



**Fire detection, warning, control and intercom systems—System design, installation and commissioning**

**Part 4: Emergency warning and intercom systems**

**STANDARDS**  
Australia

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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 25 September 2015.  
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- Association of Hydraulic Services Consultants Australia
  - Australasian Fire and Emergency Services Authorities Council
  - Australian Building Codes Board
  - Australian Chamber of Commerce and Industry
  - Australian Industry Group
  - Australian Institute of Building Surveyors
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  - Department of Human Services, Vic.
  - Engineers Australia
  - Fire Protection Association Australia
  - National Electrical and Communications Association
  - National Fire Industry Association
  - Property Council of Australia
  - Society of Fire Safety
- 

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Australian Standard<sup>®</sup>

**Fire detection, warning, control and  
intercom systems—System design,  
installation and commissioning**

**Part 4: Emergency warning and  
intercom systems**

Originally as part of AS 2220—1978.  
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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 1670.4-2004, *Fire detection, warning, control and intercom systems—System design, installation and commissioning, Part 4: Sound systems and intercom systems for emergency purposes*.

The objective of this Standard is to specify the design, installation and commissioning requirements for emergency warning systems and emergency intercom systems used in buildings for the evacuation of building occupants in the event of a fire or other type of emergency.

This Standard, for the first time, specifies the use of emergency warning control and indicating equipment (EWCIE) which complies with AS 4428.16, Grades 1 or 2. It also allows equipment complying with AS 2220.1 and AS 60849 until these Standards are withdrawn.

Several equipment standards referenced in this Standard are intended to be withdrawn at a future date. These Standards are listed at the end of Clause 1.3.

Maintenance requirements for control and indicating equipment are given in AS 1851.

The terms 'normative' and 'informative' have been used in this Standard to define the application of the appendices to which they apply. A 'normative' appendix is an integral part of a Standard, whereas an 'informative' appendix is only for information and guidance.

Notes to clauses in this Standard do not form a mandatory part for compliance with this Standard. They are of an advisory nature only and are used to give explanation or guidance to the user on recommended considerations or technical procedures, or to provide an informative cross-reference to other documents or publications.

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## FOREWORD

An emergency warning system and emergency intercom system functions as a life-safety system when it is installed within a building or site. It may utilise control and indicating equipment with full manual controls (e.g. AS 4428.16, Grade 1) in combination with an emergency intercom system.

The purpose is to provide assistance in the orderly evacuation, relocation or direction of personnel in emergencies such as, but not limited to, fire, smoke, civil commotion, bomb threats, siege, explosion, leakage of toxic substances or fumes, and structural damage. A guide to the development of evacuation procedures is described in AS 3745.

To achieve this aim, the emergency warning and emergency intercom system has the following capabilities as appropriate:

- (a) Receive alarm signals from an emergency detection system.
- (b) Delivery of intelligible speech for emergency announcements and directions.
- (c) Provide audible, and where required, visual emergency signals.
- (d) Provision for automatic and manual operation.
- (e) Continuous operation under conditions of the emergency.
- (f) Independence from other systems in manual operation.
- (g) Provide means of communication between the chief warden and the floor or area wardens.

## STANDARDS AUSTRALIA

**Australian Standard****Fire detection, warning, control and intercom systems—System design, installation and commissioning****Part 4: Emergency warning and intercom systems**

## SECTION 1 SCOPE AND GENERAL

**1.1 SCOPE**

This Standard specifies requirements for the design, installation and commissioning of emergency warning systems and emergency intercom systems comprised of components complying with the requirements of the applicable normative reference equipment Standards.

## NOTES:

- 1 The general procedures for the use of the emergency warning and intercom systems and the response of personnel are given in AS 3745.
- 2 Where an installer's statement is requested a typical example is given in Appendix D.

**1.2 APPLICATION**

Where the emergency warning system functions are required, they shall be installed to meet the requirements of Section 4 of this Standard. AS 4428.16 Grade 3 EWCIE shall not be used to satisfy the requirements of this Standard.

Where the emergency intercom system functions are required, they shall be installed to meet the requirements of Section 5 of this Standard.

**1.3 NORMATIVE REFERENCES**

The following are the normative documents referenced in this Standard:

NOTE: Documents referenced for informative purposes are listed in the Bibliography.

AS	
1603	Automatic fire detection and alarm systems
1603.5	Part 5: Manual call points
1603.11	Part 11: Visual warning devices
1603.17	Part 17: Warning equipment for people with hearing impairment
1670	Fire detection, warning, control and intercom systems—System design, installation and commissioning
1670.1	Part 1: Fire
2220	Emergency warning and intercommunication systems in buildings
2220.1	Part 1: Equipment design and manufacture
2293	Emergency evacuation lighting for buildings
2293.1	Part 1: System design, installation and operations
2484	Fire—Glossary of terms
2484.2	Fire protection and firefighting equipment