



CSA B149.1:25
National Standard of Canada



Natural gas and propane installation code



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CSA B149.1:25

***Natural gas and propane
installation code***

IGAC

Interprovincial/Territorial Gas Advisory Council



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This edition of CSA B149.1 is dedicated to the life of our friend, colleague, and member: Lance Beaulieu.

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Preface

This is the seventeenth edition of CSA B149.1, *Natural gas and propane installation code*. It supersedes the previous editions, published in 2020, 2015, 2010, 2005, and 2000 by CSA Group (CSA) as CAN/CSA-B149.1, in 1995, 1991, 1986, 1980, 1978, 1976, and 1974 by the Canadian Gas Association (CGA), and in 1971, 1966, 1962, and 1958 by CSA Group.

The major changes from the previous edition include the following:

- a) updated Code Scope inclusions to clarify the threshold for propane systems between CSA B149.1 and CSA B149.2 [Clause [1.1](#) b)];
- b) corrected terminology to “vehicle-fuelling appliance” to align with other CSA standards [Clause [1.1](#) c)];
- c) clarified exclusion of “vehicle-refuelling stations as defined by CSA B108.1” [Clause [1.2](#) g)];
- d) added hydrogen-natural gas blends to the list of gases included in this Code (Clause [1.3](#)) and added reference to hydrogen-natural gas blends to applicable clauses (Clauses [4.5.4](#), [4.24.1](#), [5.5.1.4](#), [6.2.3.1](#), [6.2.3.2](#), [6.3.2](#) to [6.3.5](#), [6.3.8.1](#), and [6.9.6](#) and Tables [5.3](#) and [6.1](#));
- e) updated or added the following definitions:
 - i) updated definition of “high pressure regulator” to “industrial regulator” (Clause [3](#));
 - ii) updated definition of “line pressure regulator” (Clause [3](#));
 - iii) added definition for “manual shut-off valve” (Clause [3](#)); and
 - iv) added definition for “vent limiter” and sub-definition “limiting orifice type” (Clause [3](#));
- f) added reference to CSA B149.3 for field-approved appliances and equipment installation (Clause [4.1.4](#));
- g) added reference to CSA B149.6 for biogas use (Clause [4.2.4](#));
- h) updated rating plate requirements to show maximum percentage of hydrogen for blends with natural gas (Clause [4.5.4](#));
- i) updated bonding requirements to align with the *Canadian Electrical Code, Part I* (Clauses [4.7.3](#), [4.7.4](#), and [4.7.5](#));
- j) hydrogen-natural gas blends as a fuel gas to be odourized or monitored by a detection system (Clause [4.24.1](#));
- k) restructured Clause [5](#) as follows:
 - i) consolidated exemptions for outdoor gas vent terminations accounting for vent limiters, indoor ventilated spaces;
 - ii) clarified overpressure protection devices used with certified line pressure regulators must be factory pre-assembled and shipped as a unit with the regulator; and
 - iii) added the ability to use industrial regulators when flows/pressures are outside the scope of certified line pressure regulators, and must be interlocked with a high/low gas pressure device that serves the same appliance;
- l) updated clearances for gas vent terminations (Table [5.3](#)), now based on relief capacity and aligned with CSA Z662:23 (Annex [D](#));
- m) prohibited the use of hoses certified to CSA 8.3 for liquid propane systems (Clause [6.2.12](#));
- n) updated requirements to permit the use of press-connect fittings certified to CSA/ANSI LC 4/CSA 6.32 for piping of NPS 2-1/2 to 4 (Clause [6.9.2](#));
- o) prohibited the use of tape as a sealant for pipe sizes larger than NPS 1-1/2 for hydrogen-natural gas blends (Clause [6.9.6](#));
- p) added minimum separation requirements between the gas system and the electrical system sharing a common trench (Clause [6.15.15](#));