ANSI Z21.84-2012

CSA Group

Standard for Manually lighted, natural gas, decorative gas appliances for installation in solid-fuel burning fireplaces

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CSA Group

AMERICAN NATIONAL STANDARD
ANSI Z21.84-2012

Third Edition - 2012
This Standard is based on the Standard for
Manually lighted, natural gas, decorative gas appliances
for installation in solid-fuel burning fireplaces
ANSI Z21.84-2002
and ANSI Z21.84a-2003,
ANSI Z21.84b-2004

APPROVED

February 17, 2012
American National Standards Institute, Inc.

Standard Developer

CSA AMERICA INC.,
Operating as "CSA Group"
8501 East Pleasant Valley Road
Cleveland, Ohio 44131

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10036

Preface

This publication represents a basic standard for safe operation, substantial and durable construction, and acceptable performance of manually lighted, natural gas decorative gas appliances for installation in solid-fuel burning fireplaces. It is the result of years of experience in the manufacture, testing, installation, maintenance, inspection and research on manually lighted, natural gas, decorative gas appliances for installation in solid fuel-burning fireplaces designed for the utilization of gas. There are risks of injury to persons inherent in some appliances that, if completely eliminated, would defeat the utility of the appliance. The provisions in this standard are intended to 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 manually lighted, natural gas decorative gas appliances for installation in solid-fuel burning fireplaces, 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 Group, 8501 East Pleasant Valley Road, Cleveland, Ohio 44131. A proposal form is provided in the back of this document.

Safe and satisfactory operation of manually lighted, natural gas, decorative gas appliances for installation in solid fuel-burning fireplaces depends to a great extent upon its proper installation, use and maintenance. It should be installed, as applicable, in accordance with the National Fuel Gas Code, ANSI Z223.1/NFPA 54; the (U.S.) Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280, or when such standard is not applicable, Manufactured Home Installations, ANSI/NCSBCS A225.1 or the Standard for Manufactured Home Installations, Sites and Communities, ANSI/NFPA 501A, manufacturers' installation instructions, and local municipal building codes.

Users of this American National Standard are advised that the devices/products/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 regulation should be followed.

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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 Manually Lighted, Natural Gas, Decorative Gas Appliances For Installation In Solid-Fuel Burning Fireplaces

(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 of 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.

At its October 20-21, 1994 meeting, the Z21/CGA Joint Subcommittee on Standards for Decorative Gas Appliances considered the development of a new standard for manually lighted, natural gas, decorative gas appliances for installation in solid-fuel burning fireplaces, and approved to distribute it for public review and comment, July 4, 1995.

The first draft manually lighted, natural gas, decorative gas appliance standard was based on current coverage from the IAS Requirement 7-94, Requirements for Manually Lighted Natural Gas, Decorative Gas Appliances for Installation in Solid-Fuel Burning Fireplaces.

Following reconsideration and modification of the proposed draft standard, in light of comments received, the joint decorative appliance subcommittee at its May 22, 1998 meeting, recommended the proposed draft standard to Accredited Standards Committee Z21/83.

The proposed daft standard for manually lighted, natural gas, decorative gas appliances for installation in solid-fuel burning fireplaces, as modified by the joint subcommittee, was approved by the Z21/83 Committee by letter ballot dated August 18, 1998.

The first edition of the American National Standard for Manually Lighted, Natural Gas, Decorative Gas Appliances for Installation in Solid-Fuel Burning Fireplaces was approved by the American National Standards Institute, Inc., on February 23, 1999.

Further revisions to the standard were developed in line with industry development. The second edition of manually lighted, natural gas decorative gas appliances for installation in solid-fuel burning appliances standard, which includes revisions deemed necessary in line with industry developments, was approved as an American National Standard by the American National Standards Institute, Inc., on June 26, 2002.

NOTE: This 2012 edition of Z21.84 incorporates changes to the 2002 edition and addenda thereto. Changes, other than editorial, are denoted by a vertical line in the margin.

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NOTE

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. (Standard for use of the International System of Units (SI): The Modern Metric System, IEEE/ASTM SI I0 or Metric Practice Guide, CAN/CSA Z234.1 are used as a guide in making metric conversion from yard/pound quantities.) If a value for a measurement and an equivalent value in other units, the first stated is to be regarded as the requirement. The given equivalent value may be approximate. If a value for a measurement and an equivalent value in other units, are both specified as a quoted marking requirement, the first stated unit, or both shall be provided.

ANSI Z21.84-2012
Manually Lighted, Natural Gas, Decorative Gas Appliances For Installation In Solid-Fuel Burning Fireplaces

Part I: Construction

1.1 Scope

1.1.1
These requirements apply to manually lighted, natural gas, decorative gas appliances for installation in solid-fuel burning fireplaces, (see Part IV, Definitions), hereinafter referred to as appliances, for use with natural gas only, at a maximum input rating of 90,000 Btu/hr (26 376 W) (except as noted in 1.7, Piezo-Electric Ignitors), which are constructed entirely of new, unused parts and materials.

These appliances do not incorporate a pilot burner or an automatic gas ignition system. The main burner(s) is intended to be lighted by hand each time the appliance is used.

The construction of manually lighted, natural gas, decorative gas appliances for installation in solid-fuel burning fireplaces is covered under Part I.

The performance of manually lighted, natural gas, decorative gas appliances for installation in solid-fuel burning fireplaces is covered under Part II.

1.1.2
Manually lighted, natural gas, decorative gas, appliances for installation in solid-fuel burning fireplaces shall not be thermostatically controlled.

1.1.3
This standard does not cover unvented room heaters.

1.1.4
The use of the term “appliance” henceforth in this standard is in reference to a manually lighted, natural gas, decorative gas appliances, for installation in a solid fuel burning fireplace.

1.1.5
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.

1.1.6
Exhibit B, List of Reference Standards, contains a list of standards specifically referenced in this standard and sources from which they may be obtained. It is the responsibility of the user of this standard to determine which referenced standard applies based on the requirements of the Authority Having Jurisdiction at the location of the installation.