



CSA/ANSI Z21.42:24 • CSA 2.15:24
National Standard of Canada
American National Standard



Gas-fired domestic illuminating appliances



scc  ccn

Legal Notice for Standards

Canadian Standards Association and CSA America Standards Inc. (operating as "CSA Group") develop standards through a consensus standards development process approved by the Standards Council of Canada and the American National Standards Institute. This process brings together volunteers representing varied viewpoints and interests to achieve consensus and develop a standard. Although CSA Group administers the process and establishes rules to promote fairness in achieving consensus, it does not independently test, evaluate, or verify the content of standards.

Disclaimer and exclusion of liability

This document is provided without any representations, warranties, or conditions of any kind, express or implied, including, without limitation, implied warranties or conditions concerning this document's fitness for a particular purpose or use, its merchantability, or its non-infringement of any third party's intellectual property rights. CSA Group does not warrant the accuracy, completeness, or currency of any of the information published in this document. CSA Group makes no representations or warranties regarding this document's compliance with any applicable statute, rule, or regulation.

IN NO EVENT SHALL CSA GROUP, ITS VOLUNTEERS, MEMBERS, SUBSIDIARIES, OR AFFILIATED COMPANIES, OR THEIR EMPLOYEES, DIRECTORS, OR OFFICERS, BE LIABLE FOR ANY DIRECT, INDIRECT, OR INCIDENTAL DAMAGES, INJURY, LOSS, COSTS, OR EXPENSES, HOWSOEVER CAUSED, INCLUDING BUT NOT LIMITED TO SPECIAL OR CONSEQUENTIAL DAMAGES, LOST REVENUE, BUSINESS INTERRUPTION, LOST OR DAMAGED DATA, OR ANY OTHER COMMERCIAL OR ECONOMIC LOSS, WHETHER BASED IN CONTRACT, TORT (INCLUDING NEGLIGENCE), OR ANY OTHER THEORY OF LIABILITY, ARISING OUT OF OR RESULTING FROM ACCESS TO OR POSSESSION OR USE OF THIS DOCUMENT, EVEN IF CSA GROUP HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, INJURY, LOSS, COSTS, OR EXPENSES.

In publishing and making this document available, CSA Group is not undertaking to render professional or other services for or on behalf of any person or entity or to perform any duty owed by any person or entity to another person or entity. The information in this document is directed to those who have the appropriate degree of experience to use and apply its contents, and CSA Group accepts no responsibility whatsoever arising in any way from any and all use of or reliance on the information contained in this document.

CSA Group is a private not-for-profit company that publishes voluntary standards and related documents. CSA Group has no power, nor does it undertake, to enforce compliance with the contents of the standards or other documents it publishes.

Intellectual property rights and ownership

As between CSA Group and the users of this document (whether it be in printed or electronic form), CSA Group is the owner, or the authorized licensee, of all works contained herein that are protected by copyright, all trade-marks (except as otherwise noted to the contrary), and all inventions and trade secrets that may be contained in this document, whether or not such inventions and trade secrets are protected by patents and applications for patents. Without limitation, the unauthorized use, modification, copying, or disclosure of this document may violate laws that protect CSA Group's and/or others' intellectual property and may give rise to a right in CSA Group and/or others to seek legal redress for such use, modification, copying, or disclosure. To the extent permitted by licence or by law, CSA Group reserves all intellectual property rights in this document.

Patent rights

Attention is drawn to the possibility that some of the elements of this standard may be the subject of patent rights. CSA Group shall not be held responsible for identifying any or all such patent rights. Users of this standard are expressly advised that determination of the validity of any such patent rights is entirely their own responsibility.

Authorized use of this document

This document is being provided by CSA Group for informational and non-commercial use only. The user of this document is authorized to do only the following:

If this document is in electronic form:

- load this document onto a computer for the sole purpose of reviewing it;
- search and browse this document; and
- print this document if it is in PDF format.

Limited copies of this document in printed or paper form may be distributed only to persons who are authorized by CSA Group to have such copies, and only if this Legal Notice appears on each such copy.

In addition, users may not and must not permit others to

- alter this document in any way or remove this Legal Notice from the attached standard;
- sell this document without authorization from CSA Group; or
- make an electronic copy of this document.

If you do not agree with any of the terms and conditions contained in this Legal Notice, you may not load or use this document or make any copies of the contents hereof, and if you do make such copies, you are required to destroy them immediately. Use of this document constitutes your acceptance of the terms and conditions of this Legal Notice.



Standards Update Service

CSA/ANSI Z21.42:24 • CSA 2.15:24
February 2024

Title: *Gas-fired domestic illuminating appliances*

To register for e-mail notification about any updates to this publication

- go to www.csagroup.org/store/
- click on **CSA Update Service**

The **List ID** that you will need to register for updates to this publication is **2131092**.

If you require assistance, please e-mail techsupport@csagroup.org or call 416-747-2233.

Visit CSA Group's policy on privacy at www.csagroup.org/legal to find out how we protect your personal information.

Canadian Standards Association (operating as “CSA Group”), under whose auspices this National Standard has been produced, was chartered in 1919 and accredited by the Standards Council of Canada to the National Standards system in 1973. It is a not-for-profit, nonstatutory, voluntary membership association engaged in standards development and certification activities.

CSA Group standards reflect a national consensus of producers and users — including manufacturers, consumers, retailers, unions and professional organizations, and governmental agencies. The standards are used widely by industry and commerce and often adopted by municipal, provincial, and federal governments in their regulations, particularly in the fields of health, safety, building and construction, and the environment.

More than 10 000 members indicate their support for CSA Group’s standards development by volunteering their time and skills to Committee work.

CSA Group offers certification and testing services in support of and as an extension to its standards development activities. To ensure the integrity of its certification process, CSA Group regularly and continually audits and inspects products that bear the CSA Group Mark.

In addition to its head office and laboratory complex in Toronto, CSA Group has regional branch offices in major centres across Canada and inspection and testing agencies in fourteen countries. Since 1919, CSA Group has developed the necessary expertise to meet its corporate mission: CSA Group is an independent service organization whose mission is to provide an open and effective forum for activities facilitating the exchange of goods and services through the use of standards, certification and related services to meet national and international needs.

For further information on CSA Group services, write to
CSA Group
178 Rexdale Boulevard
Toronto, Ontario, M9W 1R3
Canada

A National Standard of Canada is a standard developed by a Standards Council of Canada (SCC) accredited Standards Development Organization, in compliance with requirements and guidance set out by SCC. More information on National Standards of Canada can be found at www.scc.ca.

SCC is a Crown corporation within the portfolio of Innovation, Science and Economic Development (ISED) Canada. With the goal of enhancing Canada’s economic competitiveness and social wellbeing, SCC leads and facilitates the development and use of national and international standards. SCC also coordinates Canadian participation in standards development, and identifies strategies to advance Canadian standardization efforts.

Accreditation services are provided by SCC to various customers, including product certifiers, testing laboratories, and standards development organizations. A list of SCC programs and accredited bodies is publicly available at www.scc.ca.

Standards Council of Canada
600-55 Metcalfe Street
Ottawa, Ontario, K1P 6L5
Canada



Cette Norme Nationale du Canada n’est disponible qu’en anglais.

Although the intended primary application of this Standard is stated in its Scope, it is important to note that it remains the responsibility of the users to judge its suitability for their particular purpose.

®A trademark of the Canadian Standards Association, operating as “CSA Group”

CSA Group

The Canadian Standards Association (operating as “CSA Group”), under whose auspices this National Standard has been produced, was chartered in 1919 and accredited by the Standards Council of Canada to the National Standards system in 1973. It is a not-for-profit, nonstatutory, voluntary membership association engaged in standards development and certification activities.

CSA Group standards reflect a national consensus of producers and users including manufacturers, consumers, retailers, unions and professional organizations, and governmental agencies. The standards are used widely by industry and commerce and often adopted by municipal, provincial, and federal governments in their regulations, particularly in the fields of health, safety, building and construction, and the environment.

More than 10 000 members indicate their support for CSA Group’s standards development by volunteering their time and skills to Committee work.

CSA Group offers certification and testing services in support of and as an extension to its standards development activities. To ensure the integrity of its certification process, CSA Group regularly and continually audits and inspects products that bear the CSA Group Mark.

In addition to its head office and laboratory complex in Toronto, CSA Group has regional branch offices in major centres across Canada and inspection and testing agencies in fourteen countries. Since 1919, CSA Group has developed the necessary expertise to meet its corporate mission: CSA Group is an independent service organization whose mission is to provide an open and effective forum for activities facilitating the exchange of goods and services through the use of standards, certification and related services to meet national and international needs.

For further information on CSA Group services, write to:
CSA Group
178 Rexdale Boulevard, Toronto, Ontario, M1W 1P7
Canada

American National Standards Institute

The American National Standards Institute (ANSI), Inc. is the nationally recognized coordinator of voluntary standards development in the United States through which voluntary organizations, representing virtually every technical discipline and every facet of trade and commerce, organized labor and consumer interests, establish and improve the some 10 000 national consensus standards currently approved as American National Standards.

ANSI provides that the interests of the public may have appropriate participation and representation in standardization activity, and cooperates with departments and agencies of U.S. Federal, state and local governments in achieving compatibility between government codes and standards and the voluntary standards of industry and commerce.

ANSI represents the interests of the United States in international nontreaty organizations such as the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC). The Institute maintains close ties with regional organizations such as the Pacific Area Standards Congress (PASC) and the Pan American Standards Commission (COPANT). As such, ANSI coordinates the activities involved in the U.S. participation in the standards process.

ANSI approval of standards is intended to verify that the principles of openness and due process have been followed in the approval procedure and that a consensus of those directly and materially affected by the standards has been achieved. ANSI coordination is intended to assist the voluntary system to ensure that national standards needs are identified and met with a set of standards that are without conflict or unnecessary duplication in their requirements.

Responsibility of approving American standards rests with the
American National Standards Institute, Inc.
25 West 43rd Street, Fourth floor
New York, NY 10036

*National Standard of Canada
American National Standard
CSA/ANSI Z21.42:24 • CSA 2.15:24
Gas-fired domestic illuminating
appliances*



**A trademark of the Canadian Standards Association
and CSA America Standards Inc., operating as "CSA Group"*



American National Standards Institute, Inc.



*Approved on January 18, 2024 by ANSI
Published in February 2024 by CSA Group
A not-for-profit private sector organization
178 Rexdale Boulevard, Toronto, Ontario, Canada M9W 1R3*

*To purchase standards and related publications, visit our Online Store at
www.csagroup.org/store/ or call toll-free 1-800-463-6727 or 416-747-4044.*

*ICS 29.140
ISBN 978-1-4883-5015-3*

*© 2024 CSA America Standards Inc. / Canadian Standards Association
All rights reserved. No part of this publication may be reproduced in any form whatsoever
without the prior permission of the publisher.*

Contents

Technical Committee on Bi-National Gas Appliances and Related Accessories 4

Z21/CSA Joint Technical Subcommittee on Standards on Outdoor Cooking and Illuminating Appliances 9

Preface 13

SDG Foreword 15

1 Scope 16

- 1.1 Applicable equipment 16
- 1.2 Applicable equipment for fixed gas piping systems 16
- 1.3 Non-applicable equipment 16
- 1.4 Pressure references 16
- 1.5 Measurement units 16
- 1.6 Mandatory language 16

2 Reference publications 17

3 Definitions 18

4 Construction 21

- 4.1 General construction and assembly 21
 - 4.1.1 Appliance construction and materials 21
 - 4.1.2 Securement of parts 21
 - 4.1.3 Sharp edges 21
 - 4.1.4 Inlet air openings 21
 - 4.1.5 Fastener requirements 22
 - 4.1.6 Service provisions 22
- 4.2 Materials 22
 - 4.2.1 Installation material thickness 22
 - 4.2.2 Ferrous metal 22
 - 4.2.3 Supplied support part 22
 - 4.2.4 Flue products 23
 - 4.2.5 Semi-rigid tubing 23
- 4.3 Burners 23
 - 4.3.1 Repair and cleaning 23
 - 4.3.2 Burner securement 23
- 4.4 Primary air control 23
 - 4.4.1 General 23
 - 4.4.2 Shutter securement 23
- 4.5 Corrosion resistance 23
 - 4.5.1 Orifices and orifice fittings 23
 - 4.5.2 General 23
 - 4.5.3 Material 23
- 4.6 Manual gas valves 23
- 4.7 Gas appliance pressure regulators 24

4.8	Automatic valves	24
4.9	Gas filters	24
4.10	Gas ignition systems and components	24
4.10.1	Paper book match	24
4.10.2	Automatic burner ignition	24
4.10.3	Piezoelectric spark device	25
4.10.4	Manually operated electric ignition	25
4.11	Instructions	25
4.11.1	General	25
4.11.2	Front cover	25
4.11.3	Assembly, installation, and operation	27
4.11.4	Lighting instructions	27
4.11.5	Comprehensibility, accuracy, and compatibility	27
4.12	Markings	27
4.12.1	Specifications for marking materials	27
4.12.2	Rating plate	28
5	Performance	29
5.1	General	29
5.1.1	Applicable fuel types	29
5.1.2	Criteria for altitude	29
5.1.3	Burner integrity	29
5.2	Test gases	29
5.3	Test pressures and burner adjustments	30
5.4	Combustion	31
5.4.1	Air-free carbon monoxide	31
5.4.2	Method of test	31
5.5	Burner operating characteristics	32
5.5.1	Flashback	32
5.5.2	Mixer face	32
5.5.3	Flame containment	32
5.5.4	Carbon deposits	32
5.5.5	Burner noise	32
5.6	Ignition	32
5.6.1	Main burner ignition time	32
5.6.2	Pilot burner operation	33
5.6.3	Safety shut-off timing	35
5.6.4	Delayed ignition	35
5.7	Burner integrity	35
5.8	Wall and ceiling temperatures	36
5.8.1	Test set-up	36
5.8.2	Method of test	36
5.9	Manual gas valves	37
5.9.1	General	37
5.9.2	Maximum handle temperature	37
5.9.3	Manual valve temperature	37
5.10	Gas appliance pressure regulators	37
5.10.1	General	37
5.10.2	Appliance pressure regulator temperature	37

5.11	Automatic valves	37
5.11.1	General	37
5.11.2	Automatic valve temperature	37
5.12	Gas ignition systems and components	38
5.13	Illuminating appliances for outdoor installation	38
5.13.1	Rain test	38
5.13.2	Wind test at 10 mph (4.47 m/s)	41
5.13.3	Wind test at 40 mph (17.88 m/s)	41
5.14	Glass embrittlement	41
5.15	Marking material adhesion and legibility	41
5.16	Permanently attached marking tags	42
5.16.1	Detachment	42
5.16.2	Fasteners	42
6	Manufacturing and production tests	43
6.1	General	43
6.2	Materials and components	43
6.3	Manufacture test	43
6.4	Manufacture test methods	43

Annex A (normative)	— Formula for calculation of input	44
---------------------	------------------------------------	----

Technical Committee on Bi-National Gas Appliances and Related Accessories

M. W. Wilber	ESi (Engineering Systems Inc.), Plymouth, Minnesota, USA <i>Category: General Interest</i>	<i>Chair</i>
P. A. Baker	Maxitrol Company, Port Dover, Ontario, Canada <i>Category: Producer Interest</i>	<i>Vice-Chair</i>
D. N. Hird	Technical Safety Authority of Saskatchewan (TSASK), Regina, Saskatchewan, Canada <i>Category: Regulatory Authority</i>	<i>Vice-Chair</i>
A. Lanier Papageorge	Southern Company Gas, Atlanta, Georgia, USA <i>Category: Fuel Supplier</i>	<i>Vice-Chair</i>
E. Adair	Hearth, Patio & Barbecue Association, Dixon, California, USA <i>Category: Producer Interest</i>	
S. Ayers	Consumer Product Safety Commission, Rockville, Maryland, USA	<i>Non-voting</i>
D. Baxter	Ridgeview, Ontario, Canada <i>Category: General Interest</i>	
R. Beard	CSA Group, Toronto, Ontario, Canada <i>Category: Research/Testing</i>	
M. Beisheim	VentBOM LLC, Highlands Ranch, Colorado, USA <i>Category: Fuel Supplier</i>	
L. Burns	Rheem Sales Co. Inc. AKA Rheem Manufacturing Co., Montgomery, Alabama, USA	<i>Non-voting</i>
J. Brania	Underwriters Laboratories Inc., Melville, New York, USA	<i>Alternate</i>

T. Bukowski	Gas Technology Institute (GTI Energy), Des Plaines, Illinois, USA	
M. Callen	GHP Group Inc., Niles, Illinois, USA	<i>Non-voting</i>
R. Carroll	Hearth, Patio & Barbecue Association, Arlington, Virginia, USA	<i>Alternate</i>
R. Cooper	Association of Home Appliance Manufacturers (AHAM), Washington, DC, USA	<i>Non-voting</i>
S. M. Corcoran	American Gas Association, Washington, DC, USA	<i>Alternate</i>
B. Diel	M.B. Sturgis Inc., Maryland Heights, Missouri, USA	<i>Non-voting</i>
J. M. Emmel	Virginia Tech, Blacksburg, Virginia, USA <i>Category: User Interest</i>	
G. Fabbruzzo	Enbridge Gas Inc., Toronto, Ontario, Canada <i>Category: Fuel Supplier</i>	
M. Fasel	International Code Council, Indianapolis, Indiana, USA <i>Category: General Interest</i>	
L. Gill	IPEX USA LLC, Oakville, Ontario, Canada	<i>Non-voting</i>
P. Glanville	GTI Energy, Des Plaines, Illinois, USA <i>Category: Research/Testing</i>	
A. Gould	Reliance Comfort LP, Cambridge, Ontario, Canada <i>Category: User Interest</i>	
C. Grider	Intertek, Plano, Texas, USA <i>Category: Research/Testing</i>	

G. Highfield	Technical Standards and Safety Authority (TSSA), Toronto, Ontario, Canada <i>Category: Regulatory Authority</i>	
R. Jensen	Copeland, St. Louis, Missouri, USA <i>Category: Producer Interest</i>	
R. A. Jordan	Consumer Product Safety Commission, Rockville, Maryland, USA	<i>Non-voting</i>
I. Kang	Association of Home Appliance Manufacturers, Washington, DC, USA	
L. D. Kidd	Rheem Water Heating Division, Montgomery, Alabama, USA	<i>Alternate</i>
P. Kirchner	A.O. Smith Enterprises Ltd., Fergus, Ontario, Canada	<i>Non-voting</i>
J. Kleiss	Lochinvar LLC, Lebanon, Tennessee, USA	<i>Alternate</i>
P. Koepfgen	FortisBC, Surrey, British Columbia, Canada <i>Category: Fuel Supplier</i>	
W. Kowald	Lennox Industries Inc., Carrollton, Texas, USA	<i>Non-voting</i>
T. Kwon	Air-Conditioning, Heating, and Refrigeration Institute, Arlington, Virginia, USA	<i>Non-voting</i>
R. Lani	American Public Gas Association, Washington, DC, USA <i>Category: Fuel Supplier</i>	
N. Lee	Rheem Manufacturing Co., Fort Smith, Arkansas, USA <i>Category: Producer Interest</i>	
T. Manz	State of Minnesota Construction Codes and Licensing Division, St. Paul, Minnesota, USA <i>Category: Regulatory Authority</i>	

F. Myers	The Myers Group LLC, Arlington, Texas, USA <i>Category: General Interest</i>	
J. Nanni	Consumers Union, Yonkers, New York, USA <i>Category: User Interest</i>	
P. Osborne	Enercare Home and Commercial Services, North York, Ontario, Canada <i>Category: User Interest</i>	
J. Park	Association of Home Appliance Manufacturers (AHAM), Washington, DC, USA <i>Category: Producer Interest</i>	
G. J. Potter	Heater Technologies LLC, Marthasville, Missouri, USA <i>Category: General Interest</i>	
J. A. Ranfone	American Gas Association Inc., Washington, DC, USA <i>Category: Fuel Supplier</i>	
G. Reynolds	A.O. Smith Corp., Nashville, Tennessee, USA <i>Category: Producer Interest</i>	
I. Sargunam	Bloomington, Indiana, USA <i>Category: General Interest</i>	
S. Saulters	American Public Gas Association (APGA), Washington, DC, USA	<i>Alternate</i>
M. Skierkiewicz	UL LLC, Melville, New York, USA <i>Category: Research/Testing</i>	
C. Souhrada	North American Association of Food Equipment Manufacturers, Chicago, Illinois, USA <i>Category: Producer Interest</i>	
B. Streisel	GHP Group Inc., Niles, Illinois, USA <i>Category: Producer Interest</i>	

C. Suchovsky	Appliance Engineering Inc., Twinsburg, Ohio, USA <i>Category: General Interest</i>	
B. J. Swiecicki	National Propane Gas Association, Tinley Park, Illinois, USA <i>Category: Fuel Supplier</i>	
M. Thomas	Natural Resources Canada — CANMET Energy, Ottawa, Ontario, Canada	<i>Non-voting</i>
M. Travers	Reliance Comfort LP, Cambridge, Ontario, Canada	<i>Non-voting</i>
C. R. Valliere	Government of Alberta, Municipal Affairs, Edmonton, Alberta, Canada <i>Category: Regulatory Authority</i>	
P. Verhas	Innovair Solutions, Sherbrooke, Québec, Canada	<i>Non-voting</i>
D. B. Walls	Engineered Air, Calgary, Alberta, Canada	<i>Non-voting</i>
T. A. Williams	Natural Gas Direct LLC, Arlington, Virginia, USA <i>Category: User Interest</i>	
N. Shrewsbury-Gee	CSA Group, Toronto, Ontario, Canada	<i>Project Manager</i>

Z21/CSA Joint Technical Subcommittee on Standards on Outdoor Cooking and Illuminating Appliances

D. Szubra	Channel Products Inc., Solon, Ohio, USA	<i>Chair</i>
R. Ten Bruin	Weber-Stephen Products LLC, Palatine, Illinois, USA	<i>Vice-Chair</i>
E. Adair	Hearth, Patio & Barbecue Association, Dixon, California, USA	
T. Anderson	Rocky Mountain Outdoors Ltd., Victoria, British Columbia, Canada	
S. Ayers	Consumer Product Safety Commission, Rockville, Maryland, USA	
P. A. Baker	Maxitrol Co., Port Dover, Ontario, Canada	
R. Beard	CSA Group, Toronto, Ontario, Canada	
B. Bennett	Logan Outdoor Products LLC dba Camp Chef, Logan, Utah, USA	
N. Bourgeois	Metal Fusion Inc., Jefferson, Louisiana, USA	
J. Brania	Underwriters Laboratories Inc., Melville, New York, USA	
R. Calabria	Empire Comfort Systems, Belleville, Illinois, USA	
R. Carroll	Hearth, Patio & Barbecue Association, Arlington, Virginia, USA	

A. C. Carter	Element NPD LLC, Auburn, Alabama, USA
B. Diel	M.B. Sturgis Inc., Maryland Heights, Missouri, USA
B. Dresner	Empire Comfort Systems Inc., Belleville, Illinois, USA
L. Eck	Newell Brands, Wichita, Kansas, USA
T. Edwards	Metal Fusion Inc., Jefferson, Louisiana, USA
E. Ferguson	C3H8 Consulting, Eaton, Colorado, USA
C. Gherghel	Wolf Steel Ltd., Barrie, Ontario, Canada
G. Graham	Blackstone Products, Logan, Utah, USA
A. Hamill	Ooni Ltd., Broxburn, West Lothian, United Kingdom
T. L. Jackson	Accuflex Industrial Hose Ltd., Guelph, Ontario, Canada
Y. S. Kim	Consumer Product Safety Commission, Rockville, Maryland, USA
B. Levien	Loco-Crazy Good Cookers LLC, Columbus, Georgia, USA
D. McCullough	Robert H. Peterson Co., City of Industry, California, USA
P. E. Newberry	Worthington Industries, Columbus, Ohio, USA
M. N. Nureddine	Bull Outdoor Products Inc., Lodi, California, USA

T. O’Leary	Skytech Products Group, Fort Wayne, Indiana, USA	<i>Non-voting</i>
S. W. Ogle	Lowe’s Quality Assurance, Mooresville, North Carolina, USA	
R. Panaro	Cavagna North America Inc., a division of Cavagna Group, Somerset, New Jersey, USA	
J. Petersen	Petersen Engineering, Texarkana, Texas, USA	
C. Pollock	Char-Broil LLC, Columbus, Georgia, USA	
R. Rasmussen	Rasmussen Iron Works Inc., Whittier, California, USA	
M. Riggle	Dormont Manufacturing, Export, Pennsylvania, USA	
W. Ring	Fairview Ltd., Oakville, Ontario, Canada	
J. D. Runstedler	Onward Manufacturing Company Ltd., Waterloo, Ontario, Canada	
A. Sellers	Ooni Ltd., Edinburgh, Scotland	
D. Shoman	PFS Corp., Cottage Grove, Wisconsin, USA	
R. G. Smith	Global Engineered Solutions Group LLC, New Smyrna Beach, Florida, USA	
C. Su	U.S. Consumer Product Safety Commission, Rockville, Maryland, USA	
C. Suchovsky	Appliance Engineering Inc., Twinsburg, Ohio, USA	

J. Sunich	Weber-Stephen Products LLC, Carol Stream, Illinois, USA	
D. Tinney	Camp Chef, Hyde Park, Utah, USA	
T. Vandini	Quality Steel Corp., Salt Lake City, Utah, USA	
J. Vazquez	Copreci de Mexico S.A. de C.V., Guadalajara, Jalisco, Mexico	
C. Wagner	AmeriGas Propane LP, King of Prussia, Pennsylvania, USA	
N. Wilson	CSA Group, Independence, Ohio, USA	<i>Non-voting</i>
E. Wolf	Cavagna North America, Mansfield, Ohio, USA	
M. Yan	Robert H. Peterson Co., City of Industry, California, USA	
N. Shrewsbury-Gee	CSA Group, Toronto, Ontario, Canada	<i>Project manager</i>

Preface

This is the first edition of CSA/ANSI Z21.42 • CSA 2.15, *Gas-fired domestic illuminating appliances*. It supersedes the withdrawn standards CSA/ANSI Z21.42, with editions published in 2015, 2005, and 1993, and CSA 2.15, with editions published in 2016 and 1983.

This Standard is considered suitable for use for conformity assessment within the stated scope of the Standard.

This Standard was prepared by the Z21/CSA Joint Technical Subcommittee on Standards on Outdoor Cooking and Illuminating Appliances, under the jurisdiction of the Technical Committee on Bi-National Gas Appliances and Related Accessories and the Strategic Steering Committee on Standards for Gas Appliances and Related Accessories, and has been formally approved by the Z21/83 and CSA Technical Committees.

This Standard has been developed in compliance with Standards Council of Canada requirements for National Standards of Canada. It has been published as a National Standard of Canada by CSA Group.

This Standard has been approved by the American National Standards Institute (ANSI) as an American National Standard.

Interpretations: The Strategic Steering Committee on Standards for Gas Appliances and Related Accessories has provided the following direction for the interpretation of standards under its jurisdiction: “The literal text shall be used in judging compliance of products with the safety requirements of this Standard. When the literal text cannot be applied to the product, such as for new materials or construction, and when a relevant committee interpretation has not already been published, CSA Group’s procedures for interpretation shall be followed to determine the intended safety principle.”

Notes:

- 1) *Use of the singular does not exclude the plural (and vice versa) when the sense allows.*
- 2) *Although the intended primary application of this Standard is stated in its Scope, it is important to note that it remains the responsibility of the users of the Standard to judge its suitability for their particular purpose.*
- 3) *This Standard was developed by consensus, which is defined by CSA Policy governing standardization — Code of good practice for standardization as “substantial agreement. Consensus implies much more than a simple majority, but not necessarily unanimity”. It is consistent with this definition that a member may be included in the Technical Committee list and yet not be in full agreement with all clauses of this Standard.*
- 4) *To submit a request for interpretation of this Standard, please send the following information to inquiries@csagroup.org and include “Request for interpretation” in the subject line:*
 - a) *define the problem, making reference to the specific clause, and, where appropriate, include an illustrative sketch;*
 - b) *provide an explanation of circumstances surrounding the actual field condition; and*
 - c) *where possible, phrase the request in such a way that a specific “yes” or “no” answer will address the issue.*

Committee interpretations are processed in accordance with the CSA Directives and guidelines governing standardization and are available on the Current Standards Activities page at standardsactivities.csagroup.org.

- 5) *This Standard is subject to review within five years from the date of publication. Suggestions for its improvement will be referred to the appropriate committee. To submit a proposal for change, please send the following information to inquiries@csagroup.org and include “Proposal for change” in the subject line:*
 - a) *Standard designation (number);*
 - b) *relevant clause, table, and/or figure number;*