

Australian Standard[®]

**Fire detection, warning, control
and intercom systems—System
design, installation and
commissioning**

Part 6: Smoke alarms

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 18 October 1996 and published on 5 January 1997.

The following interests are represented on Committee FP/2:

Audio Engineering Society
Australian Building Codes Board
Australian Chamber of Commerce and Industry
Australian Chamber of Manufactures
Australian Construction Services—Department of Administrative Services
Australian Electrical and Electronic Manufacturers Association
Australian Fire Authorities Council
Australian Fire Protection Association
Building Owners and Managers Association of Australia
Commonwealth Fire Board
CSIRO—Division of Building, Construction and Engineering
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Part 6: Smoke alarms

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee FP/2 on Fire Detection, Warning, Control and Intercom Systems, to facilitate the installation and commissioning of smoke alarms in domestic residential situations and is the result of a consensus among the representatives on the Joint Committee to produce it as an Australian Standard.

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.

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STANDARDS AUSTRALIA

Australian Standard

**Fire detection, warning, control and intercom systems—
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Part 6: Smoke alarms

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE This Standard sets out the requirements for the installation and commissioning of smoke alarms which comply with the requirements of AS 3786.

This Standard includes information on the selection, installation and maintenance of smoke alarms.

1.2 APPLICATION This Standard applies to smoke alarms installed in single dwellings.

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

AS

2706 Numerical values—Rounding and interpretation of limiting values

3000 Electrical installations—Buildings, structures and premises (known as the SAA Wiring Rules)

3786 Smoke alarms

SAA

HB46 Guide to residential fire safety

1.4 DEFINITIONS For the purpose of this Standard, the definitions given below apply.

1.4.1 Multiple station smoke alarm—a smoke alarm with interconnection facilities for common alarm communication.

1.4.2 Single station smoke alarm—a smoke alarm not intended to be interconnected with other units for common alarm purposes.

1.4.3 Smoke alarm—a device containing a smoke detector and an alarm sounding device.

1.5 COMPLIANCE WITH OTHER STANDARDS The smoke alarm installation shall comply with the appropriate electrical safety requirements specified in AS 3000.

NOTE: To minimize false alarms caused by electrical interference and for ease of maintenance, it is recommended that smoke alarms connected to low voltage are wired to a dedicated circuit.

1.6 INTERPRETATION OF SPECIFIED LIMITING VALUES For the purpose of assessing compliance with this Standard, the specified values herein shall be interpreted in accordance with the ‘rounding method’ described in AS 2706, i.e. the observed or calculated value shall be rounded to the same number of 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 to the nearest 0.1, 0.01 and 0.001 respectively.