



BUILDINGS BULLETIN 2010-025
OTCR

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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 503.8	PC 804.1
FGC 303.3	FGC 601.3	
FGC 503.4.2	FGC 503.2.2	

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.

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."¹ 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.
7. All gas-fired direct vent space-heating appliances used for providing heat in sleeping rooms installed on or after April 30, 2011 shall be manufactured with an integral factory assembled carbon monoxide detector interlock with automatic main gas shut-off valve. Gas-fired direct vent space-heating appliances installed prior to April 30, 2011 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.
8. As per section 27-2034 (f) of the New York City Housing Maintenance Code, each heater shall be equipped with an effective device which will automatically shut off the gas supply to the heater if its pilot light or other constantly burning flame is extinguished, or in the event of an interruption of the gas supply to the heater, and will not permit the heater to be relighted unless such shut-off device is first reset manually.

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 combustibles surfaces shall meet the minimum clearances indicated by the manufacturer's instruction and the listing agency.
6. 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.
7. For existing gas-fired direct vent space-heating appliances installed pursuant to permits lawfully issued in accordance with the 1968 Building Code, they shall be deemed to be located outside of the sleeping room for the purposes of 1 RCNY §40-11 (b), provided all conditions of this bulletin are met, including the requirement for carbon monoxide detection as required by section BC 908.7. However, pursuant to section AC 28-101.4.3, Item 1, replacement units installed on or after July 1, 2009 for existing gas-fired direct vent space-heating appliances shall fully comply with the 2008 New York City Fuel Gas Code and all terms of this bulletin.

C. Maintenance

1. Gas-fired direct vent space-heating appliances, carbon monoxide detectors installed in sleeping rooms pursuant to section BC 908.7, and integral factory assembled carbon monoxide detectors shall be maintained in accordance with the manufactures instructions and the conditions of their listing.

Referenced Standards:

1. ANSI Z21.86 "Gas-Fired Vented Space Heating Appliances"