

Australian Standard™

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

Part 10: Alarm investigation

This Australian Standard was prepared by Committee FP/2, Fire Detection, Warning, Control and Intercom Systems. It was approved on behalf of the Council of Standards Australia on 29 May 1998 and published on 5 August 1998.

The following interests are represented on Committee FP/2:

Audio Engineering Society
Australasian Fire Authorities Council
Australian Building Codes Board
Australian Chamber of Commerce and Industry
Australian Chamber of Manufactures
Australian Electrical and Electronic Manufacturers Association
Commonwealth Fire Board
Deafness Forum of Australia
Department of Defence
Fire Protection Association Australia
Fire Protection Association New Zealand
Insurance Council of Australia
National Electrical Contractors Association of Australia
New Zealand Fire Equipment Association
Property Council of Australia
Scientific Services Laboratory - A Business Unit of AGAL
Telstra Corporation

Review of Australian Standards. To keep abreast of progress in industry, Australian Standards are subject to periodic review and are kept up to date by the issue of amendments or new editions as necessary. It is important therefore that Standards users ensure that they are in possession of the latest edition, and any amendments thereto.

Full details of all Australian Standards and related publications will be found in the Standards Australia Catalogue of Publications; this information is supplemented each month by the magazine 'The Australian Standard', which subscribing members receive, and which gives details of new publications, new editions and amendments, and of withdrawn Standards.

Suggestions for improvements to Australian Standards, addressed to the head office of Standards Australia, are welcomed. Notification of any inaccuracy or ambiguity found in an Australian Standard should be made without delay in order that the matter may be investigated and appropriate action taken.

This Standard was issued in draft form for comment as DR 96379 (in part).

Australian Standard™

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

Part 10: Alarm investigation

First published as AS 4428.10—1998.

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee FP/2, Fire Detection, Warning, Control and Intercom Systems, to provide a specification for alarm investigation facilities to be installed in conjunction with fire indicator panels complying with the requirements of AS 4428.1—1998, *Fire detection, warning, control and intercom systems—Control and indicating equipment, Part 1: Fire*.

The objective of the Standard is to enable the installation of alarm investigation facilities, where permitted by the fire authorities, and provide the site management with means of reducing the unwanted spurious alarm calls being transmitted to the fire brigades and possibly preventing them from attending a real fire. The alarm investigation facility can only operate in a situation where there are trained staff in attendance.

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

This Standard incorporates commentary on some of the clauses. The commentary directly follows the relevant clause, is designated by 'C' preceding the clause number and is printed in italics in a box. The commentary is for information only and does not need to be followed for compliance with the Standard.

© Copyright — STANDARDS AUSTRALIA

Users of Standards are reminded that copyright subsists in all Standards Australia publications and software. Except where the Copyright Act allows and except where provided for below no publications or software produced by Standards Australia may be reproduced, stored in a retrieval system in any form or transmitted by any means without prior permission in writing from Standards Australia. Permission may be conditional on an appropriate royalty payment. Requests for permission and information on commercial software royalties should be directed to the head office of Standards Australia.

Standards Australia will permit up to 10 percent of the technical content pages of a Standard to be copied for use exclusively in-house by purchasers of the Standard without payment of a royalty or advice to Standards Australia.

Standards Australia will also permit the inclusion of its copyright material in computer software programs for no royalty payment provided such programs are used exclusively in-house by the creators of the programs.

Care should be taken to ensure that material used is from the current edition of the Standard and that it is updated whenever the Standard is amended or revised. The number and date of the Standard should therefore be clearly identified.

The use of material in print form or in computer software programs to be used commercially, with or without payment, or in commercial contracts is subject to the payment of a royalty. This policy may be varied by Standards Australia at any time.

CONTENTS

	<i>Page</i>
SECTION 1 SCOPE AND GENERAL	
1.1 SCOPE	4
1.2 APPLICATION	4
1.3 REFERENCED DOCUMENTS	4
1.4 DEFINITIONS	4
1.5 GENERAL REQUIREMENTS	5
1.6 COMPLIANCE WITH OTHER STANDARDS	5
1.7 INTERPRETATION OF SPECIFIED LIMITING VALUES	5
1.8 NEW DESIGNS AND INNOVATIONS	5
SECTION 2 FUNCTIONS	
2.1 GENERAL	6
2.2 ALARM INVESTIGATION FACILITY (AIF) (OPTION WITH REQUIREMENTS)	6
SECTION 3 DESIGN AND CONSTRUCTION	10
SECTION 4 DOCUMENTATION	10
SECTION 5 ASSESSMENT OF COMPLIANCE	11
SECTION 6 VARIATION FROM COMPLIANT EQUIPMENT	11
APPENDICES	
A TYPICAL BLOCK SCHEMATIC OF BASIC CIE	12
B IMPLEMENTATION OF ALARM INVESTIGATION FACILITY	15
C OPERATIONAL TEST	16

STANDARDS AUSTRALIA

Australian Standard

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

Part 10: Alarm investigation

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE This Standard specifies the functional requirements and the performance criteria for the alarm investigation facility (AIF) used in automatic fire detection and alarm systems.

1.2 APPLICATION The requirements of this Standard apply to the AIF forming part of any fire detection and alarm system installed in accordance with AS 1670.1 and AS 1670.2. This includes but is not limited to fire indicator panels (FIP) and subindicator panels (SIP) complying with the requirements of AS 4428.1.

The AIF is to be incorporated only in detection systems where staff trained in its operation are present and the inclusion of the AIF has been sanctioned by the local fire authority.

1.3 REFERENCED DOCUMENTS The following documents are referred to in this Standard:

AS

- 1670 Fire detection, warning, control and intercom systems—System design, installation and commissioning
- 1670.1 Part 1: Fire
- 1670.2 Part 2: Local fire
- 2484 Fire—Glossary of terms
- 2484.2 Part 2: Fire protection and firefighting equipment
- 2706 Numerical values—Rounding and interpretation of limiting values
- 4428 Fire detection, warning, control and intercom systems—Control and indicating equipment
- 4428.0 Part 0: General requirements and test methods
- 4428.1 Part 1: Fire

AS/NZS

- 3100 Approval and test specification—General requirements for electrical equipment

1.4 DEFINITIONS For the purpose of this Standard the definitions given in AS 1670.1, AS 2484.2 and those below, apply.

1.4.1 Acknowledge—to initiate an action, as a user of the system, to accept an indicated condition.

1.4.2 AIF acknowledgment time—the time from an initial alarm until automatic transmission of the alarm via the alarm signalling equipment (ASE).

1.4.3 AIF investigation time—the time from manual acknowledgment until automatic transmission of an alarm via the ASE.