

Australian Standard®

Self-contained smoke alarms

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This Australian Standard was prepared by Committee FP/2, Automatic Fire Detection and Alarm Systems. It was approved on behalf of the Council of Standards Australia on 16 May 1990 and published on 6 August 1990.

The following interests are represented on Committee FP/2:

Attorney-General's Department
Australian Assembly of Fire Authorities
Australian Association of Rural Fire Authorities
Australian Electrical and Electronic Manufacturers Association
Australian Fire Protection Association
Australian Uniform Building Regulations Coordinating Council
Board of Fire Commissioners, New South Wales
Civil Aviation Authority
Commonwealth Fire Board
Confederation of Australian Industry
CSIRO, Division of Building, Construction and Engineering
Department of Administrative Services
Fire Protection Industry Association of Australia
Insurance Council of Australia
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Australian Standard®

Self-contained smoke alarms

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PREFACE

This Standard was prepared by the Standards Australia Committee on Automatic Fire Detection and Alarm Systems.

This Standard for self-contained smoke alarms is intended to complement the broader requirements of detectors in the Standards published as the different parts of AS 1603, Automatic fire detection and alarm systems.

The various components of automatic fire detection and alarm systems are being specified in the following Standards:

(a) Heat detectors	AS 1603.1
(b) Point type smoke detectors	AS 1603.2
(c) Flame detectors	AS 1603.3
(d) Control and indicating equipment	AS 1603.4
(e) Manually operated fire alarm call points	AS 1603.5
(f) Fire alarm bells	AS 1603.6
(g) Beam type optical smoke detectors	AS 1603.7
(h) Sampling systems	AS 1603.8

Specifications for the design, installation and maintenance of equipment for fire detection and alarm systems and the testing of actuating devices have been published as follows:

AS

1670 Automatic fire detection and alarm systems—System design, installation, and commissioning

1851 Maintenance of fire protection equipment.

1851.8 Part 8: Automatic fire detection and alarm systems

2362 Automatic fire detection and alarm systems—Methods of test for actuating devices.

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STANDARDS AUSTRALIA

Australian Standard
Self-contained Smoke Alarms

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE This Standard specifies requirements for the design and performance of electrically operated self-contained smoke alarms containing both detection and alarm facilities.

This Standard allows, although it does not require, the inclusion within the smoke alarm of facilities for interconnection with other similar units, or accessories. Where such facilities are included, this Standard specifies requirements for the connection interface. However, such an interface is not intended for connection to remote monitoring stations.

This Standard applies to self-contained smoke alarms intended for installation within residential accommodation where connection to remote monitoring stations is not required.

1.2 APPLICATION A network of interconnected smoke alarms shall not be substituted for installations which require compliance with AS 1670.

The test methods included in this Standard are intended to assess the suitability of smoke alarms solely for residential applications.

1.3 CLASSIFICATION Self-contained smoke alarms shall be classified as internally energized, externally energized, or externally and internally energized.

Each class of alarm may be either single or multiple station.

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

STANDARDS**AS**

- 1319 Safety signs for the occupational environment
- 1670 Automatic fire detection and alarm systems—System design, installation, and commissioning
- 2362 Automatic fire detection and alarm systems—Methods of test for actuating devices
 - 2362.4 Part 4: Voltage stability test
 - 2362.5 Part 5: Insulation resistance test
 - 2362.6 Part 6: Static discharge test
 - 2362.7 Part 7: Electromagnetic interference test
 - 2362.8 Part 8: Impulse voltage withstand test
 - 2362.9 Part 9: High frequency disturbance test
 - 2362.10 Part 10: Low temperature test
 - 2362.11 Part 11: Damp heat test
 - 2362.12 Part 12: Dry heat test
 - 2362.13 Part 13: Corrosion test
 - 2362.15 Part 15: Vibration test
 - 2362.17 Part 17: Sensitivity test
 - 2362.18 Part 18: Air velocity stability test
 - 2362.19 Part 19: Dust test
 - 2362.20 Part 20: Overload test
 - 2362.21 Part 21: Endurance test
 - 2362.22 Part 22: Sound pressure level test
- 2484 Fire—Glossary of terms relating to fire tests
 - 2484.2 Part 2: Fire—Glossary of terms—Fire protection and firefighting equipment
- 2546 Printed Boards
 - 2546.1 Part 1: General requirements and test methods
- 2706 Numerical values—Rounding and interpretation of limiting values
- 3000 SAA Wiring Rules

APPROVAL AND TEST SPECIFICATIONS**AS**

- 3100 Definitions and general requirements for electrical materials and equipment
- 3121 Insulating mouldings