

Australian Standard[®]

**Automatic fire detection and alarm
systems**

Part 13: Duct sampling units

This Australian Standard was prepared by Committee FP/2, Fire Detection, Warning, Control and Intercom Systems. It was approved on behalf of the Council of Standards Australia on 30 January 1998 and published on 5 April 1998.

The following interests are represented on Committee FP/2:

Audio Engineering Society
Australian Building Codes Board
Australian Chamber of Commerce and Industry
Australian Electrical and Electronic Manufacturers Association
Australasian Fire Authorities Council
Commonwealth Fire Board
Deafness Forum of Australia
Department of Defence
Fire Protection Association Australia
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Part 13: Duct sampling units

First published as AS 1603.13—1998.

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee FP/2, Fire Detection, Warning, Control and Intercom Systems, to provide performance requirements for duct sampling units for use in fire detection systems complying with the requirements of AS 1670.1, *Automatic fire detection and alarm systems—System design, installation and Commissioning, Part 1: Fire*, or in smoke management systems as required by AS 1668.1, *The use of mechanical ventilation and air-conditioning in buildings, Part 1: Fire and smoke control* and is the result of a consensus among representatives on the Joint Committee to produce it as an Australian Standard.

The term 'normative' has been used in this Standard to define the application of the appendix to which it applies. A 'normative' appendix is an integral part of a Standard.

The objective of this Standard is to provide designers and the manufacturers of duct sampling units with requirements for the design, construction and performance of duct probe assemblies and their associated, or integral smoke detectors.

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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
1.7 NEW DESIGNS AND INNOVATIONS	5
SECTION 2 GENERAL REQUIREMENTS	
2.1 GENERAL	6
2.2 SENSITIVITY	6
2.3 AIR LEAKAGE	6
SECTION 3 DESIGN AND CONSTRUCTION	
3.1 GENERAL	7
3.2 MATERIALS AND COMPONENTS	7
3.3 RADIOACTIVE MATERIALS	7
3.4 ELECTRICAL REQUIREMENTS	8
3.5 CONNECTING FACILITIES	8
3.6 INDICATING FACILITIES	8
3.7 ENCLOSURES	8
3.8 MOUNTING FACILITIES	8
3.9 DIFFERENTIAL PRESSURE MEASURING FACILITIES	8
SECTION 4 PRODUCT MARKING AND INFORMATION	
4.1 MARKING	9
4.2 POINT-OF-SALE INFORMATION	9
SECTION 5 ASSESSMENT OF COMPLIANCE	
5.1 CRITERIA OF ASSESSMENT AND TEST SCHEDULE	10
5.2 FUNCTIONAL ASSESSMENT	10
5.3 ENDURANCE ASSESSMENT	12
5.4 REPORTING	13
APPENDICES	
A FIRE TESTS	14
B AIR LEAKAGE TESTS	17

STANDARDS AUSTRALIA

Australian Standard

Automatic fire detection and alarm systems

Part 13: Duct sampling units

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE This Standard specifies requirements for the design, construction and performance of duct sampling units (DSU), as used in automatic fire detection and alarm systems.

1.2 APPLICATION This Standard applies to DSUs intended for installation in accordance with AS 1670.1 and AS 1668.1, connected to control and indicating equipment (CIE) complying with AS 4428.1.

1.3 CLASSIFICATION Duct sampling units shall be classified in accordance with their nominal sensitivity and minimum duct air velocity.

1.4 REFERENCED DOCUMENTS The following documents are referred to in this Standard:

AS

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|---------|---|
| 1668 | The use of mechanical ventilation and air-conditioning in buildings |
| 1668.1 | Part 1: Fire and smoke control |
| 1670 | Fire detection, warning, control and intercom systems—System design, installation and commissioning |
| 1670.1 | Part 1: Fire |
| 1939 | Degrees of protection provided by enclosures for electrical equipment (IP Code) |
| 2362 | Automatic fire detection and alarm systems—Methods of test for actuating devices |
| 2362.4 | Method 4: Voltage stability test |
| 2362.5 | Method 5: Insulation resistance 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 |
| 2362.10 | Method 10: Low temperature test |
| 2362.11 | Method 11: Damp heat test |
| 2362.12 | Method 12: Dry heat test |
| 2362.13 | Method 13: Corrosion test |
| 2362.15 | Method 15: Vibration test |
| 2362.16 | Method 16: Impact test |
| 2362.17 | Method 17: Sensitivity test |
| 2362.19 | Method 19: Dust test |
| 2362.25 | Method 25: Indicator visibility test |