AS 4428.9—2006
(Incorporating Amendment No. 1)

Australian Standard®

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

Part 9: Requirements for wire-free alarm zone circuits

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 26 October 2006.
This Standard was published on 21 November 2006.

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 04566.

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.

Keeping Standards up-to-date

Australian Standards® are living documents that reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued.

Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments that may have been published since the Standard was published.

Detailed information about Australian Standards, drafts, amendments and new projects can be found by visiting **www.standards.org.au**

Standards Australia welcomes suggestions for improvements, and encourages readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at **mail@standards.org.au**, or write to Standards Australia, GPO Box 476, Sydney, NSW 2001.

Australian Standard®

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

Part 9: Requirements for wire-free alarm zone circuits

Originally as AS 4428.9—1996.
Second edition 2006.
Reissued incorporating Amendment No. 1 (August 2007).

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

ISBN 0 7337 7868 2

PREFACE

This Standard was prepared by the Standards Australia Committee FP-002; Fire Detection, Warning, Control and Intercom Systems; to supersede AS 4428.9–1996, *Fire detection, warning, control and intercom systems—Control and indicating equipment*, Part 9: *Requirements for wire-free alarm zone circuits*.

This Standard incorporates Amendment No. 1 (August 2007). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.

This Standard is referenced in AS 1670.1, *Fire detection, warning, control and intercom systems—System design, installation and commissioning*, Part 1: *Fire*.

The objective of this Standard is to assist in ensuring that wire-free alarm zone circuits forming part of a system complying with AS 1670.1 function as they were intended within the control and indicating equipment.

This revision has rationalized the requirements for non-alarm conditions, e.g. fault and tamper conditions on transmitters. This may extend the battery life of transmitters, which is an important consideration for wire-free systems.

CONTENTS

Page

STANDARDS AUSTRALIA

Australian Standard

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

Part 9: Requirements for wire-free alarm zone circuits

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard sets out requirements for the design, construction and performance of components forming wire-free alarm zone circuits.

1.2 APPLICATION

The requirements of this Standard apply to those components that enable wire-free communication between individual actuating devices and control and indicating equipment (CIE) forming part of a system complying with AS 1670.1 and operating under a class licence defined by the statutory authority responsible for the allocation of relevant parts of the spectrum appropriate to the Radiocommunication Act 1992.

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

2484 Fire—Glossary of terms

2484.2 Part 2: Fire protection and firefighting equipment

2706 Numerical values—Rounding and interpretation of limiting values

3786 Smoke alarms

12239 Fire detection and alarm systems—Smoke alarms

1.4 DEFINITIONS

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

1.4.1 Wire-free system

A system employing electromagnetic radiation to transmit signals between actuating devices and control and indicating equipment (CIE) of a fire detection and alarm system.

1.4.2 Supervisory transmission

A signal transmitted periodically to confirm the presence of an actuating device in the system.