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ANSI Z21.19-2014 • CSA 1.4-2014

Refrigerators using gas fuel

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Refrigerators using gas fuel



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Preface

This is the second edition of Z21.19 • CSA 1.4, *Refrigerators using gas fuel*. It supersedes the previous edition published in 2002.

This Standard was prepared by the Z21/CSA Joint Technical Advisory Group on Standards for Gas-Fired Refrigerators and Portable Camping Equipment, under the jurisdiction of the Technical Committee on Performance and Installation of Gas Burning Appliances and Related Accessories and the Strategic Steering Committee on Standards for Gas Appliances and Related Accessories, and had been formally approved by the CSA Technical Committee and the Interprovincial Gas Advisory Council.

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:

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- 3) *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.*
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History of the development of standard for refrigerators using gas fuel

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. Joint subcommittees were established to facilitate the standards harmonization process between the United States and Canada.

The draft harmonized standard was based on current coverage from the American National Standard for Refrigerators Using Gas Fuel, Z21.19-1990, and the Canadian Gas Association Standard for Refrigerators Using Gas Fuel, CGA 1.4-M94. At the November 4–5, 1998 meeting of the (Interim CSA)/Z21 Joint Subcommittee for Gas Refrigerators and Portable Camping Equipment, the subcommittee adopted the changes to the proposed draft Harmonized Standard for Refrigerators Using Gas Fuel, ANSI Z21.19 • CSA 1.4 dated October 23, 1998 and approved the updated draft for distribution for Public Review and Comment. The new proposed draft harmonized standard (Draft #2) was distributed for Review and Comment on January 5, 1999.

At the June 23-23, 1999 joint subcommittee meeting in Atlanta, GA, the subcommittee adopted the proposed draft harmonized standard with editorial changes (Draft #3) for submittal to the parent committees for their approval. The letter ballot #99-31 was “approved, pending disposition of negative comments.” At its June 2000 meeting, the joint subcommittee reviewed the revised draft standard prepared by the refrigerators task group and adopted the revised Draft #4 for distribution for industry review. Draft #4 was distributed for another industry review during September 2000.

At its February 2001 meeting, following reconsideration and modifications of the proposed draft standard for refrigerators using gas fuel, the joint subcommittee recommended the proposed draft standard to the Accredited Standards Committee Z21/83 and the CSA Technical Committee for approval.

The proposed draft of the harmonized standard for Refrigerators Using Gas Fuel was approved by the Z21/83 Committee on January 10, 2002, and by the CSA Technical Committee by letter ballot dated April 3, 2001.

The first edition of the harmonized Z21/83 • CSA Standard for Refrigerators Using Gas Fuel was approved by the Canadian Interprovincial Gas Advisory Council on November 14, 2001 and by the American National Standards Institute, Inc., on January 14, 2002.

Following the procedures outlined above, further revisions to this standard, Z21.19 • CSA 1.4, were made in line with industry developments. The second edition of the American National Standard/CSA Standard for Refrigerators Using Gas Fuel was approved by the IGAC on March 10, 2014, and by ANSI, on February 26, 2014.

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

ANSI Z21.19-2014 • CSA 1.4-2014

The previous editions of the Standard for Refrigerators Using Gas Fuel, and addenda thereto, approved by the Interprovincial Gas Advisory Council and American National Standards Institute, Inc. are as follows:

ANSI Z21.19-2002 • CSA 1.4-2002

ANSI Z21.19a-2009 • CSA 1.4a-2009

ANSI Z21.19-2014 • CSA 1.4-2014

Refrigerators using gas fuel

1 Scope

1.1

This Standard covers gas-fired refrigerators having refrigerated spaces for (1) storage of foods, or (2) storage of foods and making ice, or (3) storage of frozen foods and making ice, or (4) storage of foods and the storage of frozen foods and making ice, hereinafter referred to as refrigerators or appliances. The Standard applies to newly produced refrigerators constructed entirely of new, unused parts and materials:

- a) for use with natural gas;
- b) for use with liquefied petroleum (propane) gases;
- c) convertible for use with natural gas and liquefied petroleum (propane) gases for residential use;
- d) for manufactured home (mobile home) installation for use with liquefied petroleum (propane) gases only (see Clause 4.1.18);
- e) for manufactured (mobile home) installation convertible for use with natural gas and liquefied petroleum (propane) gases when provision is made for the simple conversion from one gas to the other (see Clause 4.1.18);
- f) for recreational vehicle installation for use with liquefied petroleum (propane) gases only (see Clause 4.1.19); and
- g) for recreational vehicle installation convertible for use with natural gas and liquefied petroleum (propane) gases when provision is made for the simple conversion from one gas to the other (see Clause 4.1.19).

The construction of refrigerators for use with the above-mentioned gases is covered under Clause 4, Construction.

The performance of refrigerators for use with the above-mentioned gases is covered under Clause 5, Performance. Definitions are covered in Clause 3.

1.2

This Standard also covers all electrical equipment, wiring and accessories built in or supplied with gas-fired refrigerators for use with low-voltage direct current or alternating current. Appliances for use with alternating current shall be nominally rated 120 V, 60 Hz.

1.3

Refrigerators for use with gas fuel that are also for use with electricity shall also comply with the applicable provisions of *the Canadian Electrical Code, Part II, CSA C22.2* and the Standard for *Household Refrigerators and Freezers, CSA C22.2 No.63/UL 250*.

1.4

This Standard applies to those refrigerators provided with a direct, self-contained type of system employing the absorption or adsorption principle of refrigeration.