

Gas Fired Appliances Used For Heating Buildings Under Construction

PURPOSE

This bulletin has been jointly developed by Municipal Affairs and industry representatives to inform builders, contractors, renovators, gasfitters/sheet metal workers and owners of the requirements to ensure the installation and operation of gas heating appliances comply with the manufacturer's installation instructions and the CSA B149.1 Natural gas and propane installation code.

DISCUSSION

Gas fired appliances used to supply heat to buildings that are under construction or during renovations are required to be certified for that use.

CODE REFERENCES

All gas-fired appliances shall be installed and operated as per the requirements in the CSA B149.1 Natural gas and propane installation code and the appliance manufacturer's installation instructions.

The CSA B149.1 Natural gas and propane installation code includes:

4.1.3

An appliance, accessory, component, equipment, or any other item shall be installed in accordance with the manufacturer's certified instructions and this Code.

4.1.4

Where a conflict exists between the manufacturer's instructions and this Code, the requirements of this Code shall prevail unless otherwise approved.

4.2.1

An appliance, accessory, component, equipment, or material used in an installation shall be of a type and rating approved for the specific purpose for which it is employed.

4.3.2

Installers shall instruct the user in the safe and correct operation of all appliances or equipment that they install.

APPLICATION

On May 1, 2017 some manufacturers of gas heating appliances supplied in Canada, known as residential style furnaces changed their installation instructions to restrict or limit these furnaces

Issue of this STANDATA is authorized by
the Gas Administrator

[Original Signed]
Sidney Manning



from being used to heat buildings that are under construction or being renovated. These residential style furnaces may now have manufacturer's installation instructions that prohibit use of the furnace during construction or identify specific requirements for operation, maintenance and cleaning of the appliance if used during construction.

The ANSI Z21.47/CSA 2.3 Gas-fired central furnaces standard requires the manufacturer's installation instructions of these units to contain:

- A statement specifying whether the furnace is permitted to be used for heating of buildings or structures under construction.
- If the manufacturer allows such use, the instructions shall specify the conditions that are required for use. Installation must comply with all manufacturer's installation instructions.

INTERPRETATION

Buildings would be considered under construction/renovation where dusty conditions exist such as those created from installing drywall or textured finishes. A furnace certified to ANSI Z21.47/CSA 2.3 that bears an indication that it is not to be used for heating buildings or structures under construction could be used once drywall, texture and priming of interior surfaces is complete, including clean-up that would be required to minimize dust and debris. If indicated in the manufacturer's installation instructions that furnaces could be used during construction, they would be allowed at any time for that purpose following the manufacturer's specific instructions and all applicable gas code requirements.

Heating of an area during construction/renovation such as a basement development may require an alternate heat source for those areas so that a furnace with restrictions is not used for construction during the renovation. There may also need to be separation of the construction and occupied areas to ensure the furnace serving the completed portions of the home is not exposed to the construction conditions.

The compliance monitoring by the authority having jurisdiction for the gas installations may be completed prior to energizing the furnace or after the completion of the building. It is the owner's or owner's representative's responsibility to secure documentation from contractors that the permanently installed gas furnace in the building was or was not used to supply heat during the construction/renovation of the building and the installation is in accordance with the manufacturer's installation instructions. This documentation cannot be used to replace, bypass or exempt the requirements of the *Safety Codes Act*, Permit Regulation, related codes, or compliance monitoring by the authority having jurisdiction as applicable.

The following residential furnace activation form may be utilized as an example of an activation form to ensure a furnace that is not approved to be used for heating during construction was not activated at any time during construction.

Residential Furnace Activation Form

Unit Address: _____ Permit #/Issuer: _____

Builder: _____ Furnace Installer: _____

Furnace - Manufacturer: _____ Model #: _____

Serial #: _____

I, _____ (print), as a representative of the builder, declare that this furnace was not activated at any time during construction and was protected from construction contamination until the construction was completed. (This applies only if furnace was not used until occupancy).

Builder to Verify:

Line #	Date:	Initials:	Verification Items
1			Furnace was protected from construction dust or other debris
2			Gas and/or Electrical to the furnace was disabled. Furnace was not previously activated
3			Furnace is in its final location with a concrete pad or finished floor underneath
4			Return air ductwork is sealed and/or isolated from the furnace
5			Interior gypsum board installation is complete and primed and/or textured
6			House has been cleaned of all debris and drywall dust
7			Heating duct work has been professionally cleaned of dust and debris
8			All inspections required by the AHJ for activation of the HVAC system are complete

Activating HVAC Contractor to Verify:

09			Interior gypsum board installation is complete and primed and/or textured
10			Furnace is in its final location with a concrete pad or finished floor underneath
11			Gas and/or Electrical means of disablement to the furnace was in place
12			Furnace interior is clear of construction dust or debris
13			New minimum MERV 11 filter has been installed at time of activation.
14			Thermostat Installed - NO FIXED JUMPERS ALLOWED
15			Operating parameters have been verified to match values on the rating plate.
16			Commissioning procedures set out by manufacturer have been verified

Home Owner or Builder Representative

Name (print) _____ Signature _____

Activating Contractor:

Name _____ Journeyman #: _____

Signature: _____

In order for compliance to be maintained as required by the manufacturer this furnace activation protocol must be followed and the furnace must be maintained from the post-drywall stage until possession. This includes regular filter changes as required by manufacturer installation instructions and keeping the system free from debris. See furnace maintenance schedule.

For furnaces that have restrictions for use during construction, a copy of this form and the furnace maintenance schedule must be available to the AHJ at the time of furnace activation and/or up to final inspection or occupancy. A copy of these forms should be left with the homeowner's information package. Copies are to be given to the Builder and HVAC Contractor as well as the AHJ if requested.

NOTE: The full form is required to be filled out only if the furnace will be activated for heat prior to final inspection or occupancy.

Pre-Occupancy Furnace Maintenance Schedule

Date:	Maintenance Performed:	Name: (print)	Initials:	Company:	