

AS/NZS 5263.1.7:2020



Australian/New Zealand Standard™

# Gas appliances

**Part 1.7: Domestic outdoor gas cooking appliances**



AS/NZS 5263.1.7:2020

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- Australian Industry Group
- Better Regulation Division — NSW Fair Trading
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- Consumers Federation of Australia
- Energy Networks Australia
- Gas Appliance Manufacturers Association of Australia
- Gas Association of New Zealand
- Gas Energy Australia
- Gas Technical Regulators Committee
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Australian/New Zealand Standard™

# Gas appliances

## Part 1.7: Domestic outdoor gas cooking appliances

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## Preface

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee AG-001, Gas Appliances, to supersede AS/NZS 5263.1.7:2016, *Gas appliances — Part 1.7: Domestic outdoor gas barbecues*.

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 [Clauses 2.4.3](#) and [2.4.103](#). Clause 2.4.102 of AS/NZS 5263.1.7:2016 (i.e. prior to revision) will remain current for a period of 18 months following the date of publication of this Standard to ensure that where applicable both the Type 21 and Type 27 appliance connection meet the requirements of the relevant standard.

This Standard provides particular requirements for domestic outdoor cooking appliances that apply in addition to or in place of the general requirements for gas appliances set out in AS/NZS 5263.0, *Gas appliances, Part 0: General requirements*. The combination of AS/NZS 5263.1.7 (this Standard) and AS/NZS 5263.0 supersedes the combination of AS/NZS 5263.1.7:2016 and AS 5263.0—2013.

This Part 1.7 of AS/NZS 5263, supplements or modifies the corresponding clauses of Part 0. The numbering of clauses in this Part 1.7 is consistent with the numbering in Part 0 for related requirements.

Statements used in this Part 1.7 to explain the relationship of clauses in this Standard to the corresponding Clause of Part 0 are as follows:

- (a) “This Clause of AS/NZS 5263.0 applies”, in which case the corresponding clause of Part 0 and its subclauses are used without modification.  
“This Clause of AS/NZS 5263.0 applies, except as modified below”, in which case the corresponding clause of Part 0 and its subclauses are used but with the modifications, as listed in this document.
- (c) “Not applicable”, in which case the corresponding clause of Part 0 is not used in this context.

Otherwise the text in this Standard replaces the corresponding clause of Part 0.

Any clauses in this Standard that are additional to the requirements of Part 0 are numbered beginning from 101 (except for additional definitions, which begin from 201). Additional Appendices in this Part 1.7 are designated with letters starting from AA, or numbered beginning from 101 (e.g. [ZA.101](#)).

Where an Appendix or part of an Appendix (i.e. paragraph, figure or table) is cited in this Standard, reference should first be made to Part 0 for the content of the Appendix, which may be modified by this Part 1.7.

This Standard (AS/NZS 5263.1.7), together with the Standard AS/NZS 5263.0 (Part 0), constitute a means of conformance to AS 3645, *Essential requirements for gas equipment*, for domestic outdoor gas cooking appliances.

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

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

Consideration has been given to —

- (i) continuity of satisfactory operation;
- (ii) the prevention of fire hazards, and explosions;
- (iii) the prevention of injury to persons or property;
- (iv) gas rules and regulations now in force; and



- (v) relevant International Standards.

AS/NZS 5601 series of Standards provides essential requirements and means of compliance for gas installations. Any reference to “AS/NZS 5601” in AS/NZS 5263 series of Standards should be considered as reference to the appropriate part of AS/NZS 5601 series of Standards (i.e. AS/NZS 5601.1 or AS/NZS 5601.2).

The terms “normative” and “informative” are used in Standards to define the application of the appendices 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

## Gas appliances

### Part 1.7: Domestic outdoor gas cooking appliances

## Section 1 Scope and general

### 1.1 Scope and application

#### 1.1.1 Scope

This Standard provides specific requirements and test methods for domestic outdoor cooking appliances with an energy input not exceeding 200 MJ/h.

For Australia the fuel gases are natural gas (as described by AS 4564), town gas, liquefied petroleum gas (LP Gas, as described by AS 4670) and tempered liquefied petroleum gas (TLP).

For New Zealand, the fuel gases are natural gas (as specified in NZS 5442) and general product liquefied petroleum gas (NZLPG) (as specified in NZS 5435).

NOTE Other statutory and regulatory requirements may be applicable to product that falls within the scope of this Standard. It is the responsibility of the manufacturer, importer or distributor (as appropriate) to ensure that products conform with such requirements.

[Appendix AA](#) provides figures referenced in this Standard that are in addition to those in AS/NZS 5263.0.

Test methods are set out in [Appendices ZA, ZB](#) and [ZC](#) (see [Clause 1.4](#)).

#### 1.1.2 Application

This Standard is complementary to and is intended to be used in conjunction with AS/NZS 5263.0. The requirements given herein shall take precedence over corresponding requirements in that Standard.

AS 3645 specifies essential requirements for gas equipment that requires regulatory approval before sale. This Standard, together with AS/NZS 5263.0, is intended to provide a means of demonstrating conformance to AS 3645.

### 1.2 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.

NOTE Documents for informative purposes are listed in the Bibliography.

AS 1722.2, *Pipe threads of Whitworth form, Part 2: Fastening pipe threads*

AS 4621, *Regulator for use with liquefied petroleum — Vapour phase*

AS 4627, *Quick-connect devices for gas*

AS ISO 7.1, *Pipe threads where pressure-tight joints are made on the threads, Part 1: Dimensions, tolerances and designation*

AS/NZS 5263.0, *Gas appliances, Part 0: General requirements*

AS/NZS 1869, *Hose and hose assemblies for liquefied petroleum gases (LP Gas), natural gas and town gas*

UL 2061, *Adapters and Cylinder Connection Devices for Portable LP-Gas Cylinder Assemblies*



### 1.3 Terms and definitions

For the purposes of this Standard the terms and definitions given in AS/NZS 5263.0 and the following apply.

#### 1.3.201

##### **appliance connection**

point of connection on the appliance to consumer piping or to any hose assembly supplied with the appliance

Note 1 to entry: This may be the same as the gas inlet connection.

#### 1.3.202

##### **barbecue**

appliance with cooking grid(s) heated by burners

#### 1.3.203

##### **cooking grid**

surface upon which the food to be cooked is placed

Note 1 to entry: A cooking grid may be either an open grid or solid plate type.

#### 1.3.204

##### **detachable trolley**

trolley designed to allow the removal of a barbecue by the user without the use of tools or undue force

#### 1.3.205

##### **freestanding appliance**

#### 1.3.206

##### **gas inlet connection**

point of connection to consumer piping or to an LP Gas cylinder

Note 1 to entry: This may be the same as the appliance connection.

#### 1.3.207

##### **hood**

cover which provides a chamber above the cooking grid(s) of a barbecue which enables the barbecue to be used as an oven

#### 1.3.208

##### **lid**

cover designed to protect the cooking grid(s)/burner(s) when the appliance is not in use and which is moved away from the cooking area for any cooking operation

#### 1.3.209

##### **outdoor oven**

any part of an appliance where food is cooked in an enclosed cabinet, other than a barbecue with a hood

Note 1 to entry: A typical example is a pizza oven.

#### 1.3.210

##### **side burner**

hotplate burner located adjacent to or in place of a cooking grid

#### 1.3.211

##### **smoker oven**

outdoor oven in which food is smoked from the smouldering of materials such as wood



**1.3.212****storage compartment**

compartment beneath an appliance burner(s) or side burner, enclosed on at least three sides, that is capable of containing an LP Gas cylinder but which is not intended by the manufacturer to contain an LP Gas cylinder

**1.4 Test methods**

The modified and new test methods applicable for this Standard are located in the following Appendices; apart from these, the test methods of AS/NZS 5263.0 apply.

**Appendix ZA — Preliminary test methods (applicable for Section 3)**

- [ZA.1](#) Gas leakage test
- [ZA.2](#) Gas consumption test
- [ZA.8](#) Flame tracking at ignition test
- [ZA.101](#) Cross-ignition of appliances

**Appendix ZB — Limiting conditions test methods (applicable for Section 4)**

- [ZB.1](#) Determination of CO/CO<sub>2</sub> ratio for independent surface combustion burners — Underload test
- [ZB.2](#) Determination of CO/CO<sub>2</sub> ratio for any independent burner — Overload test
- [ZB.4](#) Flame characteristics at maximum and minimum limiting conditions test
- [ZB.5](#) Burner ignition at maximum and minimum limiting conditions test
- [ZB.6](#) Delayed ignition at maximum and minimum limiting conditions test
- [ZB.8](#) Pilot ignition and stability at maximum and minimum limiting conditions test
- [ZB.9](#) Burner stability when changing setting test
- [ZB.13](#) Effect of opening and closing doors at turndown condition test

**Appendix ZC — Performance test methods (applicable for Section 5)**

- [ZC.101](#) Smoker ovens and outdoor ovens with a door — Appliance stability test
- [ZC.102](#) Smoker ovens and outdoor ovens with a door — Appliance stability test — 50 kg load
- [ZC.103](#) Smoker ovens and outdoor ovens — Shelves load test
- [ZC.104](#) Smoker ovens and outdoor ovens — Shelves tilt test

## **Section 2 Design and construction**

### **2.1 Scope**

This Clause of AS/NZS 5263.0 applies.

### **2.2 General design requirements**

This Clause of AS/NZS 5263.0 applies, except as modified below.

#### **2.2.3 Fitting of flame safeguards**

Burners shall be protected by a flame safeguard if —

- (a) the burner is used to heat a smoker oven or an outdoor oven; or
- (b) the appliance is intended to be installed in or connected to the consumer piping of a boat or a caravan.

#### **2.2.12 Provision for removal of condensate**

Not applicable.

#### **2.2.101 LP Gas cylinder mounting means**

Mobile LP Gas outdoor cooking appliances shall be provided with a means to support the cylinder and

This requirement is deemed to be met if the appliance includes —

- (a) an integral mounting means for a cylinder; or
- (b) a cylinder compartment.

#### **2.2.102 Means to prevent accidental closure of hood or lid**

A hood or lid permanently attached to an appliance shall be provided with suitable means to prevent accidental closure.

#### **2.2.103 Provision and location of grease receptacle**

A barbecue shall be provided with a non-disposable grease receptacle for the collection of any excess cooking grease.

With the appliance in its installed position, any grease receptacle shall be positively located and capable of being removed without tools and without causing spillage.

#### **2.2.104 Weatherproofing**

Appliances designed for fixed outdoor installation shall be provided with, or incorporate, weatherproofing to protect the appliance while not in use.

#### **2.2.105 Pan supports for side burners**

The pan support(s) for side burners shall be secure to prevent displacement during normal use.



### **2.2.106 Prevention of separation of barbecues from detachable trolleys**

For an appliance supported by a detachable trolley, means shall be provided to prevent inadvertent separation of the appliance from the trolley.

### **2.2.107 Adequacy of means of support**

Appliances having more than two wheels shall be provided with means to prevent movement of the appliance when in use.

### **2.2.108 Smoker oven or outdoor oven — Prevention of inadvertent placement of utensils in a flame**

Smoker ovens or outdoor ovens shall be designed so as to prevent the accidental placement of shelves, cooking utensils or wood chip containers in a position where they may be impinged upon by a burner flame.

### **2.2.109 Smoker oven or outdoor oven — Prevention of accidental removal of shelves**

Smoker oven or outdoor oven shelves shall not be capable of being accidentally removed.

### **2.2.110 Smoker oven or outdoor oven — Stability of shelves**

Smoker oven or outdoor oven shelves shall be stable and horizontal when in position in the appliance.

### **2.2.111 Smoker oven or outdoor oven — Door stability**

Smoker oven or outdoor oven doors shall be so constructed that, when fully open, they will remain in that position.

### **2.2.112 Smoker oven or outdoor oven — Provision of explosion relief for appliances with door locks**

Positive door locks shall not be used unless adequate provision for explosion relief is made.

### **2.2.113 Smoker oven — Flame contact with smoker materials**

The burner flames shall not come into direct contact with the smoker materials used (e.g. wood chips).

## **2.3 Materials**

This Clause of AS/NZS 5263.0 applies.

## **2.4 Design for assembly and installation**

This Clause of AS/NZS 5263.0 applies, except as modified below.

### **2.4.3 Gas inlet connection**

Where the appliance is to be connected to consumer piping, the gas inlet connection shall —

- (a) have a thread in accordance with AS ISO 7.1 or AS 1722.2;  
NOTE See AS 3688 for guidance on the appropriate class of thread for various types of connection.
- (b) have a quick connect device in accordance with AS 4627, Type 1 or Type 2; or
- (c) have an SAE flare if the appliance is intended for boats or caravans.



Where the appliance is to be directly connected to an LP Gas cylinder, the inlet connection to the hose and regulator assembly shall —

- (i) for Australia, conform to AS 4627, Type 27; or
- (ii) for New Zealand, conform to UL 2061.

#### **2.4.101 Provision of hose assembly**

Where an appliance is to be directly connected to an LP Gas cylinder, a hose assembly in accordance with AS/NZS 1869 which incorporates a regulator in accordance with AS 4621 shall be provided.

Where an appliance is to be connected to consumer piping by the user, a hose assembly in accordance with AS/NZS 1869, which incorporates a Type 1 or Type 2 quick connect device in accordance with AS 4627, shall be provided.

#### **2.4.102 Protection of inlet connection to an LP Gas cylinder**

When a hose assembly is fitted to enable direct connection to an LP Gas cylinder, means shall be provided to prevent the gas inlet connection from coming into contact with the ground when not connected to an LP Gas Cylinder.

NOTE Limiting the length of the hose assembly is an example of achieving conformance to this requirement.

#### **2.4.103 Appliance connection where hose assembly is supplied**

Where the appliance is supplied with a hose assembly, the appliance connection shall be —

- a threaded connection using threads in accordance with AS ISO 7.1 or AS 1722.2;
- (b) a Type 2 quick-connect device in accordance with AS 4627; or
- (c) a 3/8" SAE Flare connection with 5/8-18 UNF threads.

#### **2.4.104 Appliance connection assembly**

Where the appliance is intended to be connected directly to an LP Gas cylinder or to be connected to consumer piping using a quick connect device, the hose assembly shall —

- (a) be fully assembled to the appliance connection; or
- (b) incorporate a Type 2 quick-connect device in accordance with AS 4627 as the appliance connection.

#### **2.4.105 Side burner support shelf**

The burner support shelf for any side burner shall be fixed in position and its removal shall require the use of a tool.

### **2.5 Design for maintenance**

This Clause of AS/NZS 5263.0 applies, except as modified below.

#### **2.5.8 Means for gas pressure measurement**

An appliance designed for connection to consumer piping shall have means provided to allow the gas pressure to be measured. Where an appliance incorporates only one injector, a dedicated pressure test point shall be provided.



Any dedicated pressure test point shall contain a limiting orifice not exceeding 1.0 mm diameter or equivalent restriction and be designed to accept 6 mm bore flexible tubing.

#### **2.5.101 Gas train connections**

All gas outlets intended for connection of accessories shall be suitably sealed to be gas tight.

NOTE Temporary dust covers and plastic caps are not considered suitable.

### **2.6 Design for operation**

This Clause of AS/NZS 5263.0 applies, except as modified below.

#### **2.6.4 Primary guards openings**

Not applicable.

#### **2.6.5 Touchability of flames**

Not applicable

### **2.7 Controls and safety devices**

This Clause of AS/NZS 5263.0 applies, except as modified below.

#### **2.7.1 Safety shut off system**

Not applicable.

#### **2.7.7 Tip over switch**

Not applicable.

### **2.8 Gas train**

This Clause of AS/NZS 5263.0 applies.

### **2.9 Combustion air and flue systems**

Appliances designed to be built-in shall be so designed that openings for entry of combustion air and the egress of combustion products, are part of the structure and shall not be obstructed when the appliance is installed in accordance with the manufacturer's instructions.

NOTE Refer to [Clause 2.14.2\(I\)](#) for marking clearances.

### **2.10 Fan assisted combustion systems**

Not applicable.

### **2.11 Burners and ignition systems**

This Clause of AS/NZS 5263.0 is applies, except as modified below.

#### **2.11.3 Restrictions on gauze over primary air ports**

Not applicable.



### 2.11.13 Interconnected burners

Not applicable.

## 2.12 Components

This Clause of AS/NZS 5263.0 applies

## 2.13 Cylinders and cylinder compartments

This Clause of AS/NZS 5263.0 applies, except as modified below.

### 2.13.6 Protection from spillover

With any removable grease receptacle removed, all cylinders, hoses and regulators shall be permanently protected from dripping cooking residues, dripping fats, spillover from vessels, and any other falling particles.

## 2.14 Markings

This Clause of AS/NZS 5263.0 applies, except as modified below.

### 2.14.2 Permanent markings on appliances

NOTE 1 Other marking requirements (e.g. wiring diagrams, identification of certification body and certificate number) may be applicable to a product that falls within the scope of this Standard. It is the responsibility of the

Appliances shall be provided with clear and permanent markings readily accessible and easy to read and such markings shall include the following:

- (a) Name, trademark or identification mark of the manufacturer or responsible vendor.
- (b) The model designation.
- (c) The month and year of manufacture, or the serial number where this is documented to show month and year of manufacture.
- (d) The gas or gases for which the appliance is intended to be used.
- (e) The nominal gas consumption in MJ/h and test point pressure in kPa for each gas nominated in Item (d) above. In the case of LP Gas appliances, the input may be stated alternatively in kg/h of the specified gas. Where a side burner [or other accessory burner(s)] is intended for sale with the appliance, the marking shall state the total combined gas consumption.
- (f) For side burners attached to the appliance, the nominal gas consumption in MJ/h and test point pressure in kPa for each gas nominated in Item (d) above. In the case of LP Gas appliances, the input may be stated alternatively in kg/h of the specified gas.
- (g) A warning label located on the outside of the appliance in a position where it is clearly visible to the user when operating the appliance in the installed/operating position.  
  
The warning label shall contain the elements as shown in [Figure AA.101](#) and conform to the text and symbol heights and colours specified in [Figure AA.101](#).
- (h) Any required clearances from combustible materials.
- (i) The correct ignition procedure for all burners, located in a position where the operator can easily read it when the appliance is in the installed position.



- (j) For appliances with hoods:
  - (i) A statement that the hood shall be in the open position prior to lighting, unless the operating instructions specify that the appliance may be lit with the hood closed.
  - (ii) Clear marking indicating the manufacturer's recommendation for maximum cooking conditions with the hood closed.
- (k) For any barbecue or side burner fitted with a lid:
  - (i) If the burner can be ignited with the lid closed, a marking that warns against igniting burners with the lid closed.
  - (ii) If the burner can continue to operate after the lid is closed, a marking on the underside of the lid that warns against closing the lid with the burner operating.
- (l) For built-in appliances, any clearances which are necessary to ensure that the air inlet and combustion products outlet openings remain unobstructed.
- (m) For appliances intended to be connected to a cylinder except for appliances where the hose assembly is connected with a quick connect device, the following warning —  
  
 FOR STORAGE AND CYLINDER EXCHANGE, DISCONNECT THE CYLINDER ONLY. DO NOT DISCONNECT HOSE FROM THE APPLIANCE.  
  
 NOTE 2 The wording contained in this statement may be included in the label specified in [Clause 2.14.2](#) Item (g).
- (n) For appliances with storage compartments, the warning label shown in [Figure AA.102](#), in a position clearly visible to the consumer when looking inside the compartment.
- (o) For New Zealand, for natural gas appliances the minimum gas inlet pressure required for the appliance to operate safely where this is greater than 1.13 kPa.
- (p) For New Zealand, for LPG appliances, where the New Zealand gas consumption is marked on the appliance, the value determined in accordance with this Standard.
- (q) If any burner is not protected by a flame safeguard, the following text: "Do not install in, or connect to the consumer piping or gas supply system of a boat or caravan".

#### **2.14.12 Label on guard**

Not applicable.

#### **2.14.14 Markings on packaging**

The packaging shall be marked in a prominent position with the items specified in this Clause of AS/NZS 5263.0 and, if any burner is not protected by a flame safeguard, the following text: "Do not install in, or connect to the consumer piping or gas supply system of a boat or caravan".

NOTE Where there is no packaging or the packaging is transparent, it is sufficient to place these markings on the appliance, as long as they are visible.

### **2.15 Instructions**

This Clause of AS/NZS 5263.0 applies, except as modified below.



## 2.15.2 Installation

### 2.15.2.1 Instructions supplied with the appliance

Each appliance shall be supplied with written and diagrammatic instructions that include the items specified in this Clause of AS/NZS 5263.0 and the following:

- (aa) Where the appliance is supplied in kit form —
  - (i) step by step instructions for the assembly of the relevant components, with sufficient text and/or illustrations to ensure correct assembly;
  - (ii) a list of parts, including nuts, bolts, screws, washers, etc. with illustrated identification means; and
  - (iii) a list of tools necessary for the assembly.
- (bb) Complete instructions for lighting the appliance, testing for leakage, etc.
- (cc) A warning that the appliance shall not be used indoors.
- (dd) The diagrams in Appendix G of AS/NZS 5263.0.
- (ee) The following text:
 

“This appliance shall only be used in an above ground open-air situation with natural ventilation, without stagnant areas, where gas leakage and products of combustion are rapidly dispersed by wind and natural convection.”

The following text:

“Any enclosure in which the appliance is used shall comply with one of the following:

An enclosure with walls on all sides, but at least one permanent opening at ground level and no overhead cover.”

Within a partial enclosure that includes an overhead cover and no more than two walls.

Within a partial enclosure that includes an overhead cover and more than two walls, the following shall apply —

  - (i) at least 25 % of the total wall area is completely open; and
  - (ii) at least 30 % of the remaining wall area is open and unrestricted.

In the case of balconies, at least 20 % of the total of the side, back and front wall areas shall be and remain open and unrestricted.
- (gg) For post-mounted appliances, a warning that aluminium tubing used within the post shall terminate not less than 150 mm above the intended ground level.
- (hh) Details of the thread connections (refer to [Clause 2.4.3](#)).
- (ii) Where applicable, details of the restraining tether (refer to Clause 2.4.5).
- (ii) If any burner is not protected by a flame safeguard, the following text: “Do not install in an



### **2.15.3 Operation**

#### **2.15.3.1 General**

Each appliance shall be supplied with operating instructions, covering each separate function of the appliance and such dismantling, cleaning, and assembly as is necessary for the user, and that include reference to the items specified in this Clause of AS/NZS 5263.0, and the following:

- (aa) Details for the removal, cleaning, and replacement of any devices (such as “spider guards”) fitted over primary air openings.
- (bb) The minimum LP Gas cylinder capacity.

### **2.15.4 Maintenance**

#### **2.15.4.2 Servicing instructions and maintenance schedule**

Not applicable.

##### **2.15.4.101 Maintenance instructions**

Maintenance instructions shall be available which shall include reference to the following:

- (a) Before use checks, such as cleaning the appliance and removal of accumulated grease and other cooking residue.
- (b) Routine inspection of the gas hose and regulator and a recommended replacement period of components.
- (c) Check of all connections for gas soundness.
- (d) Where applicable, routine inspection of the gas cylinder to check test date status.

NOTE Maintenance instructions may be incorporated into the general appliance operating instructions.

## Section 3 Preliminary tests — Line gases

### 3.1 General

This Clause of AS/NZS 5263.0 applies, except as modified below.

#### 3.1.101 Side burners and other accessory burners

Side burners and other accessory burners attached to appliances shall be assessed independently for gas leakage, gas consumption, ignition and safety shut off systems to [Clauses 3.3, 3.4 and 3.6](#).

### 3.2 Preparation for testing

This Clause of AS/NZS 5263.0 applies.

### 3.3 Gas leakage

When tested in accordance with Test Method [ZA.1](#) the leakage rate shall not exceed 1 mL/min when the appliance is subjected to an inlet gas pressure of 1.5 times the rated working pressure or 14 kPa, whichever is greater, for —

- (a) the gas train in the state received by the end user or installer and prior to any modification or assembly required for the attachment of any accessories; and
- (b) the fully assembled gas train after performing the modifications and assembly required to attach any accessories.

### 3.4 Gas consumption

This Clause of AS/NZS 5263.0 applies, except as modified below.

#### 3.4.101 Tolerance on determined gas consumption of multiple burners

The total determined gas consumption of all burners, including accessory burners, operating together in accordance with the manufacturer's instructions, shall be within 20 % of the sum total of the nominal gas consumption of each operated burner. Testing shall be in accordance with Test Method [ZA.2](#).

### 3.5 Gas pressure regulators

This Clause of AS/NZS 5263.0 applies.

### 3.6 Ignition and safety shut off systems

This Clause of AS/NZS 5263.0 applies, except as modified below.

#### 3.6.101 Manual ignition by match

An appliance designed for manual ignition shall be readily lit by means of a 40 mm match. In the case of multiple burner appliances, ignition by match of one burner shall be acceptable, provided that cross lighting means ensure safe and effective ignition of part of or the complete burner system.

NOTE The provision of a permanently attached device to facilitate the use of a match is acceptable.



### **3.6.102 Cross lighting**

Except for an appliance where each burner is protected by a flame safeguard, satisfactory cross lighting of all burners in the same compartment shall occur when the appliance is operated in accordance with Test Method [ZA.101](#) and the manufacturer's instructions marked on the appliance.

### **3.7 Ignition of draped fabric**

Not applicable.



## Section 4 Tests under limiting conditions

### 4.1 General

Appliances and their associated side burners(s) and other accessory burner(s) shall conform to the requirements of this Section when supplied with the test gases and under the limiting conditions specified in each clause, with the following exceptions:

- (a) Appliances intended for use with natural gas may be tested using available natural gas but in the case of dispute or borderline results test gas “N” shall be used.
- (b) Appliances intended for use with town gas may be tested using available town gas but in the case of dispute or borderline results test gas “D” shall be used.

### 4.2 CO/CO<sub>2</sub> ratio limits of any independent surface combustion burner — Underload

When tested in accordance with Test Method [ZB.1](#), the CO/CO<sub>2</sub> ratio of the combustion products of any independent surface combustion burner shall not exceed 0.02, 5 min after ignition, with the appliance operating at the limiting condition specified in [Table 4.2](#).

**Table 4.2 — Limiting conditions — Independent surface combustion burner**

Appliance gas type	Test gas	Appliance inlet pressure	Limiting condition
Natural gas (Australia)	N	0.75 kPa	The lowest operating setting to which the burner control can be set
Natural gas (NZ)	N	0.66 × Pn	
Propane	X	2.00 kPa	
Butane	Y	2.00 kPa	
Universal LP Gas	X	2.00 kPa	
NZLPG	X	2.00 kPa	
TLP	T	0.50 kPa	
TG	D	0.50 kPa	
Pn = normal test pressure			

### 4.3 CO/CO<sub>2</sub> ratio limits for any independent burner — Overload

When tested in accordance with Test Method [ZB.2](#), the CO/CO<sub>2</sub> ratio of the combustion products, shall not exceed 0.02, 5 min after ignition with the appliance operating at the limiting condition specified in [Table 4.3](#).

**Table 4.3 — Limiting conditions — All burners**

Appliance gas type	Test gas	Measured gas consumption (% of nominal gas consumption) <sup>a</sup>
Natural gas (Australia)	N	120
Natural gas (NZ)	N	115
Propane	X	113
Butane	Y	113
Universal LP Gas	Y	125
NZLPG	Y	125
TLP	T	120
TG	D	120
<sup>a</sup> Corrected in accordance with Appendix B.		



## Section 4 Tests under limiting conditions

### 4.1 General

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- (b) Appliances intended for use with town gas may be tested using available town gas but in the case of dispute or borderline results test gas “D” shall be used.

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Propane	X	2.00 kPa	
Butane	Y	2.00 kPa	
Universal LP Gas	X	2.00 kPa	
NZLPG	X	2.00 kPa	
TLP	T	0.50 kPa	
TG	D	0.50 kPa	
Pn = normal test pressure			

### 4.3 CO/CO<sub>2</sub> ratio limits for any independent burner — Overload

When tested in accordance with Test Method [ZB.2](#), the CO/CO<sub>2</sub> ratio of the combustion products, shall not exceed 0.02, 5 min after ignition with the appliance operating at the limiting condition specified in [Table 4.3](#).

**Table 4.3 — Limiting conditions — All burners**

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Natural gas (Australia)	N	120
Natural gas (NZ)	N	115
Propane	X	113
Butane	Y	113
Universal LP Gas	Y	125
NZLPG	Y	125
TLP	T	120
TG	D	120
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## Section 4 Tests under limiting conditions

### 4.1 General

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### 4.2 CO/CO<sub>2</sub> ratio limits of any independent surface combustion burner — Underload

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Butane	Y	2.00 kPa	
Universal LP Gas	X	2.00 kPa	
NZLPG	X	2.00 kPa	
TLP	T	0.50 kPa	
TG	D	0.50 kPa	
Pn = normal test pressure			

### 4.3 CO/CO<sub>2</sub> ratio limits for any independent burner — Overload

When tested in accordance with Test Method [ZB.2](#), the CO/CO<sub>2</sub> ratio of the combustion products, shall not exceed 0.02, 5 min after ignition with the appliance operating at the limiting condition specified in [Table 4.3](#).

**Table 4.3 — Limiting conditions — All burners**

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Natural gas (Australia)	N	120
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Propane	X	113
Butane	Y	113
Universal LP Gas	Y	125
NZLPG	Y	125
TLP	T	120
TG	D	120
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## Section 4 Tests under limiting conditions

### 4.1 General

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### 4.2 CO/CO<sub>2</sub> ratio limits of any independent surface combustion burner — Underload

When tested in accordance with Test Method [ZB.1](#), the CO/CO<sub>2</sub> ratio of the combustion products of any independent surface combustion burner shall not exceed 0.02, 5 min after ignition, with the appliance operating at the limiting condition specified in [Table 4.2](#).

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Butane	Y	2.00 kPa	
Universal LP Gas	X	2.00 kPa	
NZLPG	X	2.00 kPa	
TLP	T	0.50 kPa	
TG	D	0.50 kPa	
Pn = normal test pressure			

### 4.3 CO/CO<sub>2</sub> ratio limits for any independent burner — Overload

When tested in accordance with Test Method [ZB.2](#), the CO/CO<sub>2</sub> ratio of the combustion products, shall not exceed 0.02, 5 min after ignition with the appliance operating at the limiting condition specified in [Table 4.3](#).

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Butane	Y	113
Universal LP Gas	Y	125
NZLPG	Y	125
TLP	T	120
TG	D	120
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## Section 4 Tests under limiting conditions

### 4.1 General

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When tested in accordance with Test Method [ZB.1](#), the CO/CO<sub>2</sub> ratio of the combustion products of any independent surface combustion burner shall not exceed 0.02, 5 min after ignition, with the appliance operating at the limiting condition specified in [Table 4.2](#).

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Butane	Y	2.00 kPa	
Universal LP Gas	X	2.00 kPa	
NZLPG	X	2.00 kPa	
TLP	T	0.50 kPa	
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Pn = normal test pressure			

### 4.3 CO/CO<sub>2</sub> ratio limits for any independent burner — Overload

When tested in accordance with Test Method [ZB.2](#), the CO/CO<sub>2</sub> ratio of the combustion products, shall not exceed 0.02, 5 min after ignition with the appliance operating at the limiting condition specified in [Table 4.3](#).

**Table 4.3 — Limiting conditions — All burners**

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Butane	Y	113
Universal LP Gas	Y	125
NZLPG	Y	125
TLP	T	120
TG	D	120
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## Section 4 Tests under limiting conditions

### 4.1 General

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When tested in accordance with Test Method [ZB.1](#), the CO/CO<sub>2</sub> ratio of the combustion products of any independent surface combustion burner shall not exceed 0.02, 5 min after ignition, with the appliance operating at the limiting condition specified in [Table 4.2](#).

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Propane	X	2.00 kPa	
Butane	Y	2.00 kPa	
Universal LP Gas	X	2.00 kPa	
NZLPG	X	2.00 kPa	
TLP	T	0.50 kPa	
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Pn = normal test pressure			

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When tested in accordance with Test Method [ZB.2](#), the CO/CO<sub>2</sub> ratio of the combustion products, shall not exceed 0.02, 5 min after ignition with the appliance operating at the limiting condition specified in [Table 4.3](#).

**Table 4.3 — Limiting conditions — All burners**

Appliance gas type	Test gas	Measured gas consumption (% of nominal gas consumption) <sup>a</sup>
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Propane	X	113
Butane	Y	113
Universal LP Gas	Y	125
NZLPG	Y	125
TLP	T	120
TG	D	120
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## Section 4 Tests under limiting conditions

### 4.1 General

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### 4.2 CO/CO<sub>2</sub> ratio limits of any independent surface combustion burner — Underload

When tested in accordance with Test Method [ZB.1](#), the CO/CO<sub>2</sub> ratio of the combustion products of any independent surface combustion burner shall not exceed 0.02, 5 min after ignition, with the appliance operating at the limiting condition specified in [Table 4.2](#).

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When tested in accordance with Test Method [ZB.2](#), the CO/CO<sub>2</sub> ratio of the combustion products, shall not exceed 0.02, 5 min after ignition with the appliance operating at the limiting condition specified in [Table 4.3](#).

**Table 4.3 — Limiting conditions — All burners**

Appliance gas type	Test gas	Measured gas consumption (% of nominal gas consumption) <sup>a</sup>
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Butane	Y	113
Universal LP Gas	Y	125
NZLPG	Y	125
TLP	T	120
TG	D	120
<sup>a</sup> Corrected in accordance with Appendix B.		



## Section 4 Tests under limiting conditions

### 4.1 General

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### 4.2 CO/CO<sub>2</sub> ratio limits of any independent surface combustion burner — Underload

When tested in accordance with Test Method [ZB.1](#), the CO/CO<sub>2</sub> ratio of the combustion products of any independent surface combustion burner shall not exceed 0.02, 5 min after ignition, with the appliance operating at the limiting condition specified in [Table 4.2](#).

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Universal LP Gas	X	2.00 kPa	
NZLPG	X	2.00 kPa	
TLP	T	0.50 kPa	
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### 4.3 CO/CO<sub>2</sub> ratio limits for any independent burner — Overload

When tested in accordance with Test Method [ZB.2](#), the CO/CO<sub>2</sub> ratio of the combustion products, shall not exceed 0.02, 5 min after ignition with the appliance operating at the limiting condition specified in [Table 4.3](#).

**Table 4.3 — Limiting conditions — All burners**

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Propane	X	113
Butane	Y	113
Universal LP Gas	Y	125
NZLPG	Y	125
TLP	T	120
TG	D	120
<sup>a</sup> Corrected in accordance with Appendix B.		



## Section 4 Tests under limiting conditions

### 4.1 General

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TLP	T	0.50 kPa	
TG	D	0.50 kPa	
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### 4.3 CO/CO<sub>2</sub> ratio limits for any independent burner — Overload

When tested in accordance with Test Method [ZB.2](#), the CO/CO<sub>2</sub> ratio of the combustion products, shall not exceed 0.02, 5 min after ignition with the appliance operating at the limiting condition specified in [Table 4.3](#).

**Table 4.3 — Limiting conditions — All burners**

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Butane	Y	113
Universal LP Gas	Y	125
NZLPG	Y	125
TLP	T	120
TG	D	120
<sup>a</sup> Corrected in accordance with Appendix B.		



## Section 4 Tests under limiting conditions

### 4.1 General

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NZLPG	X	2.00 kPa	
TLP	T	0.50 kPa	
TG	D	0.50 kPa	
Pn = normal test pressure			

### 4.3 CO/CO<sub>2</sub> ratio limits for any independent burner — Overload

When tested in accordance with Test Method [ZB.2](#), the CO/CO<sub>2</sub> ratio of the combustion products, shall not exceed 0.02, 5 min after ignition with the appliance operating at the limiting condition specified in [Table 4.3](#).

**Table 4.3 — Limiting conditions — All burners**

Appliance gas type	Test gas	Measured gas consumption (% of nominal gas consumption) <sup>a</sup>
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Propane	X	113
Butane	Y	113
Universal LP Gas	Y	125
NZLPG	Y	125
TLP	T	120
TG	D	120
<sup>a</sup> Corrected in accordance with Appendix B.		



## Section 4 Tests under limiting conditions

### 4.1 General

Appliances and their associated side burners(s) and other accessory burner(s) shall conform to the requirements of this Section when supplied with the test gases and under the limiting conditions specified in each clause, with the following exceptions:

- (a) Appliances intended for use with natural gas may be tested using available natural gas but in the case of dispute or borderline results test gas “N” shall be used.
- (b) Appliances intended for use with town gas may be tested using available town gas but in the case of dispute or borderline results test gas “D” shall be used.

### 4.2 CO/CO<sub>2</sub> ratio limits of any independent surface combustion burner — Underload

When tested in accordance with Test Method [ZB.1](#), the CO/CO<sub>2</sub> ratio of the combustion products of any independent surface combustion burner shall not exceed 0.02, 5 min after ignition, with the appliance operating at the limiting condition specified in [Table 4.2](#).

**Table 4.2 — Limiting conditions — Independent surface combustion burner**

Appliance gas type	Test gas	Appliance inlet pressure	Limiting condition
Natural gas (Australia)	N	0.75 kPa	The lowest operating setting to which the burner control can be set
Natural gas (NZ)	N	0.66 × Pn	
Propane	X	2.00 kPa	
Butane	Y	2.00 kPa	
Universal LP Gas	X	2.00 kPa	
NZLPG	X	2.00 kPa	
TLP	T	0.50 kPa	
TG	D	0.50 kPa	
Pn = normal test pressure			

### 4.3 CO/CO<sub>2</sub> ratio limits for any independent burner — Overload

When tested in accordance with Test Method [ZB.2](#), the CO/CO<sub>2</sub> ratio of the combustion products, shall not exceed 0.02, 5 min after ignition with the appliance operating at the limiting condition specified in [Table 4.3](#).

**Table 4.3 — Limiting conditions — All burners**

Appliance gas type	Test gas	Measured gas consumption (% of nominal gas consumption) <sup>a</sup>
Natural gas (Australia)	N	120
Natural gas (NZ)	N	115
Propane	X	113
Butane	Y	113
Universal LP Gas	Y	125
NZLPG	Y	125
TLP	T	120
TG	D	120
<sup>a</sup> Corrected in accordance with Appendix B.		



## Section 4 Tests under limiting conditions

### 4.1 General

Appliances and their associated side burners(s) and other accessory burner(s) shall conform to the requirements of this Section when supplied with the test gases and under the limiting conditions specified in each clause, with the following exceptions:

- (a) Appliances intended for use with natural gas may be tested using available natural gas but in the case of dispute or borderline results test gas “N” shall be used.
- (b) Appliances intended for use with town gas may be tested using available town gas but in the case of dispute or borderline results test gas “D” shall be used.

### 4.2 CO/CO<sub>2</sub> ratio limits of any independent surface combustion burner — Underload

When tested in accordance with Test Method [ZB.1](#), the CO/CO<sub>2</sub> ratio of the combustion products of any independent surface combustion burner shall not exceed 0.02, 5 min after ignition, with the appliance operating at the limiting condition specified in [Table 4.2](#).

**Table 4.2 — Limiting conditions — Independent surface combustion burner**

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Propane	X	2.00 kPa	
Butane	Y	2.00 kPa	
Universal LP Gas	X	2.00 kPa	
NZLPG	X	2.00 kPa	
TLP	T	0.50 kPa	
TG	D	0.50 kPa	
Pn = normal test pressure			

### 4.3 CO/CO<sub>2</sub> ratio limits for any independent burner — Overload

When tested in accordance with Test Method [ZB.2](#), the CO/CO<sub>2</sub> ratio of the combustion products, shall not exceed 0.02, 5 min after ignition with the appliance operating at the limiting condition specified in [Table 4.3](#).

**Table 4.3 — Limiting conditions — All burners**

Appliance gas type	Test gas	Measured gas consumption (% of nominal gas consumption) <sup>a</sup>
Natural gas (Australia)	N	120
Natural gas (NZ)	N	115
Propane	X	113
Butane	Y	113
Universal LP Gas	Y	125
NZLPG	Y	125
TLP	T	120
TG	D	120
<sup>a</sup> Corrected in accordance with Appendix B.		



## Section 4 Tests under limiting conditions

### 4.1 General

Appliances and their associated side burners(s) and other accessory burner(s) shall conform to the requirements of this Section when supplied with the test gases and under the limiting conditions specified in each clause, with the following exceptions:

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### 4.2 CO/CO<sub>2</sub> ratio limits of any independent surface combustion burner — Underload

When tested in accordance with Test Method [ZB.1](#), the CO/CO<sub>2</sub> ratio of the combustion products of any independent surface combustion burner shall not exceed 0.02, 5 min after ignition, with the appliance operating at the limiting condition specified in [Table 4.2](#).

**Table 4.2 — Limiting conditions — Independent surface combustion burner**

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Propane	X	2.00 kPa	
Butane	Y	2.00 kPa	
Universal LP Gas	X	2.00 kPa	
NZLPG	X	2.00 kPa	
TLP	T	0.50 kPa	
TG	D	0.50 kPa	
Pn = normal test pressure			

### 4.3 CO/CO<sub>2</sub> ratio limits for any independent burner — Overload

When tested in accordance with Test Method [ZB.2](#), the CO/CO<sub>2</sub> ratio of the combustion products, shall not exceed 0.02, 5 min after ignition with the appliance operating at the limiting condition specified in [Table 4.3](#).

**Table 4.3 — Limiting conditions — All burners**

Appliance gas type	Test gas	Measured gas consumption (% of nominal gas consumption) <sup>a</sup>
Natural gas (Australia)	N	120
Natural gas (NZ)	N	115
Propane	X	113
Butane	Y	113
Universal LP Gas	Y	125
NZLPG	Y	125
TLP	T	120
TG	D	120
<sup>a</sup> Corrected in accordance with Appendix B.		



## Section 4 Tests under limiting conditions

### 4.1 General

Appliances and their associated side burners(s) and other accessory burner(s) shall conform to the requirements of this Section when supplied with the test gases and under the limiting conditions specified in each clause, with the following exceptions:

- (a) Appliances intended for use with natural gas may be tested using available natural gas but in the case of dispute or borderline results test gas “N” shall be used.
- (b) Appliances intended for use with town gas may be tested using available town gas but in the case of dispute or borderline results test gas “D” shall be used.

### 4.2 CO/CO<sub>2</sub> ratio limits of any independent surface combustion burner — Underload

When tested in accordance with Test Method [ZB.1](#), the CO/CO<sub>2</sub> ratio of the combustion products of any independent surface combustion burner shall not exceed 0.02, 5 min after ignition, with the appliance operating at the limiting condition specified in [Table 4.2](#).

**Table 4.2 — Limiting conditions — Independent surface combustion burner**

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Propane	X	2.00 kPa	
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Universal LP Gas	X	2.00 kPa	
NZLPG	X	2.00 kPa	
TLP	T	0.50 kPa	
TG	D	0.50 kPa	
Pn = normal test pressure			

### 4.3 CO/CO<sub>2</sub> ratio limits for any independent burner — Overload

When tested in accordance with Test Method [ZB.2](#), the CO/CO<sub>2</sub> ratio of the combustion products, shall not exceed 0.02, 5 min after ignition with the appliance operating at the limiting condition specified in [Table 4.3](#).

**Table 4.3 — Limiting conditions — All burners**

Appliance gas type	Test gas	Measured gas consumption (% of nominal gas consumption) <sup>a</sup>
Natural gas (Australia)	N	120
Natural gas (NZ)	N	115
Propane	X	113
Butane	Y	113
Universal LP Gas	Y	125
NZLPG	Y	125
TLP	T	120
TG	D	120
<sup>a</sup> Corrected in accordance with Appendix B.		



## Section 4 Tests under limiting conditions

### 4.1 General

Appliances and their associated side burners(s) and other accessory burner(s) shall conform to the requirements of this Section when supplied with the test gases and under the limiting conditions specified in each clause, with the following exceptions:

- (a) Appliances intended for use with natural gas may be tested using available natural gas but in the case of dispute or borderline results test gas “N” shall be used.
- (b) Appliances intended for use with town gas may be tested using available town gas but in the case of dispute or borderline results test gas “D” shall be used.

### 4.2 CO/CO<sub>2</sub> ratio limits of any independent surface combustion burner — Underload

When tested in accordance with Test Method [ZB.1](#), the CO/CO<sub>2</sub> ratio of the combustion products of any independent surface combustion burner shall not exceed 0.02, 5 min after ignition, with the appliance operating at the limiting condition specified in [Table 4.2](#).

**Table 4.2 — Limiting conditions — Independent surface combustion burner**

Appliance gas type	Test gas	Appliance inlet pressure	Limiting condition
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Propane	X	2.00 kPa	
Butane	Y	2.00 kPa	
Universal LP Gas	X	2.00 kPa	
NZLPG	X	2.00 kPa	
TLP	T	0.50 kPa	
TG	D	0.50 kPa	
Pn = normal test pressure			

### 4.3 CO/CO<sub>2</sub> ratio limits for any independent burner — Overload

When tested in accordance with Test Method [ZB.2](#), the CO/CO<sub>2</sub> ratio of the combustion products, shall not exceed 0.02, 5 min after ignition with the appliance operating at the limiting condition specified in [Table 4.3](#).

**Table 4.3 — Limiting conditions — All burners**

Appliance gas type	Test gas	Measured gas consumption (% of nominal gas consumption) <sup>a</sup>
Natural gas (Australia)	N	120
Natural gas (NZ)	N	115
Propane	X	113
Butane	Y	113
Universal LP Gas	Y	125
NZLPG	Y	125
TLP	T	120
TG	D	120
<sup>a</sup> Corrected in accordance with Appendix B.		



## Section 4 Tests under limiting conditions

### 4.1 General

Appliances and their associated side burners(s) and other accessory burner(s) shall conform to the requirements of this Section when supplied with the test gases and under the limiting conditions specified in each clause, with the following exceptions:

- (a) Appliances intended for use with natural gas may be tested using available natural gas but in the case of dispute or borderline results test gas “N” shall be used.
- (b) Appliances intended for use with town gas may be tested using available town gas but in the case of dispute or borderline results test gas “D” shall be used.

### 4.2 CO/CO<sub>2</sub> ratio limits of any independent surface combustion burner — Underload

When tested in accordance with Test Method [ZB.1](#), the CO/CO<sub>2</sub> ratio of the combustion products of any independent surface combustion burner shall not exceed 0.02, 5 min after ignition, with the appliance operating at the limiting condition specified in [Table 4.2](#).

**Table 4.2 — Limiting conditions — Independent surface combustion burner**

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Propane	X	2.00 kPa	
Butane	Y	2.00 kPa	
Universal LP Gas	X	2.00 kPa	
NZLPG	X	2.00 kPa	
TLP	T	0.50 kPa	
TG	D	0.50 kPa	
Pn = normal test pressure			

### 4.3 CO/CO<sub>2</sub> ratio limits for any independent burner — Overload

When tested in accordance with Test Method [ZB.2](#), the CO/CO<sub>2</sub> ratio of the combustion products, shall not exceed 0.02, 5 min after ignition with the appliance operating at the limiting condition specified in [Table 4.3](#).

**Table 4.3 — Limiting conditions — All burners**

Appliance gas type	Test gas	Measured gas consumption (% of nominal gas consumption) <sup>a</sup>
Natural gas (Australia)	N	120
Natural gas (NZ)	N	115
Propane	X	113
Butane	Y	113
Universal LP Gas	Y	125
NZLPG	Y	125
TLP	T	120
TG	D	120
<sup>a</sup> Corrected in accordance with Appendix B.		



## Section 4 Tests under limiting conditions

### 4.1 General

Appliances and their associated side burners(s) and other accessory burner(s) shall conform to the requirements of this Section when supplied with the test gases and under the limiting conditions specified in each clause, with the following exceptions:

- (a) Appliances intended for use with natural gas may be tested using available natural gas but in the case of dispute or borderline results test gas “N” shall be used.
- (b) Appliances intended for use with town gas may be tested using available town gas but in the case of dispute or borderline results test gas “D” shall be used.

### 4.2 CO/CO<sub>2</sub> ratio limits of any independent surface combustion burner — Underload

When tested in accordance with Test Method [ZB.1](#), the CO/CO<sub>2</sub> ratio of the combustion products of any independent surface combustion burner shall not exceed 0.02, 5 min after ignition, with the appliance operating at the limiting condition specified in [Table 4.2](#).

**Table 4.2 — Limiting conditions — Independent surface combustion burner**

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Propane	X	2.00 kPa	
Butane	Y	2.00 kPa	
Universal LP Gas	X	2.00 kPa	
NZLPG	X	2.00 kPa	
TLP	T	0.50 kPa	
TG	D	0.50 kPa	
Pn = normal test pressure			

### 4.3 CO/CO<sub>2</sub> ratio limits for any independent burner — Overload

When tested in accordance with Test Method [ZB.2](#), the CO/CO<sub>2</sub> ratio of the combustion products, shall not exceed 0.02, 5 min after ignition with the appliance operating at the limiting condition specified in [Table 4.3](#).

**Table 4.3 — Limiting conditions — All burners**

Appliance gas type	Test gas	Measured gas consumption (% of nominal gas consumption) <sup>a</sup>
Natural gas (Australia)	N	120
Natural gas (NZ)	N	115
Propane	X	113
Butane	Y	113
Universal LP Gas	Y	125
NZLPG	Y	125
TLP	T	120
TG	D	120
<sup>a</sup> Corrected in accordance with Appendix B.		



## Section 4 Tests under limiting conditions

### 4.1 General

Appliances and their associated side burners(s) and other accessory burner(s) shall conform to the requirements of this Section when supplied with the test gases and under the limiting conditions specified in each clause, with the following exceptions:

- (a) Appliances intended for use with natural gas may be tested using available natural gas but in the case of dispute or borderline results test gas “N” shall be used.
- (b) Appliances intended for use with town gas may be tested using available town gas but in the case of dispute or borderline results test gas “D” shall be used.

### 4.2 CO/CO<sub>2</sub> ratio limits of any independent surface combustion burner — Underload

When tested in accordance with Test Method [ZB.1](#), the CO/CO<sub>2</sub> ratio of the combustion products of any independent surface combustion burner shall not exceed 0.02, 5 min after ignition, with the appliance operating at the limiting condition specified in [Table 4.2](#).

**Table 4.2 — Limiting conditions — Independent surface combustion burner**

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Propane	X	2.00 kPa	
Butane	Y	2.00 kPa	
Universal LP Gas	X	2.00 kPa	
NZLPG	X	2.00 kPa	
TLP	T	0.50 kPa	
TG	D	0.50 kPa	
Pn = normal test pressure			

### 4.3 CO/CO<sub>2</sub> ratio limits for any independent burner — Overload

When tested in accordance with Test Method [ZB.2](#), the CO/CO<sub>2</sub> ratio of the combustion products, shall not exceed 0.02, 5 min after ignition with the appliance operating at the limiting condition specified in [Table 4.3](#).

**Table 4.3 — Limiting conditions — All burners**

Appliance gas type	Test gas	Measured gas consumption (% of nominal gas consumption) <sup>a</sup>
Natural gas (Australia)	N	120
Natural gas (NZ)	N	115
Propane	X	113
Butane	Y	113
Universal LP Gas	Y	125
NZLPG	Y	125
TLP	T	120
TG	D	120
<sup>a</sup> Corrected in accordance with Appendix B.		



## Section 4 Tests under limiting conditions

### 4.1 General

Appliances and their associated side burners(s) and other accessory burner(s) shall conform to the requirements of this Section when supplied with the test gases and under the limiting conditions specified in each clause, with the following exceptions:

- (a) Appliances intended for use with natural gas may be tested using available natural gas but in the case of dispute or borderline results test gas “N” shall be used.
- (b) Appliances intended for use with town gas may be tested using available town gas but in the case of dispute or borderline results test gas “D” shall be used.

### 4.2 CO/CO<sub>2</sub> ratio limits of any independent surface combustion burner — Underload

When tested in accordance with Test Method [ZB.1](#), the CO/CO<sub>2</sub> ratio of the combustion products of any independent surface combustion burner shall not exceed 0.02, 5 min after ignition, with the appliance operating at the limiting condition specified in [Table 4.2](#).

**Table 4.2 — Limiting conditions — Independent surface combustion burner**

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Propane	X	2.00 kPa	
Butane	Y	2.00 kPa	
Universal LP Gas	X	2.00 kPa	
NZLPG	X	2.00 kPa	
TLP	T	0.50 kPa	
TG	D	0.50 kPa	
Pn = normal test pressure			

### 4.3 CO/CO<sub>2</sub> ratio limits for any independent burner — Overload

When tested in accordance with Test Method [ZB.2](#), the CO/CO<sub>2</sub> ratio of the combustion products, shall not exceed 0.02, 5 min after ignition with the appliance operating at the limiting condition specified in [Table 4.3](#).

**Table 4.3 — Limiting conditions — All burners**

Appliance gas type	Test gas	Measured gas consumption (% of nominal gas consumption) <sup>a</sup>
Natural gas (Australia)	N	120
Natural gas (NZ)	N	115
Propane	X	113
Butane	Y	113
Universal LP Gas	Y	125
NZLPG	Y	125
TLP	T	120
TG	D	120
<sup>a</sup> Corrected in accordance with Appendix B.		



## Section 4 Tests under limiting conditions

### 4.1 General

Appliances and their associated side burners(s) and other accessory burner(s) shall conform to the requirements of this Section when supplied with the test gases and under the limiting conditions specified in each clause, with the following exceptions:

- (a) Appliances intended for use with natural gas may be tested using available natural gas but in the case of dispute or borderline results test gas “N” shall be used.
- (b) Appliances intended for use with town gas may be tested using available town gas but in the case of dispute or borderline results test gas “D” shall be used.

### 4.2 CO/CO<sub>2</sub> ratio limits of any independent surface combustion burner — Underload

When tested in accordance with Test Method [ZB.1](#), the CO/CO<sub>2</sub> ratio of the combustion products of any independent surface combustion burner shall not exceed 0.02, 5 min after ignition, with the appliance operating at the limiting condition specified in [Table 4.2](#).

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Universal LP Gas	X	2.00 kPa	
NZLPG	X	2.00 kPa	
TLP	T	0.50 kPa	
TG	D	0.50 kPa	
Pn = normal test pressure			

### 4.3 CO/CO<sub>2</sub> ratio limits for any independent burner — Overload

When tested in accordance with Test Method [ZB.2](#), the CO/CO<sub>2</sub> ratio of the combustion products, shall not exceed 0.02, 5 min after ignition with the appliance operating at the limiting condition specified in [Table 4.3](#).

**Table 4.3 — Limiting conditions — All burners**

Appliance gas type	Test gas	Measured gas consumption (% of nominal gas consumption) <sup>a</sup>
Natural gas (Australia)	N	120
Natural gas (NZ)	N	115
Propane	X	113
Butane	Y	113
Universal LP Gas	Y	125
NZLPG	Y	125
TLP	T	120
TG	D	120
<sup>a</sup> Corrected in accordance with Appendix B.		



## Section 4 Tests under limiting conditions

### 4.1 General

Appliances and their associated side burners(s) and other accessory burner(s) shall conform to the requirements of this Section when supplied with the test gases and under the limiting conditions specified in each clause, with the following exceptions:

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Universal LP Gas	X	2.00 kPa	
NZLPG	X	2.00 kPa	
TLP	T	0.50 kPa	
TG	D	0.50 kPa	
Pn = normal test pressure			

### 4.3 CO/CO<sub>2</sub> ratio limits for any independent burner — Overload

When tested in accordance with Test Method [ZB.2](#), the CO/CO<sub>2</sub> ratio of the combustion products, shall not exceed 0.02, 5 min after ignition with the appliance operating at the limiting condition specified in [Table 4.3](#).

**Table 4.3 — Limiting conditions — All burners**

Appliance gas type	Test gas	Measured gas consumption (% of nominal gas consumption) <sup>a</sup>
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Butane	Y	113
Universal LP Gas	Y	125
NZLPG	Y	125
TLP	T	120
TG	D	120
<sup>a</sup> Corrected in accordance with Appendix B.		



## Section 4 Tests under limiting conditions

### 4.1 General

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NZLPG	X	2.00 kPa	
TLP	T	0.50 kPa	
TG	D	0.50 kPa	
Pn = normal test pressure			

### 4.3 CO/CO<sub>2</sub> ratio limits for any independent burner — Overload

When tested in accordance with Test Method [ZB.2](#), the CO/CO<sub>2</sub> ratio of the combustion products, shall not exceed 0.02, 5 min after ignition with the appliance operating at the limiting condition specified in [Table 4.3](#).

**Table 4.3 — Limiting conditions — All burners**

Appliance gas type	Test gas	Measured gas consumption (% of nominal gas consumption) <sup>a</sup>
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Natural gas (NZ)	N	115
Propane	X	113
Butane	Y	113
Universal LP Gas	Y	125
NZLPG	Y	125
TLP	T	120
TG	D	120
<sup>a</sup> Corrected in accordance with Appendix B.		



## Section 4 Tests under limiting conditions

### 4.1 General

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- (b) Appliances intended for use with town gas may be tested using available town gas but in the case of dispute or borderline results test gas “D” shall be used.

### 4.2 CO/CO<sub>2</sub> ratio limits of any independent surface combustion burner — Underload

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NZLPG	X	2.00 kPa	
TLP	T	0.50 kPa	
TG	D	0.50 kPa	
Pn = normal test pressure			

### 4.3 CO/CO<sub>2</sub> ratio limits for any independent burner — Overload

When tested in accordance with Test Method [ZB.2](#), the CO/CO<sub>2</sub> ratio of the combustion products, shall not exceed 0.02, 5 min after ignition with the appliance operating at the limiting condition specified in [Table 4.3](#).

**Table 4.3 — Limiting conditions — All burners**

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Propane	X	113
Butane	Y	113
Universal LP Gas	Y	125
NZLPG	Y	125
TLP	T	120
TG	D	120
<sup>a</sup> Corrected in accordance with Appendix B.		



## Section 4 Tests under limiting conditions

### 4.1 General

Appliances and their associated side burners(s) and other accessory burner(s) shall conform to the requirements of this Section when supplied with the test gases and under the limiting conditions specified in each clause, with the following exceptions:

- (a) Appliances intended for use with natural gas may be tested using available natural gas but in the case of dispute or borderline results test gas “N” shall be used.
- (b) Appliances intended for use with town gas may be tested using available town gas but in the case of dispute or borderline results test gas “D” shall be used.

### 4.2 CO/CO<sub>2</sub> ratio limits of any independent surface combustion burner — Underload

When tested in accordance with Test Method [ZB.1](#), the CO/CO<sub>2</sub> ratio of the combustion products of any independent surface combustion burner shall not exceed 0.02, 5 min after ignition, with the appliance operating at the limiting condition specified in [Table 4.2](#).

**Table 4.2 — Limiting conditions — Independent surface combustion burner**

Appliance gas type	Test gas	Appliance inlet pressure	Limiting condition
Natural gas (Australia)	N	0.75 kPa	The lowest operating setting to which the burner control can be set
Natural gas (NZ)	N	$0.66 \times P_n$	
Propane	X	2.00 kPa	
Butane	Y	2.00 kPa	
Universal LP Gas	X	2.00 kPa	
NZLPG	X	2.00 kPa	
TLP	T	0.50 kPa	
TG	D	0.50 kPa	
Pn = normal test pressure			

### 4.3 CO/CO<sub>2</sub> ratio limits for any independent burner — Overload

When tested in accordance with Test Method [ZB.2](#), the CO/CO<sub>2</sub> ratio of the combustion products, shall not exceed 0.02, 5 min after ignition with the appliance operating at the limiting condition specified in [Table 4.3](#).

**Table 4.3 — Limiting conditions — All burners**

Appliance gas type	Test gas	Measured gas consumption (% of nominal gas consumption) <sup>a</sup>
Natural gas (Australia)	N	120
Natural gas (NZ)	N	115
Propane	X	113
Butane	Y	113
Universal LP Gas	Y	125
NZLPG	Y	125
TLP	T	120
TG	D	120
<sup>a</sup> Corrected in accordance with Appendix B.		



## Section 4 Tests under limiting conditions

### 4.1 General

Appliances and their associated side burners(s) and other accessory burner(s) shall conform to the requirements of this Section when supplied with the test gases and under the limiting conditions specified in each clause, with the following exceptions:

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Butane	Y	2.00 kPa	
Universal LP Gas	X	2.00 kPa	
NZLPG	X	2.00 kPa	
TLP	T	0.50 kPa	
TG	D	0.50 kPa	
Pn = normal test pressure			

### 4.3 CO/CO<sub>2</sub> ratio limits for any independent burner — Overload

When tested in accordance with Test Method [ZB.2](#), the CO/CO<sub>2</sub> ratio of the combustion products, shall not exceed 0.02, 5 min after ignition with the appliance operating at the limiting condition specified in [Table 4.3](#).

**Table 4.3 — Limiting conditions — All burners**

Appliance gas type	Test gas	Measured gas consumption (% of nominal gas consumption) <sup>a</sup>
Natural gas (Australia)	N	120
Natural gas (NZ)	N	115
Propane	X	113
Butane	Y	113
Universal LP Gas	Y	125
NZLPG	Y	125
TLP	T	120
TG	D	120
<sup>a</sup> Corrected in accordance with Appendix B.		



## Section 4 Tests under limiting conditions

### 4.1 General

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Butane	Y	2.00 kPa	
Universal LP Gas	X	2.00 kPa	
NZLPG	X	2.00 kPa	
TLP	T	0.50 kPa	
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Pn = normal test pressure			

### 4.3 CO/CO<sub>2</sub> ratio limits for any independent burner — Overload

When tested in accordance with Test Method [ZB.2](#), the CO/CO<sub>2</sub> ratio of the combustion products, shall not exceed 0.02, 5 min after ignition with the appliance operating at the limiting condition specified in [Table 4.3](#).

**Table 4.3 — Limiting conditions — All burners**

Appliance gas type	Test gas	Measured gas consumption (% of nominal gas consumption) <sup>a</sup>
Natural gas (Australia)	N	120
Natural gas (NZ)	N	115
Propane	X	113
Butane	Y	113
Universal LP Gas	Y	125
NZLPG	Y	125
TLP	T	120
TG	D	120
<sup>a</sup> Corrected in accordance with Appendix B.		



## Section 4 Tests under limiting conditions

### 4.1 General

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Universal LP Gas	X	2.00 kPa	
NZLPG	X	2.00 kPa	
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TG	D	0.50 kPa	
Pn = normal test pressure			

### 4.3 CO/CO<sub>2</sub> ratio limits for any independent burner — Overload

When tested in accordance with Test Method [ZB.2](#), the CO/CO<sub>2</sub> ratio of the combustion products, shall not exceed 0.02, 5 min after ignition with the appliance operating at the limiting condition specified in [Table 4.3](#).

**Table 4.3 — Limiting conditions — All burners**

Appliance gas type	Test gas	Measured gas consumption (% of nominal gas consumption) <sup>a</sup>
Natural gas (Australia)	N	120
Natural gas (NZ)	N	115
Propane	X	113
Butane	Y	113
Universal LP Gas	Y	125
NZLPG	Y	125
TLP	T	120
TG	D	120
<sup>a</sup> Corrected in accordance with Appendix B.		



## Section 4 Tests under limiting conditions

### 4.1 General

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### 4.2 CO/CO<sub>2</sub> ratio limits of any independent surface combustion burner — Underload

When tested in accordance with Test Method [ZB.1](#), the CO/CO<sub>2</sub> ratio of the combustion products of any independent surface combustion burner shall not exceed 0.02, 5 min after ignition, with the appliance operating at the limiting condition specified in [Table 4.2](#).

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Butane	Y	2.00 kPa	
Universal LP Gas	X	2.00 kPa	
NZLPG	X	2.00 kPa	
TLP	T	0.50 kPa	
TG	D	0.50 kPa	
Pn = normal test pressure			

### 4.3 CO/CO<sub>2</sub> ratio limits for any independent burner — Overload

When tested in accordance with Test Method [ZB.2](#), the CO/CO<sub>2</sub> ratio of the combustion products, shall not exceed 0.02, 5 min after ignition with the appliance operating at the limiting condition specified in [Table 4.3](#).

**Table 4.3 — Limiting conditions — All burners**

Appliance gas type	Test gas	Measured gas consumption (% of nominal gas consumption) <sup>a</sup>
Natural gas (Australia)	N	120
Natural gas (NZ)	N	115
Propane	X	113
Butane	Y	113
Universal LP Gas	Y	125
NZLPG	Y	125
TLP	T	120
TG	D	120
<sup>a</sup> Corrected in accordance with Appendix B.		



## Section 4 Tests under limiting conditions

### 4.1 General

Appliances and their associated side burners(s) and other accessory burner(s) shall conform to the requirements of this Section when supplied with the test gases and under the limiting conditions specified in each clause, with the following exceptions:

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### 4.2 CO/CO<sub>2</sub> ratio limits of any independent surface combustion burner — Underload

When tested in accordance with Test Method [ZB.1](#), the CO/CO<sub>2</sub> ratio of the combustion products of any independent surface combustion burner shall not exceed 0.02, 5 min after ignition, with the appliance operating at the limiting condition specified in [Table 4.2](#).

**Table 4.2 — Limiting conditions — Independent surface combustion burner**

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Propane	X	2.00 kPa	
Butane	Y	2.00 kPa	
Universal LP Gas	X	2.00 kPa	
NZLPG	X	2.00 kPa	
TLP	T	0.50 kPa	
TG	D	0.50 kPa	
Pn = normal test pressure			

### 4.3 CO/CO<sub>2</sub> ratio limits for any independent burner — Overload

When tested in accordance with Test Method [ZB.2](#), the CO/CO<sub>2</sub> ratio of the combustion products, shall not exceed 0.02, 5 min after ignition with the appliance operating at the limiting condition specified in [Table 4.3](#).

**Table 4.3 — Limiting conditions — All burners**

Appliance gas type	Test gas	Measured gas consumption (% of nominal gas consumption) <sup>a</sup>
Natural gas (Australia)	N	120
Natural gas (NZ)	N	115
Propane	X	113
Butane	Y	113
Universal LP Gas	Y	125
NZLPG	Y	125
TLP	T	120
TG	D	120
<sup>a</sup> Corrected in accordance with Appendix B.		



## Section 4 Tests under limiting conditions

### 4.1 General

Appliances and their associated side burners(s) and other accessory burner(s) shall conform to the requirements of this Section when supplied with the test gases and under the limiting conditions specified in each clause, with the following exceptions:

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- (b) Appliances intended for use with town gas may be tested using available town gas but in the case of dispute or borderline results test gas “D” shall be used.

### 4.2 CO/CO<sub>2</sub> ratio limits of any independent surface combustion burner — Underload

When tested in accordance with Test Method [ZB.1](#), the CO/CO<sub>2</sub> ratio of the combustion products of any independent surface combustion burner shall not exceed 0.02, 5 min after ignition, with the appliance operating at the limiting condition specified in [Table 4.2](#).

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Propane	X	2.00 kPa	
Butane	Y	2.00 kPa	
Universal LP Gas	X	2.00 kPa	
NZLPG	X	2.00 kPa	
TLP	T	0.50 kPa	
TG	D	0.50 kPa	
Pn = normal test pressure			

### 4.3 CO/CO<sub>2</sub> ratio limits for any independent burner — Overload

When tested in accordance with Test Method [ZB.2](#), the CO/CO<sub>2</sub> ratio of the combustion products, shall not exceed 0.02, 5 min after ignition with the appliance operating at the limiting condition specified in [Table 4.3](#).

**Table 4.3 — Limiting conditions — All burners**

Appliance gas type	Test gas	Measured gas consumption (% of nominal gas consumption) <sup>a</sup>
Natural gas (Australia)	N	120
Natural gas (NZ)	N	115
Propane	X	113
Butane	Y	113
Universal LP Gas	Y	125
NZLPG	Y	125
TLP	T	120
TG	D	120
<sup>a</sup> Corrected in accordance with Appendix B.		



## Section 4 Tests under limiting conditions

### 4.1 General

Appliances and their associated side burners(s) and other accessory burner(s) shall conform to the requirements of this Section when supplied with the test gases and under the limiting conditions specified in each clause, with the following exceptions:

- (a) Appliances intended for use with natural gas may be tested using available natural gas but in the case of dispute or borderline results test gas “N” shall be used.
- (b) Appliances intended for use with town gas may be tested using available town gas but in the case of dispute or borderline results test gas “D” shall be used.

### 4.2 CO/CO<sub>2</sub> ratio limits of any independent surface combustion burner — Underload

When tested in accordance with Test Method [ZB.1](#), the CO/CO<sub>2</sub> ratio of the combustion products of any independent surface combustion burner shall not exceed 0.02, 5 min after ignition, with the appliance operating at the limiting condition specified in [Table 4.2](#).

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Propane	X	2.00 kPa	
Butane	Y	2.00 kPa	
Universal LP Gas	X	2.00 kPa	
NZLPG	X	2.00 kPa	
TLP	T	0.50 kPa	
TG	D	0.50 kPa	
Pn = normal test pressure			

### 4.3 CO/CO<sub>2</sub> ratio limits for any independent burner — Overload

When tested in accordance with Test Method [ZB.2](#), the CO/CO<sub>2</sub> ratio of the combustion products, shall not exceed 0.02, 5 min after ignition with the appliance operating at the limiting condition specified in [Table 4.3](#).

**Table 4.3 — Limiting conditions — All burners**

Appliance gas type	Test gas	Measured gas consumption (% of nominal gas consumption) <sup>a</sup>
Natural gas (Australia)	N	120
Natural gas (NZ)	N	115
Propane	X	113
Butane	Y	113
Universal LP Gas	Y	125
NZLPG	Y	125
TLP	T	120
TG	D	120
<sup>a</sup> Corrected in accordance with Appendix B.		



## Section 4 Tests under limiting conditions

### 4.1 General

Appliances and their associated side burners(s) and other accessory burner(s) shall conform to the requirements of this Section when supplied with the test gases and under the limiting conditions specified in each clause, with the following exceptions:

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TLP	T	0.50 kPa	
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Pn = normal test pressure			

### 4.3 CO/CO<sub>2</sub> ratio limits for any independent burner — Overload

When tested in accordance with Test Method [ZB.2](#), the CO/CO<sub>2</sub> ratio of the combustion products, shall not exceed 0.02, 5 min after ignition with the appliance operating at the limiting condition specified in [Table 4.3](#).

**Table 4.3 — Limiting conditions — All burners**

Appliance gas type	Test gas	Measured gas consumption (% of nominal gas consumption) <sup>a</sup>
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Natural gas (NZ)	N	115
Propane	X	113
Butane	Y	113
Universal LP Gas	Y	125
NZLPG	Y	125
TLP	T	120
TG	D	120
<sup>a</sup> Corrected in accordance with Appendix B.		



## Section 4 Tests under limiting conditions

### 4.1 General

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TLP	T	0.50 kPa	
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### 4.3 CO/CO<sub>2</sub> ratio limits for any independent burner — Overload

When tested in accordance with Test Method [ZB.2](#), the CO/CO<sub>2</sub> ratio of the combustion products, shall not exceed 0.02, 5 min after ignition with the appliance operating at the limiting condition specified in [Table 4.3](#).

**Table 4.3 — Limiting conditions — All burners**

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Butane	Y	113
Universal LP Gas	Y	125
NZLPG	Y	125
TLP	T	120
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## Section 4 Tests under limiting conditions

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TLP	T	0.50 kPa	
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NZLPG	Y	125
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## Section 4 Tests under limiting conditions

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**Table 4.3 — Limiting conditions — All burners**

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Butane	Y	113
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NZLPG	Y	125
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## Section 4 Tests under limiting conditions

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Pn = normal test pressure			

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When tested in accordance with Test Method [ZB.2](#), the CO/CO<sub>2</sub> ratio of the combustion products, shall not exceed 0.02, 5 min after ignition with the appliance operating at the limiting condition specified in [Table 4.3](#).

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Propane	X	113
Butane	Y	113
Universal LP Gas	Y	125
NZLPG	Y	125
TLP	T	120
TG	D	120
<sup>a</sup> Corrected in accordance with Appendix B.		



## Section 4 Tests under limiting conditions

### 4.1 General

Appliances and their associated side burners(s) and other accessory burner(s) shall conform to the requirements of this Section when supplied with the test gases and under the limiting conditions specified in each clause, with the following exceptions:

- (a) Appliances intended for use with natural gas may be tested using available natural gas but in the case of dispute or borderline results test gas “N” shall be used.
- (b) Appliances intended for use with town gas may be tested using available town gas but in the case of dispute or borderline results test gas “D” shall be used.

### 4.2 CO/CO<sub>2</sub> ratio limits of any independent surface combustion burner — Underload

When tested in accordance with Test Method [ZB.1](#), the CO/CO<sub>2</sub> ratio of the combustion products of any independent surface combustion burner shall not exceed 0.02, 5 min after ignition, with the appliance operating at the limiting condition specified in [Table 4.2](#).

**Table 4.2 — Limiting conditions — Independent surface combustion burner**

Appliance gas type	Test gas	Appliance inlet pressure	Limiting condition
Natural gas (Australia)	N	0.75 kPa	The lowest operating setting to which the burner control can be set
Natural gas (NZ)	N	0.66 × Pn	
Propane	X	2.00 kPa	
Butane	Y	2.00 kPa	
Universal LP Gas	X	2.00 kPa	
NZLPG	X	2.00 kPa	
TLP	T	0.50 kPa	
TG	D	0.50 kPa	
Pn = normal test pressure			

### 4.3 CO/CO<sub>2</sub> ratio limits for any independent burner — Overload

When tested in accordance with Test Method [ZB.2](#), the CO/CO<sub>2</sub> ratio of the combustion products, shall not exceed 0.02, 5 min after ignition with the appliance operating at the limiting condition specified in [Table 4.3](#).

**Table 4.3 — Limiting conditions — All burners**

Appliance gas type	Test gas	Measured gas consumption (% of nominal gas consumption) <sup>a</sup>
Natural gas (Australia)	N	120
Natural gas (NZ)	N	115
Propane	X	113
Butane	Y	113
Universal LP Gas	Y	125
NZLPG	Y	125
TLP	T	120
TG	D	120
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## Section 4 Tests under limiting conditions

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### 4.2 CO/CO<sub>2</sub> ratio limits of any independent surface combustion burner — Underload

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Butane	Y	2.00 kPa	
Universal LP Gas	X	2.00 kPa	
NZLPG	X	2.00 kPa	
TLP	T	0.50 kPa	
TG	D	0.50 kPa	
Pn = normal test pressure			

### 4.3 CO/CO<sub>2</sub> ratio limits for any independent burner — Overload

When tested in accordance with Test Method [ZB.2](#), the CO/CO<sub>2</sub> ratio of the combustion products, shall not exceed 0.02, 5 min after ignition with the appliance operating at the limiting condition specified in [Table 4.3](#).

**Table 4.3 — Limiting conditions — All burners**

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## Section 4 Tests under limiting conditions

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### 4.2 CO/CO<sub>2</sub> ratio limits of any independent surface combustion burner — Underload

When tested in accordance with Test Method [ZB.1](#), the CO/CO<sub>2</sub> ratio of the combustion products of any independent surface combustion burner shall not exceed 0.02, 5 min after ignition, with the appliance operating at the limiting condition specified in [Table 4.2](#).

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Universal LP Gas	X	2.00 kPa	
NZLPG	X	2.00 kPa	
TLP	T	0.50 kPa	
TG	D	0.50 kPa	
Pn = normal test pressure			

### 4.3 CO/CO<sub>2</sub> ratio limits for any independent burner — Overload

When tested in accordance with Test Method [ZB.2](#), the CO/CO<sub>2</sub> ratio of the combustion products, shall not exceed 0.02, 5 min after ignition with the appliance operating at the limiting condition specified in [Table 4.3](#).

**Table 4.3 — Limiting conditions — All burners**

Appliance gas type	Test gas	Measured gas consumption (% of nominal gas consumption) <sup>a</sup>
Natural gas (Australia)	N	120
Natural gas (NZ)	N	115
Propane	X	113
Butane	Y	113
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NZLPG	Y	125
TLP	T	120
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When tested in accordance with Test Method [ZB.1](#), the CO/CO<sub>2</sub> ratio of the combustion products of any independent surface combustion burner shall not exceed 0.02, 5 min after ignition, with the appliance operating at the limiting condition specified in [Table 4.2](#).

**Table 4.2 — Limiting conditions — Independent surface combustion burner**

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Propane	X	2.00 kPa	
Butane	Y	2.00 kPa	
Universal LP Gas	X	2.00 kPa	
NZLPG	X	2.00 kPa	
TLP	T	0.50 kPa	
TG	D	0.50 kPa	
Pn = normal test pressure			

### 4.3 CO/CO<sub>2</sub> ratio limits for any independent burner — Overload

When tested in accordance with Test Method [ZB.2](#), the CO/CO<sub>2</sub> ratio of the combustion products, shall not exceed 0.02, 5 min after ignition with the appliance operating at the limiting condition specified in [Table 4.3](#).

**Table 4.3 — Limiting conditions — All burners**

Appliance gas type	Test gas	Measured gas consumption (% of nominal gas consumption) <sup>a</sup>
Natural gas (Australia)	N	120
Natural gas (NZ)	N	115
Propane	X	113
Butane	Y	113
Universal LP Gas	Y	125
NZLPG	Y	125
TLP	T	120
TG	D	120
<sup>a</sup> Corrected in accordance with Appendix B.		