

Australian Standard[®]

Gas space heating appliances



This Australian Standard® was prepared by Committee AG-001, Gas Appliances. It was approved on behalf of the Council of Standards Australia on 13 June 2008. This Standard was published on 30 June 2008.

The following are represented on Committee AG-001:

- Appliance and Component Testing
 - Australian Gas Association
 - Australian Greenhouse Office, Department of the Environment and Water Resources
 - Consumers' Federation of Australia
 - Energy Networks Association
 - Gas Appliance Manufacturers Association of Australia
 - Gas Association of New Zealand
 - Gas Technical Regulators Committee
 - Gas Utilisation Institute
 - LPG Australia
 - Master Plumbers, Gasfitters and Drainlayers New Zealand
 - Ministry of Economic Development (New Zealand)
 - New Zealand Employers and Manufacturers Association
-

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Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through the public comment period.

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PREFACE

This Standard was prepared by the Standards Australia Committee AG-001, Gas Appliances to supersede AS 4553/AG 103—2000, *Gas space heating appliances*.

This Standard incorporates Amendment No. 1 (February 2011). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.

The objective of this Standard is to provide manufacturers, designers, regulatory authorities, testing laboratories and similar organizations with uniform minimum requirements for the safety, performance and use of gas space heating appliances.

This Standard should not be regarded as a design specification or as an instruction manual.

In its preparation, consideration has been given to—

- (a) continuity of satisfactory operation;
- (b) the prevention of fire hazards, and explosions;
- (c) the prevention of injury to persons or property;
- (d) gas rules and regulations now in force; and
- (e) relevant International Standards.

AS 5601 provides essential requirements and basic standards for gas installations.

The terms ‘normative’ and ‘informative’ have been used in this Standard to define the application of the appendix to which they apply. A ‘normative’ appendix is an integral part of a Standard, whereas an ‘informative’ appendix is only for information and guidance.

Statements expressed in mandatory terms in notes to tables and figures are deemed to be requirements of this Standard.

The principal differences between this edition and AS 4553/AG 103—2000, are marked by a line in the margin. These may be a new or revised definition, Clause, Figure or M.O.T. (Method of Test).

The following have been deleted:

Definitions AGA, ALPGA, approved, authority, bypass screw, connector ends, flame blow off, flame lift, interrupter screw, occupied zone, Piezo electric ignition, room sealed appliance type 2, semi-automatic ignition, statutory authority, task efficiency, terminal and under pressure cut-off device.

Clauses: 2.3.7, 2.5.1, 2.5.6 (p), 2.7.4, 3.1.2 (last paragraph), 5.4 (2nd sentence) 5.11.4.

Figures: 1, 2, 5, 7 (replaced by dew plate), 11.

M.O.T: 5.1.2—99 Flue operation—Spillage test, Preparation of apparatus—Method 1, Steps 5 & 6.

5.1.4—95 Determination of CO/CO₂ ratio of combustion products under conditions of flue blockage, downdraught or updraught.

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STANDARDS AUSTRALIA

Australian Standard
Gas space heating appliances

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

These requirements apply to gas space heating appliances (convectors, radiant convectors, wall furnaces) with natural draught or fan assisted combustion systems intended for use with natural gas, town gas, liquefied petroleum gas (LPG) and tempered liquefied petroleum gas (TLP) with gas consumptions not exceeding 150 MJ/h.

Decorative gas log fires are not covered by this Standard but are covered by the requirements of AS 4558.

A1

This Standard covers direct fired air heaters with gas consumption up to and including 50 MJ/h.

NOTE: For direct fired air heaters with gas consumption greater than 50 MJ/h, refer to AS 5262.

1.2 REFERENCE DOCUMENTS

The following documents are referred to in this Standard as follows:

AS

1074	Steel tubes and tubulars for ordinary service
1167	Welding and brazing—Filler metals
1167.1	Part 1: Filler metal for brazing and braze welding
1432	Copper tubes for plumbing, gasfitting and drainage applications
1450	Steel tubes for mechanical purposes
1722	Pipe threads of Whitworth form
1722.1	Part 1: Sealing pipe threads
1751	Copper brazed steel tubes
1769	Welded stainless steel tubes for plumbing applications
1832	Malleable cast iron
1881	Zinc alloys—Casting ingots and castings—Quality requirements
2129	Flanges for pipes, valves and fittings
3000	Electrical installations (known as the Australian/New Zealand Wiring Rules)
3100	Approval and test specification—General requirements for electrical equipment
3688	Water supply—Metallic fittings and end connectors
4567	Twin wall metal flues - Gas appliances
4617	Manual shut off gas valves
4620	Thermoelectric flame safeguards
4625	Electronic flame safeguards and flame detectors
4629	Automatic shut off valves and vent valves
4646	Gas appliance standards—Definitions and calculations
5601	Gas installation
D26	Tube fittings with Dryseal American standard taper pipe and unified threads for automotive and industrial use
AS/NZS	
3500	Plumbing and drainage