

Australian/New Zealand Standard™

Gas installations

Part 1: General installations



AS/NZS 5601.1:2010

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee AG-006, Gas Installations. It was approved on behalf of the Council of Standards Australia on 17 November 2010 and on behalf of the Council of Standards New Zealand on 10 December 2010.

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The following are represented on Committee AG-006:

Association of Accredited Certification Bodies
Australian Gas Association
Construction, Forestry, Mining and Energy Union
Consumers Federation of Australia
Department of Mines and Energy, Queensland
Energy Networks Association
Gas Appliance Manufacturers Association of Australia
Gas Association of New Zealand
Gas Technical Regulators Committee
Gas Utilization Institute
LPG Association of New Zealand
LPG Australia
Master Plumbers and Mechanical Services Association of Australia
Master Plumbers, Gasfitters and Drainlayers New Zealand
Ministry of Economic Development (New Zealand)
Plumbing Industry Commission

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PREFACE

This Standard was prepared by the Standards Australia/Standards New Zealand Committee AG-006, Gas installations, to supersede AS 5601—2004 and NZS 5261—2003. This amalgamated Standard also incorporates additional technical and editorial amendments. The installation requirements for caravans and boats can be found in AS/NZS 5601.2.

This Standard incorporates Amendment No. 1 (August 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 intention of this Standard is to provide essential requirements and deemed to comply solutions and to promote uniform standards of gas installation.

This Standard is not to be regarded as a design specification or an instruction manual for untrained persons.

This Standard has no legal standing in its own right, but may acquire legal standing in either of the following circumstances:

- (a) Where adopted by a Government or other authority having jurisdiction over relevant installations.
- (b) Where adopted as part of an installation specification.

Regulatory bodies (Technical Regulators) may adopt this Standard. The Standard accommodates some variation of requirements among the regulatory jurisdictions. Appendix N sets out the detail of these variations.

New Zealand instituted legislative changes in 1992 which removed the responsibility for inspection and certification of gas installations from the gas suppliers and instituted a regime of gas certification by a person authorized under the Plumbers, Gasfitters, and Drainlayers Act.

Where the Standard has acquired legal standing, its requirements in Australia are mandatory (variations/exceptions being indicated as described above).

For New Zealand, it is intended that only the performance requirements (Section 2) will be mandatory.

Matters of an advisory or explanatory nature are indicated in the following manners:

- (i) The word 'NOTE(S)' followed by a statement(s).
- (ii) By the inclusion of them in an informative appendix.

Terms or words that are indicated by italics in the body of the text are defined terms or words. This does not apply to any italics used in the Preface or headings or figures. Section 1 contains the definitions of such terms or words as they apply to the Standard.

All the Australian and New Zealand Technical Regulators agree that this Standard should provide for particular appliances and components to be *certified*. It was also agreed that this Standard include a statement that this requirement would not apply retrospectively.

Section 2 of this Standard details the various aspects of a gas installation that contribute to its safety, stating performance criteria for compliance with legislative requirements for safety of gas installations. Sections 3 to 6 provide more detailed information as a means of compliance with the performance criteria.

The means of compliance in Sections 3 to 6 are not the only means of compliance with the performance criteria in Section 2.

Major changes from AS 5601—2004 include—

- (A) revision of the appendix on pipe sizing (Appendix F);
- (B) inclusion of a new appendix ‘Gas in high rise buildings’ (Appendix K);
- (C) inclusion of a new appendix ‘Diagrammatical representation of outdoor areas’ (Appendix I); and
- (D) additional requirements in relation to the use of proprietary multilayer piping systems.

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.

CONTENTS

	<i>Page</i>
SECTION 1 SCOPE AND GENERAL	
1.1 SCOPE AND APPLICATION	6
1.2 EXCLUSIONS	7
1.3 COMPLIANCE	7
1.4 OCCUPATIONAL HEALTH AND SAFETY	7
1.5 INTERPRETATION.....	7
1.6 DEFINITIONS	8
SECTION 2 PERFORMANCE BASED DESIGN AND OTHER ESSENTIAL REQUIREMENTS	
2.1 GENERAL.....	20
2.2 GENERAL WORK AND SAFETY REQUIREMENTS	20
2.3 MATERIALS, FITTINGS AND COMPONENTS	22
2.4 CONSUMER PIPING	22
2.5 FLUES	24
2.6 INSTALLING GAS APPLIANCES	25
SECTION 3 MEANS OF COMPLIANCE—GENERAL REQUIREMENTS AND SAFE WORK PRACTICES	
3.1 GAS SUPPLY.....	28
3.2 GAS DEMAND	28
3.3 SAFE WORK PRACTICES.....	28
3.4 SEALING OF OPEN PIPE ENDS	29
3.5 TESTING OF PIPING	29
3.6 ACCEPTABLE SUBSTANCES FOR TESTING	30
3.7 HOT-TAPPING OF BRANCH FITTING TO CONSUMER PIPING.....	30
3.8 INCREASING THE OPERATING PRESSURE OF EXISTING CONSUMER PIPING	30
3.9 DEALING WITH DANGEROUS GAS INSTALLATIONS	30
3.10 METHODS OF LOCATING GAS LEAKS	31
3.11 SAFETY REQUIREMENTS IN THE VICINITY OF GAS LEAKS OR SUSPECTED GAS LEAKS.....	31
3.12 SAFE DISCHARGE OF STATIC ELECTRICITY	31
3.13 ELECTRICAL SAFETY BONDING OR BRIDGING	31
3.14 CLEARING A BLOCKAGE IN CONSUMER PIPING	32
SECTION 4 MATERIALS, FITTINGS AND COMPONENTS	
4.1 GENERAL.....	33
4.2 MATERIALS FOR CONSUMER PIPING	33
4.3 CONSUMER PIPING RESTRICTIONS	33
4.4 PROHIBITED TYPES OF JOINTS AND FITTINGS	34
4.5 PROPRIETARY SYSTEMS.....	34
4.6 MATERIAL BETWEEN LP GAS CYLINDER VALVE AND INLET TO FIRST REGULATOR.....	43
4.7 OTHER MATERIALS.....	43
4.8 COMPONENTS	44

SECTION 5 INSTALLING CONSUMER PIPING

5.1	GENERAL.....	47
5.2	DESIGN OF CONSUMER PIPING.....	49
5.3	LOCATION OF CONSUMER PIPING.....	54
5.4	INSTALLATION OF CONSUMER PIPING UNDERGROUND.....	57
5.5	CORROSION CONTROL.....	59
5.6	WATER AND DUST CLEARING PROVISION IN CONSUMER PIPING.....	60
5.7	CONSUMER PIPING FOR A HIGH-RISE BUILDING.....	61
5.8	SUPPORT OF CONSUMER PIPING.....	62
5.9	USE OF HOSE ASSEMBLIES.....	63
5.10	QUICK-CONNECT DEVICES.....	65
5.11	INSTALLING GAS EQUIPMENT.....	66
5.12	GAS PRESSURE-RAISING DEVICES.....	72
5.13	VENTILATION OF GAS EQUIPMENT.....	73

SECTION 6 INSTALLING GAS APPLIANCES

6.1	REQUIREMENTS FOR GAS APPLIANCES.....	76
6.2	GENERAL INSTALLATION REQUIREMENTS.....	76
6.3	GAS APPLIANCE LOCATION.....	79
6.4	AIR SUPPLY TO GAS APPLIANCES.....	82
6.5	GAS SHUT-OFF WHEN AUTOMATIC FIRE EQUIPMENT OPERATES.....	86
6.6	GAS APPLIANCE CONNECTION.....	86
6.7	FLUE DESIGN.....	87
6.8	FLUE INSTALLATION.....	90
6.9	FLUE TERMINALS.....	93
6.10	ADDITIONAL REQUIREMENTS FOR INSTALLATION OF SPECIFIC GAS APPLIANCES.....	96
6.11	COMMISSIONING REQUIREMENTS.....	112

APPENDICES

A	CONVERSION FACTORS.....	114
B	REFERENCED DOCUMENTS.....	115
C	FIRE RESISTANT MATERIAL.....	118
D	PURGING.....	120
E	TESTING FOR GASTIGHTNESS.....	125
F	SIZING CONSUMER PIPING.....	129
G	DETERMINATION OF MAXIMUM BREATHER VENT ORIFICE SIZE FOR DEVICES NOT VENTED TO OUTSIDE ATMOSPHERE.....	165
H	FLUE DESIGN.....	171
I	APPLIANCES IN OUTDOOR AREAS.....	197
J	LP GAS CYLINDER LOCATIONS.....	200
K	GAS IN HIGH-RISE BUILDINGS.....	208
L	EXTRACTS FROM BUILDING CODES OF AUSTRALIA AND NEW ZEALAND.....	215
M	CONSUMER BILLING METER INSTALLATIONS.....	220
N	SPECIAL REQUIREMENTS IN AUSTRALIAN JURISDICTIONS.....	223

STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

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SECTION 1 SCOPE AND GENERAL

1.1 SCOPE AND APPLICATION

This Standard contains the mandatory requirements and means of compliance for the design, installation and commissioning of *gas installations* that are associated with the use or intended use of fuel gases such as *natural gas*, *LP Gas*, *biogas* or manufactured gas. The user is expected to be familiar with the properties and characteristics of those fuel gases and the principles of combustion, ventilation and flueing applicable to the safe installation and operation of *gas appliances*.

For New Zealand, these requirements cover *gas* installations downstream of the point of supply (as defined in the Gas (Safety and Measurement) Regulations 2010).

For Australia, these requirements cover *gas* installations downstream of the outlet of—

- (a) the *consumer billing meter* installation;
- (b) the first regulator on a fixed *gas* installation where an *LP Gas tank* or *cylinder(s)* is installed on site; or
- (c) the first regulator on site (if no meter is installed) where *LP Gas* is reticulated from off site storage.

Where the term ‘installation’ is used it is deemed to include the pipework, *appliances*, *flues*, air ducts, ventilation and other ancillary items.

Section 2 of this Standard contains the performance requirements for the design, installation, and commissioning of *gas installations*, including those operating at *pressures* exceeding 200 kPa. It includes, in Clause 2.6.4, some specific limitations as the performance requirements cannot be reliably met if those prohibitions are breached.

Sections 3 to 6 of this Standard contain a means of compliance for installations designed to operate with a *gas* supply *pressure* not exceeding 200 kPa.

In Australia, approval for any variation to the requirements of Sections 3 to 6 or the normative appendices might need to be obtained from the appropriate *Technical Regulator*.

In New Zealand, the *Technical Regulator* does not provide approvals for variations to the means of compliance in Sections 3 to 6. References to approval by the *Technical Regulator* are not applicable to New Zealand. The installation certifier is responsible for ensuring that the installation, including any variations, meets the requirements in Section 2.

Where a Standard is cited as part of a means of compliance or in an Appendix, any Standard with equivalent performance requirements may be used as an alternative means of compliance in New Zealand.