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Informational Bulletin 2015-02
Carbon Monoxide Detection Devices in Dwellings

Purpose:

The purpose of this bulletin is to provide information as to the current requirements for Carbon Monoxide Detectors (CMD) in single-family dwellings as well as multi-unit dwellings and rental units.

Definitions:

Building - means any structure, framework or housing, public or private, excluding single-family dwellings and multi-unit dwellings as defined, but including tanks, receptacles and containers for the storage of commodities or other materials.

Carbon Monoxide Detector - An alarm intended for the purpose of detecting carbon monoxide gas and alerting occupants by a distinct audible signal comprising an assembly that incorporates a sensor, control components, and an alarm notification appliance in a single unit operated from a power source either located in the unit or obtained at the point of installation.

Multi-Unit Dwelling - means any structure not defined above as building, which contains two or more single units, which provide permanent or transient living facilities, which may or may not include cooking and eating facilities, for one or more persons. This term shall include but not be limited to: rooming houses, dormitories, motels, hotels, apartment buildings, buildings which contain condominium units, duplexes, and houses; provided, however, that such buildings contain two or more units.

Rental Unit - means any residential unit in a building or single-family dwelling, which provides permanent or transient living facilities for one or more persons, which is occupied by tenants on a rental basis. This term shall include but not be limited to: hotels, motels, dormitories, apartments, duplex units, rooms rented out of the home of another, and single family dwellings, so long as they are rented.

Single-Family Dwelling - means any structure not defined above as building, which contains one dwelling unit, which is designed to be occupied for living purposes, and which is used by one, two or more families exclusively as a home.

Substantially Rehabilitated - means any improvement to a building or single-family dwelling, which is valued at an amount greater than 1/2 of the *assessed* valuation of the building or dwelling. Please note this amount is based on the assessed value not the resale value.

1.) SINGLE-FAMILY DWELLINGS

When They Are Required:

Every single-family dwelling, which is built or substantially rehabilitated after January 1, 2010, shall be, equipped with carbon monoxide detection devices. (1)

Exception

A carbon monoxide detection device shall not be required if the single-family dwelling does not have an attached garage and does not contain an appliance or device that uses a combustion method of burning solid, liquid, or gas fuel. If a garage or combustion fuel appliance or device is later added to the dwelling, carbon monoxide detection devices shall be required. (1)

Locations of Installation:

Carbon monoxide alarms or detectors shall be installed as follows:

(1) Outside each separate dwelling unit sleeping area in the immediate vicinity of the bedrooms.

(2) On every occupiable level of a dwelling unit, including basements, excluding attics and crawl spaces.

(3) Each individual dwelling unit contained in a multi-unit dwelling shall be equipped with a carbon monoxide alarm or detector as required above. (2)

Each detector shall be located on the wall, ceiling, or other location as specified in the manufacturer's published instructions that accompany the unit. (3)

Powering the Detectors:

New Construction:

Carbon monoxide alarms shall receive their primary power from the building wiring where such wiring is served from a commercial power source, and, where primary power is interrupted, shall receive power from a battery. Wiring shall be permanent and without a disconnecting switch other than those required for overcurrent protection. (7)

Exception

1. Carbon monoxide alarms shall be permitted to be battery operated where installed in buildings without commercial power. (7)

Existing Construction:

At this time, carbon monoxide detectors are not required to be hardwired. (5)

2.) MULTI-UNIT DWELLINGS AND RENTAL UNITS

When They Are Required:

Each multi-unit dwelling and rental unit shall be equipped with carbon monoxide detection devices. (1)

Locations of Installation:

Carbon monoxide alarms or detectors shall be installed as follows:

- (1) Outside each separate dwelling unit sleeping area in the immediate vicinity of the bedrooms.
- (2) On every occupiable level of a dwelling unit, including basements, excluding attics and crawl spaces.
- (3) Each individual dwelling unit contained in a multi-unit dwelling shall be equipped with a carbon monoxide alarm or detector as required above. (2)

Each detector shall be located on the wall, ceiling, or other location as specified in the manufacturer's published instructions that accompany the unit. (3)

Powering the Detectors:

New Construction:

Carbon monoxide alarms shall receive their primary power from the building wiring where such wiring is served from a commercial power source, and, where primary power is interrupted, shall receive power from a battery. Wiring shall be permanent and without a disconnecting switch other than those required for overcurrent protection. (6)

Exception

Where installed in buildings without commercial power, battery-powered carbon monoxide alarms shall be an acceptable alternative. (6)

Existing Construction:

At least two independent and reliable power supplies shall be provided, one primary and one secondary; each of which shall be of adequate capacity for the application. At this time, carbon monoxide detectors are not required to be hardwired. (4)

Detectors may be connected to, and powered by, a commercial fire alarm system within a building. Detectors connected to commercial fire alarm systems shall be installed in accordance with the requirements of NFPA 72 and NFPA 720. (1)

3.) GENERAL REQUIREMENTS (BOTH SINGLE-FAMILY AND MULTI-FAMILY DWELLINGS)

Combination Smoke/Carbon Monoxide Devices: (Single, Multi and Rentals)

Combination devices are permitted provided that they meet the requirements of UL 217 and UL2034. (6)

Maintenance of Devices Required: (Single-Family, Multi-Unit and Rentals)

(a) The owner of a single-family dwelling, multi-unit dwelling and/or rental unit shall be responsible for maintaining all carbon monoxide alarms or detectors in good working order. (1)

(b) No person, tenant or occupant of a multi-unit dwelling and/or rental unit shall remove any battery from a carbon monoxide alarm or detector, disconnect the primary power to a carbon monoxide alarm or detector, or tamper with or otherwise render inoperable any carbon monoxide alarm or detector. (2)

References:

(1) NH Fire Laws Annotated 153:10-a

(2) NH Administrative Rules, State Fire Code, Chapter Saf-C-6015

(3) NFPA 720 2009 Edition, Ch. 9.4.1.2

(4) NFPA 720 2009 Edition, Ch. 4.4.1.3.1

(5) International Residential Code 2009 Edition, section 315.1

(6) **International Building Code 2015 Edition, section 915.4 in anticipation of adoption, not currently adopted**

(7) **International Residential Code 2015 Edition, section 315.1 in anticipation of adoption, not currently adopted**