Australian Standard®

Fire detection and alarm systems

Part 8: Carbon monoxide fire detectors using an electro-chemical cell in combination with a heat sensor



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 23 July 2007.

This Standard was published on 9 October 2007.

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
- CSIRO Manufacturing & Materials Technology
- Deafness Forum of Australia
- Fire Protection Association Australia
- Institute of Security Executives Incorporated
- National Electrical and Communications Association
- National Fire Industry Association
- Property Council of Australia

This Standard was issued in draft form for comment as DR 06154.

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 the 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Standards may also be withdrawn.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.

AS 7240.8—2007

Australian Standard®

Fire detection and alarm systems

Part 8: Carbon monoxide fire detectors using an electro-chemical cell in combination with a heat sensor

First published as AS 7240.8—2007.

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 8405 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 7240-8 Fire detection and alarm systems, Part 8: Carbon monoxide fire detectors using an electro-chemical cell in combination with a heat sensor.

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

- (a) Its number does not appear on each page of text and its identity is shown only on the cover and title page.
- (b) In the source text 'this International Standard' should read 'this Australian Standard'.
- (c) A full point should be substituted for a comma when referring to a decimal marker.

References to International Standards should be replaced by references to equivalent Australian or Australian/New Zealand Standards, as follows:

References to International Standard or other Publication		Australian/New Zealand Standard		
ISO		AS		
7240	Fire detection and alarm systems	7240	Fire detection and alarm systems	
7240-1	Part 1: General and definitions	7240.1	Part 1: General and definitions	
7240-5	Part 5: Point type heat detectors	7240.5	Part 5: Point type heat detectors (ISO 7240-5:2003, MOD)	
7240-6	Part 6: Carbon monoxide fire detectors using electrochemical cells	7240.6	Part 6: Carbon monoxide fire detectors using electrochemical cells	
IEC		AS		
60068	Environmental testing	60068	Environmental testing	
60068-1	General and guidance	60068.1	General and guidance	
60068-2-1	Tests—Test A: Cold	60068.2.1	Tests—Test A: Cold	
60068-2-2	Tests—Test B: Dry heat	60068.2.2	Tests—Test B: Dry heat	
60068-2-6	Tests—Test Fc: Vibration (sinusoidal)	60068.2.6	Tests—Test Fc: Vibration (sinusoidal)	
60068-2-27	Tests—Test Ea and guidance: Shock	60068.2.27	Tests—Test Ea and guidance: Shock	
60068-2-30	Tests—Test Db and guidance: Damp heat, cyclic (12 h + 12 h cycle)	60068.2.30	Tests—Test Db and guidance: Damp heat, cyclic (12 hour + 12 hour cycle)	
60068-2-42	Tests—Test Kc: Sulphur dioxide test for contacts and connections	60068.2.42	Tests—Test Kc: Sulphur dioxide test for contacts and connections	
60068-2-78	Tests—Test Cab: Damp heat steady state	60068.2.78		

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

			Page
Int	roduct	ion	vi
1	Scop	oe	1
2	Norm	native references	1
3	Defir	nitions	2
4	Gene	eral requirements	2
	4.1	Compliance	
	4.2	Individual alarm indication	
	4.3	Connection of ancillary devices	
	4.4	Monitoring of detachable detectors	
	4.5	Manufacturer's adjustments	
	4.6	On-site adjustment of response behaviour	
	4.7	Rate-sensitive response behaviour	3
	4.8	Marking	3
	4.9	Data	4
	4.10	Requirements for software controlled detectors	4
5	Tests	S	5
	5.1	General	5
	5.2	Repeatability of CO response	8
	5.3	Directional dependence of CO response	8
	5.4	Directional dependence of heat response	9
	5.5	Lower limit of heat sensitivity	11
	5.6	Reproducibility of CO response	11
	5.7	Reproducibility of heat response	12
	5.8	Exposure to chemical agents at environmental concentrations	12
	5.9	Long-term stability of CO response	13
	5.10	Saturation	14
	5.11	Exposure to chemical agents that can be present during a fire	14
	5.12	Variation in supply parameters	15
	5.13	Air movement	16
		Dry heat (operational)	
		Cold (operational)	
	5.16	Damp heat, cyclic (operational)	
	5.17	· · · · · · · · · · · · · · · · ·	
		Low humidity, steady state (endurance)	
	5.19	Sulfur dioxide (SO ₂) corrosion (endurance)	21
	5.20	Shock (operational)	22
	5.21	Impact (operational)	24
	5.22	Vibration, sinusoidal (operational)	25
		Vibration, sinusoidal (endurance)	
		Electromagnetic compatibility (EMC), immunity tests (operational)	
		Fire sensitivity	
6	Test	report	30



	This is a free preview.	Purchase the e	entire publication	at the link below:
--	-------------------------	----------------	--------------------	--------------------

Product Page

- Dooking for additional Standards? Visit Intertek Inform Infostore
- Dearn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation