BUILDINGS BULLETIN 2012-005


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Purpose: This document establishes acceptance criteria for gas-fired direct vent space-heating appliances used for providing heat in rooms for sleeping purposes in accordance with the 2008 NYC Construction Codes.

Related Code Section(s): AC 28-113.2.3 FGC 503.3 FGC 503.4.2
FGC 303.3 FGC 601.3

Subject(s): Space-heating appliance, gas-fired, direct vent; Space-heating appliance, sleeping room; Gas-fired heater, direct vent, sealed combustion; Carbon monoxide detectors, sleeping rooms.

Background: Section FGC 303.3, exception (1) prohibits the location of gas-fired direct vent appliances in rooms for sleeping purposes. However, such appliances installed in accordance with this bulletin shall be deemed to be located outside of the sleeping room.

Description: Gas-fired direct vent space-heating appliances for use in rooms for sleeping purposes consist of automatic gas burner, gas pressure regulator and different controls with or without cooling section, and shall be constructed as a sealed combustion chamber.

Evaluation Scope: 2008 NYC Construction Codes

Evaluation Criteria: Pursuant to section AC 28-113, the Office of Technical Certification and Research recognizes gas-fired direct vent space-heating appliances tested, designed and evaluated in accordance with ANSI Z21.86 "Gas-Fired Vented Space Heating Appliances." when used to provide heat in sleeping rooms. Acceptable gas-fired direct vent space-heating appliance shall be listed and labeled by an approved agency in accordance with section AC 28-113.2.3.

Uses: Gas-fired direct vent space-heating appliances are used for providing heat in an interior environment. This bulletin addresses the use of such appliances in rooms for sleeping purposes.

Conditions of Acceptance: Gas-fired direct vent space-heating appliances used for providing heat in sleeping rooms shall be designed and installed in accordance with the 2008 NYC Construction Codes and other applicable provisions including but not limited to the following:
A. Design
1. The unit shall be specified in accordance with manufacturer's recommendations, the applicable listing, and the conditions of this bulletin.
2. The unit shall be factory assembled.
3. The unit shall be of direct vent type, that all air for combustion is derived from the outside atmosphere and that all flue gases are discharged directly to the outside atmosphere.
4. No retrofitting or on-site duct work is permitted in association with the unit.
5. All gas piping shall be hard-piped with no flexible connectors.
6. The unit shall be installed through a sleeve located in an exterior wall.

All gas-fired direct vent space heating appliances used for providing heat in sleeping rooms and installed or replaced pursuant to a work permit issued on or after September 30, 2013 shall be manufactured with an integral factory assembled carbon monoxide detector interlock with automatic main gas shut-off valve.

Exceptions for installation or replacement pursuant to a work permit issued prior to September 30, 2013:

a. In buildings constructed pursuant to the 2008 Code, gas-fired direct vent space-heating appliances installed or replaced shall, in lieu of an integral factory assembled carbon monoxide detector interlock be monitored by carbon monoxide detectors installed in sleeping rooms as required by section BC 908.7. Such appliances shall be deemed to be located outside of the sleeping room notwithstanding section FGC 303.3, Exception 1.

b. In buildings constructed pursuant to the 1968 Code or prior codes, gas-fired direct vent space heating appliances installed or replaced shall be in accordance with the conditions of this bulletin, except that a carbon monoxide alarm complying with 1 RCNY §28-02 may be installed within the sleeping room in lieu of an integral factory assembled carbon monoxide detector interlock. Such appliances shall be deemed to be located outside of the sleeping room notwithstanding 1 RCNY §40-11 (b).

B. Installation Requirements
1. Installation requirements shall be in accordance with the manufacturer's instructions, the applicable listing, and the conditions of this bulletin.
2. Gas-fired direct vent space-heating appliances, including those for use in rooms for sleeping purposes, shall only be installed by a master licensed plumber.
3. A licensed master plumber shall file for a permit with an “LAA 1” or a “PW1” application.
4. The unit shall be installed with natural gas only.
5. Clearances from adjacent combustible surfaces shall meet the minimum clearances indicated by the manufacturer's instruction and the listing agency.
6. Clearances from adjacent openings shall meet the minimum clearances indicated by the manufacturer's instructions and the listing agency.
7. Gas-fired direct vent space-heating appliances for use in rooms for sleeping purposes shall be labeled as per section AC 28-113.4. All shipment and deliveries of materials shall be accompanied by a label certifying the material shipped or delivered are equivalent to those tested and approved.

C. Maintenance
Gas-fired direct vent space-heating appliances, carbon monoxide detectors installed in sleeping rooms pursuant to 1 RCNY §28-02 or section BC 908.7, and integral factory assembled carbon monoxide detectors shall be maintained in accordance with the manufacturer's instructions and the conditions of their listing.

Referenced Standards: