AS 7240.2:2026

Australian STANDARD®

STANDARDS Australia

Fire detection and alarm systems

Part 2: Fire detection control and indicating equipment (ISO 7240-2:2017, MOD)



AS 7240.2:2026

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- Association of Accredited Certification Bodies
- Association of Australasian Acoustical Consultants
- Australasian Fire and Emergency Service Authorities Council
- Australian Building Codes Board
- Australian Chamber of Commerce and Industry
- Australian Industry Group
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- Deafness Forum of Australia
- Engineers Australia
- Engineers Australia/ Society of Fire Safety
- Fire Protection Association Australia
- Hydraulic Consultants Association Australasia
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Fire detection and alarm systems

Part 2: Fire detection control and indicating equipment (ISO 7240-2:2017, MOD)

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Requirements

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(a) "should" means that something is recommended.

(b) "may" means that something is permitted.

(c) "can" means that something is possible.

Structure of Standards

A Standard always has the following parts:

(i) The Preface states who developed the Standard, what the Standard is aiming to do, and how it relates to other documents.

(ii) The Scope states what the Standard is about, what it covers and what it does not cover.

(iii) The Normative references clause lists other documents that are referenced in the Standard as part of requirements.

(iv) The Terms and definitions clause defines important terms to help with understanding the Standard.

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(1) A normative appendix sets additional requirements that need to be conformed to.

(2) An informative appendix provides additional information or guidance. They usually do not contain requirements. If an informative appendix does contain requirements, the Standard will explain when those requirements apply.

(3) A Bibliography lists documents referenced in the Standard but not as part of requirements.

Many Standards include notes. Notes provide recommendations and/or guidance only. They never contain requirements.

This Standard is a modified adoption of an International Standard. It makes changes to the international text.

The changes to the international text are shown in boxes in the text. These boxes have the heading "National Variations".

To use this Standard in Australia/New Zealand, the changes in the national variation boxes need to be followed.

Preface

This Standard was prepared by the Standards Australia Committee FP-002, Fire Detection, Warning, Control and Intercom Systems, to supersede AS 7240.2:2018.

The objective of this document is to specify requirements, test methods and performance criteria for fire detection control and indicating equipment (FDCIE) for use in fire detection and fire alarm systems installed in buildings.

For the testing of other types of FDCIE, this document is intended to be used only for guidance. FDCIE with special characteristics, developed for specific risks, are not covered in this document.

This document is an adoption with national modifications and has been reproduced from ISO 7240-2:2017, *Fire detection and alarm systems — Part 2: Fire detection control and indicating equipment*. The modifications are additional requirements and are set out in national variation boxes (NVBs) which give instructions where the ISO content is to be modified for use in Australia. For copyright reasons, it is not possible to directly modify the international content.

Additional requirements are set out in Appendix ZA, which has been added at the end of the source text.

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(a) In the source text “this part of ISO 7240” should read “this document”.

(b) A full point substitutes for a comma when referring to a decimal marker.

Australian Standards that are identical adoptions of international normative references may be used interchangeably. Refer to the online catalogue for information on specific Standards.

The terms “normative” and “informative” are used in Standards to define the application of the appendices or annexes to which they apply. A “normative” appendix or annex is an integral part of a Standard, whereas an “informative” appendix or annex is only for information and guidance.

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 21, *Equipment for fire protection and fire fighting*, Subcommittee SC 3, *Fire detection and alarm systems*.

This second edition cancels and replaces the first edition (ISO 7240-2:2003), which has been technically revised.

A list of all the parts in the ISO 7240 series can be found on the ISO website.

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Introduction

NATIONAL VARIATION

Delete the third paragraph and *replace* with the following:

This document is drafted on the basis of mandatory functions, which are provided on all fire detection control and indicating equipment, and optional functions which may be provided. It is intended that the options be used for specific applications, and to meet the fire detection and alarm system design objectives. Each optional function is included as a separate entity, with its own set of requirements, in order to permit fire detection control and indicating equipment with many different combinations of functions to comply with this document.

The fire detection control and indication function (ISO 7240-1:2014, Figure 1, item B), within a fire detection and alarm system (FDAS) installed in and around buildings, is provided by the fire detection control and indicating equipment (FDCIE).

FDCIE receives signals from the fire detection function (ISO 7240-1:2014, Figure 1, item A) and the manual initiating function (ISO 7240-1:2014, Figure 1, item D). FDCIE processes received signals and may indicate information at the FDCIE and/or send signals to other functions within the fire detection and alarm system. The signals are used to provide notification to building occupants and other parties responsible for building safety in accordance with the design objectives for the fire detection and alarm system (see also ISO 7240-14 or equivalent national design standard).

This document is drafted on the basis of mandatory functions, which are provided on all fire detection control and indicating equipment, and optional functions (with requirements) which may be provided. It is intended that the options be used for specific applications, and to meet the fire detection and alarm system design objectives. Each optional function is included as a separate entity, with its own set of associated requirements, in order to permit fire detection control and indicating equipment with many different combinations of functions to comply with this document.

Other functions associated with fire detection and fire alarm may also be provided, even if not specified in this document.

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Australian Standard®

Fire detection and alarm systems

Part 2: Fire detection control and indicating equipment (ISO 7240-2:2017, MOD)

1 Scope

This document specifies requirements, test methods and performance criteria for fire detection control and indicating equipment (FDCIE) for use in fire detection and fire alarm systems installed in buildings.

For the testing of other types of FDCIE, this document is intended to be used only for guidance. FDCIE with special characteristics, developed for specific risks, are not covered in this document.

2 Normative references

NATIONAL VARIATIONS

1 After the first paragraph, *add* the following:

The Australian Standards listed below are adoptions of, or not equivalent to, the ISO and IEC normative references and are required for the application of this document. All references in the source text to the ISO and IEC normative references shall be replaced by references to the corresponding Australian Standards. Australian Standards that are identical adoptions of international normative references may be used interchangeably.

2 In the list of references below, *delete* "ISO 7240 4, *Fire detection and alarm systems — Part 4: Power supply equipment*" and *replace* with the following:

AS 7240.4, *Fire detection and alarm systems, Part 4: Power supply equipment (ISO 7240 4:2017, MOD)*

3 *Delete* "IEC 60529, *Degrees of protection provided by enclosures (IP Code)*" and *replace* with the following:

AS 60529, *Degrees of protection provided by enclosures (IP Code)*

4 *Delete* "ISO 7240-14, *Fire detection and alarm systems — Part 14: Design, installation, commissioning and service of the detection and fire alarm systems in and around buildings*" and *replace* with the following:

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

AS 4428.17, *Fire detection, warning, control and intercom systems — Control and indicating equipment, Part 17: 003 key — Fire services key system*

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 7240-1:2014, *Fire detection and alarm systems — Part 1: General and definitions*

ISO 7240-4, *Fire detection and alarm systems — Part 4: Power supply equipment*

ISO 7240-14, *Fire detection and alarm systems — Part 14: Design, installation, commissioning and service of fire detection and fire alarm systems in and around buildings*

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ISO 8201, *Acoustics — Audible emergency evacuation signal*

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 60068-2-47, *Environmental testing — Part 2: Test methods — Mounting of components, equipment and other articles for vibration, impact and similar dynamic tests*

IEC 60068-2-75, *Environmental testing — Part 2: Tests — Test Eh: Hammer tests*

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

IEC 60529, *Degrees of protection provided by enclosures (IP Code)*

IEC 60721-3-3, *Classification of environmental conditions — Part 3: Classification of groups of environmental parameters and their severities — Section 3: Stationary use and weather protected locations*

IEC 62599-2, *Alarm systems — Part 2: Electromagnetic compatibility — Immunity requirements for components of fire and security alarm systems*

3 Terms, definitions and abbreviated terms

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— IEC Electropedia: available at http://www.electropedia.org/

— ISO Online browsing platform: available at http://www.iso.org/obp

3.1 Terms and definitions

3.1.1
functional condition
condition characterized by its indication

Note 1 to entry: The functional conditions recognized in this document are the following:

— fire alarm condition, when a fire alarm is indicated;

— supervisory signal condition, when a supervisory signal is indicated;

— fault warning condition, when a fault is indicated;

— disabled condition, when the disablement of functions is indicated;

— test condition, when the testing of functions is indicated;

— quiescent condition, when FDCIE is powered by a power supply in accordance with ISO 7240-4 and no other functional condition is indicated.

3.2 Abbreviated terms

EMC	electro-magnetic compatibility
IP	ingress protection
PSE	power supply equipment

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