Australian Standard®

Decorative gas log and other fuel effect appliances



This Australian Standard® was prepared by Committee AG-001, Gas Appliances. It was approved on behalf of the Council of Standards Australia on 6 January 2011. This Standard was published on 27 January 2011.

The following are represented on Committee AG-001:

- Appliance and Component Testing
- Association of Accredited Certification Bodies
- Australian Gas Association
- Consumers' Federation of Australia
- Department of the Environment, Water, Heritage and the Arts
- Energy Networks Association
- Gas Appliance Manufacturers Association of Australia
- Gas Association of New Zealand
- Gas Technical Regulators Committee
- Gas Utilisation Institute
- LP Gas Australia
- Master Plumbers, Gasfitters and Drainlayers New Zealand
- Ministry of Economic Development (New Zealand)
- New Zealand Employers and Manufacturers Association (Central)

This Standard was issued in draft form for comment as DR AS 4558.

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Standards may also be withdrawn.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

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**, or write to Standards Australia, GPO Box 476, Sydney, NSW 2001.

Australian Standard®

Decorative gas log and other fuel effect appliances

Originated as AG 108 – June 1975. Previous edition AS 4558—2000 (AG 108—2000). Second edition 2011.

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 978 0 7337 9760 6

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee AG-001, Gas Appliances. This edition is a minor revision of AS 4558—2000 (AG 108—2000) which it supersedes. After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to retain this Standard as an Australian Standard rather than develop it as an Australian/New Zealand Standard.

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 decorative gas log and other fuel effect 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) 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/NZS 5601, Gas installations, provides essential requirements and basic standards for gas installations.

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 footnotes to tables are deemed to be requirements of this Standard.

While Australian Standards mostly do not do so, all the Australian Technical Regulators agree that this Standard should include appropriate requirements for particular appliances or components to be certified.

CONTENTS

Page

| SECTIC | ON 1 SCOPE AND GENERAL | |
|-----------------------------|---|------------------------------|
| 1.1 | SCOPE | 5 |
| 1.2 | CLASSIFICATION | 5 |
| 1.3 | REFERENCED DOCUMENTS | 6 |
| 1.4 | DEFINITIONS | 6 |
| SECTIO | NI 2 DECICILAND CONCEDUCTION | |
| | CENEDAL | 10 |
| 2.1 | | 10 |
| 2.2 | MATERIALS AND STANDARDS | . 20 |
| 2.3 | ELECTRICAL 5151EMS | . 22 |
| 2.4 | INSTALLATION REQUIREMENTS | . 22 |
| 2.5 | | 24 |
| 2.0 | CAS CONTROLS AND SAFETY SHUT OFF SYSTEMS | 24 |
| 2.7 | COMPLICATION AID SUDDI V AND CONTROL S | 24 |
| 2.0 | CONIDUSTION AIR SUPPLI AND CONTROLS | 25 |
| 2.9 | ELIEING DEGUIDEMENTS | 23 |
| 2.10 2.11 | | 21 |
| 2.11 2.12 | MARNINUS AND LADELS | 20 |
| 2.12 | INSTRUCTIONS | . 30 |
| SECTIO | ON 3 PRELIMINARY TESTS—LINE GASES | |
| 3.1 | GENERAL REQUIREMENTS | 34 |
| 3.2 | PREPARATION FOR TESTING | 34 |
| 3.3 | PRIMARY GUARDS | 36 |
| 3.4 | GAS LEAKAGE | 36 |
| 3.5 | GAS CONSUMPTION | 37 |
| 3.6 | GAS PRESSURE REGULATORS | 37 |
| 3.7 | IGNITION AND SAFETY SHUT-OFF SYSTEMS | 37 |
| SECTIO | | |
| | ON 4 LIMIT GAS TESTS | 42 |
| 4.1 | CO/CO DATIO LIMITS FOR ANY INDEPENDENT DURINED - LINDERLOAD | 42 |
| 4.2 | CO/CO_2 RATIO LIMITS FOR ANY INDEPENDENT DURNER—UNDERLOAD | 42 |
| 4.5 | CO/CO_2 RATIO LIMITS FOR ANY INDEPENDENT DURINER—OVERLOAD | . 42 |
| 4.4 | CO/CO_2 KATIO LIMITS FOR PERMANENT PILOTS—OVERLOAD | .43 |
| 4.5 | FLAME ADNORMALITI I | . 43 |
| 4.0 | CONDITIONS | 12 |
| 47 | DELAYED IGNITION AT MAYIMUM AND MINIMUM I IMITING | . 43 |
| 4./ | CONDITIONS | 12 |
| 1 0 | ELAME STADILITY TO DRAUGHT | .43 |
| 4.0 | NOISE OF EXTINCTION | . 44 11 |
| 4.9 | RUPNER STABILITY WHEN CHANGING SETTING | . 44 <i>11</i> |
| 4.10 | DURNER STADIELTT WITCH CHANGING SETTING | . 44 |
| 4.11 | I IMITING CONDITIONS | ΔΛ |
| 4 12 | EFFECT OF OPENING AND CLOSING DOORS AT TURNDOWN CONDITION | 145 |
| <u>−</u> .12 <u>/</u> 12 | LINBURNT GAS RELEASE FROM BURNER SVSTEM | 45 |
| 4.13 | BURNER INTERFERENCE AT IGNITION OR DURING COMPUSTION | 45 |
| 4 15 | CASE PRESSURE | 45 |
| 4 16 | SOOTING-LUMINOUS EFFECT APPLIANCES | 45 |
| т.10 | | т <i>.</i>) |



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

Product Page

S Looking for additional Standards? Visit Intertek Inform Infostore

> Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation