or organization acting on behalf of and authorized by the manufacturer who assumes the responsibility for approving the installation of a fire-resistant roller shutter in accordance with this Standard.

1.4.3 Fire resistance level (FRL)

The nominal grading period, in minutes, that is determined by subjecting a specimen to the standard time temperature curve regime as set out in AS 1530.4, to specify—

- (a) structural adequacy;