



**NASSAU COUNTY FIRE COMMISSION  
OFFICE OF THE FIRE MARSHAL**

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Chief Fire Marshal  
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# **FIRE MARSHAL BULLETIN**

September 1, 2014 (*REVISED*)

To: Nassau County Fire Departments, Town / City / Village Building Departments, Business and Property Owners, and NYS Licensed Alarm Contractors

From: **Assistant Chief Fire Marshal Michael F. Uttaro - *muttaro@nassaucountyny.gov***

The recently approved addition of Article VIII to the Nassau County Fire Prevention Ordinance to address the needs for the life safety requirement of carbon monoxide detection in all new and existing commercial buildings within the County of Nassau has raised questions regarding the implementation of this new law, so the following is an explanation of the law and direction on its implementation. Carbon monoxide detectors/alarms required for existing buildings shall be installed by January 1, 2015.

**SINGLE-STATION CARBON MONOXIDE ALARM** – A detector / alarm comprising an assembly that incorporates a sensor, control components, and an alarm notification appliance in one unit operated from a power source either located in the unit or obtained at the point of installation.

**MULTIPLE-STATION CARBON MONOXIDE ALARM** – A single-station carbon monoxide alarm capable of being interconnected to one or more additional alarms so that the actuation of one causes the appropriate alarm signal to operate in all interconnected alarms.

**CARBON MONOXIDE ALARM** – A single- or multiple-station carbon monoxide alarm responsive to carbon monoxide.

**CARBON MONOXIDE DETECTOR** – A device connected to an alarm control unit (fire alarm system) having a sensor that responds to carbon monoxide.

**Reference Standards:**

<b>NFPA 70-2008</b>	National Electric Code
<b>NFPA 72-2007</b>	National Fire Alarm and Signaling Code
<b>NFPA 720-2012</b>	Installation of Carbon Monoxide (CO) Detection and Warning Equip.

## **New Commercial Occupancies:**

- Carbon monoxide detectors/alarms shall be installed as part of a fire alarm system in new occupancies that require a fire alarm system to be installed. These device installations shall be submitted as part of the fire alarm system plan submission with the required fees and paperwork.
- New occupancies that do not require the installation of a fire alarm system shall install carbon monoxide detectors/alarms as independent single- or multiple-station systems.

## **Existing Commercial Occupancies:**

- Where a fire alarm system is maintained within an existing occupancy, the carbon monoxide detectors/alarms shall be interconnected to the existing fire alarm system. These devices shall be installed by a NYS licensed alarm company and shall have a letter sent to the Nassau County Fire Marshal's Office on the installer's letterhead verifying their installation and meeting the requirements of the Nassau County Fire Prevention Ordinance.

### **Exceptions:**

1. Interconnection is not required in buildings that are not undergoing alterations, repairs or construction of any kind.
  2. Carbon monoxide detectors/alarms in existing areas are not required to be interconnected where alterations or repairs do not result in the removal of interior wall or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available which could provide access for interconnection without the removal of interior finishes.
- Where an existing occupancy does not maintain a fire alarm system, plug-in, battery-operated or hard-wired carbon monoxide detectors/alarms shall be installed as required and shall be UL listed (or equivalent listing agency).

## **Additional Requirement and Installation Information**

- Carbon monoxide detectors/alarms are considered life safety devices and therefore, devices installed as part of a fire alarm system shall send trouble signals to the alarm control panel and facilitate wiring supervision.
- Carbon monoxide detectors/alarms shall be located and installed on the ceiling in the same room as permanently installed fuel burning appliances as long as such installation is not contrary to manufacturer's specifications.
- Carbon monoxide detectors/alarms shall be centrally located on every habitable level and in every tenant space of a multiple tenant building.
- Ceiling mounted carbon monoxide detectors/alarms shall be located a minimum of twelve (12) inches from any wall or as specified by manufacturer's specifications.
- Wall mounted carbon monoxide detectors/alarms shall be minimum of eighty (80) inches off the finished floor and at least six (6) inches from the ceiling or as specified by manufacturer's specifications.

- In dwelling units, sleeping units and sleeping areas, carbon monoxide detectors/alarms shall be installed as specified in the 2010 Fire Code of New York State, Section 610.
- Assembly Group A occupancies shall require additional carbon monoxide detectors/alarms in every room accommodating fifty (50) or more occupants.
- Single- and multiple-station carbon monoxide alarms shall initiate a temporal four (4) alarm sequence upon activation of the device. Carbon monoxide detectors interconnected to fire alarm systems shall initiate a temporal three (3) alarm sequence. Smoke and fire detection shall take precedence.
- Carbon monoxide detectors/alarms shall be located a minimum of three (3) feet from all air registers.

### **NYS Licensed Alarm Company Compliance and NCFM Notification Procedures**

When adding carbon monoxide detectors or combination carbon monoxide / smoke detectors to an existing approved fire alarm system, the NYS licensed alarm company shall submit a letter on their company letterhead stating that *“In accordance with the Nassau County Fire Prevention Ordinance, Article VIII, there have been \_\_\_ of detectors added to the existing approved fire alarm system. The detectors have been installed and tested in conformance with NFPA 720 2012 and NFPA 72 2007 and the system has a valid fire alarm permit issued by Nassau County Fire Marshal’s Office.”* Manufacturer’s cut sheets for these detectors shall be included with this letter. There is no fee or plan requirement for this work and there will be no approval letter sent by Nassau County Fire Marshal’s Office to the premise.

Carbon monoxide detectors added to existing conventional, zone type, fire alarm systems shall be programmed to have these detectors zoned separately as to transmit an alarm signal to the approved supervising station specifically identifying the carbon monoxide detector alarm activation. If an existing fire alarm control panel is at its capacity, an additional conventional sub panel will be permitted to be installed specifically for these required carbon monoxide detectors without the requirement of plans upon individual review and approval. The detectors and conventional sub panel have shall be installed and tested in conformance with NFPA 720 2012 and NFPA 72 2007. Manufacturer’s cut sheets for these detectors and the conventional sub panel shall be included with the required letter from the NYS licensed alarm company.

## **Carbon Monoxide Detection Frequently Asked Questions**

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### **1. Are carbon monoxide detectors/alarms required?**

Carbon monoxide detectors/alarms are required in one- and two-family dwellings and townhouses as specified in the 2010 Residential Code of New York State, section R313 and regulated by the local building authority.

All other occupancies (to which the following questions apply) are regulated by the Nassau County Fire Marshal's Office, and as of January 1, 2015 are required to have carbon monoxide detectors/alarms. Buildings which contain dwelling units, sleeping units or sleeping areas must also conform to the provisions of the 2010 Fire Code of New York State, Section 610.

### **2. Are carbon monoxide detectors/alarms required even if no source is present?**

Yes, carbon monoxide detectors/alarms are required even if no source is present.

### **3. What types of carbon monoxide detectors/alarms are permitted?**

All carbon monoxide detectors/alarms must be UL listed; and may be system-connected, plug-in, battery-operated or hard-wired depending on the situation and location requirements.

### **4. Where must carbon monoxide detectors/alarms be located?**

The locations of carbon monoxide detectors/alarms in dwelling units, sleeping units and sleeping areas are specified in the 2010 Fire Code of New York State, Section 610. All other areas shall have carbon monoxide detectors/alarms located in a central location on every habitable level, in each tenant area of a multiple tenant building and in any room with a potential source of carbon monoxide. Assembly Group A occupancies shall have additional devices in every room with an occupant load of fifty (50) or more. **All locations must comply with manufacturer's specifications.**

### **5. Are there any prohibited locations for carbon monoxide detectors/alarms?**

Carbon monoxide detectors shall not be located where prohibited by manufacturer's specifications. Depending on manufacturer, prohibited locations may include in kitchens, furnace rooms and garages, specifically where carbon monoxide detectors/alarms cannot be located farther than 3 meters (9.8 feet) away from the source. In small rooms with a source, it may not be possible to add devices. Carbon monoxide detectors/alarms shall not be located within ducts.

**6. Who may install carbon monoxide detectors/alarms?**

A NYS licensed alarm installer must perform all work when the newly added devices are interconnected to a fire alarm and smoke detection system, or in new occupancies where a fire alarm and smoke detection system is required. In existing occupancies where single- or multiple-station devices are permitted, the occupant may install plug-in or battery-operated devices, or a licensed electrician may install hard-wired devices.

**7. Do plans need to be submitted to the Nassau County Fire Marshal's Office prior to installation?**

Plans shall be submitted to the Nassau County Fire Marshal's Office prior to installation where a fire alarm and smoke detection system is also required, or where a fire alarm and smoke detection system is already present and the building is undergoing alternations, repairs or construction which impact said system. Voluntary additions to an existing fire alarm and smoke detection system shall require a detailed letter as defined below.

**8. If a plan submission is not required, what else must be sent to the Nassau County Fire Marshal's Office?**

If plans are not required, the installer of the devices must send a letter on business letterhead to the Nassau County Fire Marshal's Office stating the location and address of the work. This letter shall include the device type, quantity, location, make and model, and any additional relevant information such as device programming, power supervision, compatibility, cut sheets, etc.

**9. What alarm signal must carbon monoxide detectors sound?**

Carbon monoxide detectors attached to a fire alarm and smoke detection system, shall sound a temporal three alarm sequence. Single- and multiple-station alarms, where permitted, shall sound a temporal four alarm sequence from their integrated or accessory sounder and provide a supervisory signal if attached to a fire alarm and smoke detection system.