

Australian Standard™

**Automatic fire detection and alarm
systems**

Part 11: Visual warning devices

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 22 June 2001 and published on 4 September 2001.

The following interests are represented on Committee FP-002:

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
New Zealand Fire Protection Industry Contractors Association
Property Council of Australia
Scientific Services Laboratory—A Business Unit of AGAL
Telstra Corporation

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 Standards may also be withdrawn.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 Australia web site 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 Australian Standard*, has a full listing of revisions and amendments published each month.

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.com.au, or write to the Chief Executive, Standards Australia International Ltd, GPO Box 5420, Sydney, NSW 2001.

Australian Standard™

**Automatic fire detection and alarm
systems**

Part 11: Visual warning devices

First published as AS 1603.11—2001.

COPYRIGHT

© Standards Australia International

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 International Ltd
GPO Box 5420, Sydney, NSW 2001, Australia

ISBN 0 7337 4025 1

PREFACE

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

This Standard is the result of a consensus among representatives on the Joint Committee to produce it as an Australian Standard.

The objective of this Standard is to provide manufacturers and designers of fire detection and alarm systems with requirements for the design and performance of visual warning devices for use in fire detection, warning, control and intercom systems.

The term 'informative' has been used in this Standard to define the application of the appendix to which it applies. An 'informative' appendix is only for information and guidance.

CONTENTS

	<i>Page</i>
SECTION 1 SCOPE AND GENERAL	
1.1 SCOPE	4
1.2 APPLICATION.....	4
1.3 CLASSIFICATION.....	4
1.4 REFERENCED DOCUMENTS	4
1.5 DEFINITIONS	5
1.6 INTERPRETATION OF SPECIFIED LIMITING VALUES	5
SECTION 2 FUNCTIONS	
2.1 GENERAL	6
2.2 LIGHTING LEVELS AND FLASH RATE FOR INTERNALLY ILLUMINATED FIXED MESSAGE TYPE VWDs	6
2.3 LIGHTING LEVELS AND FLASH RATE FOR LED MATRIX FIXED MESSAGE TYPE VWDs.....	6
2.4 LIGHTING LEVELS AND FLASH RATE FOR PROGRAMMABLE MESSAGE TYPE VWDs.....	7
2.5 LIGHT INTENSITY, COLOUR, FLASH RATE AND SYNCHRONIZATION FOR STROBE TYPE VWDs.....	7
2.6 POWER SUPPLY	9
SECTION 3 DESIGN AND CONSTRUCTION	
3.1 GENERAL	11
3.2 MATERIALS AND COMPONENTS	11
3.3 ELECTRICAL.....	11
3.4 CONNECTING FACILITIES	11
3.5 ENCLOSURES	12
3.6 MOUNTING FACILITIES	12
SECTION 4 PRODUCT MARKING AND INFORMATION	
4.1 MARKING.....	13
4.2 POINT-OF-SALE INFORMATION	13
SECTION 5 ASSESSMENT OF COMPLIANCE	
5.1 CRITERIA OF ACCEPTANCE AND TEST SCHEDULES	14
5.2 FUNCTIONAL ASSESSMENT.....	14
5.3 ENDURANCE ASSESSMENT.....	14
APPENDICES	
A TYPICAL VISUAL WARNING DEVICES.....	18

STANDARDS AUSTRALIA

Australian Standard
Automatic fire detection and alarm systems**Part 11: Visual warning devices**

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard specifies requirements for the design and performance of visual warning devices (VWDs) for use in fire detection, warning, control and alarm systems.

1.2 APPLICATION

This Standard applies to VWDs intended to provide a visual warning to hearing-impaired persons, persons employed in high ambient noise environments, and persons in environments such as hospital wards where aural alarms could have adverse effects, or as an instructional reinforcement to aural alarms. The VWDs shall be selected from the classification shown in Clause 1.3.

1.3 CLASSIFICATION

VWDs shall be classified as follows:

- (a) Internally illuminated type.
- (b) LED matrix type.
- (c) Programmable message type.
- (d) Strobe type.

1.4 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
1939	Degrees of protection provided by enclosures for electrical equipment (IP Code)
2220	Emergency warning and intercommunication systems in buildings
2220.2	Part 2: System design, installation and commissioning
2362	Automatic fire detection and alarm systems—Methods of test for actuating devices
2362.4	Method 4: Voltage stability test
2362.6	Method 6: Static discharge test
2362.7	Method 7: Electromagnetic interference test
2362.8	Method 8: Impulse voltage withstand test
2362.9	Method 9: High-frequency disturbance test