

American National
Standard For
**Outdoor Decorative
Gas Appliances**

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First Edition - 2010

NOTE: Changes, other than editorial, are denoted by a vertical line in the margin.



Approved
January 5, 2010
American National Standards Institute, Inc.

Standard Developer

CSA AMERICA INC.
8501 East Pleasant Valley Road
Cleveland, Ohio 44131

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Preface

This publication represents a basic standard for safe operation, substantial and durable construction, and acceptable performance of outdoor decorative gas appliances. It is the result of years of experience in the manufacture, testing, installation, maintenance, inspection and research on appliances designed for the utilization of gas. There are risks of injury to persons inherent in appliances that, if completely eliminated, would defeat the utility of the appliance. The provisions in this Standard are intended to help reduce such risks while retaining the normal function of the appliance.

Nothing in this standard is to be considered in any way as indicating a measure of quality beyond compliance with the provisions it contains. It is designed to allow compliance of unvented room heaters, the safety, construction and performance of which may exceed the various provisions specified herein. In its preparation, recognition has been given to possibilities of improvement through ingenuity of design. As technical advances take place, revisions may become necessary. When they are believed desirable, recommendations or suggestions should be forwarded to the CSA America, 8501 East Pleasant Valley Road, Cleveland, Ohio 44131. A proposal form is provided in the back of this document.

Safe and satisfactory operation of an outdoor decorative gas appliances depends to a great extent upon its proper installation, use and maintenance. It should be installed in accordance with the *National Fuel Gas Code, ANSI Z223.1/NFPA 54*; manufacturers' installation instructions and local municipal codes.

Users of this American National Standard are advised that the device, products and activities within its scope may be subject to regulation at the Federal, state or local level. Users are strongly urged to investigate this possibility through appropriate channels. In the event of a conflict with this standard, the Federal, state or local regulations should be followed.

This standard is intended to be used by the manufacturing sector and by those applying the equipment by those responsible for its proper installation. It is the responsibility of these users to determine that in each case this standard is suitable for and applicable to the specific use they intend.

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EFFECTIVE DATE: An organization using this standard for product evaluation as a part of its certification program will normally establish the date by which all products certified by that organization should comply with this standard.

History of The Development of the Standard For Outdoor Decorative Gas Appliances

(This History is informative and is not part of the standard.)

The draft standard for outdoor decorative gas appliances is based on coverage from IAS U.S. Requirements For Outdoor Gas Fireplaces, No. 4-96; American National Standard/CSA Standard For Outdoor Cooking Gas Appliances Z21.58 • CSA 1.6; and American National Standard/CSA Standard for Vented Gas Fireplaces, Z21.50 • CSA 2.23.

In 2007, due to an increase in the development and use of outdoor gas fireplaces, CSA America was approached by the Hearth, Patio and Barbeque Association (HPBA) to develop an American National Standard for outdoor open flame decorative gas appliances. A working group was formed and a draft standard developed. During March 2008, the draft standard was transferred to the Z21/CSA Joint Technical Advisory Group (TAG) on Standards for Decorative Gas Appliances for review. Revisions were made to the draft standard, and during the TAG's October 29, 2008 meeting the first draft standard was approved for distribution for review and comment.

Following reconsideration, modification, and additional reviews of the proposed draft standard, the joint TAG during its July 27, 2009 meeting recommended the proposed draft standard to the Z21/83 Technical Committee for approval.

The Z21/83 Technical Committee approved the proposed standard for outdoor decorative gas appliances on November 18, 2009.

The American National Standards Institute, Inc., on January 5, 2010, approved the first edition of the American National Standard For Outdoor Decorative Gas Appliances, ANSI Z21.97.

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

ANSI Z21.97-2010

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American National Standard for Outdoor Decorative Gas Appliances

Part I: Construction

1.1 Scope

1.1.1

This standard applies to newly produced, decorative gas appliances for outdoor installation (see Part IV, Definitions), constructed entirely of new, unused parts and materials; hereinafter referred to as appliance. Appliances submitted for examination under this standard shall be classified as one of the following: portable, stationary or built-in.

1.1.2

Appliances may be for:

- a. Connection to a fixed fuel piping system; or
- b. Connection to a self-contained liquefied petroleum gas supply system (see Part IV, Definitions). Cylinder(s) for a self-contained system maybe either remote to the appliance, or integrally mounted on the appliance, and shall be designed for vapor withdrawal only.
 1. Appliances with input ratings less than 60,000 Btu/hr (17 584 W) shall be designed to accommodate a vertically mounted integral cylinder with a maximum size of 20 lb (9.1 kg) of fuel.
 2. Appliances with input rating greater than or equal to 60,000 Btu/hr (17 584 W) may be designed to accommodate a vertically mounted integral cylinder with a maximum size of 30 lb (13.6 kg) of fuel.
 3. Appliances with input ratings greater than or equal to 80,000 Btu/hr (23 446 W) may be designed for not more than two vertically mounted integral vapor withdrawal cylinders, each with a maximum size of 20 lb (9.1 kg) of fuel.
 4. Portable appliances intended for table top use shall have input ratings limited to not more than 15,000 Btu/hr (4 396 W) and shall be designed to accommodate a vertically mounted cylinder with a maximum size of 16.4 oz (465 g) of fuel.
 5. Portable appliances with input ratings not greater than or equal to 25,000 Btu/hr (7 327 W) may be designed for the use of not more than two cylinders, each with a maximum size of 16.4 oz (465 g) of fuel.
 6. Appliances designed for use with remote LP-cylinders use shall be limited to one cylinder of maximum 30 lb (13.6 kg) of fuel or two cylinders with maximum of 20 lb (9.1 kg) of fuel each.

1.1.3

An appliance conforming to 1.1.2-b2, and that is capable of accepting either a 20 lb (9.1 kg) or a 30 lb (13.6 kg) LP-gas cylinder, shall have all applicable tests in Part I, Construction, and Part II, Performance, conducted with both sized cylinders.