Australian Standard™

Fire detection and alarm systems

Part 21: Routing equipment

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 8 November 2005.
This Standard was published on 9 March 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

Keeping Standards up-to-date

Standards are living documents which 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 Standards may also be withdrawn.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 which may have been published since the Standard was purchased.

Detailed information about Standards can be found by visiting the Standards Web Shop at www.standards.com.au and looking up the relevant Standard in the on-line catalogue.

Alternatively, the printed Catalogue provides information current at 1 January each year, and the monthly magazine, *The Global Standard*, has a full listing of revisions and amendments published each month.

Australian Standards™ and other products and services developed by Standards Australia are published and distributed under contract by SAI Global, which operates the Standards Web Shop.

We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at mail@standards.org.au, or write to the Chief Executive, Standards Australia, GPO Box 476, Sydney, NSW 2001.

This Standard was issued in draft form for comment as DR 04387.

Australian Standard™

Fire detection and alarm systems

Part 21: Routing equipment

First published as AS 7240.21—2006

COPYRIGHT

© Standards Australia

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher.

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

ISBN 0 7337 7304 4

PREFACE

This Standard was prepared by the Standards Australia Committee FP-002, Fire Detection, Warning, Control and Intercom Systems.

This Standard is identical with and has been reproduced from ISO 7240-21:2005, *Fire detection and alarm systems—Part 21: Routing equipment*.

Variations to ISO 7240-21:2005 are indicated at the appropriate places throughout this Standard. Strikethrough (~~example~~) identifies ISO text, tables and figures, which, for the purposes of this Australian Standard, are deleted. Where text, tables or figures are added, each is set in its proper place and identified by shading (example). Added figures are not themselves shaded, but are identified by a shaded border.

As this Standard is reproduced from an international Standard, the following applies:

(a) Its number appears on the cover and title page while the international Standard number appears only on the cover.

(b) In the source text, ‘this part of ISO 7240’ should read ‘this part of AS 7240’.

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

The terms ‘normative’ and ‘informative’ are used to define the application of the annex to which they apply. A normative annex is an integral part of a standard, whereas an informative annex is only for information and guidance.

CONTENTS

INTRODUCTION

This part of ISO 7240 combines the requirements for both fire-alarm routing (transmitting) equipment (ISO 7240-1:—, Figure 1, item E) and fault (trouble) warning routing equipment (ISO 7240-1:—, Figure 1, item J) into a single equipment Standard.

Routing equipment receives signals from control and indicating equipment (ISO 7240-1:—, Figure 1, item B) and sends fire alarm signals to a fire-alarm receiving station (ISO 7240-1, Figure 1, item F) and fault signals to a fault warning (trouble signal) receiving station (ISO 7240-1,Figure 1, item K). The receiving stations may be in the same or different locations.

This part of ISO 7240 describes the mandatory functions which are required to be provided on all routing equipment covered by this part of ISO 7240, and optional functions with their associated requirements. It is intended that the options will be used for specific applications, as recommended in application guidelines.

Each optional function is included as a separate entity, with its own set of associated requirements, in order to permit routing equipment covered by this document with different combinations of functions to conform to this part of ISO 7240. Routing equipment complying with this part of ISO 7240 will need to fulfil requirements of all of the mandatory functions, together with the requirements of those optional functions which are provided.

STANDARDS AUSTRALIA

Australian Standard

Fire detection and alarm systems

Any table, figure or text of the international standard that is struck through is not part of this standard. Any Australian/New Zealand table, figure or text that is added is part of this standard and is identified by shading.

1 Scope

This part of ISO 7240 specifies requirements, methods of test, and performance criteria for fire-alarm routing (transmitting) equipment (ISO 7240-1:—, Figure 1, item E) and for fault (trouble) warning routing equipment (ISO 7240-1:—, Figure 1, item J) for use in fire detection and fire alarm systems installed in buildings.

2 Normative references

~~The following referenced documents are indispensable for the application 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.~~

References to international standards that are struck through in this clause are replaced by references to Australian or Australian/New Zealand Standards that are listed immediately thereafter and identified by shading. Any Australian or Australian/New Zealand Standard that is identical to the International Standard it replaces is identified as such.

ISO 7240-1:—, *Fire detection and alarm systems —Part 1: General and definitions*

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

AS 7240.4, *Fire detection and alarm systems* — Part 4: *Power supply equipment* (ISO 7240-15, 2004, MOD)

~~IEC 60068-1:1990-05, *Environmental testing — Part 1: General and guidance*~~

AS 60068.1, *Environmental testing* — Part 1: *General and guidance*

~~IEC 60068-2-1, *Environmental testing — Part 2: Tests. Tests A: Cold*~~

AS 60068.2.1, *Environmental testing* — Part 2.1: *Tests—Test A: Cold*

~~IEC 60068-2-6, *Environmental testing — Part 2: Tests. Test Fc: vibration (sinusoidal)*~~

AS 60068.2.6, *Environmental testing* — Part 2.6: *Tests—Test Fc: Vibration (sinusoidal)*

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

AS 60068.2.47, *Environmental testing* — Part 2.47: *Tests—Mounting of components, equipment and other articles for vibration, impact and similar dynamic tests*

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

AS 60068.2.75, *Environmental testing* — Part 2.75: *Tests—Test Eh: Hammer tests*

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

 © Standards Australia