



**Fire detection, warning, control and intercom systems—System design, installation and commissioning**

**Part 1: Fire**



AS 1670.1:2018

This Australian Standard® was prepared by FP-002, Fire Detection, Warning, Control and Intercom Systems. It was approved on behalf of the Council of Standards Australia on 29 November 2018.

This Standard was published on 21 December 2018.

The following are represented on Committee FP-002:

Association of Hydraulic Services Consultants Australia  
Australasian Fire and Emergency Service Authorities Council  
Australian Building Codes Board  
Australian Chamber of Commerce and Industry  
Australian Industry Group  
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This Standard was issued in draft form for comment as DR AS 1670.1:2018.

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ISBN 978 1 76072 321 7



# Fire detection, warning, control and intercom systems—System design, installation and commissioning

## Part 1: Fire

Originally as part of AS CA15—1961.  
Previous edition AS 1670.1—1995.  
AS 1670.1—1995 and AS 1670.2—1997 revised, amalgamated and designated as AS 1670.1—2004.  
Second edition AS 1670.1:2015.  
This edition 2018.

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## Preface

This Standard was prepared by the Standards Australia Committee FP-002, Fire Detection, Warning, Control and Intercom Systems, to supersede AS 1670.1:2015.

The objective of this revision is to remove many of the legacy Standards superseded by a number of AS 7240 Standards which have been published since 2004 as well as incorporating some corrections and clarifications.

It has also introduced AS ISO 7240.17 for short circuit isolators and AS ISO 7240.18 for input/output devices to replace the requirements for distributed CIE used with AS 4428.1 systems.

All references to smoke alarms and heat alarms have been removed.

This edition also permits the use of two editions of relevant Standards relating to components. See [Table 1.8](#) for the list of relevant editions of the Standards which apply throughout this document. Notes to clauses in this Standard do not form a mandatory part for conformance with this Standard. They are of an advisory nature only and are used to give explanation or guidance to the user of recommended considerations or technical procedures, or to provide an informative cross-reference to other documents or publications.

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

The terms “normative” and “informative” have been used in this Standard to define the application of the appendices to which they apply. A “normative” appendix is an integral part of a Standard, whereas an “informative” appendix is for information and guidance.

*This Standard incorporates commentary on some of the clauses. The commentary directly follows the relevant clause, is designated by “C” preceding the clause number and appears in italics in a box. The commentary is for information and does not need to be followed for conformance with the Standard.*

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# Australian Standard®

## Fire detection, warning, control and intercom systems—System design, installation and commissioning

### Part 1: Fire

#### Section 1 Scope and general

##### 1.1 Scope

This Standard sets out requirements for the design, installation and commissioning of fire detection and alarm systems comprising components conforming to the requirements of the appropriate component Standards.

NOTE 1 Where detection and control and indicating equipment forms part of a smoke control system in accordance with AS 1668.1, specific requirements are specified in [Clause 7](#).

NOTE 2 Where detection and control and indicating equipment forms part of a special hazard system in accordance with AS 4214, the additional requirements are covered in AS 1670.5 Fire — Special Hazards.

NOTE 3 Maintenance requirements for fire detection and alarm equipment are given in AS 1851.

##### 1.2 Application

This Standard requires that detection and occupant warning be provided throughout all areas of the building; however where systems are installed to solely meet the requirements of the NCC, refer to the NCC for areas to be protected.

##### 1.3 Normative references

The following are the normative reference documents in this Standard.

NOTE 1 Documents referenced for informative purposes are listed in the Bibliography.

NOTE 2 See [Clause 1.8](#) for the list of acceptable editions of the listed relevant normative references.

AS 1603.11, *Automatic fire detection and alarm systems, Part 11: Visual warning devices*

AS 1603.13, *Automatic fire detection and alarm systems, Part 13: Duct sampling smoke detectors*

AS 1603.17, *Automatic fire detection and alarm systems, Part 17: Warning equipment for people with hearing impairment*

AS 1668.1, *The use of ventilation and air conditioning in buildings, Part 1: Fire and smoke control in buildings*

AS 1670.1, *Fire detection, warning, control and intercom systems — System design, installation and commissioning, Part 1: Fire*

AS 1670.4, *Fire detection, warning, control and intercom systems — System design, installation and commissioning, Part 4: Emergency warning and intercom systems*

AS 2053, *Conduits and fittings for electrical installations (series)*

AS 2118.1, *Automatic fire sprinkler systems, Part 1: General systems*

AS 2118.4, *Automatic fire sprinkler systems, Part 4: Sprinkler protection for accommodation buildings not exceeding four storeys in height*