



April 16, 2007

Information Sheet

Mandatory Use of Certified Plastic Gas Venting for New and Replacement Installations

- To: All natural gas and propane contractors and the following certificate holders: G1, G2, G3, GP, DA, IMT, FXFT-Q, FXFT-2, COT, SH-01, CH-02, CH-SM1, CH-SM2, RE-0.**
- Re: Adoption of 2007 supplement to National Installation Code -new requirement that all plastic gas vent be certified to ULC S636 for both new and replacement appliances**

The Technical Standards and Safety Authority (TSSA) will be adopting the 2007 supplement to the national Natural Gas and Propane Installation Code (B149.1S1-07) on August 1, 2007. The 2007 CSA B149 Supplements and the Ontario changes can be downloaded, as of May 1, 2007 and free of charge, by going to www.ShopCSA.ca <Canadian Customers>, and clicking on "**Download CSA B149 2007 Supplements for free**" located under the title "**What's Hot**".

A major change in the code supplement is that **all plastic piping will have to be certified to ULC S636** "Standard for Type BH Gas Venting Systems".

This requirement has been put in place due to the investigated failures in a number of existing plastic gas vents, predominantly ABS plastic pipe and fittings. Noted failures have included stress cracking and melting. This may result in a carbon monoxide (CO) safety hazard in homes and may possibly cause personal injury.

This code change will affect **all gas and propane new appliance installations and replacement installations**. For example, if an existing water heater is replaced with a new water heater, the existing plastic venting must be replaced with certified ULC S636 plastic venting system.

Existing appliances and their plastic venting systems will not require action until replacement is required as this code change is not retroactive. This code change will promote the removal of the existing plastic venting within the lifespan of the natural gas or propane appliance.

To assist with explaining this situation to the homeowner, attached is a homeowner information sheet that outlines this requirement.

TSSA and the associated industries thank you in advance for your cooperation in this regard. If you require further clarification or have questions, please contact TSSA at 1-877-682-TSSA (8772), Website: www.tssa.org. Additionally, on TSSA's website, under fuels latest news, we have posted questions and answers on certification of plastic venting to assist with inquiries that you may have.



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Information Bulletin

Mandatory Use of Certified Plastic Gas Venting for New and Replacement Installations

Dear Property Owner/User:

The Technical Standards and Safety Authority's (TSSA) mandate is public safety. Designated by Ontario's Ministry of Government Services as a delegated administrative authority, TSSA administers and enforces the Technical Standards and Safety Act, 2000, which governs fuels safety and other regulated sectors in the province of Ontario. Specific to natural gas and propane appliance installations, TSSA maintains and is committed to continuously enhancing safety within the fuels sector.

TSSA has been made aware that some existing plastic gas vents installed for natural gas or propane fuelled equipment have failed (cracking, melting, etc.) in a number of installations which may lead to an unsafe condition. This condition may result in a carbon monoxide (CO) safety hazard in the home and can cause personal injury to you and your family.

To address this situation, the national installation code for gas and propane appliances has been revised. The code change, brought forward as a safety improvement, stipulates that only plastic piping that is certified as gas vent be used for all installations of *new and replacement natural gas and propane appliances*. This requirement will become effective in Ontario as of August 1, 2007.

Existing applications will not be affected unless there is a safety issue or the existing vent has deteriorated.

In the past, gas vents were not required to be separately certified. Resulting from the code change, when appliances are replaced after August 1, 2007, the existing vent will not be permitted to be re-used. Replacement of the vent may, at times, be costly if the vent is in a location that is difficult to access. TSSA will consider individual variances to this requirement provided it can be demonstrated, on an on-going basis, that the existing vent continues to operate in a safe condition.

TSSA and associated industries thank you in advance for your cooperation in this regard. If you require further clarification or have questions, please ask your gas technician, your gas utility, or TSSA at 1-877-682-8772 Website: www.tssa.org. Additionally, on TSSA's website, under fuels latest news, there are questions and answers posted to provide additional clarification.



Fuels Safety Program	Ref. No.: FS-098-07	Rev. No.:
Gaseous Fuels Code Adoption Document - Amendment	Date: April 16, 2007	Date:

**IN THE MATTER OF:
THE TECHNICAL STANDARDS AND SAFETY ACT, 2000,
S.O. 2000, c. 16 (the “Act”)**

- and -

**ONTARIO REGULATION 223/01
(Codes and Standards Adopted by Reference) made under the Act**

- and -

ONTARIO REGULATION 212/01 (Gaseous Fuels) made under the Act

Subject: Adoption of CSA-B149.1S1-07 Supplement No. 1 to CAN/CSA-B149.1-05, Natural gas and propane installation code, January 2007

Sent to: All Natural Gas and Propane Contractors, Natural Gas Advisory Council, Propane Industry Advisory Council, Natural Gas RRG CAD, Propane RRG CAD, Field Approval RRG CAD, and the following certificate holders: G1, G2, G3, GP, DA, IMT, FXFT-Q, FXFT-2, COT, SH-01, CH-02, CH-SM1, CH-SM2, RE-0.

The Director of Ontario Regulation 212/01 (Gaseous Fuels) pursuant of section 6 of Ontario Regulation 223/01 (Codes and Standards Adopted by Reference) hereby provides notice that the Gaseous Fuels Code Adoption Document published by the Technical Standards & Safety Authority, dated June 1, 2001 and amended by Director’s Order FS-67-05 dated October 31, 2005, is further amended as follows:

1. Section 1 of the Gaseous Fuels Code Adoption Document (“CAD”) is revoked and the following substituted:

1. The National Standard of Canada CSA-B.149.1-05 entitled “NATURAL GAS AND PROPANE INSTALLATION CODE” and the CSA-B149.1S1-07, Supplement No. 1, January 2007, prepared by the Canadian Standards Association is adopted with the following amendments:

2. The Gaseous Fuels (“CAD”) is amended by adding the following sections:

1.4.1 Section 3 is amended by revoking the definition of “confined space”.

1.6.1 Section 4.1.4 is revoked and the following substituted:

4.1.4 Where a conflict exists between the manufacturer’s **certified** installation instructions and this Code, the requirements of this Code shall prevail unless otherwise *accepted by the authority having jurisdiction.*

3. Section 1.9 of the Gaseous Fuels CAD is revoked and the following substituted:

1.9 Section 4.5.5 is revoked and the following substituted:

4.5.5 An appliance, component, equipment, or accessory that has been exposed to fire, explosion, flood, or other damage shall not be offered for sale, installed, re-activated or reconnected to the supply, without,

- a. approval of the authority having jurisdiction or
- b. inspection has determined it is fit for continued use by a Gas Technician I or II (as appropriate for the appliance input rating).

4. Section 1.12 of the Gaseous Fuels CAD is revoked and the following substituted:

1.12 Section 5.6.1.3 is revoked and the following substituted:

5.6.1.3 When an **appliance pressure regulator** without **internal relief** having an inlet pressure not in excess of 2 psig (14 kPa) is installed on an **appliance**, it shall be vented to the outdoors unless it is constructed or equipped with a device to limit the escape of gas from the vent opening in the event of diaphragm failure, and the opening in the device shall restrict the escape of gas to not more than 1ft³ (0.0283 m³) per hour of a gas having a specific gravity of 1.53. A **regulator** with vent limiting means shall be installed in a ventilated space only.

5. The Gaseous Fuels CAD is amended by adding the following sections:

1.12.1 Section 6.2.3 is revoked and the following substituted:

6.2.3 Natural gas piping or propane vapour phase piping with operating pressures up to and including 125 psig (860kPa) shall be at least standard weight.

1.15.1 Table 6.3 Note (2) is revoked and the following substituted:

(2) Wrapped and or factory-coated piping or tubing of all sizes and lengths, other than Corrugated Stainless Steel Tubing (CSST) and coated copper tubing, shall be tested at a minimum pressure of 100 psig (700 kPa) in accordance with the time duration on the table. CSST and coated copper tubing shall be tested in accordance to the requirements of the main body of Table 6.3.

1.18.1 Section 7.26.1 is revoked and the following substituted:

7.26.1 A water heater, unless of the direct vent type, shall not be installed in a bathroom, bedroom, or any enclosure where sleeping accommodation is provided. An enclosure containing the water heater shall not be accessed by a pedestrian door which can be opened from the bathroom or bedroom.

6. Section 1.21 of the Gaseous Fuels CAD is revoked and the following substituted:

1.21 Section 8.1.2 is revoked and the following substituted:

- 8.1.2 The requirements of 8.2 through 8.5 inclusive do not apply to:
- a. direct-vent appliances, or

- b. Category IV appliances unless installed in designated R-2000 homes or in an enclosure.

7. The Gaseous Fuels CAD is amended by adding the following sections:

1.22.1 Clause 8.9.5 is revoked and the following substituted:

8.9.5 Venting systems, or total vent run if less than 3 ft (900 mm), that employ plastic vents shall be installed such that the first 3 ft (900 mm) from the appliance outlet is readily accessible for visual inspection except for direct vent appliances such as fireplaces that are intended to have short vent lengths to be concealed for decorative purposes.

1.22.2 Clause 8.9.6 is revoked and the following substituted:

8.9.6(a) Until July 1, 2008, vents constructed using plastic piping shall be certified to ULC S636 except for special fittings (non standard vent sizes and components) which may include:

- a. entire vent systems supplied with the appliance that are not comprised of standard vent sizes and components;
- b. transitions with or without condensing lines; and
- c. termination kits.

8.9.6(b) After July 1, 2008, vents constructed using plastic piping shall be certified to ULC S636.

1.22.3 Section 8.10.13 is revoked and the following substituted:

8.10.13 A false ceiling space, or a concealed space used for return air, shall not contain a vent or vent connector that does not have sealed joints or seams.

8. Section 1.23 of the Gaseous Fuels CAD is revoked and the following substituted:

1.23 Section 8.14.8(a) is revoked and the following substituted:

8.14.8(a) directly above a paved sidewalk or paved driveway that is located between two single-family dwellings and serves both dwellings; *Note: This does not apply to non-condensing appliances.*

9. Section 1.25 of the Gaseous Fuels CAD is revoked.

10. These amendments will be effective on August 1, 2007.

Dated at Toronto this 16th day of April, 2007

John R. Marshall
Director, Ontario Regulation 212/01 (Gaseous Fuels) made under
The Technical Standards and Safety Act, 2000