

Australian Standard<sup>®</sup>

**Fire detection and alarm systems**

**Part 5: Point type heat detectors  
(ISO 7240-5:2003, MOD)**



This Australian Standard® was prepared by Committee FP-002, Fire Detection, Warning, Control and Intercom Systems. It was approved on behalf of the Council of Standards Australia on 9 January 2004.

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The following are represented on Committee FP-002:

- Audio Engineering Society
  - Australasian Fire Authorities Council
  - Australian Building Codes Board
  - Australian Chamber of Commerce and Industry
  - Australian Electrical and Electronic Manufacturers Association
  - Australian Government Analytical Laboratories, Scientific Services Laboratory
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This Standard was issued in draft form for comment as DR 03323.

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 public comment period.

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## **Fire detection and alarm systems**

### **Part 5: Point type heat detectors (ISO 7240-5:2003, MOD)**

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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 1603.2—1997, *Automatic fire detection and alarm systems—Part 2: Point type smoke detectors*. The Committee intends to withdraw AS 1603.2—1997 five years after the publication of this Standard.

*Amendment No. 1 (February 2007), is identical to ISO 7240-5:2003, Technical Corrigendum 1 and has been bound at the end of this Standard. The amendment relates to Clauses 2 and 5.*

This Standard has been adopted with national modifications and has been reproduced from ISO 7240-5:2003, *Fire detection and fire alarm systems—Part 5, Point type heat detectors*. A modification for Australian conditions is the addition of the indicator visibility requirement of AS 2362.25. The variations are set out in Annex ZA.

As this Standard is reproduced from an International Standard, the following applies:

- (a) Its number does not appear on each page of text and its identity is shown only on the cover and title page.
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References to International standards should be replaced by references to Australian Standards as follows:

<i>References to International Standard or other Publication</i>		<i>Australian/New Zealand Standard</i>	
IEC		AS	
60068	Environmental testing	60068	Environmental testing
60068-1	Part 1: General and guidance	60068.1	Part 1: General and guidance
60068-2-1	Part 2: Tests. Test A: Cold	60068.2.1	Part 2: Tests-Test A: Cold
60068-2-2	Part 2: Tests. Test B: Dry heat	60068.2.2	Part 2: Tests-Test B: Dry heat
60068-2-6	Part 2: Tests. Test Fc: Vibration (sinusoidal)	60068.2.6	Part 2: Tests-Test Fc: Vibration (sinusoidal)
60068-2-27	Part 2: Tests. Test Ea and guidance: Shock	60068.2.27	Part 2: Tests-Tests Ea and guidance: Shock
60068-2-78	Part 2: Tests. Test Cab: Damp heat, steady state	60068.2.78	Part 2: Tests- Test Cab: Damp heat, steady state

The terms ‘normative’ and ‘informative’ are used in this Standard to define the application of the annex to which they apply. A ‘normative’ annex is an integral part of a standard, whereas an ‘informative’ annex is only for information and guidance.

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## INTRODUCTION

This part of ISO 7240 has been drawn up by the Sub-Committee ISO/TC 21/SC 3 and is based on a draft prepared by European Standards Technical Committee CEN/TC 72 "*Fire detection and fire alarm systems*".

A fire detection and alarm system is required to function satisfactorily not only in the event of a fire, but also during and after exposure to conditions likely to be met in practice such as corrosion, vibration, direct impact, indirect shock and electromagnetic interference. Some tests specified are intended to assess the performance of the heat detectors under such conditions.

The performance of heat detectors is assessed from the results obtained in specific tests; ISO 7240-5 is not intended to place any other restrictions on the design and construction of such detectors.



# AUSTRALIAN STANDARD

## Fire detection and alarm systems

### Part 5: Point type heat detectors (ISO 7240-5:2003, MOD)

#### 1 Scope

This part of ISO 7240 specifies the requirements, test methods and performance criteria for point heat detectors for use in fire detection and fire alarm systems for buildings (see ISO 7240-1).

For other types of heat detector, or for detectors intended for use in other environments, this part of ISO 7240 can be used only for guidance. Heat detectors with special characteristics and developed for specific risks are not covered by this part of ISO 7240.

#### 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 209-1, *Wrought aluminium and aluminium alloys — Chemical composition and forms of products — Part 1: Chemical composition*

ISO 7240-1, *Fire detection and alarm systems — Part 1: General and definitions*

IEC 60068-1, *Environmental testing — Part 1: General and guidance*

IEC 60068-2-1, *Environmental testing — Part 2-1: Tests. Tests A: Cold*

IEC 60068-2-2, *Environmental testing — Part 2-2: Tests. Tests B: Dry heat*

IEC 60068-2-6, *Environmental testing — Part 2-6: Tests. Test Fc: Vibration (sinusoidal)*

IEC 60068-2-27, *Environmental testing — Part 2-27: Tests. Test Ea and guidance: Shock*

IEC 60068-2-42, *Environmental testing — Part 2-42: Tests — Test Kc: Sulphur dioxide test for contacts and connections*

IEC 60068-2-78, *Environmental testing — Part 2-78: Tests — Test Cab: Damp heat, steady state*

EN 50130-4, *Alarm systems — Part 4: Electromagnetic compatibility — Product family standard: Immunity requirements for components of fire, intruder and social alarm systems*

#### 3 Terms and definitions

For the purposes of this document, the following terms and definitions given in ISO 7240-1 and the following apply.