

AS 1682.2—1990

Australian Standard<sup>®</sup>

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**Fire Dampers**

**Part 2: Installation**

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This Australian Standard was prepared by Committee ME/62, Mechanical Ventilation and Air-conditioning. It was approved on behalf of the Council of Standards Australia on 24 July 1990 and published on 12 November 1990.

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The following interests are represented on Committee ME/62:

Association of Consulting Engineers, Australia  
Australian Assembly of Fire Authorities  
Australian Construction Services  
Australian Institute of Health Surveyors  
Australian Institute of Refrigeration Air Conditioning and Heating  
Australian Uniform Building Regulations Coordinating Council  
Building Management Authority, W.A.  
Building Owners and Managers Association of Australia  
Council of the Air Conditioning and Mechanical Contractors Associations of Australia  
Department of Health, New South Wales  
Fire Protection Industry Association of Australia  
Insurance Council of Australia  
Metal Trades Industry Association of Australia

Additional interests participating in preparation of Standard:

Council of the City of Sydney  
National Building Technology Centre

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## PREFACE

This Standard was prepared by the Standards Australia Committee on Mechanical Ventilation and Air-conditioning. It is based on information contained in AS 1668.1—1979, SAA Mechanical Ventilation and Airconditioning Code, Part 1: Fire precautions in buildings with air-handling systems.

Design, manufacturing, and testing requirements for fire dampers are specified in AS 1682.1, Fire dampers, Part 1: Specification.

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## CONTENTS

	<i>Page</i>
1 SCOPE .....	3
2 REFERENCED DOCUMENTS .....	3
3 DEFINITIONS .....	3
4 PRELIMINARY CONSIDERATIONS .....	3
5 INSTALLATION REQUIREMENTS .....	3
6 COMMISSIONING .....	4
 APPENDICES	
A INFORMATION TO BE SUPPLIED WITH ENQUIRY OR ORDER ....	6
B TYPICAL FIRE DAMPER SLEEVE CONNECTIONS AND TYPICAL INSTALLATION WITH 'BREAKAWAY' DUCT .....	7
C CALCULATION OF MINIMUM TOTAL CLEARANCE BETWEEN FIRE DAMPER AND SIDE OF PENETRATION .....	9

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## STANDARDS AUSTRALIA

**Australian Standard****Fire dampers**

## Part 2: Installation

**1 SCOPE** This Standard specifies requirements for the installation of fire dampers (and hence smoke dampers) complying with AS 1682.1.

NOTE: Guidelines on the information that should be supplied by the purchaser at the time of enquiring or ordering are given in Appendix A.

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

AS

1530 Methods for fire tests on building materials, components and structures

1530.4 Method 4: Fire-resistance tests of elements of building construction

1668 SAA Mechanical Ventilation and Airconditioning Code

1668.1 Part 1: Fire precautions in buildings with air-handling systems

1682 Fire dampers

1682.1 Part 1: Specification

**3 DEFINITIONS** For the purpose of this Standard, the definitions given in AS 1668.1, AS 1682.1, and those below apply.

**3.1 Approved and approval**—approved by, or the approval of, the Regulatory Authority concerned.

**3.2 Regulatory Authority**—an authority having statutory powers to control the requirements for design, performance, construction, installation, operation, or testing of air-handling systems in buildings.

**3.3 Required**—required by any Government Act, Regulation, By-law or Statutory Rule.

**3.4 Shall**—indicates that a statement is mandatory.

**3.5 Should**—indicates a recommendation.

**3.6 May**—indicates the existence of an option.

**3.7 Testing Laboratory**—an organization that conducts fire-resistance tests in accordance with AS 1530.4.

**4 PRELIMINARY CONSIDERATIONS**

**4.1 General** Fire damper(s) shall be installed in the same type of construction and in the same manner in which the prototype was tested for fire-resistance and air-leakage in AS 1682.1 or, in case of wall or floor installation, a wall or floor identified in the test report by the testing laboratory as being suitable to achieve the same FRL as that of the prototype.

**4.2 Fire-resistance** A fire damper shall have fire-resistance level in terms of integrity not less than that required of the construction in which it is mounted.

**5 INSTALLATION REQUIREMENTS****5.1 General**

**5.1.1 Manufacturer's instructions** The fire damper manufacturer's instructions for the installation of the fire damper shall be complied with.

**5.1.2 Fire-resistance of surrounding construction** The fire damper shall be installed so that it does not reduce the fire resistance level of the surrounding construction, in terms of structural adequacy and integrity.

**5.1.3 Mounting in a wall floor or ceiling** Unless other method of installation is described in the test report or the manufacturer's installation instructions referred to in AS 1682.1, the casing shall completely penetrate the wall and shall be retained—

- (a) on both sides by means of mounting flanges in such a manner that it can expand in a fire without distorting the blades in a closed position: or
- (b) on the accessible side by means of one mounting flange only, which can be fixed to the fire damper and to the wall through slotted holes to allow expansion.