

Australian Standard™

**Automatic fire detection and alarm  
systems**

**Part 16: In situ testing**

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 29 April 2002 and published on 30 May 2002.

---

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 Industry Group  
Australian Institute of Building Surveyors  
Deafness Forum of Australia  
Department of Defence  
Fire Protection Association Australia  
Institute of Security Executives  
National Electrical and Communications Association  
Property Council of Australia  
Scientific Services Laboratory—A Business Unit of AGAL

---

#### **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 Standards may also be withdrawn.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 website at [www.standards.com.au](http://www.standards.com.au) and looking up the relevant Standard in the online 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](mailto:mail@standards.com.au), or write to the Chief Executive, Standards Australia International Ltd, GPO Box 5420, Sydney, NSW 2001.

---

*This Standard was issued in draft form for comment as DR 01345.*

Australian Standard™

**Automatic fire detection and alarm  
systems**

**Part 16: In situ testers**

First published as AS 1603.16—2002.

**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 4517 2

## PREFACE

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

The objective of this Standard is to provide requirements for in situ testers, which will allow the testing of fire detectors without adversely affecting the operation of the detector under test.

It is recommended that a period of 12 months, from the publication of this Standard, be allowed for manufacturers to comply with this Standard.

## CONTENTS

	<i>Page</i>
<b>SECTION 1 SCOPE AND GENERAL</b>	
1.1 SCOPE.....	4
1.2 APPLICATION .....	4
1.3 REFERENCED DOCUMENTS.....	4
1.4 DEFINITIONS.....	4
1.5 INTERPRETATION OF SPECIFIED LIMITING VALUES.....	4
1.6 CLASSIFICATION .....	4
<b>SECTION 2 FUNCTIONS</b>	
2.1 GENERAL.....	5
2.2 TEST MEDIA.....	5
<b>SECTION 3 DESIGN AND CONSTRUCTION</b>	
3.1 GENERAL.....	6
3.2 MATERIALS AND COMPONENTS .....	6
3.3 ELECTRICAL SAFETY .....	6
<b>SECTION 4 PRODUCT INFORMATION AND MARKING</b>	
4.1 MARKING .....	7
4.2 POINT OF SALE INFORMATION.....	7
<b>SECTION 5 ASSESSMENT OF COMPLIANCE</b>	
5.1 CRITERIA OF ACCEPTANCE .....	8
5.2 CRITERIA OF ASSESSMENT OF THE EFFECT OF THE TEST MEDIA ON DETECTORS .....	8
5.3 CRITERIA FOR ESTABLISHING DISCRIMINATION .....	8
5.4 REPORTING.....	8

## STANDARDS AUSTRALIA

**Australian Standard**  
**Automatic fire detection and alarm systems****Part 16: In situ testers**

## SECTION 1 SCOPE AND GENERAL

**1.1 SCOPE**

This Standard specifies the requirements for the design, construction and performance of in situ testers for point type fire detectors.

**1.2 APPLICATION**

This Standard applies to in situ testers intended to verify the alarm operation of installed point type fire detectors.

**1.3 REFERENCED DOCUMENTS**

The following documents are referred to in this Standard.

## AS

- 1851 Maintenance of fire protection equipment
- 1851.8 Part 8: Automatic fire detection and alarm systems
- 2484 Fire—Glossary of terms
- 2484.2 Part 2: Fire protection and fire fighting equipment
- 2706 Numerical values—Rounding and interpretation of limiting values

## AS/NZS

- 3100 Approval and test specification—General requirements for electrical equipment
- 4417 Marking of electrical products to indicate compliance with regulations
- 4417.2 Part 2: Specific requirements for electrical safety regulatory applications

**1.4 DEFINITIONS**

For the purpose of this Standard, the definitions given in AS 2484.2 apply.

**1.5 INTERPRETATION OF SPECIFIED LIMITING VALUES**

For the purpose of assessing compliance with this Standard, the specified limiting values herein shall be interpreted in accordance with the 'rounding method' described in AS 2706, that is, the observed or calculated value shall be rounded to the same number figures as in the specified limiting value and then compared with the specified limiting value. For example, for specified limiting values of 2.5, 2.50 and 2.500, the observed or calculated value would be rounded respectively to the nearest 0.1, 0.01 and 0.001.

**1.6 CLASSIFICATION**

The in situ tester shall be classified according to the test medium specified in Clause 2.2.