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2020-06	Carbon Monoxide Detection Requirements in Dwellings			May 1, 2020
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## Informational Bulletin 2020-06 Carbon Monoxide Detection Devices in Single Family Dwellings

### Purpose:

The purpose of this bulletin is to provide information as to the current requirements for Carbon Monoxide Alarms in single-family dwellings.

### Definitions:

Carbon Monoxide Alarm - 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.

Single-Family Dwelling - Any structure which contains one dwelling unit, which is designed to be occupied for living purposes exclusively as a home. (1)

Substantially Rehabilitated - 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.

### 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 (referenced by the applicable codes as carbon monoxide alarm). (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) Where a fuel-burning appliance is located within a bedroom or its attached bathroom, a carbon monoxide alarm shall be installed within the bedroom.

Each detector shall be located on the wall, ceiling, or other location as specified in the manufacturer's published instructions that accompany the unit. (3,5)

### **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. (5)

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

#### **Existing Construction:**

Carbon monoxide alarms shall be permitted to be battery powered.

### **Interconnection Requirement (New Construction Only):**

When two or more alarms are installed within a dwelling unit, suite of rooms, or similar area, they shall be arranged so that the operation of any alarm causes all alarms within these locations to sound. (6)

### **Combination Smoke/Carbon Monoxide Devices:**

Combination devices are permitted provided that they meet the requirements of UL 217 and UL 2034. (3)

### **Maintenance of Devices Required:**

- (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 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 RSA 153:10-a
- (2) NH Administrative Rules, State Fire Code, Chapter Saf-C-6000
- (3) NFPA 720 2015 Edition, Ch. 9.4.1.2
- (4) NFPA 720 2015 Edition, Ch. 9.5.1.2
- (5) International Residential Code 2015 Edition, R315
- (6) NFPA 720 2015 Edition, Ch. 9.6.4