

PIPE WELDING REQUIREMENTS FOR GAS INSTALLATIONS

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Topic

CSA's B149.1 Natural gas and propane installation code details pipe welding requirements for gas piping systems installed **downstream** of a gas company's meter set or connected to a propane supply. Gas Safety Regulation section 4(3) further states that individuals must not perform welding on metallic gas piping unless they hold a Pressure Welder Certificate of Qualification.

Important information

Under section 6.9 of CSA B149.1, gas piping of NPS 2 1/2" to 4" shall be joined either by press-connect fittings certified to CSA 6.32 (ANSI LC-4) or be welded. Piping greater than NPS 4" shall be joined by welding **only**. A registered welding procedure specification shall be prepared and qualified in accordance with ASME Boiler and Pressure Vessel Code Section IX and be performed by a welder registered under the applicable provincial or territorial legislation.

Welded gas system procedures

- (1) Gas piping installations that involve welding must be performed in accordance with a procedure registered with Technical Safety BC.
- (2) Welding procedures must be registered by the holder of an appropriate class of boilers, pressure vessels, and refrigeration (BPVR) contractor license. A licensed gas contractor can [apply to become a BPVR contractor](#) or obtain the services of the same to register the welding procedure and perform the welding on behalf of the gas contractor.
- (3) The welder must hold an appropriate Welder Performance Qualification for the applicable registered welding procedure.
- (4) Acceptance criteria for welds shall be in accordance with clause 6.9.4 of CSA B149.1
- (5) The licensed BPVR contractor must supply documentation demonstrating compliance to sections: **1(1) - (4)** above to the licensed gas contractor holding the gas installation permit. This information must be supplied to the area Technical Safety BC gas safety officer upon request for inspection.
- (6) Testing of the gas system shall be performed by the licensed gas contractor in accordance with requirements listed under section 6.22 of CSA B149.1.
- (7) Other **non-pressure** piping gas system installation and commissioning scope of work not detailed under this section, must be performed by a licensed gas contractor in accordance with all applicable requirements under the [Gas Safety Regulation](#).

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References:

Gas Safety Regulation
Power Engineers, Boiler, Pressure Vessel and Refrigeration Safety Regulation
ASME Boiler and Pressure Vessel Code Section IX
CSA B149.1 Natural Gas and Propane Installation Code