



ANSI Z21.75-2016 (*reaffirmed 2020*) •
CSA 6.27-2016 (*reaffirmed 2021*)
American National Standard

Connectors for outdoor gas appliances and manufactured homes



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IGAC

International Gas Advisory Council



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Preface

This is the third edition of ANSI Z21.75 • CSA 6.27, *Connectors for outdoor gas appliances and manufactured homes*. It supersedes the previous editions published in 2007 and 2001.

This Standard was prepared by the Z21/CSA Joint Technical Subcommittee on Standards for Connectors for Gas Appliances, 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 Technical Committee(s), American National Standards Institute, 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:

- 1) *Use of the singular does not exclude the plural (and vice versa) when the sense allows.*
- 2) *This standard contains SI (Metric) corresponding 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 10 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 a corresponding value in other units are stated, the first stated value is to be regarded as the requirement. The given corresponding value may be approximate. If a value for a measurement and a corresponding value in other units are both specified as a quoted marking requirement, the first stated unit, or both shall be provided.*
- 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.*
- 4) *This publication 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 publication.*
- 5) *This Standard is subject to review at least every five years; 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:*
 - a) *Standard designation number*
 - b) *relevant clause, table, and/or figure number;*
 - c) *wording of the proposed change; and*
 - d) *rational justification for the change.*
- 6) *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:*
 - a) *define the problem, making reference to the specific clause, and, where appropriate, include an illustrative sketch;*
 - b) *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.

History of the development of the standard for connectors for outdoor gas appliances and manufactured homes

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.

A draft harmonized standard for connectors for outdoor appliances and manufactured homes was prepared by the subcommittee members and CSA staff. On September 15, 1998, the Z21/83 Joint Subcommittee on Connectors for Gas Appliances reviewed, by letter ballot, the first draft harmonized connectors for outdoor appliances and manufactured homes standard based on current coverage from the American National Standard/CGA Standard for Connectors for Gas Appliances, Z21.74/CGA 6.10-1997, and the U.S. Requirement for Gas Connectors for Connection of Fixed Appliances for Outdoor Installation, Park Trailers and Manufactured (Mobile) Homes to the Gas Supply, A.G.A. 3-87 and CSA Standard, CSA 6.27.

The September letter ballot was approved by the joint subcommittee to distribute the draft standard for review and comment in December 1998. At its July 14, 1999 meeting, following reconsideration and modifications in light of comments received on the proposed draft standard, the joint subcommittee recommended the proposed draft to the Accredited Standards Committee Z21/83 and the CSA Technical Committee for approval.

The proposed draft of the harmonized standard for connectors for outdoor appliances and manufactured homes, as modified by the joint subcommittee, was approved by the Z21/83 Committee on April 13, 2000, and by the CSA Technical Committee by letter ballot dated March 24, 2000.

The first edition of the harmonized American National Standard/CSA Standard for *Connectors for outdoor appliances and manufactured homes* was approved by the Canadian Interprovincial Gas Advisory Council on February 15, 2001, and by the American National Standards Institute, Inc., on November 27, 2001.

The second edition of the harmonized Standard for *Connectors for outdoor gas appliances and manufactured homes* was approved by the IGAC on January 4, 2006, and by ANSI on May 18, 2007.

The third edition of the harmonized Standard for *Connectors for outdoor gas appliances and manufactured homes* was approved by the IGAC on March 1, 2016, and by ANSI on April 11, 2016.

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

ANSI Z21.75-2001 • CSA 6.27-2001

ANSI Z21.75a-2002 • CSA 6.27a-2002

ANSI Z21.75b-2003 • CSA 6.27b-2003

ANSI Z21.75-2007 • CSA 6.27-2007 (R2012)

ANSI Z21.75a-2009 • CSA 6.27a-2009 (R2012)

ANSI Z21.75-2016 • CSA 6.27-2016

ANSI Z21.75-2016 • CSA 6.27-2016

Connectors for outdoor gas appliances and manufactured homes

1 Scope

1.1

This Standard applies to newly produced assembled connectors constructed entirely of new, unused parts and materials. Such connectors are intended for exterior use above ground for making the following non-rigid connections:

- a) between the gas supply and the gas inlet of an appliance for outdoor installation that is not frequently moved after installation. These connectors are not intended for use with wheeled, caster mounted, or portable appliances;
- b) between the permanent gas outlet of a manufactured home community (mobile home park) or individual site and the piping inlet on a park trailer or a manufactured (mobile) home; or
- c) between sections of a multiple section manufactured (mobile) home.

1.2

Connectors covered by this Standard are considered suitable for use with natural, manufactured, mixed, and propane gases and LP gas-air mixtures.

1.3

Connectors covered by this Standard are for use in piping systems operating at fuel gas pressures not in excess of $\frac{1}{2}$ lb/in² (3.5 kPa).

1.4

Connectors covered by this Standard are to have a nominal length of not less than 1 ft (0.31 m) or more than 6 ft (1.83 m).

1.5

If a value for measurement is given in this Standard is followed by an equivalent value in other units, the first stated value is to be regarded as the specification.

1.6

All references to "psi" throughout this Standard are to be considered gauge pressure unless otherwise specified.

1.7

Clause [1.7](#) contains provisions that are unique to Canada.

1.8

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