



CSA/ANSI Z83.26:20 • CSA 2.37:20
National Standard of Canada
American National Standard



Gas-fired outdoor infrared patio heaters



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Gas-fired outdoor infrared patio
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Preface

This is the third edition of CSA/ANSI Z83.26 • CSA 2.37, *Gas-fired outdoor infrared patio heaters*. It supersedes the previous editions published in 2014 and 2007.

The third 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) Replace references to liquefied petroleum (LP) gas with propane to clarify that other forms of LP gas are not intended to be used.
- b) Increase in maximum input rating to 24 000 Btu/hr.
- c) Distinction between a tabletop heater and a patio heater not for tabletop use.
- d) New Annex [D](#), which permits manufacturers to offer gas field conversion kits for heaters using both natural and propane gas.
- e) New Annex [E](#), which addresses installations at altitudes over 2000 ft (610 m).
- f) Existing coverage from ANSI Z21.103 added to address appliances using two one-pound cylinders with CGA 600 connectors.
- g) Existing coverage from CSA/ANSI Z21.10.1 • CSA 4.1 added to allow the use of two automatic gas valves to be used in a series to control the main burner gas instead of a single manual valve.
- h) Existing coverage from ANSI Z21.58 • CSA 1.6 added and adapted to address failure of the products to function under wind conditions.

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

This Standard was prepared by the ANSI/CSA Joint Subcommittee on Standards for Gas-Fired Infrared Radiant Heaters, under the jurisdiction of the Technical Committee on Performance and Installation of Gas Burning Appliances and Related Accessories (Z21/83) 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 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 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:
- define the problem, making reference to the specific clause, and, where appropriate, include an illustrative sketch;
 - provide an explanation of circumstances surrounding the actual field condition; and
 - 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.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:
- Standard designation (number);
 - relevant clause, table, and/or figure number;
 - wording of the proposed change; and
 - rationale for the change.

CSA/ANSI Z83.26:20 • CSA 2.37:20

Gas-fired outdoor infrared patio heaters

0 History of the development of the Standard for Gas-fired outdoor infrared patio heaters

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 coverage from the CSA International Requirement 5.90 For Gas-Fired Infrared Patio Heaters.

During its August 22, 2006 meeting, the Z83/CSA Joint Technical Advisory Group (TAG) on Standards for Gas-Fired Infrared Radiant Heaters approved the first draft harmonized standard for gas-fired outdoor infrared patio heaters, Z83.26/CSA 2.37, for distribution for review and comment.

Following reconsideration and modification of the proposed draft standard, in light of comments received, the joint TAG, at its December 5, 2006 meeting, recommended the proposed draft standard to the Z21/83 Committee and the CSA Technical Committee for approval.

The proposed draft harmonized standard for gas-fired outdoor infrared patio heaters was approved by the Z21/83 Committee on June 27, 2007, and by the CSA Technical Committee on April 19, 2007.

The first edition of the Standard for Gas-Fired Outdoor Infrared Patio Heaters, Z83.26/CSA 2.37 was approved by the Canadian Interprovincial Gas Advisory Council on September 14, 2007 and by the American National Standards Institute, Inc., on July 23, 2007.

The second edition of the Standard for Gas-Fired Outdoor Infrared Patio Heaters, Z83.26/CSA 2.37 was approved by the Canadian Interprovincial Gas Advisory Council on May 29, 2014 and by the American National Standards Institute, Inc., on June 9, 2014.

This, the third edition of the Standard for Gas-Fired Outdoor Infrared Patio Heaters, was approved by the American National Standards Institute, Inc. on October 22, 2020 and by the Interprovincial Gas Advisory Council on November 11, 2020.

The following identifies the designation and year of the third edition of the standard:

CSA/ANSI Z83.26:20 • CSA 2.37:20.

Note: *This edition of CSA/ANSI Z83.26 • CSA 2.37 incorporates changes to the 2014 edition.*

1 Scope

1.1

This Standard applies to newly produced gas-fired outdoor infrared patio heaters (see Clause [3](#)) hereinafter referred to as “heaters” or “appliances”, constructed entirely of new, unused parts and materials for use with:

- a) natural gas; or
- b) propane.

1.2

The heaters covered by this Standard are intended for installation in and heating of residential or non-residential spaces.

1.3

Infrared patio heaters may be suspended overhead, angle-mounted overhead, wall-mounted, floor-mounted or for tabletop use.

1.4

Patio heaters intended for tabletop use are those limited to input ratings of 24 000 Btu/hr (7034 W) or less. These units incorporate an integral self-contained propane gas supply system consisting of a maximum of two disposable 1 lb (0.45 kg) fuel capacity cylinders and operating at pressures not greater than 5 psi (34.5 kPa).

1.5

Infrared patio heaters not intended for tabletop use may be for connection to

- a) a fixed fuel piping system operating at inlet gas pressures not exceeding 1/2 psi (3.5kPa); or
- b) an integral self-contained propane gas supply system, provided the appliance incorporates mounting means for the attachment of a maximum of one cylinder limited to a maximum of 20 lb (9.1 kg) of fuel operating at regulated outlet with
 - i) pressure not exceeding 11 in wc (2.74 kPa); or
 - ii) pressures in excess of 11 in wc (2.74 kPa) but not greater than 5 psi (34.5 kPa).

1.6

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

1.7

Special construction provisions applicable to an appliance designed for use with an optional listed conversion kit are outlined under Annex [D](#).

1.8

Special construction provisions applicable to infrared heaters designed to operate at altitudes over 2000 ft (610 m) are outlined in Annex [E](#).

1.9

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.