

*Under Revision*  
*DR 95443*

*Amendment 1 - September 1990*  
*" 2 - April 1995*

AS 1603.2—1990

**SUPERSEDED BY:**  
AS 1603.2-1997

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Australian Standard®

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**Automatic fire detection and alarm systems**

**Part 2: Point type smoke detectors**

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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 7 March 1990 and published on 16 July 1990.

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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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AS 1603.2/Amdt 1/1990-09-17

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**Amendment No 1**  
to  
**AS 1603.2—1990**  
**Automatic fire detection and alarm systems**  
**Part 2: Point type smoke detectors**

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**CORRECTION**

The 1990 edition of AS 1603.2 is amended as follows; the amendment(s) should be inserted in the appropriate place.

*SUMMARY:* This Amendment applies to Clauses 1.3, 2.5, 3.2 and 4.1(j), and Table 3.1.

Published on 17 September 1990.

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AS 1603.2/Amdt 2/1995-04-05

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**Amendment No. 2**  
to  
**AS 1603.2—1990**  
**Automatic fire detection and alarm systems**  
**Part 2: Point type smoke detectors**

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**REVISED TEXT**

The 1990 edition of AS 1603.2 is amended as follows; the amendment(s) should be inserted in the appropriate place.

*SUMMARY:* This Amendment applies to Clause 2.8.

Published on 5 April 1995.

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**Automatic fire detection and alarm  
systems**

**Part 2: Point type smoke detectors**

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↙ First published as AS 1603.2—1990.

## PREFACE

This Standard was prepared by the Standards Australia Committee on Automatic Fire Detection and Alarm Systems to supersede, in part, AS 1603—1974, *Thermal detectors for automatic fire alarm installations*.

It is recommended that a period of twelve months from the date of publication of this Standard be allowed for manufacturers to comply with this Standard.

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 (this Standard) | 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**  
**Automatic fire detection and alarm systems**

**Part 2: Point type smoke detectors**

**SECTION 1 SCOPE AND GENERAL**

**1.1 SCOPE.** This Standard specifies requirements for the design, construction and performance of point type smoke detectors as used in automatic fire detection and alarm systems.

This Standard does not cover detectors installed in air handling ducts, although many provisions herein could be applied to such applications.

**1.2 APPLICATION.** This Standard applies to smoke detectors intended for installation in accordance with AS 1670, and connected to control and indicating equipment in accordance with AS 1603.4.

**1.3 CLASSIFICATION.** ~~Point type smoke detectors shall be of the ionization or photo-electric (light scattering) types, and shall be classified as follows:~~ **SEE AMENDMENT 1**

- ~~(a) Detectors having reduced sensitivity.~~
- ~~(b) Detectors having normal sensitivity.~~
- ~~(c) Detectors having high sensitivity.~~
- ~~(d) Detectors which are adjustable in sensitivity in situ.~~
- ~~(e) Detectors which are adjustable in sensitivity at a panel remote from the detector.~~

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

**STANDARDS**

**AS**

1603	Automatic fire detection and alarm systems
1603.4	Part 4: Control and indicating equipment
1670	Automatic fire detection and alarm systems—System design, installation and commissioning
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
2362	Automatic fire detection and alarm systems—Methods of test for actuating devices
2362.4	Method 4: Voltage stability test
2362.5	Method 5: Insulation resistance test
2362.6	Method 6: Static discharge test
2362.7	Method 7: Electromagnetic interference test
2362.8	Method 8: Impulse voltage withstand test
2362.9	Method 9: High frequency disturbance test
2362.10	Method 10: Low temperature test
2362.11	Method 11: Damp heat test
2362.12	Method 12: Dry heat test
2362.13	Method 13: Corrosion test
2362.15	Method 15: Vibration test
2362.16	Method 16: Impact test
2362.17	Method 17: Sensitivity test
2362.18	Method 18: Air velocity stability test
2362.19	Method 19: Dust test

**APPROVAL AND TEST SPECIFICATIONS**

**AS**

3100	Approval and test specification for definitions and general requirements for electrical materials and equipment
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