

NZS 5261:2003

GAS INSTALLATION

AMENDMENT NO.2

JUNE 2007

REVISED TEXT

EXPLANATORY NOTE

The main changes in Amendment No. 2 to NZS 5261 are to clarify clearances between flue terminals and gas measurement systems, and protection requirements for combustible surfaces near gas cooking appliances. The leakage testing procedure for existing installations has also been amended and a checklist has been added as a guide for installers to assess compliance with the Standard.

APPROVAL

Amendment No. 2 was approved on 5 June 2007 by the Standards Council to be an amendment to NZS 5261:2003.

COPYRIGHT (Inside front cover)

Delete:

The copyright of this document is the property of the Standards Council. No part of it may be reproduced by photocopying or by other means without the prior written permission of the Chief Executive of Standards New Zealand unless the circumstances are covered by Part III of the Copyright Act 1994.

and substitute:

The copyright of this document is the property of the Standards Council. Only Appendix O may be reproduced by photocopying or other means without the prior written permission of the Chief Executive of Standards New Zealand unless the circumstances are covered by Part III of the Copyright Act 1994.

(Amendment No.2 June, 2007)

CONTENTS (p11)

Under the Appendix heading **add**:

O Gas installation checklist (Informative) 171

Under the Table heading **add**:

16(a) Minimum clearances required for flue terminals from
gas measurement systems shown in figure 3 102
16(b) Protection of combustible materials used as cooker splashbacks 104

(Amendment No.2 June, 2007)

Single User PDF Download Terms & Conditions

You have downloaded material which is subject to strict conditions of use. Copyright in this material is owned by Standards New Zealand. Please read these terms and conditions carefully, as in addition to the usual range of civil remedies available to Standards New Zealand for infringement of copyright, under New Zealand law every person who infringes copyright may be liable to a fine not exceeding \$50,000 or to imprisonment for a term not to exceed three months.

You have purchased a single-user licence to store this non-revisable Adobe Acrobat PDF file on your personal computer. You may print out and retain ONE printed copy only.

Standards New Zealand retains title and ownership of the copyright in this PDF file and the corresponding permitted printed copy at all times.

Under this license use of both the PDF file and the single permitted printed copy of this PDF file you may make are restricted to you. Under no circumstances are you permitted to sell, transfer or copy this PDF file, the one permitted printed copy of this PDF file, or any part of either of them.

You undertake that you will not modify, adapt, translate, reverse engineer, decompile, disassemble or create derivative works based on any of the downloaded PDF file, nor will you merge it with any other software or document, even for internal use within your organization.

Under no circumstances may this PDF file be placed on a network of any sort without the express permission of Standards New Zealand.

You are solely responsible for the selection of this PDF file and any advice or recommendation given by Standards New Zealand or its employees or agents about any aspect of this PDF file is intended for guidance only and is followed or acted upon entirely at your own risk.

Standards New Zealand is not aware of any inherent risk of viruses in this PDF file at the time that it is downloaded. Standards New Zealand has exercised due diligence to ensure, so far as practicable, that this file does not contain such viruses.

No warranty of any form is given by Standards New Zealand or by any party associated with Standards New Zealand with regard to this PDF file, and you accept and acknowledge that Standards New Zealand will not be liable in any way to you or any to other person in respect of any loss or damage, however caused which may be suffered or incurred or which may arise directly or indirectly through any use of this PDF file.

Regardless of where you were when you downloaded this PDF file you accept and acknowledge that to the fullest extent possible you submit to New Zealand law with regard to this licence and to your

RELATED DOCUMENTS

NZS (p13)

After NZS 4219:1983 **add**:

NZS 4223.3:2003 Code of practice for glazing in buildings – Human impact safety requirements

AS/NZS (p13)

After AS/NZS 1596:2002 **add**:

AS/NZS 2208:1996 Safety glazing materials in buildings

AS (p15)

Delete:

AS 3914:2002 Industrial and commercial gas-fired appliances

and **substitute:**

AS 3814:2005 Industrial and commercial gas-fired appliances

New Zealand Legislation (p17)

After Hazardous Substances (Compressed Gases) Regulations 2004 **add**:

Hazardous Substances (Dangerous Goods and Scheduled Toxic Substances) Transfer Notice 2004 (New Zealand Gazette, Issue No. 35, March 2004).

(Amendment No.2 June, 2007)

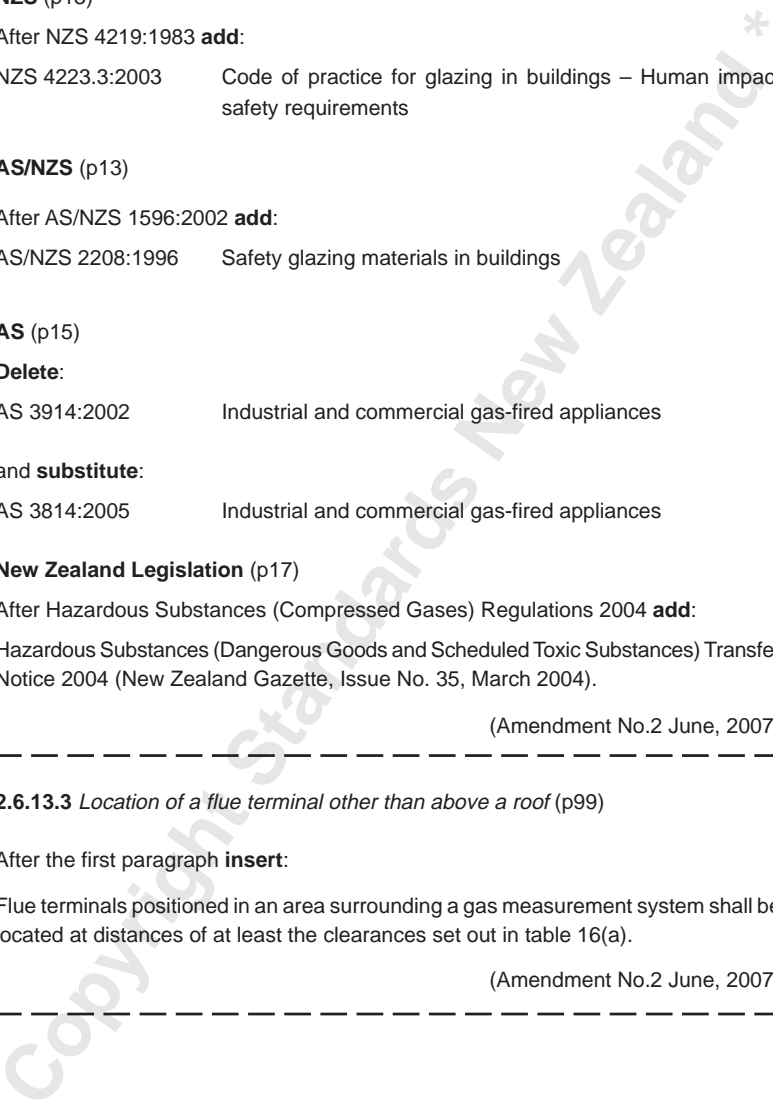
2.6.13.3 *Location of a flue terminal other than above a roof* (p99)

After the first paragraph **insert**:

Flue terminals positioned in an area surrounding a gas measurement system shall be located at distances of at least the clearances set out in table 16(a).

(Amendment No.2 June, 2007)

*On 21/12/2008 02:22 PM Plumbers NZ Ltd purchased a single use licence to store this document on a single computer. Plumbers NZ Ltd may print and retain one copy only.



In table 16 (p101) **delete** the entry:

- | | | | |
|---|--|------|------|
| d | From a gas meter (M) (see 2.5.4.9 for vent terminal location of regulator) | 1000 | 1000 |
|---|--|------|------|

and after table 16 (p101) **insert** new table 16(a):

Table 16(a) – Minimum clearances required for flue terminals from gas measurement systems shown in figure 3

Ref.	Clearances	Gas measurement system up to 25 m ³ /h (G16)		
		Venting regulator relief valve (mm)	Automatic shut off device regulator (mm)	No regulator (mm)
d	Horizontal distance	800	400	400
	Vertically above	1000	300	300
	Vertically below for natural gas	300	300	300
	Vertically below for LPG	1500	800	800
NOTE –				
(1) Clearance distances are measured from nearest point of the gas measurement system.				
(2) For gas measurement systems of greater capacity than 25 m ³ /h the clearance distances shall be increased appropriately.				
(3) This table may be used as guidance for check meter installations.				

(Amendment No.2 June, 2007)

2.7.1.2 Protection of a combustible surface near a gas cooking appliance (p103)

Delete and substitute the following:

Any combustible surface within the clearance zone specified in 2.7.1.1 shall in order to meet the requirements of 2.6.2.6 be protected by one of the methods detailed in the table 16(b).

Table 16(b) – Protection of combustible materials used as cooker splashbacks

Facing material	Minimum thickness (mm)	Backing material	Minimum thickness (mm)
Ceramic tiles	5	Gypsum based wall board; or	10
		Fibre cement board	6
Toughened glass (Notes 1 and 2)	5	Gypsum based wall board; or	10
		Fibre cement board	6
Sheet metal	0.4	Fibre cement board or	12
		Fibre cement board over 10 mm gypsum based wall board	6
Or any other system that can be demonstrated to satisfy the temperature requirement in 2.6.2.6.			
NOTE –			
(1) Toughened glass is defined in NZS 4223.3 to comply with AS/NZS 2208.			
(2) All toughened glass used as a cooker splashback shall be marked as 'toughened glass' to indicate that it is fit for purpose.			

(Amendment No.2 June, 2007)

**APPENDIX D
PRESSURE TESTING A GAS INSTALLATION**

D2 Limitation of tests (p131)

Delete the first paragraph and substitute:

This Appendix applies to gas installations where the volume of pipework does not exceed 30 litres. For installations where the pipework exceeds 30 litres, a specific written test procedure including safe purging (see Appendix C) should be developed and used to determine the gas tightness of the installation.

(Amendment No.2 June, 2007)

On p132 **add** a new clause:

D3.3 Testing precautions

The test period does not include the temperature stabilization period.

The period for temperature stabilization will depend on a number of conditions including ambient temperature and test fluid temperature.

A suitable period shall be allowed for testing equipment to adjust to ambient temperature.

(Amendment No.2 June, 2007)

D4 Pipework test procedure (p132)

In (d) **delete** suitable pressure gauge and **substitute** suitable test instrument.

(Amendment No.2 June, 2007)

D5 Installation test procedure (p133)

In (d) **delete** suitable pressure gauge and **substitute** suitable test instrument.

(Amendment No.2 June, 2007)

D6 Leakage test for existing installations (p133)

Delete and **substitute**:

The Leakage Test for existing installations shall be carried out as follows:

- (a) Depressurize the installation;
- (b) Ensure the installation is disconnected at the meter or from the cylinder;
- (c) Ensure all gas appliance pilots are turned off and all but the last control device (or tap) on each gas appliance is in the open position;
- (d) Attach a suitable test instrument;
- (e) Pressurize the installation to operating pressure or 2.0 kPa, whichever is the greater;
- (f) Isolate the pressure source and allow a suitable period (2 minutes) for the temperature of the testing medium within the consumer piping to stabilize; and
- (g) Measure the loss of pressure during a test period of 5 minutes.

If the pressure loss is equal to or less than the maximum pressure drop specified in table D2 then the installation is deemed satisfactory except when limited for a final leakage test by D7.

If the pressure loss is greater than the maximum pressure drop specified in table D2 the installation fails the leakage test and the consumer shall be advised so that remedial action can be taken.

(Amendment No.2 June, 2007)

**APPENDIX G
LPG CYLINDER LOCATIONS**

Figure G3 – Minimum clearance to a drain or openings into a building (p154)

Add a new note under figure G3.

NOTE – This figure illustrates the allowable separation distance from a building for cylinders up to an aggregate capacity of 100 kg. For storage of cylinders with aggregate capacity greater than 100 kg, the requirements in the Hazardous Substances (Dangerous Goods and Scheduled Toxic Substances) Transfer Notice 2004, Schedule 10, Clauses 7 and 20 shall be followed.

(Amendment No.2 June, 2007)

**APPENDIX M
FIRE RESISTANT MATERIAL**

M2 Specification for fire resistant material (p168)

Delete and **substitute**:

Fire resistant material should have the properties of (a) or (b) and in addition the properties of (c), (d), and (e):

- (a) When tested to NZS/AS 1530.1, be deemed not combustible;
- (b) When tested to AS/NZS 1530.3, have a zero (0) index for all of the following:
 - (i) Ignitability
 - (ii) Spread of flame
 - (iii) Heat evolved
 - (iv) Smoke developed;
- (c) A thermal resistance (R) not less than $0.05 \text{ m}^2 \text{ }^\circ\text{C/W}$, but in no instance should the material be of a thickness less than 6 mm;
- (d) If required to support a load, a compressive strength of not less than 1.5 MPa;
- (e) If required to support a load, deform not more than 2 % of its thickness when subjected to a compressive stress of 350 kPa.

(Amendment No.2 June, 2007)

On p170 **add** a new Appendix:

**APPENDIX O
GAS INSTALLATION CHECKLIST
(FOR INSTALLATIONS BELOW 250 MJ/h RATED OUTPUT)**

(Informative)

This checklist is provided as guidance for installers to check compliance of a gas installation with NZS 5261. The checklist is not exhaustive, and both Parts 1 and 2 of the Standard should be consulted when assessing any gas installation to ensure that the essential safety requirements are met.

Consumer		Date		
Address		Certificate No.		
		Job No.		
Item	Clause/ Appendix	C	NA	Notes
General requirements				
Gas supply verified	1.2, 1.3, 2.2, 2.6 and Appendix B			
Installation tested & gastight				
Gas pipework				
General requirements				
Design				
Location				
Supports & anchoring	1.3, 1.4, 2.2 – 2.5			
Corrosion protection				
Materials & components				
Isolating valves				
Pressure regulation				
Overpressure protection				
Vent lines				
Test points				

*On 21/12/2008 02:22 PM Plumbers NZ Ltd purchased a single use licence to store this document on a single computer. Plumbers NZ Ltd may print and retain one copy only.

*On 21/12/2008 02:22 PM Plumbers NZ Ltd purchased a single use licence to store this document on a single computer. Plumbers NZ Ltd may print and retain one copy only.

Item	Clause/ Appendix	C	NA	Notes
Gas pipework (continued)				
Expansion & contraction				
Pipe protection	1.3, 1.4, 2.2 – 2.5			
Flexible connections				
Earthing				
Pipeline identification				
Disconnection				
Soundness testing	Appendix D			
Sizing	Appendix E			
Appliance installation				
Appliance(s) declaration	NZS 5262			
Mounting & restraint	1.6, 2.6, 2.7			
Location				
Clearances				
Disconnection				
Combustible surfaces				
Temperature safety				
Flues				
Design	Appendix F			
Manufacturer's specifications followed	–			
Installation and location	1.3, 1.5, 2.3, 2.6			
Materials				
Structure & supports				
Clearances				
Temperature safety				
Draught diverter				
Terminal & clearances				
Ventilation				
Appliances Input	1.6, 2.6			
Requirements				

Item	Clause/ Appendix	C	NA	Notes
Ventilation (continued)				
Sizing of openings	1.6, 2.6			
Location of openings				
Air not contaminated				
Mechanical ventilation				
LPG Installations				
Location	Appendix G			
Clearances				
Weather protection				
Ventilation				
Drainage				
Restraint chains				
Hoses & fittings				
Labelling & signage				
Commissioning				
Purging	Appendix C			
Controls tested & set	1.2, 1.6 and Appendix H			
Safety devices tested & set				
Gas rating				
Combustion testing				
Consumer instruction				
Certification				
Certificate issued	NA			
C = Compliant		NA = Not Applicable		
Name	Signature	Reg. No.		

Appendix O is available in A4 size as a free download from our website:

www.standards.co.nz

(Amendment No.2 June, 2007)