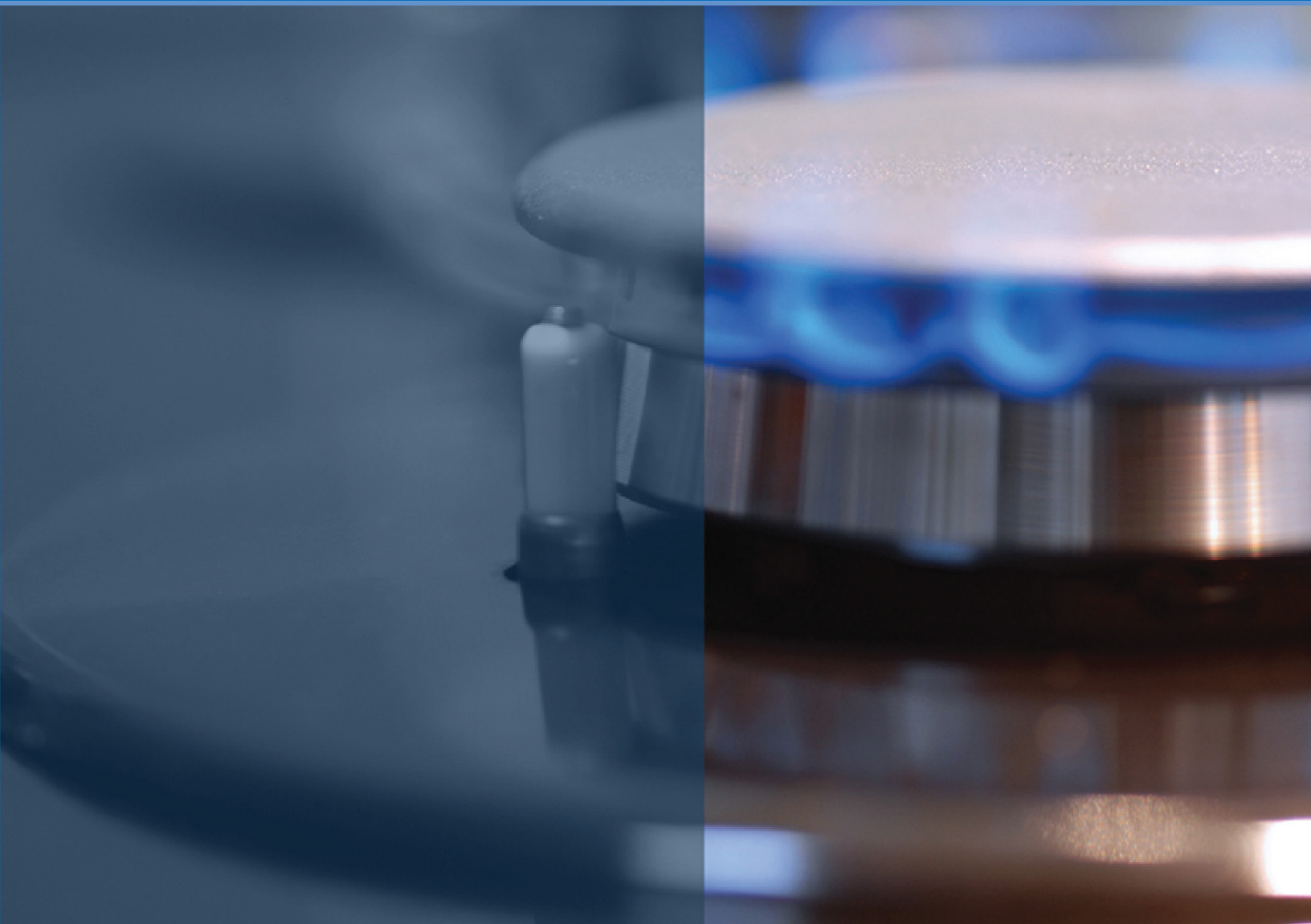




Natural gas and propane code handbook

CSA B149HB:20



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CSA B149HB:20 January 2020

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CSA B149HB:20
***Natural gas and propane code
handbook***



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*Published in January 2020 by CSA Group
A not-for-profit private sector organization
178 Rexdale Boulevard, Toronto, Ontario, Canada M9W 1R3*

*To purchase standards and related publications, visit our Online Store at store.csagroup.org
or call toll-free 1-800-463-6727 or 416-747-4044.*

ISBN 978-1-4883-2629-5

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Preface

This is the sixth edition of CSA's B149HB, *Natural gas and propane code handbook*. It supersedes the previous editions, published in 2015, 2005, 2000, 1995, and 1991 by CSA.

In 1991, members of the natural gas and propane industry recommended that an appliance installation Code handbook be written. This recommendation included a suggestion that the handbook provide clarification of Code requirements. Regulatory documents, such as the Code, contain technical language conveying both legal and field-usage requirements, but the complexity of such language may at times diminish the clarity of the information communicated.

This Handbook serves as a means of clarifying Code requirements. The committee members who develop the Code have had experience with most of the information contained in this Handbook, and this experience has served to facilitate their work. The content of the Handbook was derived primarily from submissions made to the CSA B149 Installation Code Committee from a variety of sources. Much of the background information for this Handbook, therefore, originated from requests for changes to the requirements of the Code. The background information provided with a proposal for a change to the Code may be used in future editions of this Handbook. It is, therefore, important that the intent and rationale for any proposal be clear.

The scope of coverage in this edition has been expanded. It now addresses some of the content of CAN/CSA B149.2-15, *Propane storage and handling code*, specifically related to typical propane applications but excluding industrial applications, such as bulk storage.

CSA acknowledges the contribution of the Handbook's key author, Ted Kesik of Knowledge Mapping Inc. Jean-François Bussi eres, Barry Cavens, Brad Diggins, Carey LaRose, Bob Pattison, Gary Potter, George Prociw, John Marshall, John McCormack, Ron McRae, David Stainrod, Dale C. Stewart, Ivo Svorinic, David Weishuhn, and Gord Williams reviewed the content prior to publication, and their contributions are gratefully acknowledged.

4.1 Application

The values given in yard/pound units are the standard. The B149.1 and B149.2 Codes contain SI (metric) equivalents to yard/pound units so that the Code can be used in SI (metric) units. As SI (metric) equivalents are approximate, imperial units of measurement must be used to determine compliance with Code requirements.

The manufacturer's certified instructions and the Code must be used when an appliance, accessory, component, equipment, or any other item is installed. Manufacturer's certified instructions are based on approved test methods intended to ensure that performance standards and code compliance are achieved.

Where a **conflict** exists between the manufacturer's certified installation instructions and the Code, the requirements of the Code must prevail unless otherwise approved by the **authority having jurisdiction**, for reasons of safety, performance, and enforceability.



When installing unfamiliar equipment (e.g., duct furnaces), check the applicable installation requirements in **Clause 7** to identify any conflicting requirements between the Code and the manufacturer's certified installation instructions. Where conflicts are identified, resolve these by contacting the authority having jurisdiction prior to installation.

4.2 Approval of appliances, accessories, components, equipment, and materials

The requirements of **Clause 4.2** are intended to establish the procedures for the approval of appliances, accessories, components, equipment, and materials for which they are employed.

Where an installation does not match Code requirements, permission in writing from the authority having jurisdiction is required. This permission applies only to the particular installation for which it is given because each situation may be different and what makes sense in one case may not make sense in another.

In some cases, an installation may require field assembly or construction of an appliance. Such cases always require prior approval of the authority having jurisdiction to ensure suitability and proper appliance performance. The field assembly or construction of appliances falls under CSA B149.3, *Code for the field approval of fuel-related components on appliances and equipment*.

Note: B149.3 applies only to appliances and equipment that are not approved.



Refer to **Clause 7** of the Code to determine whether a proposed installation is covered by these requirements. Where it is not, check to see if the application is covered by the manufacturer's certified installation instructions.

Consult with the authority having jurisdiction if the suitability of the installation is still unclear.