

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 8 September 2010.

This Standard was published on 7 December 2010.

The following are represented on Committee FP-002:

- Audio Engineering Society
 - Australasian Fire and Emergency Service Authorities Council
 - Australian Building Codes Board
 - Australian Chamber of Commerce and Industry
 - Australian Industry Group
 - Australian Institute of Building Surveyors
 - CSIRO Manufacturing & Materials Technology
 - Deafness Forum of Australia
 - Department of Defence (Australia)
 - Fire Protection Association Australia
 - National Electrical and Communications Association
 - National Fire Industry Association
 - Property Council of Australia
 - Security Providers Association of Australia
 - Society of Fire Safety
-

This Standard was issued in draft form for comment as DR AS 1603.11.

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Standards may also be withdrawn.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.

Australian Standard[®]

**Automatic fire detection and alarm
systems**

Part 11: Visual warning devices

First published as AS 1603.11—2001.
Second edition 2010.

COPYRIGHT

© Standards Australia Limited

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, unless otherwise permitted under the Copyright Act 1968.

Published by SAI Global Limited under licence from Standards Australia Limited, GPO Box 476, Sydney, NSW 2001, Australia

ISBN 978 0 7337 9740 8

PREFACE

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

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.

This Standard differs from the last edition in the following ways:

- (a) Synchronization is now an optional function.
- (b) Provision for evacuation and alert signals to ISO 7731 and ISO 8201 respectively.

Each optional function is included as a separate entity, with its own set of associated requirements, in order to permit visual warning devices with many different combinations of functions to comply with this Standard.

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	10
3.2 MATERIALS AND COMPONENTS.....	10
3.3 ELECTRICAL.....	10
3.4 CONNECTING FACILITIES.....	10
3.5 CHARACTER HEIGHTS AND VIEWING DISTANCE.....	11
3.6 DISPLAY SURFACE.....	11
3.7 WEATHER RESISTANCE—OPTIONAL.....	11
3.8 MOUNTING FACILITIES.....	11
SECTION 4 PRODUCT MARKING AND INFORMATION	
4.1 MARKING	12
4.2 POINT-OF-SALE INFORMATION.....	12
SECTION 5 ASSESSMENT OF COMPLIANCE	
5.1 CRITERIA OF ACCEPTANCE AND TEST SCHEDULES	13
5.2 STRENGTH OF SCREW THREADS	13
5.3 ENDURANCE ASSESSMENT.....	13
5.4 REPORTING.....	16

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 are classified as 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
1670.4	Part 4: System design, installation and commissioning—Sound systems and intercom systems for emergency purposes
2362	Fire detection, warning, control and intercom systems
2362.4	Method 4: Voltage stability test
2362.13	Method 13: Corrosion test
2362.16	Method 16: Impact test
2484	Fire—Glossary of terms relating to fire tests
2484.1	Part 1: Fire tests
2484.2	Part 2: Fire protection and firefighting equipment
2706	Numerical values—Rounding and interpretation of limiting values
3121	Approval and test specification—Insulating mouldings