



CSA/ANSI Z21.72:19 • CSA 11.2:19
National Standard of Canada
American National Standard



Portable type gas camp stoves



Standards Council of Canada
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Standards Update Service

***CSA/ANSI Z21.72:19 • CSA 11.2:19
November 2019***

Title: *Portable type gas camp stoves*

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Gas Advisory Council*



*Approved on September 16, 2019 by ANSI
Approved on September 28, 2019 by IGAC
Effective in Canada December 1, 2021
Published in November 2019 by CSA Group
A not-for-profit private sector organization
178 Rexdale Boulevard, Toronto, Ontario, Canada M9W 1R3*

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*ICS 97.200.30
ISBN 978-1-4883-1701-9*

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Preface

This is the fourth edition of CSA/ANSI Z21.72 • CSA 11.2, *Portable type gas camp stoves*. It supersedes the previous editions published in 2016, 2011, and 2000.

The fourth edition of this Standard has been updated to reflect current industry practice, and address CSA Group's guide on drafting Standards. Major changes to this edition include the following:

- a) revision to maximum input for portable type gas stoves;
- b) addition of requirements to address the safety issue of easily or manually removable gas sealing means employed on the camp stove;
- c) addition of requirement for minimum melting temperature for valve materials;
- d) addition of requirement for manufacturer specification of fuel canister to be used during testing;
- e) addition of requirement to add prevention of overheating of fuel canisters;
- f) addition of requirements for disposable butane fuel canisters;
- g) addition of requirement for remote cylinders using compressed gas;
- h) harmonization of recreational camping equipment standards;
- i) addition of requirement to address improper placement of inverted grates;
- j) addition of requirement to address testing with blended fuels;
- k) addition of requirement to provide marking for use with blended fuels;
- l) addition of requirement to address operating in environments with low operating temperatures;
- m) revision of language to reflect current practice of an air-free CO loading and include reference to GRI report for further clarification;
- n) addition of requirement to expand coverage and encompasses any operating control or handle that might be contacted during normal cooking operation;
- o) addition of requirement to address cylinder temperatures and to identify other items to be tested under wall, floor, ceiling, and component temperatures;
- p) addition of requirements to add coverage for ignition; and administrative change to include English/French translations in markings and instructions.

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

This Standard was prepared by the Joint Technical Subcommittee on Gas-Fired Refrigerators and Portable Camping Equipment under the jurisdiction of the Z21/83 Technical Committee on Performance and Installation of Gas Burning Appliances and Related Accessories and the Strategic Steering Committee on Fuels and Appliances. It has been formally approved by the Z21/83 Technical Committee, the Canadian Technical Committee on Gas Appliances and Related Accessories, and the Interprovincial Gas Advisory Council.

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 Fuels and Appliances 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 CSA

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 standards.activities.csa.ca.

- 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;*
 - c) *wording of the proposed change; and*
 - d) *rationale for the change.*

History of the development of the Standard for Portable type gas camp stoves

Note: *This History is informative and is not part of the standard.*

With the onset of the Free Trade Agreement between the United States and Canada on January 2, 1988, significant attention was given to the harmonization of the United States and Canadian safety standards addressing gas-fired equipment for residential, commercial, and industrial applications. It was believed that the elimination of the differences between the standards would remove potential trade barriers and provide an atmosphere in which North American manufacturers could market more freely in the United States and Canada. The harmonization of these standards was also seen as a step toward harmonization with international standards.

The draft harmonized standard was based on current coverage from the *American National Standard for Portable Camp Cook Stoves for Use with Propane Gas*, Z21.72-1982, and the Canadian standard for *Portable Type Gas Camp Stoves*, CAN1-11.2-M79. On September 19, 1997, the Z21/(Interim CSA) Joint Gas Refrigerators and Portable Camping Equipment Subcommittee reviewed by letter ballot the first draft harmonized portable type gas camp stoves standard. At its February 5, 1998 meeting, in light of comments received, the joint subcommittee agreed to adopt the revised draft standard for public review and comment. The revised draft portable type gas camp stoves standard was distributed for an industrial review during June 1998.

At its November 1998 meeting, the subcommittee assigned a task group to review the comments received and to revise the draft standard. At its June 1999 meeting, the joint subcommittee reviewed the revised draft standard prepared by the camping equipment task group and agreed to distribute substantive changes to the camp stoves draft standard for another industry review. The substantive revisions to the draft standard were distributed for an industrial review during September 1999.

During its January 25-26, 2000 meeting, the joint gas refrigerators and portable camping equipment subcommittee recommended the proposed draft standard to the Accredited Standards Committee Z21/83 and the (Interim CSA) Standards Steering Committee for approval.

The proposed draft was approved by the Z21/83 Committee on April 13, 2000, and by the CSA Technical Committee by letter ballot dated March 9, 2000.

The first edition of the harmonized American National Standard/CSA Standard for *Portable Type Gas Camp Stoves* was approved by the Canadian Interprovincial Gas Advisory Council (IGAC) on June 1, 2000, and by the American National Standards Institute, Inc. (ANSI), on September 14, 2000.

The second edition of the Standard for *Portable Type Gas Camp Stoves* was approved by the IGAC on August 23, 2011, and by ANSI on March 17, 2011.

The third edition of the Standard for *Portable Type Gas Camp Stoves* was approved by the IGAC on November 16, 2015, and by ANSI on December 7, 2015.

This is the fourth edition of the Standard for *Portable Type Gas Camp Stoves*, was approved by the IGAC on September 28, 2019 and by ANSI on September 16, 2019.

The following identifies the designation and year of the harmonized standard:

CSA/ANSI Z21.72:19 • CSA 11.2:19

Note: *This edition of CSA/ANSI Z21.72 • CSA 11.2 incorporates changes to the 2016 edition.*

CSA/ANSI Z21.72:19 • CSA 11.2:19

Portable type gas camp stoves

1 Scope

1.1

This Standard applies to portable type gas camp stoves (hereinafter referred to as “appliance” or “stove”) having input ratings of 15,000 Btu/hr (4.4 kW) or less per burner for use:

- a) with propane gas, butane gas, and any combination thereof; and
- b) outdoors only.

1.2

Stoves and components employing materials or having forms of construction differing from those detailed in this Standard may be examined and tested according to the intent of the Standard and if found to be satisfactorily equivalent, may be given recognition.

1.3

This Standard applies to stoves constructed entirely of new, unused parts.

1.4

All references to psi throughout this Standard are to be considered gauge pressures unless otherwise specified.

1.5

All accessories recommended by the manufacturer for use with appliances certified to this Standard are to be supplied and evaluated with the appliance.

1.6

If a value for measurement, as given in this Standard, is followed by an equivalent value in other units, the first stated value is to be regarded as the specification, except as noted in Clause [4.13](#), Instructions, and Clause [4.14.1](#).

1.7

Annex [A](#), Items Unique to Canada, contains clauses that are unique to Canada.

1.8

Clause [2](#), Reference publications, contains a list of standards specifically referenced in this Standard, and sources from which these standards may be obtained.

1.9

This Standard contains SI (Metric) equivalents to the yard/pound quantities, the purpose being to allow the Standard to be used in SI (Metric) units. (IEEE/ASTM SI 10, *American National Standard for Metric Practice*, or ISO 80000-1:2009, *Quantities and units – Part 1: General* is used as a guide in making metric conversion from yard/pound quantities.) If a value for a measurement and a corresponding value in