

TEXT
(CO Alarms – Commercial Buildings)

Part 1228 of Title 19 NYCRR is amended by adding a new section 1228.4, to read as follows:

Section 1228.4. Carbon Monoxide Detection in Commercial Buildings

(a) **Definitions.** In this Section 1228.4, the following terms shall have the following meanings unless a different meaning is clearly implied by the context:

(1) **COMMERCIAL BUILDING.** The term “commercial building” means any new or existing building that is not a one- or two-family dwelling; a multiple single-family dwelling (townhouse); a building owned as a condominium or cooperative and containing dwelling units; a bed and breakfast dwelling; or a building or structure which contains one or more dwelling units, sleeping units or sleeping areas and which is classified, in whole or in part, in one or more of the following occupancy Groups: E, I-1, I-2 (except hospitals), I-4, R-1, R-2, R-3 or R-4.

(3) **CENTRAL LOCATION.** The term “central location” means the point within a detection zone that maximizes the detection of carbon monoxide, the notification of occupants in normally occupied areas, and the notification of occupants prior to entering normally unoccupied areas.

(2) **DETECTION ZONE.** The term “detection zone” means each story of a commercial building, or a portion of each story that is served by common heat, ventilation, and/or air conditioning equipment.

(4) **EXISTING COMMERCIAL BUILDING.** The term “existing commercial building” means a commercial building that was constructed prior to June 23, 2015. A commercial building constructed after June 23, 2015 shall be deemed to be an “existing commercial building” if the application for the building permit for the initial construction of such commercial building was filed prior to June 23, 2015.

(5) NEW COMMERCIAL BUILDING. The term “new commercial building” means a commercial building that is not an existing commercial building.

(6) 2010 BCNYS. The term “2010 BCNYS” means the publication entitled “Building Code of New York State” published by the International Code Council, Inc. (publication date: August 2010).

(7) 2010 FCNYS. The term “2010 FCNYS” means the publication entitled “Fire Code of New York State” published by the International Code Council, Inc. (publication date: August 2010).

(6) NFPA 720. The term “NFPA 720” means the publication entitled “Installation of Carbon Monoxide (CO) Detection and Warning Equipment” published by the National Fire Protection Association (publication date: 2009).

(6) UL 2034. The term “UL 2034” means the publication entitled “Single and Multiple Station Carbon Monoxide Alarms” published by the Underwriters Laboratories, Inc. (publication date: February 28, 2008).

(6) UL 2075. The term “UL 2075” means the publication entitled “Standard for Gas and Vapor Detectors and Sensors” published by the Underwriters Laboratories, Inc. (publication date: March 5, 2013).

(6) UL 217. The term “UL 217” means the publication entitled “Standard for Single and Multiple Station Smoke Alarms” published by the Underwriters Laboratories, Inc. (publication date: August 25, 2006).

(b) General. Carbon monoxide detection shall be installed in all new commercial buildings and in all existing commercial building in accordance with subdivisions (c) through (j) of this Section 1228.4.

(c) Where required. Carbon monoxide detection shall be provided where any one or more of the conditions in specified in paragraphs (1) through (4) of this subdivision exists.

Exception 1. Carbon monoxide detection shall not be required in a storage or utility building that is only occupied for occasional building or equipment maintenance.

Exception 2. Carbon monoxide detection shall not be required in a portion of a commercial buildings that has ambient conditions that would activate carbon monoxide detection, provided that an approved alternative and/or safety plan shall have been implemented for such commercial building.

Exception 3. Carbon monoxide detection shall not be required in a canopy, building, or portion of a building having a perimeter that is at least 50% open.

(1) Fuel-burning appliances and fuel-burning fireplaces in classrooms of Group E occupancies.

Carbon monoxide detection shall be provided in every classroom in a Group E occupancy that contains any fuel-burning appliance or fuel-burning fireplace.

(2) Forced-air furnaces serving classrooms of Group E occupancies. Carbon monoxide detection shall be provided in every classroom in a Group E occupancy that is served by a fuel-burning, forced-air furnace.

Exception: Carbon monoxide detection shall not be required in a classroom that is served by a fuel-burning, forced-air furnace, provided that

- (i) carbon monoxide detection is provided in the first room or area in every detection zone served by each main duct leaving such furnace,
- (ii) the carbon monoxide alarm signals are automatically transmitted to an approved location, and
- (iii) such classroom does not contain any fuel-burning appliance or fuel-burning fireplace.

(3) Fuel-burning appliances. Carbon monoxide detection shall be provided in every detection zone in new commercial buildings and existing commercial buildings that contains any fuel-burning appliance or fuel-burning fireplace.

(4) Private garages. Carbon monoxide detection shall be provided in detection zones adjacent to attached private garages. For the purposes of this paragraph, an open parking garage complying with Section 406.3 of the 2010 edition of the 2010 BCNYS or an enclosed parking garage complying with Section 406.4 of the 2010 BCNYS shall not be considered a private garage.

Exception 1. Carbon monoxide detection shall not be required in a private garage that connects to a commercial building through an open-ended corridor.

Exception 2. Where carbon monoxide detection is provided in an approved location between openings to a private garage and a detection zone, carbon monoxide detection shall not be required throughout the remainder of the commercial building.

(d) Locations. Where required by subdivision (c) of this section, carbon monoxide detection shall be installed in the locations specified in paragraphs (1) through (3) of this subdivision.

(1) Detection zones less than 10,000 square feet. Carbon monoxide detection shall be placed in a central location within each required detection zone.

(2) Detection zones 10,000 square feet of greater. Carbon monoxide detection shall be placed in a central location within each required detection zone. Additionally, no portion of the detection zone shall be greater than 100 feet from carbon monoxide detection.

Exception: Carbon monoxide detection shall not be required throughout a detection zone where carbon monoxide detection is provided in one of the following locations:

- (i) in an approved location between the fuel-burning appliance or fuel-burning fireplace and the remainder of the detection zone, or

(ii) on the ceiling of the room containing the fuel-burning appliance or fuel-burning fireplace.

(3) Group E occupancies. In Group E occupancies, Carbon monoxide alarm signals shall be automatically transmitted to an on-site location that is staffed by school personnel.

Exception: Carbon monoxide alarm signals shall not be required to be automatically transmitted to an on-site location that is staffed by school personnel in Group E occupancies with an occupant load of 30 or less or in an existing commercial building.

(e) **Detection equipment.** Carbon monoxide detection required by this section 1228.4 shall be provided by carbon monoxide alarms complying with subdivision (f) or carbon monoxide detection systems complying with subdivision (g).

(f) **Carbon monoxide alarms.** Carbon monoxide alarms shall comply with paragraphs (1) through (3) of this subdivision.

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

Exception 1. An existing commercial building shall be permitted to have carbon monoxide alarms powered solely by 10-year battery power.

Exception 2. Where installed in commercial buildings without commercial power, battery-powered carbon monoxide alarms shall be an acceptable alternative.

(2) Listings. Carbon monoxide alarms shall be listed in accordance with UL 2034.

(3) Combination alarms. Combination carbon monoxide / smoke alarms shall be prohibited.

(4) Interconnection. In new commercial buildings where a carbon monoxide alarm is installed in a normally unoccupied detection zone, such carbon monoxide alarm shall be interconnected with a carbon monoxide alarm that is placed in an adjacent normally occupied detection zone.

(g) Carbon monoxide detection systems. Carbon monoxide detection systems shall be an acceptable alternative to carbon monoxide alarms and shall comply with paragraphs (1) through (3) of this subdivision.

(1) General. Carbon monoxide detection systems shall comply with NFPA 720. Carbon monoxide detectors shall be listed in accordance with UL 2075.

(2) Locations. Carbon monoxide detectors shall be installed in the locations specified in Section 1228.4(d). These locations supersede the locations specified in NFPA 720.

(3) Combination detectors. Combination carbon monoxide/smoke detectors installed in carbon monoxide detection systems shall be an acceptable alternative to carbon monoxide detectors, provided they are listed in accordance with UL 2075 and UL 268.

(4) Notification devices. Notification devices shall comply with NFPA 720 or, in the alternative, be provided in the locations required for carbon monoxide detection in Part 1228.4(d).

(h) Maintenance. Carbon monoxide alarms and carbon monoxide detection systems shall be maintained in accordance with NFPA 720. Carbon monoxide alarms and carbon monoxide detectors that become inoperable or begin producing end-of-life signals shall be replaced.

(i) Monitoring of carbon monoxide detection. Carbon monoxide detection shall be monitored in accordance with this subdivision.

(1) Carbon monoxide detection systems. All carbon monoxide detection systems installed in accordance with subdivision (h) of this Section 1228.4 shall be monitored.

(2) Monitoring in new commercial buildings. All carbon monoxide detection shall be monitored in new commercial buildings that are required by section 903 or 907 of the 2010 FCNYS to have a fire alarm control panel installed for the monitoring of automatic fire detection systems, manual fire alarm systems, or automatic sprinkler systems.

(3) Fundamentals of monitoring. The following requirements apply to all monitoring of carbon monoxide detection, including existing carbon monoxide detection and installations completed under subdivision (d) of this Section 1228.4.

(i) Signal. Carbon monoxide detection shall not activate a fire signal to a fire alarm control panel.

(ii) Notification appliances. Carbon monoxide detection shall not activate notification appliances that announce a fire alarm or is not distinctive from a fire notification as required by NFPA 72.

(j) Mixed used buildings containing occupancies other than commercial buildings. In new buildings, carbon monoxide detection required by this Part shall be interconnected with other regulations requiring carbon monoxide detection.

(k) Incorporation by reference.

(1) 2010 BCNYS. The publication entitled “Building Code of New York State” published by International Code Council, Inc. (publication date: August 2010) is hereby incorporated by reference in this section 1228.4. Copies of said publication (referred to in this Section 1228.4 as “2010 BCNYS”) may be obtained from the publisher at the following address: International Code Council, Inc., 500 New Jersey Avenue, NW, 6th Floor, Washington, DC 20001. The 2010 BCNYS is available for public inspection and copying at New York State Department of State, 99 Washington Avenue, Albany, NY 12231-0001.

(2) 2010 FCNYS. The publication entitled “Fire Code of New York State” published by International Code Council, Inc. (publication date: August 2010) is hereby incorporated by reference in

this section 1228.4. Copies of said publication (referred to in this Section 1228.4 as “2010 FCNYS”) may be obtained from the publisher at the following address: International Code Council, Inc., 500 New Jersey Avenue, NW, 6th Floor, Washington, DC 20001. The 2010 FCNYS is available for public inspection and copying at New York State Department of State, 99 Washington Avenue, Albany, NY 12231-0001.

(3) NFPA 720. The publication entitled “Installation of Carbon Monoxide (CO) Detection and Warning Equipment” published by the National Fire Protection Association (publication date: 2009) is hereby incorporated by reference in this section 1228.4. Copies of said publication (referred to in this Section 1228.4 as “NFPA 720”) may be obtained from the publisher at the following address: National Fire Protection Association, Batterymarch Park, Quincy, MA 02269. NFPA 720 is available for public inspection and copying at New York State Department of State, 99 Washington Avenue, Albany, NY 12231-0001.