AS/NZS 5601.2:2020 (Incorporating Amendment No. 1)





Australian/New Zealand Standard™

Gas installations

Part 2: LP Gas installations in caravans and boats for non-propulsive purposes



AS/NZS 5601.2:2020

This Joint Australian/New Zealand Standard[™] was prepared by Joint Technical Committee AG-006, Gas Installation. It was approved on behalf of the Council of Standards Australia on 18 September 2020 and by the New Zealand Standards Approval Board on 22 September 2020.

This Standard was published on 1 October 2020.

The following are represented on Committee AG-006:

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Australian Gas Association

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This Standard was issued in draft form for comment as DR AS/NZS 5601.2:2020.

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Australian/New Zealand Standard™

Gas installations

Part 2: LP Gas installations in caravans and boats for non-propulsive purposes

Originated in New Zealand as NZS 5428:1996 and part of NZS 5261:2003. Originated in Australia as part of AS 5601—2004. First joint edition AS/NZS 5601.2:2010. Previous edition 2013. Third edition 2020. Reissued incorporating Amendment No 1 (February 2021).

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Preface

This Standard was prepared by the Standards Australia/Standards New Zealand Committee AG-006, Gas Installations, to supersede AS/NZS 5601.2:2013.

This Standard incorporates Amendment No. 1 (February 2021). The start and end of changes introduced by the Amendment are indicated in the text by tags including the amendment number 1. [A]

If a Standard is referenced in legislation, the legislative instrument or regulation specifies when the Standard or Amendment comes into effect. Regulatory Authorities have indicated 12 months, following the date of publication, as an appropriate transition period for <u>Clauses 1.3.59</u>, <u>2.3.1</u>, <u>5.2.8</u>, <u>5.2.9</u>, and <u>Table 5.1.4.3</u>, with respect to the cylinder quick-connect device.

General gas installation requirements for applications other than caravans and boats can be found in AS/NZS 5601.1, *Gas installations, Part 1: General installations.*

The objective of this Standard is to provide essential requirements and deemed-to-conform solutions to promote uniform standards of gas installation, and to provide a stand-alone Standard for LP Gas installations in caravans and boats for non-propulsive purposes.

This Standard is based on the general installation requirements of AS/NZS 5601.1.

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.

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

- (i) The word "NOTE" followed by a statement(s).
- (ii) By inclusion in an informative appendix.
- (iii) By inclusion in examples or caution statements.

Words that are indicated by italics in the body of the text are terms defined in <u>Clause 1.3</u>. This indication of italics does not apply to the text in the Preface, headings or figures. <u>Section 1</u> contains the definitions of such terms as they apply to this Standard.

This Standard includes a statement that its requirements do not apply retrospectively.

<u>Section 2</u> 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. <u>Sections 3</u> to 9 provide more detailed information on conformance to the performance criteria.

The means of conformance in Sections 3 to $\underline{9}$ are not the only means of conformance to the performance criteria in Section 2.

Major changes from AS/NZS 5601.2:2013 include the following:

(A) The terms "pipe", "piping", "tube" and "tubing" are used throughout this Standard. They are to be considered to have the same meaning.

- (B) Where the term "installation" is used, it is deemed to include the appliances, flues, ventilation, piping, components and other ancillary items.
- (C) Introduction of definitions for "controlled area", "domestic caravan", "encapsulated", "ignition source", "non-sparking by nature", "quick-connect device (cylinder)" and "toughened safety glass".
- (D) Prohibition of *in situ* fill cylinders on caravans, see <u>Clause 2.4.5</u> and <u>Clause 3.1.5.1</u>.
- (E) Introduction of requirement for orientation of cylinders on caravan drawbars to allow for unobstructed relief of cylinder pressure, see <u>Clause 3.1.4</u>.
- (F) Figures showing "controlled area" and clearances on caravan drawbars for ignition sources, see Clause 3.1.8.
- (G) A figure showing venting through a drain outlet from a cylinder compartment in a caravan, see Figure 3.3.1(B).
- (H) Introduction of the requirement for shut-off solenoid valves to be "encapsulated" in LP Gas cylinder compartments, see <u>Clauses 3.3.1(g)</u> and <u>3.3.3(i)</u>.
- (I) Clarification of access to internal cylinder compartments in caravans, see <u>Clause 3.3.4.1</u>.
- (J) Allowance of hard drawn copper for use on houseboats on inland waterways on the low pressure side of the gas installation, see <u>Clause 5.1.4.2</u>.
- (K) Limitations of hose assembly pigtails to only be class F, see <u>Clause 5.1.4.3</u>.
- (L) Prohibition on the use of press-fit connections, see <u>Clause 5.1.4.4(g)</u>.
- (M) Introduction of requirements for "encapsulated" electrical devices, see <u>Clause 5.3</u>.
- (N) Introduction of increased requirements for new installations of distance between cookers and rangehoods, see Clause 6.11.1.
- (0) Introduction of requirement of carbon monoxide detectors in boats to conform with referenced internationally recognized Standards, see Clause 7.5.
- (P) Additional requirements for thermal protection of combustible surfaces, see <u>Appendix B</u>.
- (Q) New pipe sizing tables allowing for more flow capacity, see Appendix C.
- (R) Additional requirements for gas leakage tests for appliances with interlocks, see <u>Clause E.3.2(b)</u>.
- (S) Introduction new appendix on purging, see Appendix L.
- (T) The inclusion of references to a cylinder quick-connect device.

The terms "normative" and "informative" have been used in Standards 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.

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Australian/New Zealand Standard

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Section 1 Scope and general

1.1 Scope, exclusions and application

1.1.1 Scope

This Standard specifies requirements and means of conformance for the design, installation, repair, alteration, modification, replacement and *commissioning* of *LP Gas installations* in *caravans* and *boats* for non-propulsive purposes.

The requirements cover —

- (a) caravans;
- (b) mobile homes, mobile holiday homes, campervans and motor homes;
- (c) transportable structures with fixed *gas installations,* other than transportable homes and classroom units;
- (d) trucks and trailers incorporating fixed *gas installations*;
- (e) boats;
- (f) houseboats;
- (g) floating restaurants, whether fixed or mobile; and
- (h) catering vehicles, whether self-propelled or towed.

NOTE 1 A mobile home includes what is often referred to as a "tiny house", which is a relocatable home as distinct from a permanent structure that is transported from one fixed location to the next (see exclusions below).

NOTE 2 Where commercial catering equipment is to be installed, refer to AS/NZS 5601.1 for specific appliance installation requirements downstream of the appliance installation valve.

1.1.2 Exclusions

This Standard does not apply to —

- (a) installations covered by statutory requirements such as the New Zealand *Maritime Transport Act 1994* and the Australian Maritime Safety Authority, *National Standard for Commercial Vessels*;
- (b) the use of *LP Gas* as a fuel for automotive or propulsion purposes;
- (c) installations in transportable homes and classroom units;
- (d) installation of commercial catering equipment;
- (e) portable or mobile gas appliances (such as barbeques or patio heaters) that are connected to an *LP Gas cylinder*, other than where an *LP Gas cylinder(s)* is connected to *piping*; and
- (f) the service or repair of a gas appliance.