



**CSA
Group**

**ANSI Z21.101-2012
CSA 8.5-2012**

Gas hose connectors for portable and moveable gas appliances



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CSA Standards Update Service

Z21.101-2012 · CSA 8.5-2012

November 2012

Title: *Gas hose connectors for portable and moveable gas appliances*

Pagination: 49 pages each dated **November 2012**

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AMERICAN NATIONAL STANDARD
ANSI Z21.101-2012

CSA 8.5-2012

First Edition - 2012
This Standard is based on the Standard for
Gas hose connectors for portable and moveable gas appliances
ANSI Z21.101-2012 • CSA 8.5-2012

APPROVED



October 5, 2012
American National Standards Institute, Inc.

ICAC

September 24, 2012
Interprovincial Gas Advisory Council
Effective in Canada May 1, 2014

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***American National Standards Institute, Inc.
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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.

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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 Develop of The Standard for Gas portable and moveable gas appliances

(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 equipment.

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 preliminary step toward harmonization with international standards, which was to become a necessity as Europe moved toward its goal to form the Economic Community (EC) by early 1990's.

In October 2007, the CSA/Z21 Joint Committee on Standards for Connectors for Gas Appliances approved the development of a draft bi-national standard for gas hose connectors for other than all metal construction.

The first draft harmonized standard was based on the CSA Requirement 1-0 for Connectors for Other than all Metal construction. The first draft was subsequently issued for public review during January 2010.

Following reconsideration and modification of the proposed draft standard, in light of comments received, the joint committee on Standards for Connectors for Gas Appliances at its June 13, 2012 meeting, recommended the proposed draft to the Z21/83 Technical Committee and the CSA Technical Committee for approval.

The proposed draft of the harmonized Standard for Gas hose connectors for portable and moveable gas appliances, as modified by the joint technical advisory group, was approved by the Z21/83 Committee and the CSA Technical Committee during their meeting July 17, 2012.

The first edition of the harmonized Standard for Gas hose connectors for portable and moveable gas appliances, was approved by the Canadian Interprovincial Gas Advisory Council on September 24, 2012 and by the American National Standards Institute, Inc., on October 5, 2012.

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

ANSI Z21.101-2012 • CSA 8.3-2012

ANSI Z21.101-2012 • CSA 8.5-2012
***Gas hose connectors for portable and
moveable gas appliances***



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*Published in November 2012 by CSA Group
A not-for-profit private sector organization
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ISBN 978-1-77139-151-1

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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 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 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.

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(September, 2012)

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(July, 2012)

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ANSI Z21.101-2012 • CSA 8.5-2012

Gas hose connectors for portable and moveable gas appliances

1 Scope

1.1

This standard applies to newly produced gas hose connectors for portable and moveable gas appliances constructed entirely of new, unused parts and materials, consisting of flexible tubing for gas leak resistance that:

- (a) Shall be equipped with a male plug fitting which connects to an *ANSI Z21.90/CSA 6.24, Gas Convenience Outlets and Optional Enclosures*.
- (b) Are for use with indoor gas-fired appliances that are portable or frequently moved after installation.
- (c) Are for use on piping systems having fuel gas pressure not in excess of 5 psi (34.5 kPa).
- (d) Are capable of operation at temperatures between 32°F (0°C) and 200°F (93°C).
- (e) Are of $\frac{1}{4}$ in to 1- $\frac{1}{2}$ in nominal internal diameters.
- (f) Are of not more than 6 ft (1.83 m) nominal length.
- (g) Are equipped with standard taper pipe threads (conforming to the *Standard for Pipe Threads, General Purpose (Inch), ANSI/ASME B1.20.1* or the *Standard for Dryseal Pipe Threads (Inch) ANSI/ASME B1.20.3*) on the end fittings attaching to the appliance and to the gas supply piping.

1.2

Connectors complying with this standard are considered suitable for use with natural, manufactured, mixed and LP-gas air mixtures

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.

1.4

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

1.5

Section 7, Items Unique to Canada, contains provisions that are unique to Canada.

1.6

Section 2, List of Reference Standards, contains a list of standards specifically referenced in this standard and sources from which these reference standards may be obtained.