

**AS 4551—2008**  
(Incorporating Amendment Nos 1 and 2)

AS 4551—2008

**Australian Standard<sup>®</sup>**

**Domestic gas cooking appliances**



This Australian Standard® was prepared by Committee AG-001, Gas Appliances. It was approved on behalf of the Council of Standards Australia on 12 June 2008. This Standard was published on 30 June 2008.

---

The following are represented on Committee AG-001:

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

This Standard was issued in draft form for comment as DR 08052.

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

---

#### **Keeping Standards up-to-date**

Australian Standards® are living documents that reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued.

Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments that may have been published since the Standard was published.

Detailed information about Australian Standards, drafts, amendments and new projects can be found by visiting [www.standards.org.au](http://www.standards.org.au)

Standards Australia welcomes suggestions for improvements, and encourages readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at [mail@standards.org.au](mailto:mail@standards.org.au), or write to Standards Australia, GPO Box 476, Sydney, NSW 2001.

---

**AS 4551—2008**  
(Incorporating Amendment Nos 1 and 2)

**Australian Standard<sup>®</sup>**

## **Domestic gas cooking appliances**

First published as AS 4551—2000 (AG 101—2000).  
Revised as AS 4551—2008.  
Reissued incorporating Amendment No. 1 (December 2009).  
Reissued incorporating Amendment No. 2 (June 2012).

### **COPYRIGHT**

© Standards Australia Limited

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher, unless otherwise permitted under the Copyright Act 1968.

Published by SAI Global Limited under licence from Standards Australia Limited, GPO Box 476, Sydney, NSW 2001, Australia

ISBN 0 7337 8780 0

## PREFACE

This Standard was prepared by the Standards Australia Committee AG-001, Gas Appliances to supersede AS 4551—2000 (AG 101—2000), Domestic gas cooking appliances.

*This Standard incorporates Amendment No. 1 (December 2009) and Amendment No. 2 (June 2012). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.*

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

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

In its preparation, consideration has been given to—

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

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

The principal differences between this edition and AS 4551—2000 (AG 101—2000), are marked by a line in the margin. These differences may be a new or revised definition, Clause, Figure or Method of Test (M.O.T.).

The following have been deleted:

- (i) Definitions: AGA, ALPGA, Approved, Authority, Bypass screw, Direct fired oven, Flame blow off, Flame lift, Grill fret, Grill grid (smokeless), Indirect fired oven, Interrupter screw, Piezo electric ignition, Rotisserie, Semi-automatic ignition, Simmer gas consumption and Terminal.
- (ii) Clauses: 2.1.14, 2.3.2, 2.5.1, 2.7.4, 2.7.5, 2.7.6 (both Clauses are now incorporated into 2.10.8.3 (a) and (b)), 2.8.10, 2.11.2.7 (incorporated in Clause 2.11.3), 3.7.3 (now Clause 4.8), 5.7.4 and 5.7.6 (incorporated in Clause 2.2.5).
- (iii) Figures: 1, 2, 5 and 8 (replaced by dew plate).

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

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

## CONTENTS

	<i>Page</i>
<b>SECTION 1 SCOPE AND GENERAL</b>	
1.1 SCOPE.....	5
1.2 REFERENCED DOCUMENTS.....	5
1.3 DEFINITIONS.....	6
<b>SECTION 2 DESIGN AND CONSTRUCTION</b>	
2.1 GENERAL.....	18
2.2 MATERIALS.....	22
2.3 ELECTRICAL SYSTEMS.....	24
2.4 INSTALLATION REQUIREMENTS.....	25
2.5 MAINTENANCE REQUIREMENTS .....	26
2.6 PRESSURE REGULATORS .....	27
2.7 GAS CONTROLS AND SAFETY SHUT OFF SYSTEMS .....	27
2.8 IGNITION, PILOTS AND MAIN BURNERS.....	28
2.9 FLUEING REQUIREMENTS .....	30
2.10 MARKINGS .....	31
2.11 INSTRUCTIONS.....	34
<b>SECTION 3 PRELIMINARY TESTS FOR LINE GASES</b>	
3.1 GENERAL.....	37
3.2 PREPARATION FOR TESTING .....	37
3.3 GAS LEAKAGE.....	38
3.4 GAS CONSUMPTION.....	39
3.5 GAS PRESSURE REGULATORS .....	39
3.6 IGNITION AND SAFETY SHUT OFF SYSTEMS.....	39
3.7 FLAME STABILITY.....	41
<b>SECTION 4 TESTS USING LIMIT CONDITIONS</b>	
4.1 GENERAL.....	42
4.2 CO/CO <sub>2</sub> RATIO LIMITS FOR ANY INDEPENDENT SURFACE COMBUSTION BURNER .....	42
4.3 CO/CO <sub>2</sub> RATIO LIMITS FOR ANY INDEPENDENT BURNER OTHER THAN SURFACE COMBUSTION BURNERS .....	42
4.4 CO/CO <sub>2</sub> RATIO LIMITS FOR PERMANENT PILOT BURNERS.....	43
4.5 FLAME CHARACTERISTICS AT MAXIMUM AND MINIMUM LIMITING CONDITIONS .....	43
4.6 BURNER IGNITION AT MAXIMUM AND MINIMUM LIMITING CONDITIONS .....	43
4.7 DELAYED IGNITION AT MAXIMUM AND MINIMUM LIMITING CONDITIONS .....	43
4.8 BURNER STABILITY WHEN CHANGING SETTING.....	44
4.9 PILOT IGNITION AND STABILITY AT MAXIMUM AND MINIMUM LIMITING CONDITIONS .....	44
4.10 UNBURNT GAS RELEASE FROM BURNER SYSTEM .....	44
4.11 BURNER INTERFERENCE AT IGNITION OR DURING COMBUSTION.....	44
4.12 BLOCKED FLUEWAY TERMINAL.....	44
4.13 CASE PRESSURE TEST .....	45
4.14 OVEN BURNER FLAME STABILITY DURING COLD START .....	45

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

- 
- Looking for additional Standards? Visit Intertek Inform Infostore
  - Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation
-