Australian Standard®

Fire detection and alarm systems

A1

Part 15: Point type fire detectors using scattered light, transmitted light or ionization sensors in combination with a heat sensor (ISO 7240-15:2004, 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 17 March 2004.
This Standard was published on 29 April 2004.

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
- Australian Industry Group
- Australian Institute of Building Surveyors
- Deafness Forum of Australia
- Department of Defence (Australia)
- Fire Protection Association Australia
- Institute of Security Executives
- National Electrical and Communications Association
- Property Council of Australia

This Standard was issued in draft form for comment as DR 03325.

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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AS 7240.15—2004
(Amendment No. 1 attached)

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First published as AS 7240.15—2004.
Reissued with Amendment No. 1 attached (March 2007).

Published by Standards Australia GPO Box 476, Sydney, NSW 2001, Australia

ISBN 0 7337 5905 X

PREFACE

This Standard was prepared by the Standards Australia Committee FP-002, Fire Detection, Warning, Control and Intercom Systems.

Amendment No. 1 (March 2007), is identical to ISO 7240-15:2004, Technical Corrigendum 1 and has been bound at the end of this Standard. The amendment relates to the Part Title and Appendix N.

This Standard has been adopted with national modifications and has been reproduced from ISO 7240-15:2004, *Fire detection and fire alarm systems,* Part 15*: Multisensor fire detectors.* A modification for Australian Condition 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.

(b) In the source text 'this International Standard' should read 'this Australian Standard'.

(c) A full point should be substituted for a comma when referring to a decimal marker.

References to International standards should be replaced by references to Australian Standards as follows:

References to International Standard or other publication		*Australian/New Zealand Standard*	
ISO		AS	
7240	Fire detection and alarm systems	7240	Fire detection and alarm systems
7240-5	Part 5: Point-type heat detectors	7240.5	Part 5: Point-type heat detectors (ISO 7240-5:2003, MOD)
7240-7	Part 7: Point-type smoke detectors using scattered light, transmitted light or ionization	7240.7	Part 7: Point-type smoke detectors using scattered light, transmitted light or ionization (ISO 7240-7:2003, MOD)
IEC		AS	
60068	Environmental testing	60068	Environmental testing
60068-1	Part 1: General and guidance	60068.1	General and guidance
60068-2-1	Part 2: Tests, Test A: Cold	60068.2.2	Tests—Test A: Cold
60068-2-6	Part 2: Tests, Test Fc: Vibration (sinusoidal)	60068.2.6	Tests—Test Fc: Vibration (sinusoidal)
60068-2-27	Part 2: Tests, Test Ea and guidance: Shock	60068.2.27	Tests—Tests Ea and guidance: Shock
60068-2-78	Part 2: Tests, Test Cab: Damp heat, steady state	60068.2.78	Tests— Test Cab: Damp heat, steady state

The term '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 for multisensor fire detectors describes requirements for different types of multisensor fire detectors.

This part of ISO 7240 is drafted on the basis of functions which are required to be provided on all multisensor fire detectors covered by this standard, and optional functions with requirements which may be provided. It is intended that the options will be used for specific applications, as recommended in application guidelines.

Each optional function is included as a separate entity, with its own set of associated requirements, in order to permit multisensor fire detectors covered by this standard with different combinations of functions to conform to this standard.

Other functions associated with fire detection and fire alarm may also be provided, even if not specified in this part of ISO 7240, if they do not jeopardize any function required by this document.

NOTES

AUSTRALIAN STANDARD

Fire detection and alarm systems

Part 15:
A1 | Point type fire detectors using scattered light, transmitted light or ionization sensors in combination with a heat sensor (ISO 7240-15:2004, MOD)

1 Scope

This part of ISO 7240 specifies requirements, test methods and performance criteria for point-type resettable multisensor fire detectors for use in fire detection systems installed in buildings, incorporating in one mechanical enclosure at least one smoke sensor and at least one other sensor which responds to heat, and in which the signal(s) of the smoke sensor(s) is (are) combined with the signal(s) of the heat sensor(s).

The performance of single components within a multisensor fire detector covered by this standard may not be sufficient for conformity to other standards for the single sensor.

Certain types of detectors may contain radioactive materials. The national requirements for radiation protection differ from country to country and they are not therefore specified in this standard. However, such detectors are expected to conform to the national requirements and be in line with the recommendations of the Nuclear Energy Agency (NEA) of the Organisation for Economic Co-operation and Development (OECD)[1)].

2 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*

ISO 7240-5, *Fire detection and alarm systems — Part 5: Point-type heat detectors*

ISO 7240-7, *Fire detection and alarm systems — Part 7: Point-type smoke detectors using scattered light, transmitted light or ionization*

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

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

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

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

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1) OECD, *Recommendations for ionization smoke detectors in implementation of radiation protection standards. Nuclear Energy Agency, Organisation for economic Co-operation and Development, Paris, France*