



**Automatic fire detection and
alarm systems**

Part 13: Duct sampling smoke detectors

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Australia



AS 1603.13:2018

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- Australian Institute of Building Surveyors
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Preface

This Standard was prepared by Standards Australia Committee FP-002, Fire Detection, Warning, Control and Intercom Systems, to supersede AS 1603.13—1998, *Automatic fire detection and alarm systems, Part 13: Duct sampling units*.

The objective of this Standard is to specify performance requirements for duct sampling equipment for use in fire detection and alarm systems or smoke control systems conforming with the requirements of AS 1670.1, *Automatic fire detection and alarm systems — System design, installation and Commissioning, Part 1: Fire*.

The purpose of the revision is to permit the use of AS 7240 series smoke detectors in duct sampling housings of equipment conforming to one of the Standards in the referenced documents. This Standard no longer includes the use of smoke detectors conforming to AS 1603.2.

The term “normative” is used in Standards to define the application of the appendices to which they apply. A “normative” appendix is an integral part of a Standard.

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Australian Standard[®]

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Section 1 Scope and general

1.1 Scope

This Standard specifies performance of duct sampling equipment (DSE) comprising an AS 7240 series smoke detector and duct sampling housing.

1.2 Application

This Standard applies to DSEs intended for installation in accordance with AS 1670.1.

Where the duct sampling housing is part of duct sampling equipment conforming to one of the standards in the referenced documents, the only test required is the sensitivity test specified in [Clause 2.2](#).

For duct sampling housings without a certificate of conformity to one of the referenced standards, then all requirements of this Standard must be assessed and tested.

1.3 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document.

AS 7240.1, *Fire detection and alarm systems, Part 1: General and definitions*

AS 7240.7, *Fire detection and alarm systems, Part 7: Point-type smoke detectors using scattered light, transmitted light or ionization*

AS 7240.15, *Fire detection and alarm systems, Part 15: Point-type fire detectors using smoke and heat sensor*

AS 7240.27, *Fire detection and alarm systems, Part 27: Point-type fire detectors using a scattered light, transmitted-light or ionization smoke sensor, an electrochemical-cell carbon-monoxide sensor and a heat sensor*

AS/NZS 3100, *Approval and test specification — General requirements for electrical equipment*

AS/CA S009, *Installation requirements for customer cabling (Wiring rules)*

IEC 60068 (series), *Environmental testing*

EN 54-27, *Fire detection and fire alarms systems, Part 27 Duct smoke detectors*

UL 268A, *Standard for Smoke Detectors for Duct Application*

1.4 Terms and definitions

For the purpose of this Standard, the definitions given in AS 7240.1 and those below apply.

1.4.1

duct sampling equipment (DSE)

a duct sampling housing conforming to either AS 1603.13—1998 or EN 54-27 or UL 268A which incorporates a smoke detector conforming to the AS 7240 series