



Fire detection, warning, control and intercom systems — Control and indicating equipment

Part 16: Emergency warning control and indicating equipment

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Part 16: Emergency warning control and indicating equipment

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Preface

This Standard was prepared by Standards Australia Committee FP-002, Fire Detection, Warning, Control and Intercom Systems, to supersede AS 4428.16:2015, *Fire detection and alarm systems, Part 16: Emergency warning control and indicating equipment*.

The objective of this Standard is to specify requirements, test methods and performance criteria for emergency warning control and indicating equipment (EWCIE) as the main component of an emergency warning system (EWS).

This Standard (AS 4428.16) is in part based on ISO 7240-16:2007, *Fire detection and alarm systems, Part 16: Sound system control and indicating equipment*.

This revision corrects a number of non-technical errors and terminology, and clarifies requirements.

The following technical requirements have been revised:

- (a) Relaxed requirements for a single zone Grade 3 EWCIE.
- (b) Requirements for the silence warning signals manual control.
- (c) Reset operation interlock in manual mode only.
- (d) Provision to override All-emergency zone selection.
- (e) Ready to talk indication.

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.

Contents

Preface	ii
Introduction	viii
1 Scope	1
2 Normative references	1
3 Terms and definitions	2
3.1 Definitions	2
3.2 Abbreviations	3
3.3 Tolerances	4
4 General requirements	4
4.1 General	4
4.2 Combined CIE	4
4.3 Integrated CIE	4
4.4 Power supply equipment (PSE)	4
5 Requirements for indications	5
5.1 Display of functional conditions	5
5.2 Identification of indications	5
5.3 Indications on alphanumeric displays	5
5.4 Indication of the supply of power	5
5.5 Additional indications	5
6 Quiescent condition	6
7 Emergency warning condition	6
7.1 Reception and processing of alarm signals	6
7.2 Indication of alarm signals — optional function	6
7.3 Alert signal — optional function	7
7.4 Evacuate signal	7
7.5 Indication of the emergency warning condition	8
7.6 Audible indication of alarm signal reception — optional function	8
7.7 Delay before entering the emergency warning condition — optional function	8
7.8 Phased evacuation for multi-zone systems — optional function	9
7.9 Silencing the emergency warning signal	9
7.9.1 Silencing of the emergency warning signal from the emergency detection system — optional function	9
7.9.2 Silencing of the emergency warning signals with a manual control — optional function	10
7.10 Reset of the emergency warning condition	10
7.10.1 Reset of the emergency warning condition from the emergency detection system — optional function	10
7.10.2 Reset of the emergency warning condition with a manual control — optional function	10
7.11 Output to warning devices — optional function	10
7.12 Emergency warning condition output signal — optional function	11
8 Fault warning condition	11
8.1 Reception and processing of fault signals	11
8.2 Indication of fault warning condition	11
8.3 Indication of faults in specified functions	12
8.3.1 Faults requiring specific indication	12
8.3.2 Faults requiring general indication	12
8.3.3 Faults related to the transmission path to the emergency detection system	12
8.3.4 Faults related to emergency zones	13
8.3.5 Earth fault	13
8.4 System fault	13

8.5	Audible indication of fault warning condition.....	13
8.6	Reset of fault indications.....	13
8.7	Fault warning condition output signal.....	14
9	Disabled condition — optional function.....	14
9.1	General.....	14
9.2	Indication of the disabled condition.....	14
9.3	Indication of specific emergency zone in the disabled state.....	14
9.4	Disabled condition output.....	15
10	Test condition — optional function.....	15
10.1	General.....	15
10.2	Indication of the test condition.....	15
10.3	Indication of specific emergency zones in the test state.....	15
10.4	Test condition output.....	16
11	Automatic/manual mode control — optional function.....	16
11.1	General.....	16
11.2	Manual control of networked EWCIE — optional function.....	16
11.3	Indications of auto/manual mode selection.....	16
11.4	Manual mode output.....	17
12	Manual controls for emergency zones.....	17
12.1	Individual emergency zone controls — optional function.....	17
12.2	All-emergency zone controls — optional function.....	18
12.2.1	General.....	18
12.2.2	All alert control — optional function.....	18
12.2.3	All live speech control — optional function.....	18
12.2.4	All evacuate control — optional function.....	18
12.3	Indication of emergency zones in the emergency warning condition.....	19
13	Interface to external control device(s) — optional function.....	19
14	Emergency microphone — optional function.....	19
14.1	General.....	19
14.2	Ready-to-talk indicator — optional function.....	20
14.3	Emergency microphone priority.....	20
15	Design requirements.....	20
15.1	General.....	20
15.1.1	Design requirements.....	20
15.1.2	Process of design inspection.....	20
15.2	Hardware documentation.....	21
15.2.1	Installation and user documentation.....	21
15.2.2	Design documentation.....	21
15.3	Mechanical design requirements.....	22
15.3.1	General.....	22
15.3.2	Interconnection access.....	22
15.3.3	Multiple cabinets.....	22
15.3.4	Transmission paths and replaceable parts.....	22
15.3.5	Arrangement of controls and indicators and legibility of labels.....	22
15.4	Electrical and other design requirements.....	24
15.4.1	Power sources changeover.....	24
15.4.2	Isolation of circuits.....	24
15.4.3	Audible test tone.....	24
15.5	Integrity of transmission paths.....	25
15.5.1	Paths between parts of the EWCIE.....	25
15.5.2	Paths to loudspeakers and warning devices.....	25
15.5.3	Paths between multiple EWCIE.....	25
15.5.4	Paths to remote PSE(s).....	25
15.6	Accessibility of indications and controls.....	25
15.7	Indications by means of light-emitting indicators.....	26

15.7.1	Visibility of indicators	26
15.7.2	Flash rate of indicators	26
15.7.3	Multiple function indicators	26
15.8	Indications on alphanumeric displays	26
15.8.1	Integrity of display	26
15.8.2	Mandatory indication	26
15.8.3	Identification of information	26
15.8.4	Minimum information	26
15.8.5	Legibility of information	27
15.9	Colours and labelling of indications	27
15.10	Colours and labelling of controls	28
15.11	Audible indication	28
15.12	Testing of indicators	29
15.13	Audio performance	29
15.13.1	Output power	29
15.13.2	Signal-to-noise ratio	29
15.13.3	Frequency response of EWCIE	29
15.14	Message store	30
15.15	Redundant power amplifiers — optional function	30
16	Additional design requirements for software-controlled EWCIE	31
16.1	General	31
16.2	Software documentation	31
16.2.1	Software design overview	31
16.2.2	Software design detailed	31
16.2.3	Software design structure	32
16.3	Program monitoring	32
16.3.1	General	32
16.3.2	Indication of program execution failure	32
16.3.3	Single processor	32
16.3.4	Multiple processors	32
16.3.5	Monitoring devices	32
16.3.6	Safe state	32
16.4	Storage of programs and data	33
16.4.1	General	33
16.4.2	Working life of storage devices	33
16.4.3	Program storage requirements	33
16.4.4	Site-specific storage requirements	33
16.5	Monitoring of memory contents	33
17	Marking	33
18	Tests	34
18.1	General	34
18.1.1	Testing laboratories	34
18.1.2	Combined EWCIE and other CIE	34
18.1.3	Atmospheric conditions for tests	34
18.1.4	Operating conditions for tests	34
18.1.5	Specimen configuration	34
18.1.6	Mounting arrangements	35
18.1.7	Tolerances	35
18.1.8	Provisions for tests	35
18.2	Functional test	35
18.2.1	Principle	35
18.2.2	Test schedule	35
18.2.3	Test report	38
18.3	Test schedule	38
18.3.1	General	38
18.3.2	Tests for one specimen	39
18.3.3	Tests for two specimens	39

18.3.4	Tests for three specimens	39
18.3.5	Environmental test requirements	39
18.3.6	Test report	39
18.4	Output power test	39
18.4.1	Principle	39
18.4.2	Test procedure	40
18.4.3	Test report	41
18.5	Signal-to-noise ratio test	41
18.5.1	Principle	41
18.5.2	Test procedure	41
18.5.3	Test requirements	42
18.5.4	Test report	42
18.6	Frequency response of EWCIE without microphone(s) test	42
18.6.1	Principle	42
18.6.2	Test procedure	42
18.6.3	Test requirements	43
18.6.4	Test report	43
18.7	Frequency response of EWCIE with microphone(s)	43
18.7.1	Principle	43
18.7.2	Test procedure	43
18.7.3	Test requirements	44
18.7.4	Test report	44
18.8	Cold (operational) test	44
18.8.1	Principle	44
18.8.2	Test procedure	45
18.8.3	Test report	45
18.9	Dry heat, steady-state test (operational) — Optimal requirement	45
18.9.1	Principle	45
18.9.2	Test procedure	45
18.9.3	Test report	46
18.10	Damp heat, steady-state test (operational)	46
18.10.1	Principle	46
18.10.2	Test procedure	46
18.10.3	Test report	47
18.11	Damp heat, steady-state test (endurance)	47
18.11.1	Principle	47
18.11.2	Test procedure	47
18.11.3	Test requirements	48
18.11.4	Test report	48
18.12	Impact test (operational)	48
18.12.1	Principle	48
18.12.2	Test procedure	48
18.12.3	Test requirements	49
18.12.4	Test report	49
18.13	Vibration, sinusoidal test (operational)	49
18.13.1	Principle	49
18.13.2	Test procedure	49
18.13.3	Test requirements	50
18.13.4	Test report	50
18.14	Vibration, sinusoidal test (endurance)	50
18.14.1	Principle	50
18.14.2	Test procedure	50
18.14.3	Test requirements	51
18.14.4	Test report	51
18.15	Supply voltage variation test (operational)	51
18.15.1	Principle	51
18.15.2	Test procedure	51
18.15.3	Test report	52

18.16	Electromagnetic compatibility (EMC) immunity test (operational)	52
18.16.1	Principle	52
18.16.2	Test procedure	52
18.16.3	Test requirements	53
18.16.4	Test report	54
18.17	Alert and evacuation tone test (operational)	54
18.17.1	Principle	54
18.17.2	Test procedure	54
18.17.3	Test report	55
18.18	Phased evacuation test (operational)	55
18.18.1	Principle	55
18.18.2	Test procedure	55
18.18.3	Test report	57
19	Test report	57
Appendix A	(normative) Grades of EWCIE	58
Appendix B	(normative) Common indicators, controls and outputs when the EWCIE and the FDCIE are combined	60
Appendix C	(informative) Interface between the EWCIE and the emergency detection system	62
Appendix D	(informative) Explanation of access levels	63
Appendix E	(informative) Design for software controlled EWCIE	65
Appendix F	(informative) Use of optional functions	66
Bibliography		67

Introduction

Emergency warning control and indicating equipment (EWCIE) is the main component of an emergency warning system (EWS). An EWS is the most common system used to provide warning to occupants of fire detected by a fire detection and alarm system. An EWS may be interfaced to other emergency detection systems (EDS), to warn of events such as storms, earthquakes or bomb threats.

All Grades of EWCIE is required to meet general requirements and non-optional functions. Some optional functions (see [Appendix F](#)) are mandatory to conform to this Standard for specific Grades of EWCIE as set out in [Appendix A](#). Where an optional function is implemented, all requirements specified shall be met.

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Part 16: Emergency warning control and indicating equipment

1 Scope

This Standard specifies requirements, test methods and performance criteria for emergency warning control and indicating equipment (EWCIE) as the main component of an emergency warning system (EWS). This Standard covers three Grades of EWCIE to suit different risks and regulatory requirements. The additional requirements for each Grade are set out in [Appendix A](#).

NOTE 1 The EWS provides information to warn occupants within one, or more, emergency zones, to effect appropriate action in indoor or outdoor environments. This includes the use of loudspeakers to broadcast emergency announcements, alert signals in accordance with ISO 7731, and evacuate signals in accordance with ISO 8201, and may include visual and tactile warning devices.

NOTE 2 Installation requirements, use of emergency warning signals, use of visual and tactile warning device, audibility and intelligibility, are given in AS 1670.1 and AS 1670.4.

2 Normative references

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.

NOTE Documents for informative purposes are listed in the Bibliography.

AS 4428.4, *Fire detection, warning, control and intercom systems — Control and indicating equipment, Part 4: Emergency intercom control and indicating equipment*

AS 7240.4, *Fire detection and alarm systems, Part 4: Power supply equipment*

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

AS ISO 7240.1, *Fire detection and alarm systems, Part 1: General and definitions*

AS ISO/IEC 17025, *General requirements for the competence of testing and calibration laboratories*

AS/CA S009, *Installation requirements for customer cabling (Wiring rules)*

AS/NZS 3100, *Approval and test specification — General requirements for electrical equipment*

IEC 60068, *Environmental testing (series)*

IEC 60268-1, *Sound system equipment—Part 1: General*

IEC 60268-4, *Sound system equipment —Part 4: Microphones*

IEC 60721-3-3, *Sound system equipment —Part 3-3: Classification of groups of environmental parameters and their severities—Stationary use at weather protected locations*

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

ISO 7731, *Ergonomics — Danger signals for public and work areas — Auditory danger signals*

ISO 8201, *Alarm systems — Audible emergency evacuation signal — Requirements*