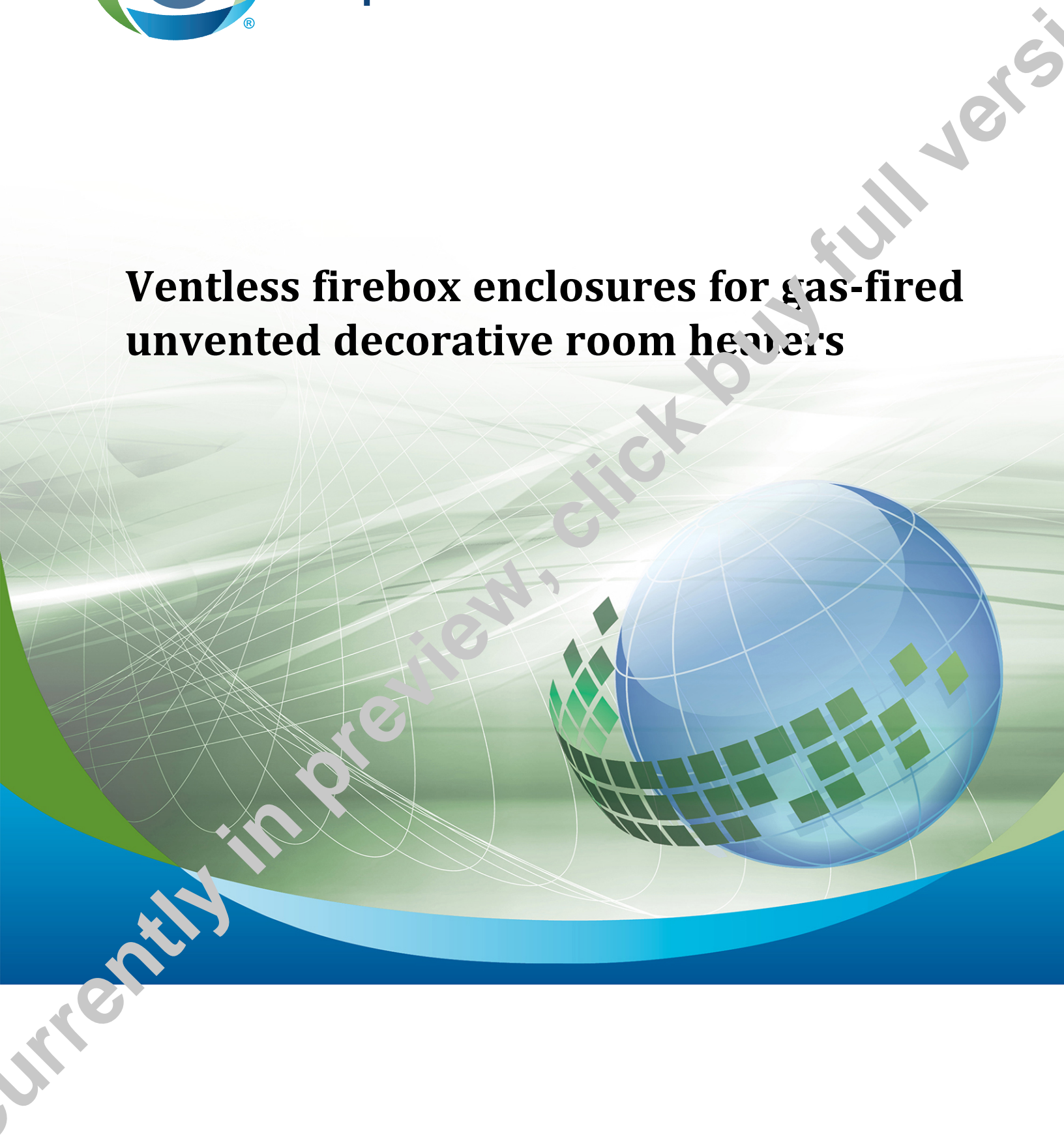




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**ANSI Z21.91-2017**

# **Ventless firebox enclosures for gas-fired unvented decorative room heaters**



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# ***Revision History***

**ANSI Z21.91-2017, Ventless firebox enclosures for gas-fired unvented decorative room heaters**

<b>Revision from previous edition</b>	<b>Revision symbol (in margin)</b>
Clauses <a href="#">1.4</a> and <a href="#">4.6.1</a> Annex <a href="#">F</a>	Δ

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# Preface

This is the third edition of ANSI Z21.91, *Ventless firebox enclosures for gas-fired unvented decorative room heaters*. It supersedes the previous editions published in 2007 and 2001.

This Standard was prepared by the Z21 Technical Subcommittee on Standards for Unvented Gas-Fired Heating Appliances under the jurisdiction of the Z21/83 Technical Committee on Performance and Installation of Gas Burning Appliances and Accessories, and had been formally approved by the Technical Committee and the American National Standards Institute.

**Interpretations:** The Z21/83 Technical Committee on Performance and Installation of Gas Burning Appliances and 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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  - b) *relevant clause, table, and/or figure number;*
  - c) *wording of the proposed change; and*
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  - c) *where possible, phrase the request in such a way that a specific “yes” or “no” answer will address the issue.*

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## History of the development of the Standard for Ventless firebox enclosures for gas-fired unvented decorative room heaters

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

At its May 19, 1998 meeting, the Z21 Subcommittee on Standards for Unvented Gas-Fired Heating Appliances considered the development of a new standard for ventless firebox enclosures for gas-fired unvented decorative room heaters, and approved to distribute it for public review and comment, August 1999.

The first draft ventless firebox enclosures for gas-fired unvented decorative room heaters standard was based on current coverage from IAS Requirement 2-97, Ventless Firebox Enclosures for Gas-Fired Decorative Type Unvented Room Heaters.

Following reconsideration and modification of the proposed draft standard, in light of comments received, the unvented heater subcommittee at its December 2, 1999 meeting, recommended the proposed draft standard to Accredited Standards Committee Z21/83.

The proposed draft standard for ventless firebox enclosures for gas-fired unvented decorative room heaters, as modified by the subcommittee, was approved by the Z21/83 Committee on July 18, 2000.

The first edition of the American National Standard for Ventless Firebox Enclosures for Gas-Fired Unvented Decorative Room Heaters was approved by the American National Standards Institute, Inc., on January 9, 2001.

The second edition of the American National Standard for Ventless Firebox Enclosures for Gas-Fired Unvented Decorative Room Heaters was approved by the American National Standards Institute, Inc., on February 28, 2007.

This, the third edition of the Standard for Ventless Firebox Enclosures for Gas-Fired Unvented Decorative Room Heaters was distributed for industry review dated August 2012, and approved by the Z21/83 Technical Committee on Standards for Performance and Installation of Gas Burning Appliances and Accessories on September 23, 2016, and formally approved by ANSI on January 3, 2017.

The previous editions of the ventless firebox enclosures standard, and addenda thereto, approved by the American National Standards Institute, Inc. are as follows:

ANSI Z21.91-2001

ANSI Z21.91a-2002

ANSI Z21.91b-2004

ANSI Z21.91-2007

The following identifies the designation and year of this Standard:

ANSI Z21.91-2017

**Note:** *This edition of ANSI Z21.91 incorporates changes to the 2007 edition. Changes, other than editorial, are denoted by a delta symbol in the margin.*

# ANSI Z21.91-2017

## ***Ventless firebox enclosures for gas-fired unvented decorative room heaters***

### **1 Scope**

#### **1.1**

This Standard applies to newly produced ventless firebox enclosures (see Clause 3, Definitions), herein after referred to as fireboxes, for unvented decorative room heaters.

#### **1.2**

Fireboxes covered by this Standard are intended for use with unvented decorative room heaters that comply with ANSI Z21.11.2 for installation in solid fuel-burning fireplaces.

#### **1.3**

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.

#### **Δ 1.4**

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

#### **1.5**

In this Standard, “shall” is used to express a requirement, i.e., a provision that the user is obliged to satisfy in order to comply with the standard; “should” is used to express a recommendation or that which is advised but not required; and “may” is used to express an option or that which is permissible within the limits of the Standard.

Notes accompanying clauses do not include requirements or alternative requirements; the purpose of a note accompanying a clause is to separate from the text explanatory or informative material.

Notes to tables and figures are considered part of the table or figure and may be written as requirements.

Annexes are designated normative (mandatory) or informative (nonmandatory) to define their application.

### **2 Reference publications**

This Standard refers to the following publications, and where such reference is made, it shall be to the edition listed below, including all amendments published thereto.

#### **CSA Group**

ANSI Z21.11.2-2016

*Gas-Fired Room Heaters, Volume II, Unvented Room Heaters*

**American Gas Association**

ANSI Z223.1-2015/NFPA 54-2015  
*National Fuel Gas Code*

**American National Standards Institute, Inc.**

ANSI Y14.15-1966 (R1988)  
*Electrical and Electronic Diagrams*

**Institute of Electrical and Electronic Engineers**

ANSI/IEEE 315-1975 (R1994), and Supplement, ANSI/IEEE 315A-1986  
*Graphic Symbols for Electrical and Electronics Diagrams (Including Reference Designation Class Designation Letters)*

**National Electrical Manufacturers Association (NEMA)**

ANSI Z535.1-2006 (R2011)  
*Safety Color Code*

ANSI Z535.4-2011  
*Product Safety Signs and Labels*

**National Fire Protection Association**

ANSI/NFPA 70-2014  
*National Electrical Code*

NFPA 54-2015/ANSI Z223.1-2015  
*National Fuel Gas Code*

**Underwriters Laboratories Inc.**

ANSI/UL 62-2014  
*Flexible Cords and Cables*

ANSI/UL C101-2002  
*Leakage Current for Appliances*

UL 127-2011  
*Factory-Built Fireplaces*

### 3 Definitions

The following definitions shall apply in this Standard:

**Baffle** — an object placed in an appliance to change the direction of, or retard the flow of air, gas-air mixtures, or flue gases.

**Base** — the lowest supporting frame or structure of the appliance, exclusive of legs.

**BTU** — abbreviation for British Thermal Unit. The quantity of heat required to raise the temperature of 1 pound of water 1°F.